

# Subject Index 2001\*

## A

### Absolute configuration

15-*O*-Deacetylrhaposerin and rhaserin — new components of a lactone mixture from *Rhaponticum serratuloides*, **3**, 537

Determination of the enantiomeric composition of *N,N*-dimethyl- $\alpha$ -ferrocenylethylamine by  $^1\text{H}$  NMR spectroscopy, **7**, 1323

Direct *C*-nitration of cyclic  $\alpha,\beta$ -unsaturated oximes under the action of sodium nitrite and acetic acid in methanol, **8**, 1410

(+)- $\delta$ -Cadinol as a promising starting compound in the synthesis of eleuthesides, **9**, 1699

### Absorption

Hydrogenation of  $\text{CO}_2$  conjugated with dehydrogenation of cyclohexane over an intermetallic catalyst, **7**, 1201

### Acetalization

(+)- $\delta$ -Cadinol as a promising starting compound in the synthesis of eleuthesides, **9**, 1699

### Acetates

Oxidative dimerization of vinylbornylacetylenes under the action of mercuric acetate, **7**, 1238

### Acetic acid

Direct *C*-nitration of cyclic  $\alpha,\beta$ -unsaturated oximes under the action of sodium nitrite and acetic acid in methanol, **8**, 1410

### Acetoacetic ester

Carbonylation of chloroacetone to methyl acetoacetate, **11**, 2239

### Acetone

Reactions of 9,10-phenanthrenequinone and its nitro derivatives with acetone in the presence of  $\text{Al}_2\text{O}_3$ , **9**, 1625

### Acetonides

15-*O*-Deacetylrhaposerin and rhaserin — new components of a lactone mixture from *Rhaponticum serratuloides*, **3**, 537

Migration of the *O*-acetyl group in the acetonation of guaianolide rhaposerin, **12**, 2459

### Acetylation

Synthetic potential of substituted 7-alkylseleno-1,4-dihydro-1,6-naphthyridines, **1**, 122

Steroid compounds from the Pacific starfish *Lysastrosoma anthosticta*, **2**, 313

### Acetylcyclopropane

Catalytic ring opening of acetylcyclopropane by water and alcohols under the action of copper or palladium salts, **7**, 1242

### 2-Acetyldimedone

Trifluoroacetylation of 2-acetyldimedone, **3**, 568

### Acetylene

*Ab initio* MP2 calculations of the products of acetylene addition to  $\text{HgCl}_2$ , **6**, 958

Reactions of photogenerated fluorine atoms with molecules trapped in solid argon. 4. Spectroscopic characteristics of  $\beta\text{-C}_2\text{H}_2\text{F}^\cdot$  radicals generated in reactions of mobile F atoms with  $\text{C}_2\text{H}_2$  molecules trapped in solid argon, **6**, 989

### Acetylene derivatives

Synthesis and transformations of metallacycles. 24. Zr-Catalyzed cycloalumination of asymmetrical disubstituted acetylenes, **3**, 484

Regiochemistry of the reactions of phenylenedioxytrichlorophosphorane with phenylacetylene and propargyl chloride in the presence of benzyltrimethylammonium chloride, **4**, 745

### Acetylenides

Thermodynamics of copper, silver, gold, and mercury acetylenides (review), **7**, 1121

### *N*-Acetyl-D-fucosamine

A novel synthesis of *N*-acetyl- $\alpha$ -D-fucosamine 1-phosphate and uridine 5'-diphospho-*N*-acetyl- $\alpha$ -D-fucosamine, **7**, 1303

### 3-Acetyl-4-hydroxycoumarin

Hydrogen bond in 3-acetyl-4-hydroxycoumarin: X-ray diffraction study and quantum-chemical calculations, **3**, 418

### Acetylide complexes

Synthesis of the gold-dirhenium ferrocenylacetylide cluster. The crystal structure of  $\text{Re}_2(\mu\text{-C}\equiv\text{CFC})\{\text{Au}(\text{PPh}_3)\}(\text{CO})_8$ , **12**, 2441

### Acid-base interactions

Acidity of heteropoly acids with various structures and compositions studied by IR spectroscopy of the pyridinium salts, **4**, 587

Acidity function of methanesulfonic acid solutions in ethyl acetate, **6**, 1003

Solvation of complexes with strong symmetric H bonds in the methanesulfonic acid—2-pyrrolidone system, **6**, 1008

### Acidity

Acidity of heteropoly acids with various structures and compositions studied by IR spectroscopy of the pyridinium salts, **4**, 587

Acidity function of methanesulfonic acid solutions in ethyl acetate, **6**, 1003

A study of complexation of chloral hydrate with heteropoly anions having various structures, **9**, 1529

### Acids

Merocyanine form of photochromic spirooxazines in acid solutions, **7**, 1214

### CH-Acids

A new method for the synthesis of fluorinated vinyl sulfides and ketene dithioacetals, **6**, 1044

### Acids, dicarboxylic

EPR study of weak exchange interactions in binuclear copper(II) complexes with salicylaldehyde acyldihydrazones, **5**, 812

### Acids, Lewis

Phosphorylation of heptafluorobutanol in the presence of metal chloride—ether catalytic systems, **8**, 1457

\* Compiled by L. G. Menchikov and M. E. Poloznikova, Editor L. O. Kononov.

Coordination chemistry of macrocyclic multidentate Lewis acids. Synthesis and structures of complexes of cyclic trimeric perfluoro-*o*-phenylenemercury with *N,N*-dimethylacetamide and *n*-butyronitrile, **9**, 1673

New potentialities of electrophilic addition in the assembly of polyfunctional compounds from simple precursors (review), **11**, 1949

#### Acridine dyes

Luminescence properties of acridine dyes in micellar sodium dodecyl sulfate solutions containing thallium ions, **6**, 986

#### Acrylamide complexes

The preparation and reactivity of metal-containing monomers. 54. Thermolysis of the acrylamide monomer  $[\text{Co}(\text{CH}_2=\text{CHCONH}_2)_4(\text{H}_2\text{O})_2](\text{NO}_3)_2$ , **5**, 901

#### Acrylic acid, copolymers

Reaction of the acrylic acid and 1-vinylimidazole copolymer with  $\text{CuCl}_2$  in aqueous solution, **8**, 1382

#### 1-Acryloylpyrrolidine

The rate constants for the addition of radicals  $\text{CCl}_3\text{CH}_2\cdot\text{CHR}$  ( $\text{R} = \text{Ph}, \text{CO}_2\text{Me}, \text{CONC}_4\text{H}_8$ ) to some unsaturated compounds, **3**, 557

#### Aconine

A new norditerpenoid alkaloid aconine from the roots of *Aconitum kusnezoffii* Reichb., **2**, 311

#### Activated carbons

Prediction of the micropore structure parameters and adsorption properties of activated carbons, **6**, 974

On the mechanisms of phenol adsorption by carbons, **11**, 2060

Dubinin's theory and its contribution to adsorption science (review), **12**, 2265

#### Activation energy

Effect of medium on the rate constant of decarbonylation of phenylacetyl radical, **2**, 237

The reactivity of organoboranes in radical substitution reactions, **3**, 390

Possible intramolecular rearrangements of *O*-vinyloximes initiated by N—O bond dissociation: a quantum-chemical analysis, **5**, 764

Magnetic parameters and rotational mobility of the  $\equiv\text{SiON}(\text{O}^\cdot)\text{CX}_3$  nitroxides ( $\text{X} = \text{H}, \text{D}$ ) grafted on silica surface, **12**, 2384

#### Activation enthalpy

The reactivity of *tert*-butoxyl radicals in reactions of hydrogen abstraction and  $\beta$ -elimination, **2**, 241

The reactivity of phosphonic esters in aqueous micellar solutions of cationic surfactants, **7**, 1181

#### Activation entropy

The reactivity of *tert*-butoxyl radicals in reactions of hydrogen abstraction and  $\beta$ -elimination, **2**, 241

The reactivity of phosphonic esters in aqueous micellar solutions of cationic surfactants, **7**, 1181

#### Activation of bonds

Activation of C—H bonds in  $\text{C}_1$ — $\text{C}_3$  alkanes by titanium(IV) and zirconium(IV) cationic complexes: a DFT study, **3**, 376

Prediction of the micropore structure parameters and adsorption properties of activated carbons, **6**, 974

Hydrogenation of  $\text{CO}_2$  conjugated with dehydrogenation of cyclohexane over an intermetallic catalyst, **7**, 1201

DFT study of the mechanism of alkane hydrogenolysis by transition metal hydrides. 1. Interaction of silica-supported zirconium hydrides with methane, **11**, 2050

#### Activation parameters

NMR studies of the dynamic behavior of 2-anilino-6-chloro-4-methoxy-1,3,5-triazine in solution, **12**, 2473

#### Activator cations

Some features of hydrolysis of organic and inorganic substrates by *Escherichia coli* inorganic pyrophosphatase in the presence of various activator cations, **10**, 1877

#### Acutiphycin

Synthesis of a C(9)—C(13) fragment of acutiphycin from levoglucosan, **6**, 1101

#### *N*-Acyl-2-(alk-1-enyl)anilines

A facile method for the synthesis of 3,1-benzooxazines from *N*-acyl-2-(alk-2-enyl)anilines, **4**, 659

#### Acylation

A facile method for the synthesis of 3,1-benzooxazines from *N*-acyl-2-(alk-2-enyl)anilines, **4**, 659

*peri*-Naphthylenediamines. 32. Reactions of 4,5-bis(dimethylamino)-1-naphthyllithium and 4,5-bis(dimethylamino)-1-naphthylmagnesium bromide with electrophilic agents. New representatives of double naphthalene "proton sponges" with the structures of 1,1'-binaphthyl ketone and 1,1'-binaphthylmethanol, **5**, 854

Synthesis of bis(polyfluoroalkyl)-1,3,5-triketones, **7**, 1233

2,5,6,7,8-Pentasubstituted (*S*)- and (*R*)-[2-chroman-2-yl]ethanols as intermediates for the synthesis of  $\alpha$ -tocopherol and its chiral analogs, **11**, 2121

Protonation and acylation of the heterometallic complexes  $(\mu\text{-H})\text{Os}_3(\mu\text{-O}_2\text{CC}_5\text{H}_4\text{FeCp})(\text{CO})_{10}$  and  $\text{Fe}\{(\mu\text{-O}_2\text{CC}_5\text{H}_4)(\mu\text{-H})\text{Os}_3(\text{CO})_{10}\}_2$ , **12**, 2451

#### *N*-Acylimidazolidinone-carboxylates

First attempts at differential diastereoselection in catalytic reactions of *N*-chirally substituted dirhodium(II) tetrakis[methyl 2-oxoimidazolidine-4(*S*)-carboxylates] with diazoacetates, **11**, 2156

#### Acyl(imido)ketenes

Chemistry of acyl(imido)ketenes. 6. Synthesis and the molecular structure of ethyl 2-oxo-2,5-dihydrofuro[2,3-*b*]quinoxaline-3-carboxylate, **7**, 1317

#### Acyl-urokinase

Diffusional transport of urokinase and acyl-urokinase into fibrin and plasma clots: time of contact and fibrinolytic response *in vitro*, **10**, 1885

#### Adamantane derivatives

Adsorption of adamantanol isomers on graphitized thermal carbon black, **5**, 823

Gas chromatography of halogenated adamantanes, **5**, 828

#### Addition reactions

The rate constants for the addition of radicals  $\text{CCl}_3\text{CH}_2\cdot\text{CHR}$  ( $\text{R} = \text{Ph}, \text{CO}_2\text{Me}, \text{CONC}_4\text{H}_8$ ) to some unsaturated compounds, **3**, 557

Efficient method for the synthesis of new [2-(alkyl-arylthio)ethyl]pyridines, **3**, 563

*peri*-Naphthylenediamines. 32. Reactions of 4,5-bis(dimethylamino)-1-naphthyllithium and 4,5-bis(dimethylamino)-1-naphthylmagnesium bromide with electrophilic agents. New representatives of double naphthalene "proton sponges" with the structures of 1,1'-binaphthyl ketone and 1,1'-binaphthylmethanol, **5**, 854

Transformations of 1-amino-2-(3-hydroxyalk-1-ynyl)-9,10-anthraquinones in the presence of amines, **9**, 1663

Synthesis of  $\alpha$ -amino oximes and bis- $\alpha$ -amino oximes from the monoterpene hydrocarbons 3-carene and  $\alpha$ -pinene and  $\alpha,\omega$ -diamines, **11**, 2106

Reactivity of esters of 2-cyanoacrylic acid toward some free radicals, **12**, 2356

#### Additive—group approach

Thermodynamic properties and valence—power field of thiyl radicals, **12**, 2310

#### Adenosine-5'-diphosphate

Electron transfer coupled with ATP hydrolysis in nitrogenase (review), **10**, 1789

#### Adenosine-5'-triphosphate

Relationship between the structure of the protein globule and bioluminescence spectra of firefly luciferase (review), **10**, 1752

Electron transfer coupled with ATP hydrolysis in nitrogenase (review), **10**, 1789

#### Adipic acid derivatives

EPR study of weak exchange interactions in binuclear copper(II) complexes with salicylaldehyde acyldihydrazones, **5**, 812

#### $\alpha$ -Adrenolytic activity

Two-fragment  $\alpha$ -adrenolytics. 4. Synthesis of phosphorylated derivatives of 2-aryloxyethylamines and *N*-phenylpiperazine, **1**, 125

#### Adsorbents

Physicochemical features of the formation of siliceous porous mesophases. 4. Effect of duration and temperature of the hydrothermal treatment on the structural and textural properties, **2**, 175

Polytrimethylsilylpropyne as adsorbent for separation of gases, **2**, 233

Adsorption of carbon dioxide on microporous carbon adsorbent PAU-10, **4**, 591

The fundamentals of adsorption theory for a mixture of bulky molecules in slit-shaped pores with heterogeneous wall surfaces, **5**, 786

Simulation of adsorption dynamics in adsorbent layers of short length. Estimation of the concentration region of validity of Zeldovich's equality, **9**, 1578

#### Adsorption

Characteristic features of phase diagrams describing condensation of adsorbate in narrow pores, **1**, 50

Adsorption and adsorption-induced deformation of NaX zeolite under high pressures of carbon dioxide, **1**, 60

Adsorption of chlorobenzene and benzene on  $\gamma$ -Al<sub>2</sub>O<sub>3</sub>, **1**, 68

Physicochemical features of the formation of siliceous porous mesophases. 4. Effect of duration and temperature of the hydrothermal treatment on the structural and textural properties, **2**, 175

Thermodynamic parameters of adsorption described by the logarithmic Temkin isotherm, **2**, 217

Statistical modeling of equilibrium adsorption of non-ideal mixtures on zeolites, **2**, 220

Chromatographic study of adsorption from binary and ternary solutions, **2**, 228

Polytrimethylsilylpropyne as adsorbent for separation of gases, **2**, 233

Adsorption of carbon dioxide on microporous carbon adsorbent PAU-10, **4**, 591

The fundamentals of adsorption theory for a mixture of bulky molecules in slit-shaped pores with heterogeneous wall surfaces, **5**, 786

Adsorption of adamantanol isomers on graphitized thermal carbon black, **5**, 823

Gas chromatography of halogenated adamantanes, **5**, 828

Prediction of the micropore structure parameters and adsorption properties of activated carbons, **6**, 974

Experimental and molecular-statistical investigation of adsorption of aminoadamantanes on graphitized thermal carbon black, **6**, 980

Sorption of aliphatic ketones from aqueous solutions by starch cryotextures, **6**, 1032

Concentration relationships of coefficients of self-diffusion and viscosity of the adsorbate in narrow slit-like pores, **9**, 1572

Estimation of oxyhydroxide specific surface area using the amounts of OH groups adsorbed, **9**, 1582

On the mechanisms of phenol adsorption by carbons, **11**, 2060

Dubinin's theory and its contribution to adsorption science (review), **12**, 2265

#### Adsorption dynamics

Simulation of adsorption dynamics in adsorbent layers of short length. Estimation of the concentration region of validity of Zeldovich's equality, **9**, 1578

#### Adsorption heat

Adsorption of carbon dioxide on microporous carbon adsorbent PAU-10, **4**, 591

Adsorption of adamantanol isomers on graphitized thermal carbon black, **5**, 823

#### Adsorption isotherm

Characteristic features of phase diagrams describing condensation of adsorbate in narrow pores, **1**, 50

Chromatographic study of adsorption from binary and ternary solutions, **2**, 228

Concentration relationships of coefficients of self-diffusion and viscosity of the adsorbate in narrow slit-like pores, **9**, 1572

Simulation of adsorption dynamics in adsorbent layers of short length. Estimation of the concentration region of validity of Zeldovich's equality, **9**, 1578

On the mechanisms of phenol adsorption by carbons, **11**, 2060

#### Adsorption Temkin isotherm

Thermodynamic parameters of adsorption described by the logarithmic Temkin isotherm, **2**, 217

#### Adsorption-induced deformation

Adsorption and adsorption-induced deformation of NaX zeolite under high pressures of carbon dioxide, **1**, 60

#### Aglycons

Steroid compounds from the Pacific starfish *Lysastrosoma anthosticta*, **2**, 313

Sulfated steroid compounds from the starfish *Aphelasterias japonica* of the Kuril population, **4**, 724

#### Agonists

Chemical aspects of influence of medical drugs on organism functions (review), **8**, 1356

#### Agostic interaction

Synthesis and stereochemistry of diastereomeric *closo*-( $\pi,\sigma$ -dicyclopentenyl)rhodacarboranes with the agostic C—H...Rh bond, **3**, 504

**Alcohols**

Studies of photoinduced addition of water and alcohols to substituted dihydroquinolines, **4**, 673

Asymmetric reduction of ketones with sodium aluminum hydride modified with chiral amino alcohols, **5**, 843

Secondary metabolites of *Astragalus danicus* Retz. and *A. inopinatus* Boriss., **6**, 1107

**Alcoholysis**

Catalytic ring opening of acetylcyclopropane by water and alcohols under the action of copper or palladium salts, **7**, 1242

**Aldehydes**

Fluorescent-labeled derivatives of dolichyl phosphate. Analogs of dolichyl phosphate with the 2-aminopyridine residue at the  $\omega$ -end of the chain, **3**, 531

Stereoselective dimerization of chiral  $\alpha$ -bromoamides promoted by  $\text{Fe}(\text{CO})_5$ , **3**, 548

Conversion of aromatic aldehydes into 1-aryl-2,2-dichloroethenes, **6**, 1047

New method for the synthesis of  $\beta$ -bromostyrenes, **8**, 1401

Derivatives of dolichyl phosphate with fluorescent label. Analogs of dolichyl phosphate with different lengths of isoprene chain, containing the (1-naphthyl)amino group in the  $\omega$ -fragment, **11**, 2221

Vicarious nucleophilic substitution of hydrogen in aldehydes and Knoevenagel reaction of iminium salts with  $\alpha$ -halocarbanions, **11**, 2236

**Aldol cross condensation**

New potentialities of electrophilic addition in the assembly of polyfunctional compounds from simple precursors (review), **11**, 1949

**Aliphatic amines**

A new method for the synthesis of *N*-substituted (4-oxo-4,5,6,7-tetrahydroindol-3-yl)acetic acids, **7**, 1259

New *N*-nitrosoamines. 1. Synthesis and nitrosative cleavage of the Mannich bases derived from nitrogen-containing heterocycles and primary aliphatic amines, **9**, 1630

**Aliphatic ketones**

Sorption of aliphatic ketones from aqueous solutions by starch cryotextures, **6**, 1032

**Alkali metal compounds**

Asymmetric Michael reaction of diethyl malonate with crotonaldehyde catalyzed by chiral aminocarboxylates, amino alcoholates, and amino phenolates, **9**, 1620

**Alkaline recyclization**

Thioureas from 3-aminoquinazolin-4(3*H*)-one. 2. Unusual alkaline recyclization of 3-(*N'*,*N'*,*S*-trialkylisothio-ureido)quinazolin-4(3*H*)-ones into new 1,3,4-oxadiazoles, **2**, 272

**Alkanes**

Mechanisms of the reactions of propane with  $\text{CBr}_3^+$  cation and superelectrophilic complex  $\text{CBr}_4^+ \cdot \text{AlBr}_3^-$  containing a bromine-centered cationic center: a theoretical study, **1**, 29

A new route of the reaction of  $\text{EtAlCl}_2$  with  $\alpha$ -olefins catalyzed by Ti complexes, **2**, 292

Activation of C—H bonds in  $\text{C}_1$ — $\text{C}_3$  alkanes by titanium(IV) and zirconium(IV) cationic complexes: a DFT study, **3**, 376

A new type of capillary column for gas chromatography, **4**, 641

The role of metal-oxygen intermediates in biological and chemical monooxygenation of alkanes (review), **10**, 1795

DFT study of the mechanism of alkane hydrogenolysis by transition metal hydrides. 1. Interaction of silica-supported zirconium hydrides with methane, **11**, 2050

**Alkanethiols**

Regioselective replacement of nitro groups in 2,4,6-trinitrotoluene under the action of alkanethiols. Synthesis of *ortho*-(alkylthio)-substituted nitrotoluenes and their oxidation to sulfoxides and sulfones, **2**, 261

Thermodynamic properties and valence-force field of alkanethiols and dialkyl sulfides, **9**, 1563

**Alkan-1-ols**

Estimation of hydrogen bond energy in *n*-alkanols from the gas chromatography data, **6**, 1023

The use of a nonlinear equation for calculation of the retention indices of polar substances in gas chromatography with linear temperature programming, **6**, 1027

**Alkenes**

Thermal ene reactions of methyl 3,3,3-trifluoro-2-*R*-sulfonyliminopropionates. Synthesis of  $\gamma,\delta$ -unsaturated derivatives of  $\alpha$ -amino  $\alpha$ -trifluoromethylcarboxylic acids, **6**, 1041

Organometallic derivatives of 2,6-di-*tert*-butylphenols as specific inhibitors of methyl oleate oxidation, **6**, 1097

Catalytic *C*-phenylation of methyl acrylate with triphenylantimony(V) dicarboxylates, **7**, 1291

Synthesis and transformation of metallacycles. 25. On a mechanism of the  $\text{Ni}(\text{acac})_2$ -catalyzed conversion of 3-alkyl-1-ethylalumacyclopentanes into 1,1-disubstituted cyclopropanes, **8**, 1465

New potentialities of electrophilic addition in the assembly of polyfunctional compounds from simple precursors (review), **11**, 1949

Synthesis of  $\alpha$ -amino oximes and bis- $\alpha$ -amino oximes from the monoterpene hydrocarbons 3-carene and  $\alpha$ -pinene and  $\alpha,\omega$ -diamines, **11**, 2106

**Alkenolides**

Synthesis of nine-, ten-, and fifteen-membered alkenolides by the oxidative cleavage of the bridging C=C bond in 2-oxabicycloalkenes, **11**, 2149

**Alkenylanilines**

Cyclization of *ortho*-(alk-2-enyl)anilines under the action of iodine, **3**, 456

Amidines: synthesis from *o*-alkenylanilines and cyclization in polyphosphoric acid, **3**, 545

A facile method for the synthesis of 3,1-benzooxazines from *N*-acyl-2-(alk-2-enyl)anilines, **4**, 659

Synthesis of 2'-bromo-8-methylspiro(4*H*-3,1-benzooxazine-4,1'-cyclopentan)-2(1*H*)-one and 2-amino-2'-bromo-8-methylspiro(4*H*-3,1-benzooxazine-4,1'-cyclopentane) from 6-(cyclopent-1-enyl)-2-methylaniline, **12**, 2466

**Alkoxides**

New chlorinated cyclopentenones prepared from hexachlorocyclopentadiene: synthesis, chemical properties, and application in the synthesis (review), **9**, 1489

**Alkyl halides**

Thioureas from 3-aminoquinazolin-4(3*H*)-one. 2. Unusual alkaline recyclization of 3-(*N'*,*N'*,*S*-trialkylisothio-ureido)quinazolin-4(3*H*)-ones into new 1,3,4-oxadiazoles, **2**, 272

Synthetic approaches to trialkyl(ferrocenylmethyl)ammonium salts as cationic templates for the preparation of ferromagnets on the basis of bimetal oxalates, **3**, 497

**Alkylacetylenes**

Oxidation of alkylphenylacetylenes and dialkylacetylenes on palladium catalysts in DMSO, **4**, 649

**1-Alkyl-2-(alkylthio)pyrroles**

Mass spectra of new groups of functionalized heterocycles. 4. 1-Alkyl-2-(alkylthio)pyrroles, **12**, 2390

**Alkylamines**

Reactions of 3-substituted 1-aryl-5,6,7,8-tetrafluoroquinolones(cinnolones) with morpholine, **12**, 2416

**Alkylarenesulfonyl chlorides**

Efficient method for the synthesis of new [2-(alkyl-arylthio)ethyl]pyridines, **3**, 563

**[2-(Alkylarylthio)ethyl]pyridines**

Efficient method for the synthesis of new [2-(alkyl-arylthio)ethyl]pyridines, **3**, 563

**Alkylation**

Investigation of the regioselectivity of alkylation of 3-nitropyridin-2(1*H*)-ones, **3**, 460

*peri*-Naphthylenediamines. 31. Study of interconversions of 2,3-dihydroperimidines and 1,8-bis(dialkylamino)naphthalenes. Convenient synthesis of 1,2,2,3-tetramethyl-2,3-dihydroperimidine and a monoisopropyl analog of the "proton sponge", **5**, 846

Synthesis of a C(9)—C(13) fragment of acutiphycin from levoglucosan, **6**, 1101

Membrane extraction of organic compounds. 3. A new receptor fragment for carboxylate groups based of the calix[4]arene platform, **11**, 2134

Reactions of 1,3-dibromopropyne with 1-aryl-2,2-dimethylhydrazines as a new method for the synthesis of substituted 1,3,4-oxadiazinium bromides, **12**, 2475

**Alkylchlorosulfonation**

Efficient method for the synthesis of new [2-(alkyl-arylthio)ethyl]pyridines, **3**, 563

**Alkylmagnesium chloride**

Activation by the Grignard reagent of the bis(2-phenylindenyl)zirconium dichloride—triisobutylaluminum catalytic system for propene polymerization, **9**, 1696

**Alkylphenylacetylenes**

Oxidation of alkylphenylacetylenes and dialkylacetylenes on palladium catalysts in DMSO, **4**, 649

**Alkylphosphonic acids**

Chemical modification of alumina and silica with alkylphosphonic acids and their esters, **9**, 1693

**Alkylseleno-1,6-naphthyridines**

Synthetic potential of substituted 7-alkylseleno-1,4-dihydro-1,6-naphthyridines, **1**, 122

**2-Alkylsulfonyliminohexahydro-1,3,5-triazines**

5-Substituted 2-alkyl- and 2-arylsulfonyliminohexahydro-1,3,5-triazines, **3**, 480

**Alkylthiochloroacetylenes**

Reaction of alkylthiochloroacetylenes with sodium azide, **4**, 751

**Alkylthiyl radicals**

Thermodynamic properties and valence—power field of thiyl radicals, **12**, 2310

**Alkynes**

Specific features of the chemical behavior of acetylenic derivatives of benzocrown ethers, **5**, 868

Unusual oxidative cleavage of the aryl—ethynyl bonds in (arylethynyl)polymethylbenzenes with iodine in dimethyl sulfoxide, **6**, 1051

One-step cyclopropanation of alkynes with diiodomethane and triethylaluminum, **8**, 1406

Metal-induced B—H activation in Cp\*Rh, Cp\*Ir, (*p*-cymene)Ru, and (*p*-cymene)Os half-sandwich complexes containing the 1,2-dicarba-*closo*-dodecaborane(12)-1,2-dichalcogenolato ligand (review), **9**, 1518

New potentialities of electrophilic addition in the assembly of polyfunctional compounds from simple precursors (review), **11**, 1949

Cross-coupling of *E,E*-1,4-diiodobuta-1,3-diene with nucleophiles catalyzed by Pd or Ni complexes: a new route to functionalized dienes, **11**, 2095

**Allenes**

Synthesis and transformations of metallacycles. 26. Cp<sub>2</sub>ZrCl<sub>2</sub>-Catalyzed cycloaluminum of substituted allenes with Et<sub>3</sub>Al, **11**, 2188

**Allobetulin**

Synthesis of quinoxalines fused with triterpenes, ursolic acid and betulin derivatives, **2**, 304

**Allyl carbonates**

Derivatives of phosphorous acid as a new class of ligands for Pd-catalyzed allylation, **3**, 554

**Allyl halides**

Synthesis and transformation of metallacycles. 25. On a mechanism of the Ni(acac)<sub>2</sub>-catalyzed conversion of 3-alkyl-1-ethylalumacyclopentanes into 1,1-disubstituted cyclopropanes, **8**, 1465

**Allylation**

Derivatives of phosphorous acid as a new class of ligands for Pd-catalyzed allylation, **3**, 554

**Allylboranes**

Reductive mono- and diallylation of the bis(pyridine)dihydropyridyllithium dimer by triallylborane, **6**, 1078

Allylmetallation of benzoazaheterocycles with allylic derivatives of zinc. Synthesis of 1,4-ethano-2,3-dihydroisoquinolines and allylated heterocycles, **11**, 2172

**Allylboration**

Reductive mono- and diallylation of the bis(pyridine)dihydropyridyllithium dimer by triallylborane, **6**, 1078

**Allylmetallation**

Allylmetallation of benzoazaheterocycles with allylic derivatives of zinc. Synthesis of 1,4-ethano-2,3-dihydroisoquinolines and allylated heterocycles, **11**, 2172

**2-Allyl-1,2,3,6-tetrahydropyridine**

Reductive mono- and diallylation of the bis(pyridine)dihydropyridyllithium dimer by triallylborane, **6**, 1078

**Allylzinc halides**

Allylmetallation of benzoazaheterocycles with allylic derivatives of zinc. Synthesis of 1,4-ethano-2,3-dihydroisoquinolines and allylated heterocycles, **11**, 2172

**Alumacyclopentanes**

Synthesis and transformation of metallacycles. 25. On a mechanism of the Ni(acac)<sub>2</sub>-catalyzed conversion of 3-alkyl-1-ethylalumacyclopentanes into 1,1-disubstituted cyclopropanes, **8**, 1465

Synthesis and transformations of metallacycles. 26. Cp<sub>2</sub>ZrCl<sub>2</sub>-Catalyzed cycloaluminum of substituted allenes with Et<sub>3</sub>Al, **11**, 2188

**Alumacyclopentenes**

Synthesis and transformations of metallacycles. 24. Zr-Catalyzed cycloaluminum of asymmetrical disubstituted acetylenes, **3**, 484

**Alumina**

Adsorption of chlorobenzene and benzene on  $\gamma$ -Al<sub>2</sub>O<sub>3</sub>, **1**, 68

Reactions of 9,10-phenanthrenequinone and its nitro derivatives with acetone in the presence of Al<sub>2</sub>O<sub>3</sub>, **9**, 1625

Chemical modification of alumina and silica with alkylphosphonic acids and their esters, **9**, 1693

**Aluminosilicates**

Synthesis of  $\alpha$ -tocopherol analogs with unsaturated side chain and their transformation into the corresponding chromans with  $\omega$ -functionalized side chain, **11**, 2227

**Aluminum bromide**

Mechanisms of the reactions of propane with CBr<sub>3</sub><sup>+</sup> cation and superelectrophilic complex CBr<sub>4</sub><sup>+</sup> · AlBr<sub>3</sub><sup>-</sup> containing a bromine-centered cationic center: a theoretical study, **1**, 29

Study of complex formation between aluminum bromide and benzene by <sup>27</sup>Al NMR spectroscopy, **1**, 73

The influence of small additives of arenes on low-temperature isobutylene polymerization in an aliphatic solvent, **4**, 631

Functionalization of alkanes and cycloalkanes by super-electrophiles. 15. Carbonylation of cycloheptane, cyclo-octane, and isomeric monoalkylcyclohexanes with CO in the presence of CBr<sub>4</sub> · 2AlBr<sub>3</sub> to form individual esters of tertiary carboxylic acids of the cyclohexane series, **12**, 2394

**Aluminum compounds**

Oxidative transformations of cyclohexane, methylcyclopentane, and pentane on treatment with superelectrophiles based on polyhalomethane and aluminum halides, **1**, 81

Cryosynthesis, structure, and IR spectra of aluminum chloride—nitromethane molecular complexes, **7**, 1159

Heterometallic zirconocene(III) aluminum hydride complex (Cp<sub>2</sub>ZrH)<sub>2</sub>HAICl<sub>2</sub> · C<sub>4</sub>H<sub>8</sub>O<sub>2</sub> · C<sub>6</sub>H<sub>6</sub>, **11**, 2200

**Ames test**

Synthesis and study of the mutagenic activity of di(indeno[2,1-*b*]indolyl)- and di(indeno[2,1-*b*]pyrrolyl)methanes and -dimethylsilanes, **8**, 1439

**Amide-imide tautomerism**

Reactions of 1,3-dibromopropyne with 1-aroyle-2,2-dimethylhydrazines as a new method for the synthesis of substituted 1,3,4-oxadiazinium bromides, **12**, 2475

**Amides**

*N*-Substituted tetrahydro-1,3-oxazines and oxazolidines. 1. A new version of the Mannich reaction involving amino alcohols, **1**, 104

Solvation of amides of carboxylic acids in aqueous solutions of ethylene glycol, **5**, 780

Spirocyclohexadienones. 4. Synthesis and dienone-phenolic rearrangement of 1-*R*-3,3-dialkyl-2-azaspiro[4.5]deca-1,6,9-trien-8-ones, **9**, 1648

Coordination chemistry of macrocyclic multidentate Lewis acids. Synthesis and structures of complexes of cyclic trimeric perfluoro-*o*-phenylenemercury with *N,N*-dimethylacetamide and *n*-butyronitrile, **9**, 1673

**Amidines**

Amidines: synthesis from *o*-alkenylanilines and cyclization in polyphosphoric acid, **3**, 545

Polydentate coordination of the thallium atom in complexes with chiral amidinylcyclopentadienyl ligands, **5**, 890

**Amidophosphites**

Derivatives of phosphorous acid as a new class of ligands for Pd-catalyzed allylation, **3**, 554

**Amines**

First ionization potentials of amines and electronic effects in their radical cations, **1**, 43

Cetylpyridinium bromide-based oil-in-water microemulsions as a medium for hydrolysis of esters of phosphorus acids in the presence of primary amines, **2**, 245

5-Substituted 2-alkyl- and 2-arylsulfonyliminohexahydro-1,3,5-triazines, **3**, 480

A new method for the synthesis of CF<sub>3</sub>-containing aminovinyl ketones, **8**, 1395

Transformations of 1-amino-2-(3-hydroxyalk-1-ynyl)-9,10-anthraquinones in the presence of amines, **9**, 1663

Organophosphate hydrolase — an enzyme catalyzing degradation of phosphorus-containing toxins and pesticides (review), **10**, 1826

Influence of *o*-benzoquinone nature on initiation of radical polymerization by the *o*-benzoquinone—*tert*-amine system, **12**, 2366

Nitro group substitution in 2,4,6-trinitrotoluene under the action of arenethiols and transformations of the reaction products, **12**, 2406

Reactions of cyclic enamino ketones with benzylidene-malononitriles. Synthesis of new fused heterocyclic systems containing the 1,4-dihydropyridine fragment, **12**, 2428

**Amino acids**

Synthesis and physiological activity of trialkyl phosphorothioates and trialkyl phosphorodithioates containing fragments of *N*-acylated amino acids, **1**, 147

Asymmetric synthesis of (*S*)- and (*R*)- $\alpha$ -methylserine based on the chiral recyclable reagent (*S*)-*N*-(2-benzoylphenyl)-1-benzylpyrrolidine-2-carboxamide, **6**, 1037

Thermal ene reactions of methyl 3,3,3-trifluoro-2-*R*-sulfonyliminopropionates. Synthesis of  $\gamma,\delta$ -unsaturated derivatives of  $\alpha$ -amino  $\alpha$ -trifluoromethylcarboxylic acids, **6**, 1041

Enzyme active sites: bioinformatics, architecture, and mechanisms of action (review), **10**, 1709

Relationship between the structure of the protein globule and bioluminescence spectra of firefly luciferase (review), **10**, 1752

Membrane extraction of organic compounds. 3. A new receptor fragment for carboxylate groups based of the calix[4]arene platform, **11**, 2134

**Amino alcohols**

*N*-Substituted tetrahydro-1,3-oxazines and oxazolidines. 1. A new version of the Mannich reaction involving amino alcohols, **1**, 104

Asymmetric reduction of ketones with sodium aluminum hydride modified with chiral amino alcohols, **5**, 843

 **$\alpha$ -Amino oximes**

Synthesis of  $\alpha$ -amino oximes and bis- $\alpha$ -amino oximes from the monoterpene hydrocarbons 3-carene and  $\alpha$ -pinene and  $\alpha,\omega$ -diamines, **11**, 2106

**Amino sugars**

A novel synthesis of *N*-acetyl- $\alpha$ -D-fucosamine 1-phosphate and uridine 5'-diphospho-*N*-acetyl- $\alpha$ -D-fucosamine, **7**, 1303

**Aminoadamantanes**

Experimental and molecular-statistical investigation of adsorption of aminoadamantanes on graphitized thermal carbon black, **6**, 980

**$\omega$ -Aminoalkylidenediphosphonic acids**

Amino-substituted *gem*-diphosphonic acids: structures of complexes with divalent metal cations in aqueous solutions, **4**, 697

**1-Amino-3-aryloxypropan-2-ols**

New approach to nonracemic 1-alkylamino-3-aryloxypropan-2-ols belonging to  $\beta$ -blockers *via* cyclic sulfites, **3**, 436

***o*-Aminobenzenethiol**

Nucleophilic ring-opening of the azole and azine moieties in 6-nitro-1,2,4-triazolo[1,5-*a*]pyrimidin-7-ones, **4**, 682

Reactions of 1-aryl(alkyl)-3-ethoxalyl-5,6,7,8-tetrafluoro-1,4-dihydrocinnolin(quinolin)-4-ones with aromatic dinucleophiles, **4**, 689

**Amino-containing solvents**

Spectral study of reactions of La@C<sub>82</sub> and Y@C<sub>82</sub> with amino-containing solvents, **11**, 2242

**6-Amino-1,3-dimethyluracil**

Reaction of 6-amino-1,3-dimethyluracil with hexafluoroacetone and ethyl trifluoropyruvate benzoylimines, **6**, 1113

**2-Aminoethanol**

2-Polyfluoroalkylchromones. 7. Reactions of 6-substituted 2-tetra- and 2-pentafluoroethylchromones with 2-aminoethanol, **7**, 1314

**2-(1-Aminoethyl)bicyclo[2.2.1]heptane**

NMR study of diastereoisomerism of 2-(1-aminoethyl)bicyclo[2.2.1]heptane and its hydrochloride (deitofirin), **6**, 1014

**1-Amino-2-(3-hydroxyalk-1-ynyl)-9,10-anthraquinones**

Transformations of 1-amino-2-(3-hydroxyalk-1-ynyl)-9,10-anthraquinones in the presence of amines, **9**, 1663

**1-Amino-3-hydroxypropylphosphinic and -phosphonic acids**

Synthesis of phosphinic and phosphonic analogs of homoserine, **2**, 316

**Aminoiminomethanesulfinic acid**

Tautomerization of thiourea dioxide in aqueous solution, **2**, 203

**Aminomethylation**

*N*-Substituted tetrahydro-1,3-oxazines and oxazolidines. 1. A new version of the Mannich reaction involving amino alcohols, **1**, 104

New *N*-nitrosoamines. 1. Synthesis and nitrosative cleavage of the Mannich bases derived from nitrogen-containing heterocycles and primary aliphatic amines, **9**, 1630

**1-Aminonaphthalene**

Derivatives of dolichyl phosphate with fluorescent label. Analogs of dolichyl phosphate with different lengths of isoprene chain, containing the (1-naphthyl)amino group in the  $\omega$ -fragment, **11**, 2221

***o*-Aminophenols**

Nucleophilic ring-opening of the azole and azine moieties in 6-nitro-1,2,4-triazolo[1,5-*a*]pyrimidin-7-ones, **4**, 682

Reactions of 1-aryl(alkyl)-3-ethoxalyl-5,6,7,8-tetrafluoro-1,4-dihydrocinnolin(quinolin)-4-ones with aromatic dinucleophiles, **4**, 689

Structures of condensation products of *ortho*-aminophenols with ninhydrin, **6**, 1064

**5-(2-Aminophenyl)-2-dialkylamino-1,3,4-oxadiazoles**

Thioureas from 3-aminoquinazolin-4(3*H*)-one. 2. Unusual alkaline recyclization of 3-(*N'*,*N'*,*S*-trialkylisothio-ureido)quinazolin-4(3*H*)-ones into new 1,3,4-oxadiazoles, **2**, 272

**2-Amino-6-phenylpyrazines**

<sup>S</sup><sub>N</sub><sup>H</sup>-Reactions of 1,2,4-triazine *N*-oxides, pyrazine *N*-oxides, and perin *N*-oxides with arenethiols, **6**, 1068

**Aminophosphites**

Derivatives of phosphorous acid as a new class of ligands for Pd-catalyzed allylation, **3**, 554

 **$\beta$ -Amino- $\beta$ -trifluoromethyl vinyl ketones**

2-Polyfluoroalkylchromones. 8. 2-Trifluoromethyl- and 6-nitro-2-trifluoromethylchromones in reactions with amines, **8**, 1426

 **$\beta$ -Aminovinyl ketones**

Synthesis and liquid-crystalline properties of substituted  $\beta$ -aminovinyl ketones and their complexes with copper(II), **5**, 805

**Ammonia**

2-Polyfluoroalkylchromones. 7. Reactions of 6-substituted 2-tetra- and 2-pentafluoroethylchromones with 2-aminoethanol, **7**, 1314

**Ammonium bases**

Addition of bromine to 2-methyl-2-azabicyclo[2.2.1]hept-5-ene, **5**, 917

**Ammonolysis**

Reaction of 3*H*-perfluoroalk-2-enes with ammonia, **1**, 155

**Amnoximation**

Single step, solvent-free processes: examples and prospects (review), **11**, 2010

**2-Anilino-6-chloro-4-methoxy-1,3,5-triazine**

NMR studies of the dynamic behavior of 2-anilino-6-chloro-4-methoxy-1,3,5-triazine in solution, **12**, 2473

**Anionic nucleophiles**

Chemistry of 2,4,6-trinitrobenzotrile. 1. Substitution of nitro groups in 2,4,6-trinitrobenzotrile under the action of anionic nucleophiles. Factors facilitating the replacement of the *ortho*-nitro group, **12**, 2401

**Anomerization**

A novel synthesis of *N*-acetyl- $\alpha$ -D-fucosamine 1-phosphate and uridine 5'-diphospho-*N*-acetyl- $\alpha$ -D-fucosamine, **7**, 1303

**Anthracene derivatives**

Cation-dependent pericyclic reactions of crown-containing photochromic compounds (review), **11**, 1970

**Anthranilic acid**

X-ray diffraction analysis and luminescence spectral study of crystal solvates of *N*-(*N'*-tosylanthranoyl)anthranilic acid with acetic acid and dimethylformamide, **4**, 728

**Antiferromagnetism**

Binuclear and polynuclear transition metal complexes with macrocyclic ligands. 1. Synthesis and the structure of an antiferromagnetic binuclear nickel complex prepared by the reaction of *o*-phenylenediamine with pyrrole-2,5-dicarb-aldehyde and nickel pivalate, **12**, 2445

**Antifolate drugs**

Dihydrofolate reductase: structural aspects of mechanisms of enzyme catalysis and inhibition (review), **10**, 1733

**Antimony compounds**

Catalytic *C*-phenylation of methyl acrylate with triphenyl-antimony(v) dicarboxylates, **7**, 1291

**Antioxidants**

Organometallic derivatives of 2,6-di-*tert*-butylphenols as specific inhibitors of methyl oleate oxidation, **6**, 1097

**Apigenin**

Secondary metabolites of *Astragalus danicus* Retz. and *A. inopinatus* Boriss., **6**, 1107

**Aqua complexes**

Synthesis and the crystal structure of a supramolecular adduct of the  $[\text{Mo}_3\text{O}_4(\text{H}_2\text{O})_6\text{Cl}_3]^+$  cluster complex with macrocyclic cavitand cucurbituril, **3**, 494

**Aqueous solutions**

Tautomerization of thiourea dioxide in aqueous solution, **2**, 203

Amino-substituted *gem*-diphosphonic acids: structures of complexes with divalent metal cations in aqueous solutions, **4**, 697

Structural parameters of concentrated aqueous solutions of LiCl under extreme conditions, as calculated by the method of integral equations. Effect of temperature, **6**, 935

Sorption of aliphatic ketones from aqueous solutions by starch cryotextures, **6**, 1032

The reactivity of phosphonic esters in aqueous micellar solutions of cationic surfactants, **7**, 1181

Electrochemical analysis of the coordination sphere of ruthenium(II) as electron transfer mediator in glucose oxidase catalysis in aqueous solutions, **10**, 1849

**Arenes**

The influence of small additives of arenes on low-temperature isobutylene polymerization in an aliphatic solvent, **4**, 631

Regioselectivity in the reactions of the acetate ion with electron-deficient arenes, **6**, 1056

Reactions of some arenes and pyrazoles in MeCN under conditions of undivided-cell electrolysis, **7**, 1274

**Arenethiols**

Nitro group substitution in 2,4,6-trinitrotoluene under the action of arenethiols and transformations of the reaction products, **12**, 2406

**Argon**

Statistical modeling of equilibrium adsorption of non-ideal mixtures on zeolites, **2**, 220

Reactions of photogenerated fluorine atoms with molecules trapped in solid argon. 4. Spectroscopic characteristics of  $\beta\text{-C}_2\text{H}_2\text{F}^\cdot$  radicals generated in reactions of mobile F atoms with  $\text{C}_2\text{H}_2$  molecules trapped in solid argon, **6**, 989

Concentration relationships of coefficients of self-diffusion and viscosity of the adsorbate in narrow slit-like pores, **9**, 1572

**Aromatic aldehydes**

Synthesis of 1-aryl-1,2,3,4-tetrahydro-9*H*-pyrido[3,4-*b*]indoles (1,2,3,4-tetrahydro- $\beta$ -carbolines) under high pressures, **3**, 560

**Aromatic amines**

A new method for the synthesis of *N*-substituted (4-oxo-4,5,6,7-tetrahydroindol-3-yl)acetic acids, **7**, 1259

Reduction of nitrosoarene ligands in binuclear palladium(II) complexes, **9**, 1689

**Aromatic compounds**

Reactions of 1,3,3,3-tetrafluoro-2-methoxycarbonylpropenylsulfenyl chloride with aromatic and heterocyclic compounds, **7**, 1255

2,4,6,8-Tetraiodo-2,4,6,8-tetraazabicyclo[3.3.0]octane-3,7-dione as a mild and convenient reagent for iodination of aromatic compounds, **12**, 2411

**Aromatic hydrocarbons**

Relationship between reduction potentials and electron affinities of fullerenes and their derivatives, **9**, 1593

**Aromatic thiols**

Efficient method for the synthesis of new [2-(alkyl-arylthio)ethyl]pyridines, **3**, 563

**Aromaticity**

Intramolecular  $\text{Y}\leftarrow\text{O}$  ( $\text{Y} = \text{N}, \text{P}, \text{As}, \text{Sb}, \text{Bi}$ ) coordination in organopnictogen compounds: an *ab initio* and DFT study, **11**, 2028

Induced aromaticity, **12**, 2325

**1-Aroyl-2,2-dimethylhydrazines**

Reactions of 1,3-dibromopropyne with 1-aryl-2,2-dimethylhydrazines as a new method for the synthesis of substituted 1,3,4-oxadiazinium bromides, **12**, 2475

 **$\sigma$ -Aryl metal complexes**

2,6-Di-*tert*-butylphenols and phenoxy radicals with metal-metal bonds, **4**, 716

**Arylation**

Reactions of some arenes and pyrazoles in MeCN under conditions of undivided-cell electrolysis, **7**, 1274

**Aryldichlorocarbenium ions**

Electrophilic aromatic trichloromethylation: intermediates and products, **11**, 2046

**1-Aryl-2,2-dichloroethenes**

Conversion of aromatic aldehydes into 1-aryl-2,2-dichloroethenes, **6**, 1047

**Arylhydrazides**

Photochromism of single crystals of arylhydrazide derivatives, **12**, 2471

**2-Aryloxyethylamines**

Two-fragment  $\alpha$ -adrenolytics. 4. Synthesis of phosphorylated derivatives of 2-aryloxyethylamines and *N*-phenylpiperazine, **1**, 125

**3-(2-Aryloxyethylamino)propylphosphonates and -phosphinates**

Two-fragment  $\alpha$ -adrenolytics. 4. Synthesis of phosphorylated derivatives of 2-aryloxyethylamines and *N*-phenylpiperazine, **1**, 125

**2-Arylsulfonyliminohexahydro-1,3,5-triazines**

5-Substituted 2-alkyl- and 2-arylsulfonyliminohexahydro-1,3,5-triazines, **3**, 480

**1-Arylthio-2-azidoanthraquinones**

Synthesis of 5*H*-naphtho[2,3-*c*]phenothiazine-8,13-diones from 1-arylthio-2-azidoanthraquinones, **4**, 678

**5-Arylthio-1,2,4-triazines**

$\text{S}_\text{N}^\text{H}$ -Reactions of 1,2,4-triazine *N*-oxides, pyrazine *N*-oxides, and perin *N*-oxides with arenethiols, **6**, 1068

***N*-Aryl-2-(2,2-trifluoro-1-methoxycarbonyl)ethylidene)-2,3-dihydrothiazoles**

Reactions of 1,3,3,3-tetrafluoro-2-methoxycarbonylpropenylsulfenyl chloride with enamines, **9**, 1645

**L-Ascorbic acid**

Study of the transformations of 2-*C*-(indol-3-yl)methyl- $\alpha$ -L-xylo-hex-3-ulofuranosonic acid (the open form of ascorbigen) in an acidic medium, **7**, 1309

**Ascorbigen**

Study of the transformations of 2-*C*-(indol-3-yl)methyl- $\alpha$ -L-xylo-hex-3-ulofuranosonic acid (the open form of ascorbigen) in an acidic medium, **7**, 1309

**Aspargine**

First attempts at differential diastereoselection in catalytic reactions of *N*-chirally substituted dirhodium(II) tetrakis[methyl 2-oxoimidazolidine-4(*S*)-carboxylates] with diazoacetates, **11**, 2156

**Aspartic acid**

Enzyme active sites: bioinformatics, architecture, and mechanisms of action (review), **10**, 1709



**Asterosaponin aglycons**

Sulfated steroid compounds from the starfish *Aphelasterias japonica* of the Kuril population, **4**, 724

**Asymmetric induction**

Stereospecific formation of polycyclic ferrocenyldihydropyrazoles based on *Z*- and *E*-isomeric ferrocenyl-substituted  $\alpha,\beta$ -unsaturated ketones of the heterocyclic series, **5**, 895

**Asymmetric reduction**

Asymmetric reduction of ketones with sodium aluminum hydride modified with chiral amino alcohols, **5**, 843

**Asymmetric synthesis**

Asymmetric synthesis of (*S*)- and (*R*)- $\alpha$ -methylserine based on the chiral recyclable reagent (*S*)-*N*-(2-benzoylphenyl)-1-benzylpyrrolidine-2-carboxamide, **6**, 1037

Stereochemistry of optically active compounds. Problems and prospects (review), **8**, 1339

**Atom-atom potentials**

Gas chromatography of halogenated adamantanes, **5**, 828

Experimental and molecular-statistical investigation of adsorption of aminoadamantanes on graphitized thermal carbon black, **6**, 980

**Azabicycloheptenes**

Addition of bromine to 2-methyl-2-azabicyclo[2.2.1]hept-5-ene, **5**, 917

**Azahomo[60]fullerenes**

Study of the factors determining the outcome of cycloaddition of isocyanurato-substituted azides to [60]fullerene, **11**, 2162

**Azamacrocyclic complexes**

Electrochemical activation of freons using electron transfer mediators (review), **11**, 1929

**Azelaic acid**

EPR study of weak exchange interactions in binuclear copper(II) complexes with salicylaldehyde acyldihydrazones, **5**, 812

**Azides**

Reaction of alkylthiochloroacetylenes with sodium azide, **4**, 751

Synthesis and properties of monoimines of  $\alpha$ -diketones, derivatives of 3-imidazoline nitroxides, **5**, 874

Quantum-chemical study of the singlet potential energy surface of the nitrene—dioxygen system, **12**, 2346

**Azidoalkylisocyanurates**

The synthesis of *N*-isocyanurato-substituted aziridino[1,2][60]fullerenes, **3**, 445

Study of the factors determining the outcome of cycloaddition of isocyanurato-substituted azides to [60]fullerene, **11**, 2162

**Aziridines**

Addition of bromine to 2-methyl-2-azabicyclo[2.2.1]hept-5-ene, **5**, 917

**Azo dyes**

New aromatic azo compounds: syntheses and liquid-crystalline properties, **7**, 1248

Environmental biotechnology: a tandem of biocatalytic and engineering approaches (review), **10**, 1818

**Azoles**

Photochromic dihetarylethenes. 7. Synthesis of bis(thienylazoles), photochromic analogs of diarylethenes, **1**, 116

Reactions of some arenes and pyrazoles in MeCN under conditions of undivided-cell electrolysis, **7**, 1274

**Azoniatricycloheptanes**

Addition of bromine to 2-methyl-2-azabicyclo[2.2.1]hept-5-ene, **5**, 917

**B****Bacillomycins**

Cyclic lipopeptides with fungicidal activity from the sea isolate of the bacterium *Bacillus subtilis*, **11**, 2231

**Baeyer—Villiger reaction**

Single step, solvent-free processes: examples and prospects (review), **11**, 2010

**Barbituric acid**

$S_N^H$ -Reactions of triazolo[4,3-*b*]- and tetrazolo[1,5-*b*]-1,2,4-triazines with methylene-active carbonyl compounds, **11**, 2183

**Basicity**

*peri*-Naphthylenediamines. 32. Reactions of 4,5-bis(dimethylamino)-1-naphthyllithium and 4,5-bis(dimethylamino)-1-naphthylmagnesium bromide with electrophilic agents. New representatives of double naphthalene "proton sponges" with the structures of 1,1'-binaphthyl ketone and 1,1'-binaphthylmethanol, **5**, 854

A study of complexation of chloral hydrate with heteropoly anions having various structures, **9**, 1529

**Benzaldehyde**

Unexpectedly high stability of benzaldehyde in the presence of Pd-561 giant cluster, **5**, 921

**Benzene**

Adsorption of chlorobenzene and benzene on  $\gamma$ -Al<sub>2</sub>O<sub>3</sub>, **1**, 68

Study of complex formation between aluminum bromide and benzene by <sup>27</sup>Al NMR spectroscopy, **1**, 73

Adsorption of vapor mixtures of water and organic substance on activated carbons, **4**, 595

The fundamentals of adsorption theory for a mixture of bulky molecules in slit-shaped pores with heterogeneous wall surfaces, **5**, 786

Prediction of the micropore structure parameters and adsorption properties of activated carbons, **6**, 974

Dubinin's theory and its contribution to adsorption science (review), **12**, 2265

**Benzene derivatives**

Chromatographic study of adsorption from binary and ternary solutions, **2**, 228

**Benzenetricarbonylchromium**

Reactivity of benzenetricarbonylchromium derivatives under conditions of dissociative ionization in the gas phase, **6**, 970

**Benzocrown ethers**

Specific features of the chemical behavior of acetylenic derivatives of benzocrown ethers, **5**, 868

**1,3,2,4-Benzodithiadiazine**

Intermediates of photolysis of 1,3,2,4-benzodithiadiazines studied by matrix isolation spectroscopy and quantum chemistry, **11**, 2064

**1,2,3-Benzodithiazolyl radical**

Intermediates of photolysis of 1,3,2,4-benzodithiadiazines studied by matrix isolation spectroscopy and quantum chemistry, **11**, 2064

**1,2,3-Benzodithiazol-2-yl nitrene**

Intermediates of photolysis of 1,3,2,4-benzodithiadiazines studied by matrix isolation spectroscopy and quantum chemistry, **11**, 2064

**Benzofurans**

Benzylfuran in the synthesis of benzo-annelated heterocycles (review), **9**, 1510

**Benzoisoxazoles**

Synthesis of 4,6-dinitro-3-*R*-benzo[*d*]isoxazoles and their transformations under the action of nucleophiles, **3**, 464

**Benzonaphthopyrans**

Cation-dependent pericyclic reactions of crown-containing photochromic compounds (review), **11**, 1970

**Benzooxaphosphorinines**

Reaction of 4,6-bis(*tert*-butyl)-2,2,2-trichlorobenzo[*d*]-1,3,2-dioxaphosphole with phenylacetylene. *ipso*-Substitution of the *tert*-butyl group, **4**, 693

Regiochemistry of the reactions of phenylenedioxytrichlorophosphorane with phenylacetylene and propargyl chloride in the presence of benzyltrimethylammonium chloride, **4**, 745

**Benzooxazines**

A facile method for the synthesis of 3,1-benzoaxazines from *N*-acyl-2-(alk-2-enyl)anilines, **4**, 659

Structures of condensation products of *ortho*-aminophenols with ninhydrin, **6**, 1064

Synthesis of 2'-bromo-8-methylspiro(4*H*-3,1-benzoaxazine-4,1'-cyclopentan)-2(1*H*)-one and 2-amino-2'-bromo-8-methylspiro(4*H*-3,1-benzoaxazine-4,1'-cyclopentane) from 6-(cyclopent-1-enyl)-2-methylaniline, **12**, 2466

**Benzooxazinones**

Nucleophilic ring-opening of the azole and azine moieties in 6-nitro-1,2,4-triazolo[1,5-*a*]pyrimidin-7-ones, **4**, 682

Reactions of 1-aryl(alkyl)-3-ethoxalyl-5,6,7,8-tetrafluoro-1,4-dihydrocinnolin(quinolin)-4-ones with aromatic dinucleophiles, **4**, 689

***o*-Benzoquinones**

Influence of *o*-benzoquinone nature on initiation of radical polymerization by the *o*-benzoquinone-*tert*-amine system, **12**, 2366

***o*-Benzosemiquinone**

Bis(1,4-di-*tert*-butyl-1,4-diazabutadiene)copper(i) [(3,6-di-*tert*-butyl-*o*-benzosemiquinono)(3,6-di-*tert*-butylcatecholato)cuprate(ii)]. The molecular structure and intramolecular electron transfer, **11**, 2193

**Benzothiazine**

A new synthesis of spiro-fused 1,4-benzothiazines, **7**, 1264

**Benzothiazinones**

Nucleophilic ring-opening of the azole and azine moieties in 6-nitro-1,2,4-triazolo[1,5-*a*]pyrimidin-7-ones, **4**, 682

Reactions of 1-aryl(alkyl)-3-ethoxalyl-5,6,7,8-tetrafluoro-1,4-dihydrocinnolin(quinolin)-4-ones with aromatic dinucleophiles, **4**, 689

**Benzo[*b*]thiophenes**

Sulfurization of polymers. 4. Poly(4,5,6,7-tetrathiono-4,5,6,7-tetrahydrobenzothiophene-2,3-diyl) and related structures based on polystyrene and elemental sulfur, **2**, 253

Chemistry of 2,4,6-trinitrobenzonitrile. 1. Substitution of nitro groups in 2,4,6-trinitrobenzonitrile under the action of anionic nucleophiles. Factors facilitating the replacement of the *ortho*-nitro group, **12**, 2401

**Benzotrichloride**

Electrophilic aromatic trichloromethylation: intermediates and products, **11**, 2046

**Benzoylimine hexafluoroacetone**

Reaction of 6-amino-1,3-dimethyluracil with hexafluoroacetone and ethyl trifluoropyruvate benzoylimines, **6**, 1113

**Benzyl alcohols**

Catalytic phosphorylation of polyfluoroalkanols. 17. Synthesis and the stereochemistry of tris( $\alpha$ -trifluoromethylbenzyl) phosphates, **6**, 1085

**Benzylamine**

2-Polyfluoroalkylchromones. 6. Synthesis of substituted 2-morpholino-2-trifluoromethylchroman-4-ones, **3**, 453

2-Polyfluoroalkylchromones. 7. Reactions of 6-substituted 2-tetra- and 2-pentafluoroethylchromones with 2-aminoethanol, **7**, 1314

**Benzylfuran**

Benzylfuran in the synthesis of benzo-annelated heterocycles (review), **9**, 1510

***R*-(+)-2-Benzylideneaminobutan-1-ol**

Reaction of *R*-(+)-2-benzylideneaminobutan-1-ol with ethylene phosphorochloridite. Stereospecific formation of (3*R*,5*R*)-2-(2-chloroethoxy)-5-ethyl-2-oxo-3-phenyl-1,4,2-oxazaphosphorinane, **12**, 2468

**Benzylidenemalononitriles**

Reactions of cyclic enaminketones with benzylidenemalononitriles. Synthesis of new fused heterocyclic systems containing the 1,4-dihydropyridine fragment, **12**, 2428

**(6-Benzylloxy-2,5,7,8-tetramethylchroman-2-yl)acetaldehydes**

2,5,6,7,8-Pentasubstituted (*S*)- and (*R*)-[2-chroman-2-yl]ethanols as intermediates for the synthesis of  $\alpha$ -tocopherol and its chiral analogs, **11**, 2121

**2-(6-Benzylloxy-2,5,7,8-tetramethylchroman-2-yl)ethanols**

2,5,6,7,8-Pentasubstituted (*S*)- and (*R*)-[2-chroman-2-yl]ethanols as intermediates for the synthesis of  $\alpha$ -tocopherol and its chiral analogs, **11**, 2121

**Benzyl(phenyl)ferrocenylphosphine**

Diastereoselectivity of the formation of planar chiral ruthenocenol in reactions of chiral tertiary phosphines with the ( $\eta^4$ -cyclopentadienone)( $\eta^5$ -cyclopentadienyl)ruthenium cation, **11**, 2212

***N*-(Benzylsulfonyl)-*o*-phenylenediamine**

Structures of condensation products of *ortho*-aminophenols with ninhydrin, **6**, 1064

**Benzyltrimethylammonium chloride**

Regiochemistry of the reactions of phenylenedioxytrichlorophosphorane with phenylacetylene and propargyl chloride in the presence of benzyltrimethylammonium chloride, **4**, 745

**Betaines**

Heteroorganic betaines. 6. Structure and reactivity of silicon-containing organophosphorus betaines with the  $^-S-Si-C-P^+$  fragment: a DFT study, **5**, 771

**Betulin**

Synthesis of quinoxalines fused with triterpenes, ursolic acid and betulin derivatives, **2**, 304

**Bicyclic lactone**

Synthetic approaches to homochiral bicyclo[5.2.1]decane based on *d*-camphor, **4**, 654

**3,3'-Bidiaziridines**

Synthesis and structures of 1,1'-dialkyl-3,3'-bidiaziridines, **3**, 440

**Bifunctional catalysts**

Single step, solvent-free processes: examples and prospects (review), **11**, 2010

**Bimetallic complexes**

Synthesis and transformations of metallacycles. 27. Quantum-chemical study of the mechanism of styrene catalytic cyclometallation with triethylaluminum in the presence of  $Cp_2ZrCl_2$ , **12**, 2336

**Bimetallic nanoparticles**

Single step, solvent-free processes: examples and prospects (review), **11**, 2010

**1,1'-Binaphthyl ketone**

*peri*-Naphthylenediamines. 32. Reactions of 4,5-bis(dimethylamino)-1-naphthyllithium and 4,5-bis(dimethylamino)-1-naphthylmagnesium bromide with electrophilic agents. New representatives of double naphthalene "proton sponges" with the structures of 1,1'-binaphthyl ketone and 1,1'-binaphthylmethanol, **5**, 854

**1,1'-Binaphthylmethanol**

*peri*-Naphthylenediamines. 32. Reactions of 4,5-bis(dimethylamino)-1-naphthyllithium and 4,5-bis(dimethylamino)-1-naphthylmagnesium bromide with electrophilic agents. New representatives of double naphthalene "proton sponges" with the structures of 1,1'-binaphthyl ketone and 1,1'-binaphthylmethanol, **5**, 854

**Binary complexes**

Binary molecular complexes of silicon tetrafluoride with water, methanol, and dimethyl ether. Quantum-chemical study, **12**, 2316

**Binary mixtures**

Statistical modeling of equilibrium adsorption of non-ideal mixtures on zeolites, **2**, 220

**Binuclear complexes**

EPR study of weak exchange interactions in binuclear copper(II) complexes with salicylaldehyde acyldihydrazones, **5**, 812

Heterometallic zirconocene(III) aluminum hydride complex (Cp<sub>2</sub>ZrH)<sub>2</sub>HAICl<sub>2</sub>·C<sub>4</sub>H<sub>8</sub>O<sub>2</sub>·C<sub>6</sub>H<sub>6</sub>, **11**, 2200

Binuclear and polynuclear transition metal complexes with macrocyclic ligands. 1. Synthesis and the structure of an antiferromagnetic binuclear nickel complex prepared by the reaction of *o*-phenylenediamine with pyrrole-2,5-dicarbaldehyde and nickel pivalate, **12**, 2445

**Biocatalysis**

Environmental biotechnology: a tandem of biocatalytic and engineering approaches (review), **10**, 1818

**Bioinformatics**

Enzyme active sites: bioinformatics, architecture, and mechanisms of action (review), **10**, 1709

**Biological activity**

Secondary metabolites of *Astragalus danicus* Retz. and *A. inopinatus* Boriss., **6**, 1107

**Biologically active compounds**

Hydrolysis of some imidazole, benzimidazole, and 1,2,3-benzotriazole derivatives according to HPLC and NMR diffusimetry data, **5**, 820

New chlorinated cyclopentenones prepared from hexachlorocyclopentadiene: synthesis, chemical properties, and application in the synthesis (review), **9**, 1489

**Bioluminescence**

Relationship between the structure of the protein globule and bioluminescence spectra of firefly luciferase (review), **10**, 1752

**Biomimicking**

Cycloplatinated aryl ketoximes as effective biomimicking catalysts for hydrolysis of esters of phosphorothioic acid, **10**, 1844

**Bioremediation**

Environmental biotechnology: a tandem of biocatalytic and engineering approaches (review), **10**, 1818

**Biosensors**

Electroanalytical applications of Prussian Blue and its analogs (review), **10**, 1811

**Biradicals**

Exohedral η<sup>5</sup>-π-complexes of fullerene C<sub>20</sub>, **2**, 180

Reactions of metallated 1-hydroxy-2,2,4,5,5-pentamethyl-2,5-dihydro-1*H*-imidazole with functionalized nitroxyl radicals derived from 2,5-dihydro-1*H*-imidazole and 2,5-dihydro-1*H*-imidazole 3-oxide, **4**, 665

Spin chemistry of short-lived intermediates in the reactions of germanorbornadiene derivatives and digermabicyclooctadiene (review), **11**, 1916

**Bis-CH-acids**

Intramolecular electrophilic rearrangements in saturated acyclic systems. Reactions of bis-carbanions with isocyanates, **5**, 838

**Bis-α-amino oximes**

Synthesis of α-amino oximes and bis-α-amino oximes from the monoterpene hydrocarbons 3-carene and α-pinene and α,ω-diamines, **11**, 2106

***N,N'*-Bis(5-amino-3-chloro-1,2,4-thiazol-4-yl)diazenes**

Unusual scission of 3,7-dichlorobis(1,2,4-thiazolo[4,5-*b*:4',5'-*e*]pyrazine by nucleophiles, **7**, 1287

**Bisarene complexes**

A study of peralkylated derivatives of bis(η<sup>6</sup>-benzene)chromium by gas-phase electronic absorption spectroscopy, **8**, 1390

**Bis(azacrown) derivatives of dibenzylidenecyclopentanone**

Complex formation between azacrown derivatives of dibenzylidenecyclopentanone and alkali-earth metal ions, **3**, 404

**1,2-Bis(2-benzothiazolyl)ethenes**

Photochromic dihetarylethenes. 10. Photochromic 1,2-bis[2-(benzothiazol-2-yl)-3-thienyl]- and 1,2-bis[2-(benzothiazol-2-yl)benzothiophen-3-yl]ethenes, **12**, 2420

**Bis-carbamates**

Intramolecular electrophilic rearrangements in saturated acyclic systems. Reactions of bis-carbanions with isocyanates, **5**, 838

**Bis-carbanions**

Intramolecular electrophilic rearrangements in saturated acyclic systems. Reactions of bis-carbanions with isocyanates, **5**, 838

**Bis(cyclopentadienyl) complexes**

Activation of C—H bonds in C<sub>1</sub>—C<sub>3</sub> alkanes by titanium(IV) and zirconium(IV) cationic complexes: a DFT study, **3**, 376

**1,8-Bis(dimethylamino)naphthalene**

*peri*-Naphthylenediamines. 33. Further studies of the reactions of 1,8-bis(dimethylamino)naphthalene with trifluoroacetic anhydride, **5**, 860

**7,7'-Bis(3-ethyl-1,4,5,8-tetrahydroxynaphthalene-2,6-dione)**

Chemistry of naphthazarin derivatives. 7. Determination of structures of substituted 2,6(7)-dihydroxynaphthazarins by UV and IR spectroscopy, **1**, 88

**Bis(3-ethyl-2,5,6,8-tetrahydroxynaphthalene-1,4-diones)**

Chemistry of naphthazarin derivatives. 7. Determination of structures of substituted 2,6(7)-dihydroxynaphthazarins by UV and IR spectroscopy, **1**, 88

**9,10:10,9'-Bishemiketals**

Reactions of 9,10-phenanthrenequinone and its nitro derivatives with acetone in the presence of Al<sub>2</sub>O<sub>3</sub>, **9**, 1625

**Bisothiazolo[4,5-*b*:4',5'-*e*]pyrazines**

Unusual scission of 3,7-dichlorobisothiazolo[4,5-*b*:4',5'-*e*]pyrazine by nucleophiles, **7**, 1287

**Bis(ketenyl)benzenes**

Bis(ketenyl)benzenes: preparation, observation, and reaction with tetramethylpiperidin-1-yloxy, **11**, 2130

**Bis(methylenedithiotetrafulvalene)**

Molecular complex of C<sub>60</sub> fullerene with an organic  $\pi$ -donor, bis(methylenedithiotetrafulvalene): synthesis, crystal structures, and properties, **8**, 1423

**Bismuth compounds**

Crystal and electronic structure of Ni<sub>3</sub>Bi<sub>2</sub>S<sub>2</sub> (parkerite), **3**, 353

New polymolecular bismuth monohalides. Synthesis and crystal structures of Bi<sub>4</sub>Br<sub>x</sub>I<sub>4-x</sub> (*x* = 1, 2, or 3), **12**, 2304

***cis*-1,2-Bis(4-nitrofurazan-3-yloxy)cycloalkanes**

Promotion effect of hypervalent iodine compounds on the reactions of 3-hydroxy-4-nitrofurazan with cycloalkanes, **12**, 2479

***O*,*O*-Bis(*p*-nitrophenyl) methyl phosphonate**

Cetylpyridinium bromide-based oil-in-water microemulsions as a medium for hydrolysis of esters of phosphorus acids in the presence of primary amines, **2**, 245

***cis*- and *trans*-Bis[(2-nitroxyethyl)isonicotinamide-*N*]dichloropalladium(II)**

Synthesis and the crystal structures of *N*-(2-nitroxyethyl)isonicotinamide and its complexes with PdCl<sub>2</sub> and PtCl<sub>2</sub> as potential antitumor medicines, **3**, 520

**Bis(2-phenylindenyl)zirconium dichloride**

Activation by the Grignard reagent of the bis(2-phenylindenyl)zirconium dichloride—triisobutylaluminum catalytic system for propene polymerization, **9**, 1696

**Bis(pyridine)dihydropyridyllithium**

Reductive mono- and diallylation of the bis(pyridine)dihydropyridyllithium dimer by triallylborane, **6**, 1078

**Bis-silicon(germanium)-containing ketenes**

Silylation and germylation of trialkylsilyl(germyl)ethoxyacetylenes containing bulky substituents at the silicon or germanium atom, **6**, 1088

**Bis-silylketenes**

Silylation of silyl- and germylketenes containing bulky substituents at the silicon or germanium atom, **6**, 1093

***N,N*-Bis(silyloxy)enamines**

Silylation as a new strategy of the use of aliphatic nitro compounds in organic synthesis (review), **11**, 1936

***N,N*-Bis(trimethylsilyloxy)aminocyclopropanes**

Silylation of  $\gamma,\gamma$ -bis(alkoxycarbonyl)-substituted aliphatic nitro compounds: synthesis of *N,N*-bis(trimethylsilyloxy)aminocyclopropanes, **12**, 2433

**Bis-zirconacenedichloride**

Synthesis and transformations of metallacycles. 27. Quantum-chemical study of the mechanism of styrene catalytic cyclometallation with triethylaluminum in the presence of Cp<sub>2</sub>ZrCl<sub>2</sub>, **12**, 2336

 **$\beta$ -Blockers**

New approach to nonracemic 1-alkylamino-3-aryloxypropan-2-ols belonging to  $\beta$ -blockers *via* cyclic sulfites, **3**, 436

**Bond dissociation energies**

The determination of enthalpies of formation of organic free radicals from bond dissociation energies. 5. Organosulfur radicals, **9**, 1570

**Bond energy**

The reactivity of organoboranes in radical substitution reactions, **3**, 390

**Boric acid**

Unexpected transformation of 1,1'-methylenebis(2-naphthol) into 1,2,1',2'-tetrahydrospiro(naphthalene-1,3'-naphtho[2,1-*b*]pyran)-2-one, a spirodimer of 1,2-naphthoquinone 1-methide, in the presence of boric acid and paraformaldehyde, **5**, 914

**Bornenone**

Synthetic approaches to homochiral bicyclo[5.2.1]decenes based on *d*-camphor, **4**, 654

**Bornylacetylenes**

Oxidative dimerization of vinylbornylacetylenes under the action of mercuric acetate, **7**, 1238

**Borole**

Synthesis of dicationic triple-decker complexes with a central *B*-cyclohexyl-substituted borole ligand, **7**, 1332

**Boron compounds**

A new method for the synthesis of fluorinated vinyl sulfides and ketene dithioacetals, **6**, 1044

Crystal structure and excimer fluorescence of dibenzoyl-methanato-boron difluoride, **9**, 1612

**Bromination**

Bromination of photochromic spironaphthoxazines, **3**, 470

A facile method for the synthesis of 3,1-benzooxazines from *N*-acyl-2-(alk-2-enyl)anilines, **4**, 659

Addition of bromine to 2-methyl-2-azabicyclo[2.2.1]hept-5-ene, **5**, 917

Synthesis of 4,5-dihydroxyphthalonitrile, **5**, 919

Oxidative bromination of tricyclic sesquiterpenoids (1*S*,3*S*,5*R*,6*S*,9*S*)-5-hydroxy-6,10,10-trimethyltricyclo[7.2.0.0<sup>1,6</sup>]judecan-2-one and clovane-2 $\beta$ ,9 $\alpha$ -diol with the HBr—DMSO system, **8**, 1419

Electrophilic substitution in eleven-vertex metallocarborane 1,2,4-CpCoC<sub>2</sub>B<sub>8</sub>H<sub>10</sub>, **9**, 1683

Reaction of *exo-nido*-ruthenacarborane [Cl(Ph<sub>3</sub>P)<sub>2</sub>Ru]-5,6,10-( $\mu$ -H)<sub>3</sub>-10-H-7,8-C<sub>2</sub>B<sub>9</sub>H<sub>8</sub> with bromine, **11**, 2245

**Bromine**

Mechanisms of the reactions of propane with CBr<sub>3</sub><sup>+</sup> cation and superelectrophilic complex CBr<sub>4</sub><sup>+</sup>·AlBr<sub>3</sub><sup>-</sup> containing a bromine-centered cationic center: a theoretical study, **1**, 29

***N*-( $\alpha$ -Bromoacyl)oxazolidinones**

Stereoselective dimerization of chiral  $\alpha$ -bromoamides promoted by Fe(CO)<sub>5</sub>, **3**, 548

**1-Bromo-4,5-bis(dimethylamino)naphthalene**

*peri*-Naphthylenediamines. 32. Reactions of 4,5-bis(dimethylamino)-1-naphthyllithium and 4,5-bis(dimethylamino)-1-naphthylmagnesium bromide with electrophilic agents. New representatives of double naphthalene "proton sponges" with the structures of 1,1'-binaphthyl ketone and 1,1'-binaphthylmethanol, **5**, 854

**Bromoform**

New method for the synthesis of  $\beta$ -bromostyrenes, **8**, 1401

**Bromonitro(*N*-fluoroimino)methane**

Reactions of (difluoroamino)trinitromethane with nucleophilic reagents, **4**, 736

**Bromostyrenes**

New method for the synthesis of  $\beta$ -bromostyrenes, **8**, 1401

**Bromotrimethylgermane**

Silylation and germylation of trialkylsilyl(germyl)ethoxyacetylenes containing bulky substituents at the silicon or germanium atom, **6**, 1088

**Butadiene**

Synthesis of 1,3,4-trifluoroisquinoline by coprolysis of 2,3,5,6-tetrafluoropyridine-4-sulfonyl chloride with butadiene, **2**, 322

**tert-Butoxyl radical**

The reactivity of *tert*-butoxyl radicals in reactions of hydrogen abstraction and  $\beta$ -elimination, **2**, 241

**tert-Butyl chloride**

The influence of small additives of arenes on low-temperature isobutylene polymerization in an aliphatic solvent, **4**, 631

***n*-Butyllithium**

*peri*-Naphthylenediamines. 32. Reactions of 4,5-bis(dimethylamino)-1-naphthyllithium and 4,5-bis(dimethylamino)-1-naphthylmagnesium bromide with electrophilic agents. New representatives of double naphthalene "proton sponges" with the structures of 1,1'-binaphthyl ketone and 1,1'-binaphthylmethanol, **5**, 854

Reductive mono- and dialylation of the bis(pyridine)dihydropyridyllithium dimer by triallylborane, **6**, 1078

***n*-Butyronitrile**

Coordination chemistry of macrocyclic multidentate Lewis acids. Synthesis and structures of complexes of cyclic trimeric perfluoro-*o*-phenylenemercury with *N,N*-dimethylacetamide and *n*-butyronitrile, **9**, 1673

**C****Cadmium compounds**

Mercury and cadmium pnictidehalides: the inverted Zintl phases (review), **3**, 337

**"Cage" effect**

Adsorption of adamantanol isomers on graphitized thermal carbon black, **5**, 823

Gas chromatography of halogenated adamantanes, **5**, 828

Experimental and molecular-statistical investigation of adsorption of aminoadamantanes on graphitized thermal carbon black, **6**, 980

**Calcium compounds**

Amino-substituted *gem*-diphosphonic acids: structures of complexes with divalent metal cations in aqueous solutions, **4**, 697

**Calixarenes**

Hydrophosphinoyl derivatives of calix[4]resorcinarenes, **4**, 748

Hydration of calixarene-containing polymers, **8**, 1379

Membrane extraction of organic compounds. 3. A new receptor fragment for carboxylate groups based of the calix[4]arene platform, **11**, 2134

**Calix[4]resorcinarene**

Hydrophosphinoyl derivatives of calix[4]resorcinarenes, **4**, 748

**Calorimetry**

Thermodynamics of copper, silver, gold, and mercury acetylenides (review), **7**, 1121

Hydration of calixarene-containing polymers, **8**, 1379

Thermodynamic properties of carbynoid structures in the 0–340 K range, **9**, 1533

On the mechanisms of phenol adsorption by carbons, **11**, 2060

Dubinín's theory and its contribution to adsorption science (review), **12**, 2265

**Carbamates**

Intramolecular electrophilic rearrangements in saturated acyclic systems. Reactions of bis-carbanions with isocyanates, **5**, 838

**Carbamide**

Effect of H/D-isotope substitution on the solubility and solvation thermodynamics of krypton in methanol solutions of carbamide, **12**, 2360

**Carbanions**

Intramolecular electrophilic rearrangements in saturated acyclic systems. Reactions of bis-carbanions with isocyanates, **5**, 838

Vicarious nucleophilic substitution of hydrogen in aldehydes and Knoevenagel reaction of iminium salts with  $\alpha$ -halocarbanions, **11**, 2236

**Carbenes**

Rh<sub>2</sub>(OAc)<sub>4</sub>-Catalyzed reaction of 1,3-dioxanes with methyl diazoacetate, **5**, 865

Molecular structure of carbene analogs (review), **11**, 1903

Reactions of methoxycarbonylcarbene with 3-ethyl-2-phenyl- and 2,3-diphenyloxazolidines, **11**, 2144

**Carbenoid complexes**

Conversion of aromatic aldehydes into 1-aryl-2,2-dichloroethenes, **6**, 1047

New method for the synthesis of  $\beta$ -bromostyrenes, **8**, 1401

**Carboalumination**

Synthesis and transformations of metallacycles. 24. Zr-Catalyzed cycloalumination of asymmetrical disubstituted acetylenes, **3**, 484

**Carbolines**

Synthesis of 1-aryl-1,2,3,4-tetrahydro-9*H*-pyrido[3,4-*b*]indoles (1,2,3,4-tetrahydro- $\beta$ -carbolines) under high pressures, **3**, 560

New approach to the functionalization of  $\delta$ -carboline derivatives, **8**, 1449

**Carbon**

Adsorption of carbon dioxide on microporous carbon adsorbent PAU-10, **4**, 591

**Carbon dioxide**

Adsorption and adsorption-induced deformation of NaX zeolite under high pressures of carbon dioxide, **1**, 60

Adsorption of carbon dioxide on microporous carbon adsorbent PAU-10, **4**, 591

Hydrogenation of CO<sub>2</sub> conjugated with dehydrogenation of cyclohexane over an intermetallic catalyst, **7**, 1201

**Carbon monoxide**

Thermodynamics of alternating copolymer of styrene and CO in the 0–600 K region, **12**, 2372

Catalytic properties of chromites with a spinel structure in the oxidation of CO and hydrocarbons and reduction of nitrogen oxides, **12**, 2377

Functionalization of alkanes and cycloalkanes by super-electrophiles. 15. Carbonylation of cycloheptane, cyclooctane, and isomeric monoalkylcyclohexanes with CO in the presence of CBr<sub>4</sub>·2AlBr<sub>3</sub> to form individual esters of tertiary carboxylic acids of the cyclohexane series, **12**, 2394

**Carbon nanoscale materials**

Preparation of sphere-shaped nanoscale carbon nitride polymer, **11**, 2020

**Carbon nitride**

Preparation of sphere-shaped nanoscale carbon nitride polymer, **11**, 2020

**Carbon tetrachloride**

Characteristic features of phase diagrams describing condensation of adsorbate in narrow pores, **1**, 50

The fundamentals of adsorption theory for a mixture of bulky molecules in slit-shaped pores with heterogeneous wall surfaces, **5**, 786

Conversion of aromatic aldehydes into 1-aryl-2,2-dichloroethenes, **6**, 1047

Transformations of cycloalkanes under the action of organoaluminum compounds and transition metal complexes in the presence of polychloromethanes, **7**, 1326

Dubinin's theory and its contribution to adsorption science (review), **12**, 2265

**Carbon-centered radicals**

Reactivity of esters of 2-cyanoacrylic acid toward some free radicals, **12**, 2356

**Carbonyl complexes**

Protonation and acylation of the heterometallic complexes  $(\mu\text{-H})\text{Os}_3(\mu\text{-O}_2\text{CC}_5\text{H}_4\text{FeCp})(\text{CO})_{10}$  and  $\text{Fe}\{(\mu\text{-O}_2\text{CC}_5\text{H}_4)(\mu\text{-H})\text{Os}_3(\text{CO})_{10}\}_2$ , **12**, 2451

Electron transfer-induced replacement of carbonyl ligands in cobalt clusters, **12**, 2483

**Carbonyl compounds**

Stereoselective dimerization of chiral  $\alpha$ -bromoamides promoted by  $\text{Fe}(\text{CO})_5$ , **3**, 548

*Ab initio* study of the structure and conformations of 2-fluoroethanal in the ground and lowest excited electronic states, **6**, 945

$S_1 \leftarrow S_0$  Vibronic spectrum and structure of 2,2-difluoroethanal in the  $S_1$  state, **7**, 1218

**Carbonyl group**

Complex formation between azacrown derivatives of dibenzylidene-cyclopentanone and alkali-earth metal ions, **3**, 404

**Carbonyl oxides**

Solvent effects on the absorption spectrum and recombination kinetics of diphenylcarbonyl oxide, **5**, 793

**Carbonylation**

Phosphine  $\sigma$ -syndonyl complexes of Ni, Pd, and Pt, **3**, 525

Kinetics and mechanism of styrene hydrocarboalkoxylation catalyzed by  $\text{Pd}^0$  complex in the presence of toluenesulfonic acid, **10**, 1839

Carbonylation of chloroacetone to methyl acetoacetate, **11**, 2239

Functionalization of alkanes and cycloalkanes by super-electrophiles. 15. Carbonylation of cycloheptane, cyclooctane, and isomeric monoalkylcyclohexanes with CO in the presence of  $\text{CBr}_4 \cdot 2\text{AlBr}_3$  to form individual esters of tertiary carboxylic acids of the cyclohexane series, **12**, 2394

**Carboranes**

Metal-induced B—H activation in  $\text{Cp}^*\text{Rh}$ ,  $\text{Cp}^*\text{Ir}$ , (*p*-cymene)Ru, and (*p*-cymene)Os half-sandwich complexes containing the 1,2-dicarba-*closo*-dodecaborane(12)-1,2-dichalcogenolato ligand (review), **9**, 1518

Electrophilic substitution in eleven-vertex metallacarborane 1,2,4- $\text{CpCoC}_2\text{B}_8\text{H}_{10}$ , **9**, 1683

**Carbyne**

Thermodynamic properties of carbynoid structures in the 0–340 K range, **9**, 1533

**Carbynoid structure**

Thermodynamic properties of carbynoid structures in the 0–340 K range, **9**, 1533

**3-Carene**

Synthesis of  $\alpha$ -amino oximes and bis- $\alpha$ -amino oximes from the monoterpene hydrocarbons 3-carene and  $\alpha$ -pinene and  $\alpha,\omega$ -diamines, **11**, 2106

**Caryophyllene**

Oxidative bromination of tricyclic sesquiterpenoids (1*S*,3*S*,5*R*,6*S*,9*S*)-5-hydroxy-6,10,10-trimethyltricyclo[7.2.0.0<sup>1,6</sup>]judecan-2-one and clovane-2 $\beta$ ,9 $\alpha$ -diol with the HBr—DMSO system, **8**, 1419

**Catalysis**

A new route of the reaction of  $\text{EtAlCl}_2$  with  $\alpha$ -olefins catalyzed by Ti complexes, **2**, 292

Synthesis and transformations of metallacycles. 23.  $\text{Cp}_2\text{TiCl}_2$ -Catalyzed cyclometallation of fullerene  $\text{C}_{60}$  with  $\text{EtAlCl}_2$ , **2**, 297

Derivatives of phosphorous acid as a new class of ligands for Pd-catalyzed allylation, **3**, 554

The nature of colloidal platinum in aqueous solution: features of catalytic reactions, **4**, 626

Asymmetric transfer hydrogenation of ketones catalyzed by rhodium and iridium complexes with chiral bidentate Schiff's bases, **4**, 734

$\text{Rh}_2(\text{OAc})_4$ -Catalyzed reaction of 1,3-dioxanes with methyl diazoacetate, **5**, 865

Unexpectedly high stability of benzaldehyde in the presence of Pd-561 giant cluster, **5**, 921

Conversion of aromatic aldehydes into 1-aryl-2,2-dichloroethenes, **6**, 1047

Catalytic phosphorylation of polyfluoroalkanols. 17. Synthesis and the stereochemistry of tris( $\alpha$ -trifluoromethylbenzyl) phosphates, **6**, 1085

Catalytic ring opening of acetylcyclopropane by water and alcohols under the action of copper or palladium salts, **7**, 1242

Reactions of cyanofurazans with  $\beta$ -dicarbonyl compounds, **7**, 1280

Catalytic C-phenylation of methyl acrylate with triphenylantimony(v) dicarboxylates, **7**, 1291

Transformations of cycloalkanes under the action of organoaluminum compounds and transition metal complexes in the presence of polychloromethanes, **7**, 1326

New method for the synthesis of  $\beta$ -bromostyrenes, **8**, 1401

Synthesis and transformation of metallacycles. 25. On a mechanism of the  $\text{Ni}(\text{acac})_2$ -catalyzed conversion of 3-alkyl-1-ethylalumacyclopentanes into 1,1-disubstituted cyclopropanes, **8**, 1465

Metal-induced B—H activation in  $\text{Cp}^*\text{Rh}$ ,  $\text{Cp}^*\text{Ir}$ , (*p*-cymene)Ru, and (*p*-cymene)Os half-sandwich complexes containing the 1,2-dicarba-*closo*-dodecaborane(12)-1,2-dichalcogenolato ligand (review), **9**, 1518

Enzyme active sites: bioinformatics, architecture, and mechanisms of action (review), **10**, 1709

Dihydrofolate reductase: structural aspects of mechanisms of enzyme catalysis and inhibition (review), **10**, 1733

The role of metal-oxygen intermediates in biological and chemical monooxygenation of alkanes (review), **10**, 1795

Organophosphate hydrolase — an enzyme catalyzing degradation of phosphorus-containing toxins and pesticides (review), **10**, 1826

Catalysis of noncomplementary reactions by transition metals clusters. Kinetic description, **10**, 1833

Kinetics and mechanism of styrene hydrocarboalkoxylation catalyzed by Pd<sup>0</sup> complex in the presence of toluenesulfonic acid, **10**, 1839

Cycloplatinated aryl ketoximes as effective biomimicking catalysts for hydrolysis of esters of phosphorothioic acid, **10**, 1844

Electrochemical analysis of the coordination sphere of ruthenium(II) as electron transfer mediator in glucose oxidase catalysis in aqueous solutions, **10**, 1849

Proteinases immobilized on poly(vinyl alcohol) cryogel: novel biocatalysts for peptide synthesis in organic media, **10**, 1896

Cross-coupling of *E,E*-1,4-diiodobuta-1,3-diene with nucleophiles catalyzed by Pd or Ni complexes: a new route to functionalized dienes, **11**, 2095

Reactions of diazoalkanes with unsaturated compounds. 14. Reactions of diazomethane, diazocyclopropane, and methyl diazoacetate with 1,1,2,2-tetrafluoro-3-vinylcyclobutane and 2,3,3-trifluoro-1-vinylcyclobutene to form [3+2] and [1+2] cycloadducts, **11**, 2113

Synthesis of nine-, ten-, and fifteen-membered alkenolides by the oxidative cleavage of the bridging C=C bond in 2-oxabicycloalkenes, **11**, 2149

First attempts at differential diastereoselection in catalytic reactions of *N*-chirally substituted dirhodium(II) tetrakis[methyl 2-oxoimidazolidine-4(*S*)-carboxylates] with diazoacetates, **11**, 2156

Synthesis and transformations of metallacycles. 26. Cp<sub>2</sub>ZrCl<sub>2</sub>-Catalyzed cycloalumination of substituted allenes with Et<sub>3</sub>Al, **11**, 2188

Heterometallic zirconocene(III) aluminum hydride complex (Cp<sub>2</sub>ZrH)<sub>2</sub>HAICl<sub>2</sub>·C<sub>4</sub>H<sub>8</sub>O<sub>2</sub>·C<sub>6</sub>H<sub>6</sub>, **11**, 2200

Synthesis of α-tocopherol analogs with unsaturated side chain and their transformation into the corresponding chromans with ω-functionalized side chain, **11**, 2227

Synthesis and transformations of metallacycles. 27. Quantum-chemical study of the mechanism of styrene catalytic cyclometallation with triethylaluminum in the presence of Cp<sub>2</sub>ZrCl<sub>2</sub>, **12**, 2336

Catalytic properties of chromites with a spinel structure in the oxidation of CO and hydrocarbons and reduction of nitrogen oxides, **12**, 2377

### Catalysts

Oxidation of alkylphenylacetylenes and dialkylacetylenes on palladium catalysts in DMSO, **4**, 649

Deep oxidation of methane on granulated and monolith copper—manganese oxide catalysts, **9**, 1589

Activation by the Grignard reagent of the bis(2-phenylindenyl)zirconium dichloride—triisobutylaluminum catalytic system for propene polymerization, **9**, 1696

Simple and efficient synthesis of *closo*-rhoda- and *closo*-iridacarboranes with π-ligands based on cyclic dienes, **9**, 1702

Transformations of the chiral diphosphine rhodium catalyst [(1,5-COD)Rh(−)R,R-DIOP]<sup>+</sup>CF<sub>3</sub>SO<sub>3</sub><sup>−</sup> under conditions of hydrogenation, **10**, 1855

Enantioselective hydrogenation in the presence of the rhodium(I) complex with (+)-4*S*,5*S*-*N*<sup>4</sup>,*N*<sup>4</sup>,*N*<sup>5</sup>,*N*<sup>5</sup>,2,2-hexamethyl-1,3-dioxolane-4,5-dimethanamine, **10**, 1860

First attempts at differential diastereoselection in catalytic reactions of *N*-chirally substituted dirhodium(II) tetrakis[methyl 2-oxoimidazolidine-4(*S*)-carboxylates] with diazoacetates, **11**, 2156

Carbonylation of chloroacetone to methyl acetoacetate, **11**, 2239

### Cationic polymerization

The influence of small additives of arenes on low-temperature isobutylene polymerization in an aliphatic solvent, **4**, 631

### Cations

Protonation of 2-quinolythiazoles in the ground and excited states in ethanol, **7**, 1186

### Cerebrosides

Glycosphingolipid with a branched sphingosine base from soft corals from the Andaman Islands, **8**, 1474

### Cerium compounds

Chemiluminescence in the oxidation of Na<sub>2</sub>C<sub>60</sub> by the (NH<sub>4</sub>)<sub>2</sub>Ce(NO<sub>3</sub>)<sub>6</sub> complex in THF, **4**, 731

### Cesium compounds

A novel synthesis of *N*-acetyl-α-D-fucosamine 1-phosphate and uridine 5'-diphospho-*N*-acetyl-α-D-fucosamine, **7**, 1303

### Cetylpyridinium bromide

Cetylpyridinium bromide-based oil-in-water microemulsions as a medium for hydrolysis of esters of phosphorus acids in the presence of primary amines, **2**, 245

### Cetyltrimethylammonium

The reactivity of phosphonic esters in aqueous micellar solutions of cationic surfactants, **7**, 1181

Micellar enzymology: methodology and technique (review), **10**, 1718

### Charge-transfer complexes

Interaction of chlorine dioxide with nitroxyl radicals, **4**, 614

Induced aromaticity, **12**, 2325

### Chelate complexes

Bis(O—Si)-chelate fluorobis(2-oxohexahydroazepino-methyl)silylium tetrafluoroborate, a cation-anionic complex containing a silylium ion stabilized by O→Si coordination, **2**, 331

Peculiarities of NMR spectra of heterospin complexes, **11**, 2078

### Chemical bond

Electron density distribution in vanadocene (η<sup>5</sup>-C<sub>5</sub>H<sub>5</sub>)<sub>2</sub>V and mixed metallocenes (η<sup>5</sup>-C<sub>5</sub>H<sub>5</sub>)M(η<sup>5</sup>-C<sub>7</sub>H<sub>7</sub>) (M = Ti, V, or Cr) and (η<sup>5</sup>-C<sub>5</sub>H<sub>5</sub>)Ti(η<sup>8</sup>-C<sub>8</sub>H<sub>8</sub>). Effect of the nature of the cyclic ligand on the character of the M—(π-ligand) bond, **1**, 130

The nature of the O—O bond in hydroperoxides, **9**, 1539

### Chemical ionization

Interaction of trimethylsilyl ions with nitrates of the estrane series in the gas phase, **2**, 250

### Chemiluminescence

Generation of an oscillating chemical reaction in a heterogeneous system by the oxidation of an alkaline solution of luminol with sodium(VI) ferrate in the presence of copper ions, **1**, 159

Chemiluminescence in the oxidation of Na<sub>2</sub>C<sub>60</sub> by the (NH<sub>4</sub>)<sub>2</sub>Ce(NO<sub>3</sub>)<sub>6</sub> complex in THF, **4**, 731

Chemiluminescence during thermolysis of the (Ph<sub>3</sub>COOCPh<sub>3</sub>)<sub>*n*</sub>—Ph<sub>3</sub>C· peroxide containing captured triphenylmethyl radical, **7**, 1194

### Chevreul phases

Synthesis and structure of a new octahedral molybdenum thiocyanide cluster complex K<sub>7</sub>[Mo<sub>6</sub>(μ<sub>3</sub>-S)<sub>8</sub>(CN)<sub>6</sub>]·8H<sub>2</sub>O, **7**, 1140

### Chiral catalysts

Asymmetric Michael reaction of diethyl malonate with crotonaldehyde catalyzed by chiral aminocarboxylates, amino alcoholates, and amino phenolates, **9**, 1620

**Chiral complexes**

Stereodivergent synthesis of chiral low-molecular bio-regulators using readily available lipases (review), **11**, 1984

First attempts at differential diastereoselection in catalytic reactions of *N*-chirally substituted dirhodium(II) tetrakis[methyl 2-oxoimidazolidine-4(*S*)-carboxylates] with diazoacetates, **11**, 2156

**Chlorides**

Synthesis and the crystal structures of *N*-(2-nitroxyethyl)isonicotinamide and its complexes with PdCl<sub>2</sub> and PtCl<sub>2</sub> as potential antitumor medicines, **3**, 520

Structural parameters of concentrated aqueous solutions of LiCl under extreme conditions, as calculated by the method of integral equations. Effect of temperature, **6**, 935

Cryosynthesis, structure, and IR spectra of aluminum chloride—nitromethane molecular complexes, **7**, 1159

Reaction of the acrylic acid and 1-vinylimidazole copolymer with CuCl<sub>2</sub> in aqueous solution, **8**, 1382

Heterometallic zirconocene(III) aluminum hydride complex (Cp<sub>2</sub>ZrH)<sub>2</sub>HAICl<sub>2</sub> · C<sub>4</sub>H<sub>8</sub>O<sub>2</sub> · C<sub>6</sub>H<sub>6</sub>, **11**, 2200

**Chlorination**

New chlorinated cyclopentenones prepared from hexachlorocyclopentadiene: synthesis, chemical properties, and application in the synthesis (review), **9**, 1489

**Chlorine dioxide**

Reactions of chlorine dioxide with organic compounds. Selective oxidation of sulfides to sulfoxides by chlorine dioxide, **3**, 432

Interaction of chlorine dioxide with nitroxyl radicals, **4**, 614

Liquid-phase oxidation of thiols with chlorine dioxide, **12**, 2352

**Chloroacetone**

Carbonylation of chloroacetone to methyl acetoacetate, **11**, 2239

***o*-Chloroarylacetylenes**

Heterocyclization of *o*-(arylethynyl)arylhydrazines as a new procedure for the synthesis of substituted 1*H*- and 2*H*-indazoles and indoles, **7**, 1268

**Chlorobenzene**

Adsorption of chlorobenzene and benzene on γ-Al<sub>2</sub>O<sub>3</sub>, **1**, 68

**3-Chloro-5,6-dimethoxythiazolo[4,5-*b*]pyrazine**

Unusual scission of 3,7-dichlorobisothiazolo[4,5-*b*:4',5'-*e*]pyrazine by nucleophiles, **7**, 1287

**Chloroform**

Crystal structures of chloroform solvates of fullerenes, **1**, 78

Transformations of cycloalkanes under the action of organoaluminum compounds and transition metal complexes in the presence of polychloromethanes, **7**, 1326

 **$\alpha$ -Chloroketone**

Photochromic dihetarylethenes. 7. Synthesis of bis(thienylazoles), photochromic analogs of diarylethenes, **1**, 116

**3-Chloropropylphosphinates**

Two-fragment  $\alpha$ -adrenolytics. 4. Synthesis of phosphorylated derivatives of 2-aryloxyethylamines and *N*-phenylpiperazine, **1**, 125

**3-Chloropropylphosphonates**

Two-fragment  $\alpha$ -adrenolytics. 4. Synthesis of phosphorylated derivatives of 2-aryloxyethylamines and *N*-phenylpiperazine, **1**, 125

**3-Chloropropylthiophosphonates**

Two-fragment  $\alpha$ -adrenolytics. 4. Synthesis of phosphorylated derivatives of 2-aryloxyethylamines and *N*-phenylpiperazine, **1**, 125

 **$\beta$ -Chlorovinylmercury chloride**

*Ab initio* MP2 calculations of the products of acetylene addition to HgCl<sub>2</sub>, **6**, 958

**Chromites**

Catalytic properties of chromites with a spinel structure in the oxidation of CO and hydrocarbons and reduction of nitrogen oxides, **12**, 2377

**Chromium compounds**

A study of peralkylated derivatives of bis( $\eta^6$ -benzene)chromium by gas-phase electronic absorption spectroscopy, **8**, 1390

Estimation of oxyhydroxide specific surface area using the amounts of OH groups adsorbed, **9**, 1582

Catalytic properties of chromites with a spinel structure in the oxidation of CO and hydrocarbons and reduction of nitrogen oxides, **12**, 2377

 **$\alpha$ -Chymotrypsin**

Micellar enzymology: methodology and technique (review), **10**, 1718

Relationship between the hydration degree of poly-*N*-isopropylacrylamide gel and activity of immobilized  $\alpha$ -chymotrypsin, **10**, 1891

**Cinnolines**

Benzyfurans in the synthesis of benzo-annelated heterocycles (review), **9**, 1510

**Circular dichroism**

Direct *C*-nitration of cyclic  $\alpha,\beta$ -unsaturated oximes under the action of sodium nitrite and acetic acid in methanol, **8**, 1410

Micellar enzymology: methodology and technique (review), **10**, 1718

**Clusters**

Synthesis and the crystal structure of a supramolecular adduct of the [Mo<sub>3</sub>O<sub>4</sub>(H<sub>2</sub>O)<sub>6</sub>Cl<sub>3</sub>]<sup>+</sup> cluster complex with macrocyclic cavitand cucurbituril, **3**, 494

The nature of colloidal platinum in aqueous solution: features of catalytic reactions, **4**, 626

Unexpectedly high stability of benzaldehyde in the presence of Pd-561 giant cluster, **5**, 921

Synthesis, structures, and properties of the niobium and tantalum telluride cubane clusters [M<sub>4</sub>( $\mu_4$ -O)( $\mu_3$ -Te)<sub>4</sub>(CN)<sub>12</sub>]<sup>6-</sup> (M = Nb or Ta), **6**, 930

Synthesis and structure of a new octahedral molybdenum thiocyanide cluster complex K<sub>7</sub>[Mo<sub>6</sub>( $\mu_3$ -S)<sub>8</sub>(CN)<sub>6</sub>] · 8H<sub>2</sub>O, **7**, 1140

Synthesis and structure of the polymeric cluster compound [Mn(H<sub>2</sub>O)<sub>4</sub>]<sub>3</sub>[W<sub>4</sub>S<sub>4</sub>(CN)<sub>12</sub>] · *n*H<sub>2</sub>O containing very large cavities, **9**, 1525

Electron transfer coupled with ATP hydrolysis in nitro-genase (review), **10**, 1789

Catalysis of noncomplementary reactions by transition metals clusters. Kinetic description, **10**, 1833

Fragmentation behavior of Si<sub>2</sub>Cl<sub>*n*</sub><sup>+</sup> cations (*n* = 1–6), **11**, 2087

New polymolecular bismuth monohalides. Synthesis and crystal structures of Bi<sub>4</sub>Br<sub>*x*</sub>I<sub>4-*x*</sub> (*x* = 1, 2, or 3), **12**, 2304

Synthesis of the gold-dirhenium ferrocenylacetylde cluster. The crystal structure of Re<sub>2</sub>( $\mu$ -C≡CFc){Au(PPh<sub>3</sub>)}(CO)<sub>8</sub>, **12**, 2441

Protonation and acylation of the heterometallic complexes ( $\mu$ -H)Os<sub>3</sub>( $\mu$ -O<sub>2</sub>CC<sub>5</sub>H<sub>4</sub>FeCp)(CO)<sub>10</sub> and Fe{( $\mu$ -O<sub>2</sub>CC<sub>5</sub>H<sub>4</sub>)( $\mu$ -H)Os<sub>3</sub>(CO)<sub>10</sub>}<sub>2</sub>, **12**, 2451



Electron transfer-induced replacement of carbonyl ligands in cobalt clusters, **12**, 2483

#### Cobalt compounds

The preparation and reactivity of metal-containing monomers. 54. Thermolysis of the acrylamide monomer  $[\text{Co}(\text{CH}_2=\text{CHCONH}_2)_4(\text{H}_2\text{O})_2](\text{NO}_3)_2$ , **5**, 901

Synthesis of dicationic triple-decker complexes with a central *B*-cyclohexyl-substituted borole ligand, **7**, 1332

Electrophilic substitution in eleven-vertex metallocarborane 1,2,4-CpCoC<sub>2</sub>B<sub>8</sub>H<sub>10</sub>, **9**, 1683

Unusual condensation of propargylamine. Generation of the 1,3-di(propargylimino)propane anion coordinated to the cobalt(III) atom, **11**, 2206

Unusual transformation of the urea molecule giving rise to the NCO<sup>-</sup> anion as a bridging ligand between two Co<sup>II</sup> atoms, **11**, 2251

Electron transfer-induced replacement of carbonyl ligands in cobalt clusters, **12**, 2483

Destruction of polymeric cobalt(II) trimethylacetate. Synthesis and structures of new complexes Co<sub>9</sub>(μ<sub>3</sub>-OH)<sub>6</sub>(μ-OCCMe<sub>3</sub>)<sub>12</sub>(OCMe<sub>2</sub>)<sub>4</sub> and Co<sub>6</sub>(μ<sub>4</sub>-O)<sub>2</sub>(μ-OCCMe<sub>3</sub>)<sub>10</sub>(η-HOCCMe<sub>3</sub>)<sub>4</sub>, **12**, 2485

#### Coefficient of self-diffusion

Concentration relationships of coefficients of self-diffusion and viscosity of the adsorbate in narrow slit-like pores, **9**, 1572

#### Coefficient of shear viscosity

Concentration relationships of coefficients of self-diffusion and viscosity of the adsorbate in narrow slit-like pores, **9**, 1572

#### Colloids

The nature of colloidal platinum in aqueous solution: features of catalytic reactions, **4**, 626

Optical spectra of Pd-561 nanoclusters in aqueous solutions, **5**, 809

#### Complex catalysts

Phosphorylation of heptafluorobutanol in the presence of metal chloride—ether catalytic systems, **8**, 1457

#### Complex electrophilic reagents

Efficient method for the synthesis of new [2-(alkyl-arylthio)ethyl]pyridines, **3**, 563

#### Complex formation

Complex formation between azacrown derivatives of dibenzylidencyclopentanone and alkali-earth metal ions, **3**, 404

Synthesis and the crystal structures of *N*-(2-nitroxyethyl)isonicotinamide and its complexes with PdCl<sub>2</sub> and PtCl<sub>2</sub> as potential antitumor medicines, **3**, 520

Interaction of chlorine dioxide with nitroxyl radicals, **4**, 614

Complex formation between polyethylene oxide-containing nonionic surfactants and α- and β-cyclodextrins, **4**, 620

Amino-substituted *gem*-diphosphonic acids: structures of complexes with divalent metal cations in aqueous solutions, **4**, 697

Deprotonation of the peptide NH groups and diastereoselective hydrogenation of *N*-acetyl-α,β-dehydrodipeptides, **4**, 738

Heteroorganic betaines. 6. Structure and reactivity of silicon-containing organophosphorus betaines with the <sup>-</sup>S—Si—C—P<sup>+</sup> fragment: a DFT study, **5**, 771

*Ab initio* MP2 calculations of the products of acetylene addition to HgCl<sub>2</sub>, **6**, 958

Photochemical investigation of the triplet state of 3,3'-diethylthiocarbocyanine iodide in the presence of DNA, **7**, 1190

Formation of a tetranuclear nickel(II) complex containing an unusual bridging ligand, **7**, 1336

Reaction of the acrylic acid and 1-vinylimidazole copolymer with CuCl<sub>2</sub> in aqueous solution, **8**, 1382

New approach to the functionalization of δ-carboline derivatives, **8**, 1449

*P,O*-Ligands. Complexes of tetraphenylmethylenediphosphine oxide with silver nitrate, **8**, 1469

A study of complexation of chloral hydrate with heteropoly anions having various structures, **9**, 1529

Coordination chemistry of macrocyclic multidentate Lewis acids. Synthesis and structures of complexes of cyclic trimeric perfluoro-*o*-phenylenemercury with *N,N*-dimethylacetamide and *n*-butyronitrile, **9**, 1673

Micellar enzymology: methodology and technique (review), **10**, 1718

The role of metal-oxygen intermediates in biological and chemical monooxygenation of alkanes (review), **10**, 1795

Cation-dependent pericyclic reactions of crown-containing photochromic compounds (review), **11**, 1970

DFT study of the mechanism of alkane hydrogenolysis by transition metal hydrides. 1. Interaction of silica-supported zirconium hydrides with methane, **11**, 2050

Bis(1,4-di-*tert*-butyl-1,4-diazabutadiene)copper(II) [(3,6-di-*tert*-butyl-*o*-benzosemiquinono)(3,6-di-*tert*-butylcatecholato)cuprate(II)]. The molecular structure and intramolecular electron transfer, **11**, 2193

#### Complexes

Mechanisms of the reactions of propane with CBr<sub>3</sub><sup>+</sup> cation and superelectrophilic complex CBr<sub>4</sub><sup>+</sup> · AlBr<sub>3</sub><sup>-</sup> containing a bromine-centered cationic center: a theoretical study, **1**, 29

Study of complex formation between aluminum bromide and benzene by <sup>27</sup>Al NMR spectroscopy, **1**, 73

Oxidative transformations of cyclohexane, methylcyclopentane, and pentane on treatment with superelectrophiles based on polyhalomethane and aluminum halides, **1**, 81

Kinetics of η<sup>6</sup>→η<sup>5</sup> isomerization of (η<sup>6</sup>-fluorenyl)(η<sup>5</sup>-cyclopentadienyl)iron, **1**, 157

Phosphorescence of Group IVB metal complexes, **2**, 329

Synthesis and liquid-crystalline properties of substituted β-aminovinyl ketones and their complexes with copper(II), **5**, 805

Reactivity of benzenetricarbonylchromium derivatives under conditions of dissociative ionization in the gas phase, **6**, 970

Solvation of complexes with strong symmetric H bonds in the methanesulfonic acid—2-pyrrolidone system, **6**, 1008

*P,O*-Ligands. Complexes of tetraphenylmethylenediphosphine oxide with silver nitrate, **8**, 1469

Metal-induced B—H activation in Cp\*Rh, Cp\*Ir, (*p*-cymene)Ru, and (*p*-cymene)Os half-sandwich complexes containing the 1,2-dicarba-*closo*-dodecaborane(12)-1,2-dichalcogenolato ligand (review), **9**, 1518

#### π-Complexes

Exohedral η<sup>5</sup>-π-complexes of fullerene C<sub>20</sub>, **2**, 180

*Ab initio* MP2 calculations of the products of acetylene addition to HgCl<sub>2</sub>, **6**, 958

Synthesis, molecular structures, and thermal decomposition of heterometallic ( $\pi$ -cyclooctadiene)platinum-bis(tri-carbonyliron- $\mu_3$ -chalcogenides)[Fe—Fe], ( $\pi$ -C<sub>8</sub>H<sub>12</sub>)Pt( $\mu_3$ -X)<sub>2</sub>Fe<sub>2</sub>(CO)<sub>6</sub>, where X = S, Se, or Te, **11**, 2215

#### $\sigma$ -Complexes

Phosphine  $\sigma$ -sydnonyl complexes of Ni, Pd, and Pt, **3**, 525

#### Condensation

Unexpected reaction of 1,1,1,10,10-hexafluorodecane-2,4,7,9-tetrone with methyl trifluoroacetate, **1**, 101

5-Substituted 2-alkyl- and 2-arylsulfonylimino-hexahydro-1,3,5-triazines, **3**, 480

Introduction of the 1*H*-indol-3-yl(phenyl)methyl residue into some CH acids, **3**, 543

Amidines: synthesis from *o*-alkenylanilines and cyclization in polyphosphoric acid, **3**, 545

Trifluoroacetylation of 2-acetyldimedone, **3**, 568

Structures of condensation products of *ortho*-aminophenols with ninhydrin, **6**, 1064

Formation of a tetranuclear nickel(II) complex containing an unusual bridging ligand, **7**, 1336

Reactions of 9,10-phenanthrenequinone and its nitro derivatives with acetone in the presence of Al<sub>2</sub>O<sub>3</sub>, **9**, 1625

Synthesis of linear and angular anthraquinonoisothiazol-3-ones, their *S*-oxides, and *S,S*-dioxides, **9**, 1657

Unusual condensation of propargylamine. Generation of the 1,3-di(propargylimino)propane anion coordinated to the cobalt(III) atom, **11**, 2206

Synthesis of  $\alpha$ -tocopherol analogs with unsaturated side chain and their transformation into the corresponding chromans with  $\omega$ -functionalized side chain, **11**, 2227

Vicarious nucleophilic substitution of hydrogen in aldehydes and Knoevenagel reaction of iminium salts with  $\alpha$ -halocarbanions, **11**, 2236

Binuclear and polynuclear transition metal complexes with macrocyclic ligands. 1. Synthesis and the structure of an antiferromagnetic binuclear nickel complex prepared by the reaction of *o*-phenylenediamine with pyrrole-2,5-dicarbaldehyde and nickel pivalate, **12**, 2445

#### Conductivity

Sulfurization of polymers. 4. Poly(4,5,6,7-tetrathiono-4,5,6,7-tetrahydrobenzothiofene-2,3-diyl) and related structures based on polystyrene and elemental sulfur, **2**, 253

#### Conformational analysis

Amino-substituted *gem*-diphosphonic acids: structures of complexes with divalent metal cations in aqueous solutions, **4**, 697

#### Conformational equilibrium

The influence of the surface on conformational equilibrium in thin layers of nematic liquid crystal, **2**, 319

Peculiarities of NMR spectra of heterospin complexes, **11**, 2078

#### Conformations

The influence of the surface on conformational equilibrium in thin layers of nematic liquid crystal, **2**, 319

Possible intramolecular rearrangements of *O*-vinyloximes initiated by N—O bond dissociation: a quantum-chemical analysis, **5**, 764

Polydentate coordination of the thallium atom in complexes with chiral amidinylcyclopentadienyl ligands, **5**, 890

Mechanism of formation and monomolecular decomposition of *aci*-nitromethanes: a quantum-chemical study, **6**, 952

Structures and conformational behavior of phosphorothioites and their complexes with transition metals obtained from X-ray diffraction analysis (review), **7**, 1130

Reaction of the acrylic acid and 1-vinylimidazole copolymer with CuCl<sub>2</sub> in aqueous solution, **8**, 1382

*P,O*-Ligands. Complexes of tetraphenylmethylenediphosphine oxide with silver nitrate, **8**, 1469

Equilibrium conformation of dimethylaminodichlorophosphine molecule: the use of the results of quantum-chemical calculations and spectroscopic measurements in the analysis of gas-phase electron diffraction data, **9**, 1550

Membrane extraction of organic compounds. 3. A new receptor fragment for carboxylate groups based of the calix[4]arene platform, **11**, 2134

Magnetic parameters and rotational mobility of the  $\equiv$ SiON(O<sup>•</sup>)CX<sub>3</sub> nitroxides (X = H, D) grafted on silica surface, **12**, 2384

#### Conformers

S<sub>1</sub>←S<sub>0</sub> Vibronic spectrum and structure of 2,2-difluoroethanal in the S<sub>1</sub> state, **7**, 1218

Conformations of *Z*- and *E*-isomers of some chiral (1*R*,4*R*)-2-arylidene-*p*-menthan-3-ones, **9**, 1596

Structure and spectra of 1,3,2-dioxaphospholenes. 1. Microwave spectra of 2-chloro-4,5-dimethyl-1,3,2-dioxaphospholene and its isotopomers in the ground and excited vibrational states, **9**, 1605

Intramolecular Y←O (Y = N, P, As, Sb, Bi) coordination in organopnictogen compounds: an *ab initio* and DFT study, **11**, 2028

#### Conjugation

Effect of substituents on ionization potentials of phosphorus compounds. Conjugation in radical cations, **1**, 35

First ionization potentials of amines and electronic effects in their radical cations, **1**, 43

#### Coordination

Effect of substituents on ionization potentials of phosphorus compounds. Conjugation in radical cations, **1**, 35

Bis(O—Si)-chelate fluorobis(2-oxohexahydroazepino-methyl)silylium tetrafluoroborate, a cation-anionic complex containing a silylium ion stabilized by O→Si coordination, **2**, 331

Polydentate coordination of the thallium atom in complexes with chiral amidinylcyclopentadienyl ligands, **5**, 890

Structural parameters of concentrated aqueous solutions of LiCl under extreme conditions, as calculated by the method of integral equations. Effect of temperature, **6**, 935

Structures and conformational behavior of phosphorothioites and their complexes with transition metals obtained from X-ray diffraction analysis (review), **7**, 1130

Organophosphate hydrolase — an enzyme catalyzing degradation of phosphorus-containing toxins and pesticides (review), **10**, 1826

#### Copolymerization

Thermodynamics of alternating copolymer of styrene and CO in the 0–600 K region, **12**, 2372

#### Copolymers

Reaction of the acrylic acid and 1-vinylimidazole copolymer with CuCl<sub>2</sub> in aqueous solution, **8**, 1382

Thermodynamics of alternating copolymer of styrene and CO in the 0–600 K region, **12**, 2372

**Copper compounds**

Anomalous line broadening in the ESR spectra of copper(II) dithizonate, **3**, 413

Amino-substituted *gem*-diphosphonic acids: structures of complexes with divalent metal cations in aqueous solutions, **4**, 697

Synthesis and liquid-crystalline properties of substituted  $\beta$ -aminovinyl ketones and their complexes with copper(II), **5**, 805

EPR study of weak exchange interactions in binuclear copper(II) complexes with salicylaldehyde acyldihydrazones, **5**, 812

Conversion of aromatic aldehydes into 1-aryl-2,2-dichloroethenes, **6**, 1047

Thermodynamics of copper, silver, gold, and mercury acetylenides (review), **7**, 1121

Catalytic ring opening of acetylcyclopropane by water and alcohols under the action of copper or palladium salts, **7**, 1242

Reaction of the acrylic acid and 1-vinylimidazole copolymer with  $\text{CuCl}_2$  in aqueous solution, **8**, 1382

New method for the synthesis of  $\beta$ -bromostyrenes, **8**, 1401

Deep oxidation of methane on granulated and monolith copper—manganese oxide catalysts, **9**, 1589

Structural investigations of paramagnetic metalloproteins using high-resolution NMR spectroscopy: iron-sulfur and copper proteins (review), **10**, 1762

Electron transfer coupled with ATP hydrolysis in nitrogenase (review), **10**, 1789

Structural and functional model of methane hydroxylase of membrane-bound methane monooxygenase from *Methylococcus capsulatus* (Bath), **10**, 1867

Synthesis of nine-, ten-, and fifteen-membered alkenolides by the oxidative cleavage of the bridging C=C bond in 2-oxabicycloalkenes, **11**, 2149

Bis(1,4-di-*tert*-butyl-1,4-diazabutadiene)copper(I) [(3,6-di-*tert*-butyl-*o*-benzosemiquinono)(3,6-di-*tert*-butylcatecholato)cuprate(II)]. The molecular structure and intramolecular electron transfer, **11**, 2193

**Copper ions**

Generation of an oscillating chemical reaction in a heterogeneous system by the oxidation of an alkaline solution of luminol with sodium(VI) ferrate in the presence of copper ions, **1**, 159

**Copyrolysis**

Synthesis of 1,3,4-trifluoroisoquinoline by copyrolysis of 2,3,5,6-tetrafluoropyridine-4-sulfonyl chloride with butadiene, **2**, 322

**Corn starch**

Thermodynamic characteristics of supramolecular complexes of aroma compounds with ordered structures of polysaccharides of corn starch and its cryotextures, **2**, 300

Sorption of aliphatic ketones from aqueous solutions by starch cryotextures, **6**, 1032

**Cornforth rearrangement**

A tandem of the Cornforth rearrangements of 4-(1,2,3-triazol-1-yl)iminomethyl-1,2,3-thiadiazole, **2**, 268

**Cotton effect**

Direct *C*-nitration of cyclic  $\alpha,\beta$ -unsaturated oximes under the action of sodium nitrite and acetic acid in methanol, **8**, 1410

**Cristazarin**

Chemistry of naphthazarin derivatives. 8. Determination of structures of substituted 2-hydroxy-6(7)-methoxy-naphthazarins and 7(8)-hydroxypyranonaphthazarins by IR spectroscopy, **1**, 95

**Critical micelle concentration**

Complex formation between polyethylene oxide-containing nonionic surfactants and  $\alpha$ - and  $\beta$ -cyclodextrins, **4**, 620

**Cross-coupling**

Heterocyclization of *o*-(arylethynyl)arylhydrazines as a new procedure for the synthesis of substituted 1*H*- and 2*H*-indazoles and indoles, **7**, 1268

Silylation as a new strategy of the use of aliphatic nitro compounds in organic synthesis (review), **11**, 1936

**Crotonaldehyde**

Asymmetric Michael reaction of diethyl malonate with crotonaldehyde catalyzed by chiral aminocarboxylates, amino alcoholates, and amino phenolates, **9**, 1620

**Crown effect**

Specific features of the chemical behavior of acetylenic derivatives of benzocrown ethers, **5**, 868

**Crown ethers**

Complex formation between azacrown derivatives of dibenzylidenecyclopentanone and alkali-earth metal ions, **3**, 404

Cation-dependent pericyclic reactions of crown-containing photochromic compounds (review), **11**, 1970

**Cryochemistry**

Reactions of photogenerated fluorine atoms with molecules trapped in solid argon. 4. Spectroscopic characteristics of  $\beta\text{-C}_2\text{H}_2\text{F}^\cdot$  radicals generated in reactions of mobile F atoms with  $\text{C}_2\text{H}_2$  molecules trapped in solid argon, **6**, 989

**Cryotextures**

Thermodynamic characteristics of supramolecular complexes of aroma compounds with ordered structures of polysaccharides of corn starch and its cryotextures, **2**, 300

Sorption of aliphatic ketones from aqueous solutions by starch cryotextures, **6**, 1032

**Crystal solvates**

Heterometallic zirconocene(III) aluminum hydride complex  $(\text{Cp}_2\text{ZrH})_2\text{HAlCl}_2 \cdot \text{C}_4\text{H}_8\text{O}_2 \cdot \text{C}_6\text{H}_6$ , **11**, 2200

**Crystal structure**

Crystal structures of chloroform solvates of fullerenes, **1**, 78

Electron density distribution in vanadocene ( $\eta^5\text{-C}_5\text{H}_5$ )<sub>2</sub>V and mixed metallocenes ( $\eta^5\text{-C}_5\text{H}_5$ )M( $\eta^5\text{-C}_7\text{H}_7$ ) (M = Ti, V, or Cr) and ( $\eta^5\text{-C}_5\text{H}_5$ )Ti( $\eta^8\text{-C}_8\text{H}_8$ ). Effect of the nature of the cyclic ligand on the character of the M-( $\pi$ -ligand) bond, **1**, 130

Reactions of *N*-phenyl-*o*-semiquinonedimine complexes of nickel and platinum with carbonyl-containing low-valence iron and rhenium compounds, **1**, 142

Bis(O—Si)-chelate fluorobis(2-oxohexahydroazepinomethyl)silylium tetrafluoroborate, a cation-anionic complex containing a silylium ion stabilized by O→Si coordination, **2**, 331

Mercury and cadmium pnictidehalides: the inverted Zintl phases (review), **3**, 337

Crystal and electronic structure of  $\text{Ni}_3\text{Bi}_2\text{S}_2$  (parkerite), **3**, 353

Synthesis and the crystal structure of a supramolecular adduct of the  $[\text{Mo}_3\text{O}_4(\text{H}_2\text{O})_6\text{Cl}_3]^+$  cluster complex with macrocyclic cavitand cucurbituril, **3**, 494

- Synthesis and the crystal structures of *N*-(2-nitroxyethyl)isonicotinamide and its complexes with PdCl<sub>2</sub> and PtCl<sub>2</sub> as potential antitumor medicines, **3**, 520
- X-ray diffraction analysis and luminescence spectral study of crystal solvates of *N*-(*N'*-tosylanthranoyl)anthranilic acid with acetic acid and dimethylformamide, **4**, 728
- Polydentate coordination of the thallium atom in complexes with chiral amidinylcyclopentadienyl ligands, **5**, 890
- Stereospecific formation of polycyclic ferrocenyldihydropyrazoles based on *Z*- and *E*-isomeric ferrocenyl-substituted  $\alpha,\beta$ -unsaturated ketones of the heterocyclic series, **5**, 895
- Synthesis, structures, and properties of the niobium and tantalum telluride cubane clusters [M<sub>4</sub>( $\mu_4$ -O)( $\mu_3$ -Te)<sub>4</sub>(CN)<sub>12</sub>]<sup>6-</sup> (M = Nb or Ta), **6**, 930
- Crystal defects and stability of RDX, **6**, 1000
- Synthesis of 4,5-dihydrothiazole derivatives by the reaction of perfluoro-2-methylpent-2-en-3-yl isothiocyanate with ambident N,O- and N,S-nucleophiles, **6**, 1072
- Reductive mono- and diallylation of the bis(pyridine)dihydropyridyllithium dimer by triallylborane, **6**, 1078
- Synthesis and structure of a new octahedral molybdenum thiocyanide cluster complex K<sub>7</sub>[Mo<sub>6</sub>( $\mu_3$ -S)<sub>8</sub>(CN)<sub>6</sub>] · 8H<sub>2</sub>O, **7**, 1140
- Synthesis and the crystal structure of the supramolecular complex [Cl<sub>3</sub>InW<sub>3</sub>S<sub>4</sub>(H<sub>2</sub>O)<sub>9</sub>]<sup>2+</sup> with cucurbituril, **7**, 1144
- Unusual scission of 3,7-dichlorobisothiazolo[4,5-*b*:4',5'-*e*]pyrazine by nucleophiles, **7**, 1287
- Chemistry of acyl(imido)ketenes. 6. Synthesis and the molecular structure of ethyl 2-oxo-2,5-dihydrofuro[2,3-*b*]quinoxaline-3-carboxylate, **7**, 1317
- Formation of a tetranuclear nickel(II) complex containing an unusual bridging ligand, **7**, 1336
- Molecular complex of C<sub>60</sub> fullerene with an organic  $\pi$ -donor, bis(methylenedithiotetrafulvalene): synthesis, crystal structures, and properties, **8**, 1423
- Synthesis of (2*E*)-2-(tetrafluoroethylidene)-3,3-bis(trifluoromethyl)-2,3-dihydrothiazolo[3,2-*a*]benzimidazole, **8**, 1446
- New approach to the functionalization of  $\delta$ -carboline derivatives, **8**, 1449
- Synthesis and structure of the polymeric cluster compound [Mn(H<sub>2</sub>O)<sub>4</sub>]<sub>3</sub>[W<sub>4</sub>S<sub>4</sub>(CN)<sub>12</sub>] · *n*H<sub>2</sub>O containing very large cavities, **9**, 1525
- The nature of the O—O bond in hydroperoxides, **9**, 1539
- Crystal structure and excimer fluorescence of dibenzoyl-methanatorboron difluoride, **9**, 1612
- Crystal and molecular structures of salts of the secondary permethylmetallocenylmethyl cations (C<sub>5</sub>Me<sub>5</sub>MC<sub>5</sub>Me<sub>4</sub>CHR)<sup>+</sup>X<sup>-</sup> (M = Ru, Os; R = Ph, C<sub>6</sub>F<sub>5</sub>; X = BF<sub>4</sub>, PF<sub>6</sub>), **9**, 1616
- New *N*-nitrosoamines. 1. Synthesis and nitrosative cleavage of the Mannich bases derived from nitrogen-containing heterocycles and primary aliphatic amines, **9**, 1630
- Coordination chemistry of macrocyclic multidentate Lewis acids. Synthesis and structures of complexes of cyclic trimeric perfluoro-*o*-phenylenemercury with *N,N*-dimethylacetamide and *n*-butyronitrile, **9**, 1673
- Heteroorganic betaines. 7. Synthesis and structure of a germanium-containing organophosphorus betaine Et<sub>3</sub>P<sup>+</sup>—CHMe—GeMe<sub>2</sub>—S<sup>-</sup>, **9**, 1679
- Electrophilic substitution in eleven-vertex metallacarborane 1,2,4-CpCoC<sub>2</sub>B<sub>8</sub>H<sub>10</sub>, **9**, 1683
- Peculiarities of NMR spectra of heterospin complexes, **11**, 2078
- Study of alkaloids from the flora of the Siberian and Altai regions. 6. Crystal and molecular structure of songorine *Z*-oxime, **11**, 2092
- Allylmetallation of benzoazaheterocycles with allylic derivatives of zinc. Synthesis of 1,4-ethano-2,3-dihydroisoquinolines and allylated heterocycles, **11**, 2172
- Bis(1,4-di-*tert*-butyl-1,4-diazabutadiene)copper(I) [(3,6-di-*tert*-butyl-*o*-benzosemiquinono)(3,6-di-*tert*-butylcatecholato)cuprate(II)]. The molecular structure and intramolecular electron transfer, **11**, 2193
- Heterometallic zirconocene(III) aluminum hydride complex (Cp<sub>2</sub>ZrH)<sub>2</sub>HAiCl<sub>2</sub> · C<sub>4</sub>H<sub>8</sub>O<sub>2</sub> · C<sub>6</sub>H<sub>6</sub>, **11**, 2200
- Synthesis and the structure of tribromo(7-bromobicyclo[4.1.0]hept-7-yl)germane, **11**, 2203
- Synthesis, molecular structures, and thermal decomposition of heterometallic ( $\pi$ -cyclooctadiene)platinum-bis(tricarbonyliron- $\mu_3$ -chalcogenides)[Fe—Fe], ( $\pi$ -C<sub>8</sub>H<sub>12</sub>)Pt( $\mu_3$ -X)<sub>2</sub>Fe<sub>2</sub>(CO)<sub>6</sub>, where X = S, Se, or Te, **11**, 2215
- Reaction of *exo-nido*-ruthenacarborane [Cl(Ph<sub>3</sub>P)<sub>2</sub>Ru]-5,6,10-( $\mu$ -H)<sub>3</sub>-10-H-7,8-C<sub>2</sub>B<sub>9</sub>H<sub>8</sub> with bromine, **11**, 2245
- Synthesis and the structure of the triphenylphosphine complex of *o*-nickelacarborane, 3,3-(PPh<sub>3</sub>)<sub>2</sub>-3,1,2-NiC<sub>2</sub>B<sub>9</sub>H<sub>11</sub>, **11**, 2248
- Unusual transformation of the urea molecule giving rise to the NCO<sup>-</sup> anion as a bridging ligand between two Co<sup>II</sup> atoms, **11**, 2251
- closo*-3-( $\eta^3$ -4,6-Dimethylbicyclo[3.3.0]oct-1-en-2-yl)-1,2-dimethyl-3,1,2-dicarbollyliridium with an agostic C—H...Ir bond, **11**, 2254
- Structure determination from powder diffraction (review), **12**, 2273
- Ternary metal sulfides M<sub>2</sub>MoS<sub>2</sub>: synthesis using single-layer dispersions of molybdenum disulfide and study of the structure, **12**, 2293
- New polymolecular bismuth monohalides. Synthesis and crystal structures of Bi<sub>4</sub>Br<sub>x</sub>I<sub>4-x</sub> (x = 1, 2, or 3), **12**, 2304
- Synthesis of the gold-dirhenium ferrocenylacetylide cluster. The crystal structure of Re<sub>2</sub>( $\mu$ -C≡CFc){Au(PPh<sub>3</sub>)}(CO)<sub>8</sub>, **12**, 2441
- Binuclear and polynuclear transition metal complexes with macrocyclic ligands. 1. Synthesis and the structure of an antiferromagnetic binuclear nickel complex prepared by the reaction of *o*-phenylenediamine with pyrrole-2,5-dicarbaldehyde and nickel pivalate, **12**, 2445
- First X-ray diffraction study of nitrosonium complexes of nitrogen-containing organic compounds: a complex of 1,10-phenanthroline with NO<sup>+</sup>BF<sub>4</sub><sup>-</sup>, **12**, 2477
- Destruction of polymeric cobalt(II) trimethylacetate. Synthesis and structures of new complexes Co<sub>9</sub>( $\mu_3$ -OH)<sub>6</sub>( $\mu$ -OOCMe<sub>3</sub>)<sub>12</sub>(OCMe<sub>2</sub>)<sub>4</sub> and Co<sub>6</sub>( $\mu_4$ -O)<sub>2</sub>( $\mu$ -OOCMe<sub>3</sub>)<sub>10</sub>( $\eta$ -HOOCMe<sub>3</sub>)<sub>4</sub>, **12**, 2485
- Crystalline module**  
Modular design of icosahedral metal clusters (review), **1**, 1
- Crystallization**  
Crystal defects and stability of RDX, **6**, 1000
- Asymmetric synthesis of (*S*)- and (*R*)- $\alpha$ -methylserine based on the chiral recyclable reagent (*S*)-*N*-(2-benzoylphenyl)-1-benzylpyrrolidine-2-carboxamide, **6**, 1037
- Micellar enzymology: methodology and technique (review), **10**, 1718

**Cuculoquinone**

Chemistry of naphthazarin derivatives. 7. Determination of structures of substituted 2,6(7)-dihydroxynaphthazarins by UV and IR spectroscopy, **1**, 88

**Cucurbituril**

Synthesis and the crystal structure of a supramolecular adduct of the  $[\text{Mo}_3\text{O}_4(\text{H}_2\text{O})_6\text{Cl}_3]^+$  cluster complex with macrocyclic cavitand cucurbituril, **3**, 494

Synthesis and the crystal structure of the supramolecular complex  $[\text{Cl}_3\text{InW}_3\text{S}_4(\text{H}_2\text{O})_9]^{2+}$  with cucurbituril, **7**, 1144

**Cyanation**

Synthesis of 4,5-dihydroxyphthalonitrile, **5**, 919

**Cyanine dyes**

Photochemical investigation of the triplet state of 3,3'-diethylthiacarbocyanine iodide in the presence of DNA, **7**, 1190

**2-Cyanoacetamide**

Preparative synthesis of 3-cyano-4-difluoromethyl- and 3-cyano-4-trifluoromethyl-2(1*H*)-pyridones, **4**, 669

**2-Cyanoacrylates**

Reactivity of esters of 2-cyanoacrylic acid toward some free radicals, **12**, 2356

**Cyanobiphenyls**

The influence of the surface on conformational equilibrium in thin layers of nematic liquid crystal, **2**, 319

**Cyanoborohydrides**

Selective reduction of the acyl group in cyclic  $\alpha$ -acyl- $\beta$ -dicarbonyl compounds with sodium cyanoborohydride. Efficient synthesis of cyclic  $\alpha$ -alkyl- $\beta$ -dicarbonyl compounds, **2**, 324

**Cyanofurazans**

Reactions of cyanofurazans with  $\beta$ -dicarbonyl compounds, **7**, 1280

**3-Cyano-2(1*H*)-pyridones**

Preparative synthesis of 3-cyano-4-difluoromethyl- and 3-cyano-4-trifluoromethyl-2(1*H*)-pyridones, **4**, 669

**Cyclic compounds**

Selective reduction of the acyl group in cyclic  $\alpha$ -acyl- $\beta$ -dicarbonyl compounds with sodium cyanoborohydride. Efficient synthesis of cyclic  $\alpha$ -alkyl- $\beta$ -dicarbonyl compounds, **2**, 324

**Cyclic lipopeptides**

Cyclic lipopeptides with fungicidal activity from the sea isolate of the bacterium *Bacillus subtilis*, **11**, 2231

**Cyclic polyenes**

Single step, solvent-free processes: examples and prospects (review), **11**, 2010

**Cyclic voltammetry**

Synthesis, structures, and properties of the niobium and tantalum telluride cubane clusters  $[\text{M}_4(\mu_4\text{-O})(\mu_3\text{-Te})_4(\text{CN})_{12}]^{6-}$  (M = Nb or Ta), **6**, 930

Molecular electrochemistry of hydrofullerenes  $\text{C}_{70}\text{H}_{36-46}$ , **6**, 996

Electroanalytical applications of Prussian Blue and its analogs (review), **10**, 1811

Electrochemical analysis of the coordination sphere of ruthenium(II) as electron transfer mediator in glucose oxidase catalysis in aqueous solutions, **10**, 1849

**Cyclization**

Cyclization of *ortho*-(alk-2-enyl)anilines under the action of iodine, **3**, 456

5-Substituted 2-alkyl- and 2-arylsulfonyliminohexahydro-1,3,5-triazines, **3**, 480

Stereoselective cyclization of alkyl *N*-phthaloyl-4-bromoglutamates to cyclopropane derivatives, **4**, 644

Synthesis of 5*H*-naphtho[2,3-*c*]phenothiazine-8,13-diones from 1-arylthio-2-azidoanthraquinones, **4**, 678

*peri*-Naphthylenediamines. 31. Study of interconversions of 2,3-dihydroperimidines and 1,8-bis(dialkylamino)naphthalenes. Convenient synthesis of 1,2,2,3-tetramethyl-2,3-dihydroperimidine and a monoisopropyl analog of the "proton sponge", **5**, 846

A new method for the synthesis of *N*-substituted (4-oxo-4,5,6,7-tetrahydroindol-3-yl)acetic acids, **7**, 1259

Chemistry of acyl(imidoyl)ketenes. 6. Synthesis and the molecular structure of ethyl 2-oxo-2,5-dihydrofuro[2,3-*b*]quinoxaline-3-carboxylate, **7**, 1317

Reactions of 1,3,3,3-tetrafluoro-2-methoxycarbonylpropene-sulfonyl chloride with enamines, **9**, 1645

Synthesis of linear and angular anthraquinonoisothiazol-3-ones, their *S*-oxides, and *S,S*-dioxides, **9**, 1657

Transformations of 1-amino-2-(3-hydroxyalk-1-ynyl)-9,10-anthraquinones in the presence of amines, **9**, 1663

Silylation as a new strategy of the use of aliphatic nitro compounds in organic synthesis (review), **11**, 1936

Intermediates of chemical assembling of oligoorganosiloxanes in hydrolysis of organochlorosilanes (review), **11**, 1998

Allylmethallation of benzoazaheterocycles with allylic derivatives of zinc. Synthesis of 1,4-ethano-2,3-dihydroisoquinolines and allylated heterocycles, **11**, 2172

**Cycloaddition**

Density functional theoretical studies of [2+2] cycloaddition of simple transient silenes and germenes to ethylene, formaldehyde, and thioformaldehyde, and vibrational analysis of spectra of reactants and cyclic products, **1**, 20

The synthesis of *N*-isocyanurato-substituted aziridino[1,2][60]fullerenes, **3**, 445

1,3-Dipolar cycloaddition of cyclic  $\alpha$ -methoxynitrones, derivatives of 2*H*-imidazole 1-oxide and 4*H*-imidazole 3-oxide, **5**, 882

10-(3-Hydroxypropyl)-1,4,6,8-tetraphenyl-1,4,7,8-tetraaza-5-phosphoniaspiro[4.5]deca-6,9-diene chloride: synthesis and molecular structure, **8**, 1461

Silylation as a new strategy of the use of aliphatic nitro compounds in organic synthesis (review), **11**, 1936

Cation-dependent pericyclic reactions of crown-containing photochromic compounds (review), **11**, 1970

Synthesis of nitrosubstituted triangulanes, **11**, 2101

Study of the factors determining the outcome of cycloaddition of isocyanurato-substituted azides to [60]fullerene, **11**, 2162

**Cycloalkanes**

Functionalization of alkanes and cycloalkanes by super-electrophiles. 15. Carbonylation of cycloheptane, cyclooctane, and isomeric monoalkylcyclohexanes with CO in the presence of  $\text{CBr}_4 \cdot 2\text{AlBr}_3$  to form individual esters of tertiary carboxylic acids of the cyclohexane series, **12**, 2394

**Cycloalkenes**

Promotion effect of hypervalent iodine compounds on the reactions of 3-hydroxy-4-nitrofurazan with cycloalkenes, **12**, 2479

**Cycloalumination**

Synthesis and transformations of metallacycles. 24. Zr-Catalyzed cycloalumination of asymmetrical disubstituted acetylenes, **3**, 484

Synthesis and transformations of metallacycles. 27. Quantum-chemical study of the mechanism of styrene catalytic cyclometallation with triethylaluminum in the presence of  $\text{Cp}_2\text{ZrCl}_2$ , **12**, 2336

**Cycloastragenol**

Secondary metabolites of *Astragalus danicus* Retz. and *A. inopinatus* Boriss., **6**, 1107

**Cyclobisdialkylamidophosphites**

Synthesis of cavity systems by cyclophosphorylation of 1,7-dihydroxynaphthalene with phosphorous triamides, **5**, 923

**Cyclobutane**

Cation-dependent pericyclic reactions of crown-containing photochromic compounds (review), **11**, 1970

**Cyclocondensation**

Reaction of 6-amino-1,3-dimethyluracil with hexafluoroacetone and ethyl trifluoropyruvate benzoylimines, **6**, 1113

Cyclocondensation of 5-ethynyl-1,4-naphthoquinone derivatives with hydrazine, **9**, 1668

**Cyclodextrins**

The role of intra- and intermolecular hydrogen bonds in the formation of  $\beta$ -cyclodextrin head-to-head and head-to-tail dimers. The results of *ab initio* and semiempirical quantum-chemical calculations, **2**, 206

Complex formation between polyethylene oxide-containing nonionic surfactants and  $\alpha$ - and  $\beta$ -cyclodextrins, **4**, 620

**Cycloheptane**

Functionalization of alkanes and cycloalkanes by super-electrophiles. 15. Carbonylation of cycloheptane, cyclooctane, and isomeric monoalkylcyclohexanes with CO in the presence of  $\text{CBr}_4 \cdot 2\text{AlBr}_3$  to form individual esters of tertiary carboxylic acids of the cyclohexane series, **12**, 2394

**Cycloheptanone**

Synthesis of  $\omega$ - and  $(\omega - 1)$ -acetylenic acids from five-, six-, or seven-membered cycloalkanones, **5**, 833

**Cycloheptatrienyl ligands**

Electron density distribution in vanadocene  $(\eta^5\text{-C}_5\text{H}_5)_2\text{V}$  and mixed metallocenes  $(\eta^5\text{-C}_5\text{H}_5)\text{M}(\eta^5\text{-C}_7\text{H}_7)$  ( $\text{M} = \text{Ti}$ ,  $\text{V}$ , or  $\text{Cr}$ ) and  $(\eta^5\text{-C}_5\text{H}_5)\text{Ti}(\eta^8\text{-C}_8\text{H}_8)$ . Effect of the nature of the cyclic ligand on the character of the  $\text{M}-(\pi\text{-ligand})$  bond, **1**, 130

**Cyclohexa-2,5-dien-4-one**

Spirocyclohexadienones. 4. Synthesis and dienone-phenolic rearrangement of 1-R-3,3-dialkyl-2-azaspiro[4.5]deca-1,6,9-trien-8-ones, **9**, 1648

**Cyclohexane**

Oxidative transformations of cyclohexane, methylcyclopentane, and pentane on treatment with super-electrophiles based on polyhalomethane and aluminum halides, **1**, 81

Adsorption of vapor mixtures of water and organic substance on activated carbons, **4**, 595

Hydrogenation of  $\text{CO}_2$  conjugated with dehydrogenation of cyclohexane over an intermetallic catalyst, **7**, 1201

Transformations of cycloalkanes under the action of organoaluminum compounds and transition metal complexes in the presence of polychloromethanes, **7**, 1326

**Cyclohexanone**

Synthesis of  $\omega$ - and  $(\omega - 1)$ -acetylenic acids from five-, six-, or seven-membered cycloalkanones, **5**, 833

**Cyclometallation**

Synthesis and transformations of metallacycles. 23.  $\text{Cp}_2\text{TiCl}_2$ -Catalyzed cyclometallation of fullerene  $\text{C}_{60}$  with  $\text{EtAlCl}_2$ , **2**, 297

Synthesis and transformations of metallacycles. 26.  $\text{Cp}_2\text{ZrCl}_2$ -Catalyzed cycloalumination of substituted allenes with  $\text{Et}_3\text{Al}$ , **11**, 2188

**Cyclooctadiene**

Synthesis, molecular structures, and thermal decomposition of heterometallic ( $\pi$ -cyclooctadiene)platinum-bis(tri-carbonyliron- $\mu_3$ -chalcogenides)[ $\text{Fe}-\text{Fe}$ ], ( $\pi\text{-C}_8\text{H}_{12}$ ) $\text{Pt}(\mu_3\text{-X})_2\text{Fe}_2(\text{CO})_6$ , where  $\text{X} = \text{S}$ ,  $\text{Se}$ , or  $\text{Te}$ , **11**, 2215

**Cyclooctane**

Transformations of cycloalkanes under the action of organoaluminum compounds and transition metal complexes in the presence of polychloromethanes, **7**, 1326

Functionalization of alkanes and cycloalkanes by super-electrophiles. 15. Carbonylation of cycloheptane, cyclooctane, and isomeric monoalkylcyclohexanes with CO in the presence of  $\text{CBr}_4 \cdot 2\text{AlBr}_3$  to form individual esters of tertiary carboxylic acids of the cyclohexane series, **12**, 2394

**Cyclooctatetraenyl ligands**

Electron density distribution in vanadocene  $(\eta^5\text{-C}_5\text{H}_5)_2\text{V}$  and mixed metallocenes  $(\eta^5\text{-C}_5\text{H}_5)\text{M}(\eta^5\text{-C}_7\text{H}_7)$  ( $\text{M} = \text{Ti}$ ,  $\text{V}$ , or  $\text{Cr}$ ) and  $(\eta^5\text{-C}_5\text{H}_5)\text{Ti}(\eta^8\text{-C}_8\text{H}_8)$ . Effect of the nature of the cyclic ligand on the character of the  $\text{M}-(\pi\text{-ligand})$  bond, **1**, 130

**Cyclopentadienes**

Bis-(2-diphenylphosphinoethyl)cyclopentadienylchloro-lutetium: synthesis and dynamic behavior in solution, **7**, 1295

**(Cyclopentadienone)(cyclopentadienyl)ruthenium cation**

Diastereoselectivity of the formation of planar chiral ruthenocenol in reactions of chiral tertiary phosphines with the  $(\eta^4\text{-cyclopentadienone})(\eta^5\text{-cyclopentadienyl})$ ruthenium cation, **11**, 2212

**Cyclopentadienyl complexes**

Polydentate coordination of the thallium atom in complexes with chiral amidinylcyclopentadienyl ligands, **5**, 890

Bis-(2-diphenylphosphinoethyl)cyclopentadienylchloro-lutetium: synthesis and dynamic behavior in solution, **7**, 1295

Synthesis and transformations of metallacycles. 27. Quantum-chemical study of the mechanism of styrene catalytic cyclometallation with triethylaluminum in the presence of  $\text{Cp}_2\text{ZrCl}_2$ , **12**, 2336

Protonation and acylation of the heterometallic complexes  $(\mu\text{-H})\text{Os}_3(\mu\text{-O}_2\text{CC}_5\text{H}_4\text{FeCp})(\text{CO})_{10}$  and  $\text{Fe}\{(\mu\text{-O}_2\text{CC}_5\text{H}_4)(\mu\text{-H})\text{Os}_3(\text{CO})_{10}\}_2$ , **12**, 2451

**Cyclopentanes**

Synthesis and transformations of metallacycles. 26.  $\text{Cp}_2\text{ZrCl}_2$ -Catalyzed cycloalumination of substituted allenes with  $\text{Et}_3\text{Al}$ , **11**, 2188

**Cyclopentanoids**

New chlorinated cyclopentenones prepared from hexachloro-cyclopentadiene: synthesis, chemical properties, and application in the synthesis (review), **9**, 1489

**Cyclopentanone**

Synthesis of  $\omega$ - and  $(\omega - 1)$ -acetylenic acids from five-, six-, or seven-membered cycloalkanones, **5**, 833

**Cyclophanes**

Cation-dependent pericyclic reactions of crown-containing photochromic compounds (review), **11**, 1970

**Cyclopropanation**

One-step cyclopropanation of alkynes with diiodomethane and triethylaluminum, **8**, 1406

Reactions of diazoalkanes with unsaturated compounds. 14. Reactions of diazomethane, diazocyclopropane, and methyl diazoacetate with 1,1,2,2-tetrafluoro-3-vinylcyclobutane and 2,3,3-trifluoro-1-vinylcyclobutene to form [3+2] and [1+2] cycloadducts, **11**, 2113

**Cyclopropane-1,2-dicarboxylic acid**

Stereoselective cyclization of alkyl *N*-phthaloyl-4-bromoglutamates to cyclopropane derivatives, **4**, 644

**Cyclopropanes**

Stereoselective cyclization of alkyl *N*-phthaloyl-4-bromoglutamates to cyclopropane derivatives, **4**, 644

One-step cyclopropanation of alkynes with diiodomethane and triethylaluminum, **8**, 1406

Synthesis and transformation of metallacycles. 25. On a mechanism of the Ni(acac)<sub>2</sub>-catalyzed conversion of 3-alkyl-1-ethylalumacyclopentanes into 1,1-disubstituted cyclopropanes, **8**, 1465

Silylation of  $\gamma,\gamma$ -bis(alkoxycarbonyl)-substituted aliphatic nitro compounds: synthesis of *N,N*-bis(trimethylsilyloxy)aminocyclopropanes, **12**, 2433

**Cyclopropylcyclobutanes**

Reactions of diazoalkanes with unsaturated compounds. 14. Reactions of diazomethane, diazocyclopropane, and methyl diazoacetate with 1,1,2,2-tetrafluoro-3-vinylcyclobutane and 2,3,3-trifluoro-1-vinylcyclobutene to form [3+2] and [1+2] cycloadducts, **11**, 2113

**Cyclopropylcyclobutenes**

Reactions of diazoalkanes with unsaturated compounds. 14. Reactions of diazomethane, diazocyclopropane, and methyl diazoacetate with 1,1,2,2-tetrafluoro-3-vinylcyclobutane and 2,3,3-trifluoro-1-vinylcyclobutene to form [3+2] and [1+2] cycloadducts, **11**, 2113

**Cyclopropylgermanes**

Synthesis and the structure of tribromo(7-bromobicyclo[4.1.0]hept-7-yl)germane, **11**, 2203

**Cyclotrimethylenetrinitramine (RDX)**

Crystal defects and stability of RDX, **6**, 1000

**Cytochrome P450**

The role of metal-oxygen intermediates in biological and chemical monooxygenation of alkanes (review), **10**, 1795

**D****15-*O*-Deacetylrrhaposerin**

15-*O*-Deacetylrrhaposerin and rhaserin — new components of a lactone mixture from *Rhaponticum serratuloides*, **3**, 537

Migration of the *O*-acetyl group in the acetonation of guaianolide rhaposerin, **12**, 2459

**Deacylation**

Diffusional transport of urokinase and acyl-urokinase into fibrin and plasma clots: time of contact and fibrinolytic response *in vitro*, **10**, 1885

**Decahydro-*closo*-decaborate anion**

Regioselective hydrogen—deuterium exchange in the [B<sub>10</sub>H<sub>10</sub>]<sup>2-</sup> anion. Syntheses of [1,10-B<sub>10</sub>H<sub>8</sub>D<sub>2</sub>]<sup>2-</sup> and [2,3,4,5,6,7,8,9-B<sub>10</sub>H<sub>2</sub>D<sub>8</sub>]<sup>2-</sup>, **6**, 1115

**Decalins**

Transformations of cycloalkanes under the action of organoaluminum compounds and transition metal complexes in the presence of polychloromethanes, **7**, 1326

**Decarbonylation**

Effect of medium on the rate constant of decarbonylation of phenylacetyl radical, **2**, 237

Chemistry of acyl(imidoyl)ketenes. 6. Synthesis and the molecular structure of ethyl 2-oxo-2,5-dihydrofuro[2,3-*b*]quinoxaline-3-carboxylate, **7**, 1317

**Decarboxylation**

The preparation and reactivity of metal-containing monomers. 54. Thermolysis of the acrylamide monomer [Co(CH<sub>2</sub>=CHCONH<sub>2</sub>)<sub>4</sub>(H<sub>2</sub>O)<sub>2</sub>](NO<sub>3</sub>)<sub>2</sub>, **5**, 901

Synthesis of nitrosubstituted triangulanes, **11**, 2101

**Dehydration**

Oxidative dehydrogenation of *N*-methyl-*o*-phenylenediamine coordinated to the Pd<sup>II</sup> and Pt<sup>II</sup> atoms, **3**, 515

The preparation and reactivity of metal-containing monomers. 54. Thermolysis of the acrylamide monomer [Co(CH<sub>2</sub>=CHCONH<sub>2</sub>)<sub>4</sub>(H<sub>2</sub>O)<sub>2</sub>](NO<sub>3</sub>)<sub>2</sub>, **5**, 901

**Dehydrobromination**

Synthesis of  $\omega$ - and ( $\omega - 1$ )-acetylenic acids from five-, six-, or seven-membered cycloalkanones, **5**, 833

**Dehydrodipeptides**

Deprotonation of the peptide NH groups and diastereoselective hydrogenation of *N*-acetyl- $\alpha,\beta$ -dehydrodipeptides, **4**, 738

**Dehydrofluorination**

A new method for the synthesis of fluorinated vinyl sulfides and ketene dithioacetals, **6**, 1044

*N*-Substituted trifluoroacetimidoyl halides: synthesis and properties, **9**, 1639

**Dehydrogenation**

A new route of the reaction of EtAlCl<sub>2</sub> with  $\alpha$ -olefins catalyzed by Ti complexes, **2**, 292

Transformations of 1-amino-2-(3-hydroxyalk-1-ynyl)-9,10-anthraquinones in the presence of amines, **9**, 1663

**Demercuration**

Phosphine  $\sigma$ -sydnonyl complexes of Ni, Pd, and Pt, **3**, 525

**Deoxygenation**

Direct *C*-nitration of cyclic  $\alpha,\beta$ -unsaturated oximes under the action of sodium nitrite and acetic acid in methanol, **8**, 1410

**Deoxyribonucleic acid**

Photochemical investigation of the triplet state of 3,3'-diethylthiacarbocyanine iodide in the presence of DNA, **7**, 1190

**Deprotonation**

Deprotonation of the peptide NH groups and diastereoselective hydrogenation of *N*-acetyl- $\alpha,\beta$ -dehydrodipeptides, **4**, 738

**Deuterio-exchange**

Regioselective hydrogen—deuterium exchange in the [B<sub>10</sub>H<sub>10</sub>]<sup>2-</sup> anion. Syntheses of [1,10-B<sub>10</sub>H<sub>8</sub>D<sub>2</sub>]<sup>2-</sup> and [2,3,4,5,6,7,8,9-B<sub>10</sub>H<sub>2</sub>D<sub>8</sub>]<sup>2-</sup>, **6**, 1115

**Deuterolysis**

Synthesis and transformations of metallacycles. 23. Cp<sub>2</sub>TiCl<sub>2</sub>-Catalyzed cyclometallation of fullerene C<sub>60</sub> with EtAlCl<sub>2</sub>, **2**, 297

**Diacetylenido complexes**

Electron transfer-induced replacement of carbonyl ligands in cobalt clusters, **12**, 2483

**Dialkyl 1-phthalylimidocyclopropane-1,2-dicarboxylates**

Stereoselective cyclization of alkyl *N*-phthaloyl-4-bromoglutamates to cyclopropane derivatives, **4**, 644

**Dialkyl sulfides**

Thermodynamic properties and valence-force field of alkanethiols and dialkyl sulfides, **9**, 1563

**Dialkyl trioxides**

Free-radical chain decomposition of ozone initiated by di(*tert*-butyl) trioxide, **1**, 63

**4-Dialkylamino-2-phenyl-naphtho[2,3-*h*]quinoline-7,12-diones**

Transformations of 1-amino-2-(3-hydroxyalk-1-ynyl)-9,10-anthraquinones in the presence of amines, **9**, 1663

**1,1'-Dialkyl-3,3'-bidiaziridines**

Synthesis and structures of 1,1'-dialkyl-3,3'-bidiaziridines, **3**, 440

***N,N*-Dialkylcarbamoyloxy(trialkyl)germanes**

Reactions of hexaorganoyldigermoxanes with *O*-trimethylsilyl carbamates, **4**, 743

**4,10-Diallyl-3,9-diazatricyclo[6.2.2.0<sup>2,7</sup>]dodecane**

Reductive mono- and diallylation of the bis(pyridine)di-hydropyridyllithium dimer by triallylborane, **6**, 1078

**2,6-Diallylpiperidines**

Reductive mono- and diallylation of the bis(pyridine)di-hydropyridyllithium dimer by triallylborane, **6**, 1078

**Diamines**

Oxidative dehydrogenation of *N*-methyl-*o*-phenylenediamine coordinated to the Pd<sup>II</sup> and Pt<sup>II</sup> atoms, **3**, 515

Asymmetric reduction of ketones with sodium aluminum hydride modified with chiral amino alcohols, **5**, 843

Enantioselective hydrogenation in the presence of the rhodium(i) complex with (+)-4*S*,5*S*-*N*<sup>4</sup>,*N*<sup>4</sup>,*N*<sup>5</sup>,*N*<sup>5</sup>,2,2-hexamethyl-1,3-dioxolane-4,5-dimethanamine, **10**, 1860

**1,2-Diaminobenzene**

Binuclear and polynuclear transition metal complexes with macrocyclic ligands. 1. Synthesis and the structure of an antiferromagnetic binuclear nickel complex prepared by the reaction of *o*-phenylenediamine with pyrrole-2,5-dicarbaldehyde and nickel pivalate, **12**, 2445

**Diaminocyclohexane derivatives**

Asymmetric transfer hydrogenation of ketones catalyzed by rhodium and iridium complexes with chiral bidentate Schiff's bases, **4**, 734

**1,2-Diaminoethane**

Synthesis of  $\alpha$ -amino oximes and bis- $\alpha$ -amino oximes from the monoterpene hydrocarbons 3-carene and  $\alpha$ -pinene and  $\alpha,\omega$ -diamines, **11**, 2106

**1,6-Diaminohexane**

Synthesis of  $\alpha$ -amino oximes and bis- $\alpha$ -amino oximes from the monoterpene hydrocarbons 3-carene and  $\alpha$ -pinene and  $\alpha,\omega$ -diamines, **11**, 2106

**1,5-Diamino-3-(2-hydroxyethyl)-3-azabicyclo[3.3.1]non-6-ene and -nonane**

Reduction of 3-(2-hydroxyethyl)-1,5-dinitro-3-azabicyclo[3.3.1]non-6-ene, **2**, 265

**1,8-Diaminonaphthalenes**

*peri*-Naphthylenediamines. 31. Study of interconversions of 2,3-dihydroperimidines and 1,8-bis(dialkylamino)naphthalenes. Convenient synthesis of 1,2,2,3-tetramethyl-2,3-dihydroperimidine and a monoisopropyl analog of the "proton sponge", **5**, 846

**1,3-Diaminopropane**

Synthesis of  $\alpha$ -amino oximes and bis- $\alpha$ -amino oximes from the monoterpene hydrocarbons 3-carene and  $\alpha$ -pinene and  $\alpha,\omega$ -diamines, **11**, 2106

Unusual condensation of propargylamine. Generation of the 1,3-di(propargylimino)propane anion coordinated to the cobalt(III) atom, **11**, 2206

**1,2-Diarylethenes**

Photochromic dihetarylethenes. 10. Photochromic 1,2-bis[2-(benzothiazol-2-yl)-3-thienyl]- and 1,2-bis[2-(benzothiazol-2-yl)benzothiophen-3-yl]ethenes, **12**, 2420

**Diastereomers**

Synthesis and structures of 1,1'-dialkyl-3,3'-bidiaziridines, **3**, 440

NMR study of diastereoisomerism of 2-(1-aminoethyl)bicyclo[2.2.1]heptane and its hydrochloride (deitiforin), **6**, 1014

Catalytic phosphorylation of polyfluoroalkanols. 17. Synthesis and the stereochemistry of tris( $\alpha$ -trifluoromethylbenzyl) phosphates, **6**, 1085

**Diastereoselectivity**

Synthesis and stereochemistry of diastereomeric *closo*-( $\pi,\sigma$ -dicyclopentenyl)rhodacarboranes with the agostic C—H...Rh bond, **3**, 504

Introduction of the 1*H*-indol-3-yl(phenyl)methyl residue into some CH acids, **3**, 543

Stereoselective dimerization of chiral  $\alpha$ -bromoamides promoted by Fe(CO)<sub>5</sub>, **3**, 548

Diastereoselective synthesis of (*R*\*,*R*\*)-ethyl 2-[1*H*-indol-3-yl(phenyl)methyl]-3-oxobutanoate, **3**, 570

Deprotonation of the peptide NH groups and diastereoselective hydrogenation of *N*-acetyl- $\alpha,\beta$ -dehydrodipeptides, **4**, 738

Asymmetric synthesis of (*S*)- and (*R*)- $\alpha$ -methylserine based on the chiral recyclable reagent (*S*)-*N*-(2-benzoylphenyl)-1-benzylpyrrolidine-2-carboxamide, **6**, 1037

Stereochemistry of optically active compounds. Problems and prospects (review), **8**, 1339

New potentialities of electrophilic addition in the assembly of polyfunctional compounds from simple precursors (review), **11**, 1949

Stereodivergent synthesis of chiral low-molecular bioregulators using readily available lipases (review), **11**, 1984

First attempts at differential diastereoselection in catalytic reactions of *N*-chirally substituted dirhodium(II) tetrakis[methyl 2-oxoimidazolidine-4(*S*)-carboxylates] with diazoacetates, **11**, 2156

Diastereoselectivity of the formation of planar chiral ruthenocenol in reactions of chiral tertiary phosphines with the ( $\eta^4$ -cyclopentadienone)( $\eta^5$ -cyclopentadienyl)ruthenium cation, **11**, 2212

Synthesis of  $\alpha$ -tocopherol analogs with unsaturated side chain and their transformation into the corresponding chromans with  $\omega$ -functionalized side chain, **11**, 2227

**Diastereotopism**

Synthesis of stereoisomeric *d,l* and *meso* forms of *O,O'*-bis-(*O,O'*-dialkyl 1-phosphorylbenzyl)phenylphosphonites and -thionophosphonates containing a pseudo-chiral center and determination of their configurations by NMR spectroscopy, **2**, 287

**3,7-Diazabicyclo[3.3.1]nonane**

A new method for the synthesis of 3,7-diazabicyclo[3.3.1]nonanes, **4**, 753

**Diazo compounds**

Reactions of diazoalkanes with unsaturated compounds. 14. Reactions of diazomethane, diazocyclopropane, and methyl diazoacetate with 1,1,2,2-tetrafluoro-3-vinylcyclobutane and 2,3,3-trifluoro-1-vinylcyclobutene to form [3+2] and [1+2] cycloadducts, **11**, 2113



Reactions of methoxycarbonylcarbene with 3-ethyl-2-phenyl- and 2,3-diphenyloxazolidines, **11**, 2144

#### Diazoketones

Bis(ketenyl)benzenes: preparation, observation, and reaction with tetramethylpiperidin-1-yloxy, **11**, 2130

#### Diazomalonamide

A tandem of the Cornforth rearrangements of 4-(1,2,3-triazol-1-yl)iminomethyl-1,2,3-thiadiazole, **2**, 268

#### Diazotization

Synthetic potential of substituted 7-alkylseleno-1,4-dihydro-1,6-naphthyridines, **1**, 122

#### 14*H*-Dibenzo[*a,j*]xanthene

Unexpected transformation of 1,1'-methylenebis(2-naphthol) into 1,2,1',2'-tetrahydrospiro(naphthalene-1,3'-naphtho[2,1-*b*]pyran)-2-one, a spirodimer of 1,2-naphthoquinone 1-methide, in the presence of boric acid and paraformaldehyde, **5**, 914

#### Dibenzoylmethanatorboron difluoride

Crystal structure and excimer fluorescence of dibenzoylmethanatorboron difluoride, **9**, 1612

#### Dibenzyl ketone

Effect of medium on the rate constant of decarbonylation of phenylacetyl radical, **2**, 237

#### 4',5'-Dibromofluorescein

Electron transfer coupled with ATP hydrolysis in nitro-genase (review), **10**, 1789

#### 6,7-Dibromoheptanoic acid

Synthesis of  $\omega$ - and ( $\omega - 1$ )-acetylenic acids from five-, six-, or seven-membered cycloalkanones, **5**, 833

#### 5,6-Dibromohexanoic acid

Synthesis of  $\omega$ - and ( $\omega - 1$ )-acetylenic acids from five-, six-, or seven-membered cycloalkanones, **5**, 833

#### 4,5-Dibromopentanoic acid

Synthesis of  $\omega$ - and ( $\omega - 1$ )-acetylenic acids from five-, six-, or seven-membered cycloalkanones, **5**, 833

#### 1,3-Dibromopropyne

Reactions of 1,3-dibromopropyne with 1-aryl-2,2-dimethylhydrazines as a new method for the synthesis of substituted 1,3,4-oxadiazinium bromides, **12**, 2475

#### 3,5-Di-*tert*-butyl-4-hydroxybenzaldehyde

Fulleropyrrolidine-containing sterically hindered phenol. Synthesis, structure, and properties, **4**, 607

#### 2,6-Di-*tert*-butylphenols

Organometallic derivatives of 2,6-di-*tert*-butylphenols as specific inhibitors of methyl oleate oxidation, **6**, 1097

#### Dicarboxylic acids

EPR study of weak exchange interactions in binuclear copper(II) complexes with salicylaldehyde acyldihydrazones, **5**, 812

#### Dichlorogermylene

Proton-donor properties of  $\text{HCCl}_3$ ,  $\text{HSiCl}_3$ , and  $\text{HGeCl}_3$  molecules: a quantum-chemical study, **4**, 740

#### Dichlorophenylphosphine

Synthesis of stereoisomeric *d,l* and *meso* forms of *O,O'*-bis-(*O,O'*-dialkyl 1-phosphorylbenzyl)phenylphosphonites and -thionophosphonates containing a pseudochiral center and determination of their configurations by NMR spectroscopy, **2**, 287

#### Dichlorosilylene

Proton-donor properties of  $\text{HCCl}_3$ ,  $\text{HSiCl}_3$ , and  $\text{HGeCl}_3$  molecules: a quantum-chemical study, **4**, 740

#### Dichlorostyrenes

Conversion of aromatic aldehydes into 1-aryl-2,2-dichloroethenes, **6**, 1047

#### Dicobalthexacarbonyl complexes

New potentialities of electrophilic addition in the assembly of polyfunctional compounds from simple precursors (review), **11**, 1949

#### Dicyclopentadiene

Synthesis and stereochemistry of diastereomeric *closo*-( $\pi,\sigma$ -dicyclopentenyl)rhodacarboranes with the agostic C—H...Rh bond, **3**, 504

#### Diels—Alder reaction

Reductive mono- and dialylation of the bis(pyridine)dihydropyridyllithium dimer by triallylborane, **6**, 1078

#### Diethyl malonate

Asymmetric Michael reaction of diethyl malonate with crotonaldehyde catalyzed by chiral aminocarboxylates, amino alcoholates, and amino phenolates, **9**, 1620

#### 3-Diethylamino-5-ethynyl-1,4-naphthoquinones

Cyclocondensation of 5-ethynyl-1,4-naphthoquinone derivatives with hydrazine, **9**, 1668

#### *N,N*-Diethylcarbamyloxy(triphenyl)germane

Reactions of hexaorganoyldigermoxanes with *O*-trimethylsilyl carbamates, **4**, 743

#### Diethylenetriamine

2-Polyfluoroalkylchromones. 9. Synthesis and structures of 5-(2-hydroxyaryl)-7-polyfluoroalkyl-1,4,8-triazabicyclo[5.3.0]dec-4-enes, **8**, 1430

Synthesis of  $\alpha$ -amino oximes and bis- $\alpha$ -amino oximes from the monoterpene hydrocarbons 3-carene and  $\alpha$ -pinene and  $\alpha,\omega$ -diamines, **11**, 2106

#### 3,3'-Diethylthiacarbocyanine iodide

Photochemical investigation of the triplet state of 3,3'-diethylthiacarbocyanine iodide in the presence of DNA, **7**, 1190

#### 3,5-Diethyl-1,2,4-triazolium 4-nitroimide

Synthesis of 3,5-disubstituted 1*H*-1,2,4-triazolium 4-nitroimides, **12**, 2481

#### Differential scanning calorimetry

Thermodynamic characteristics of supramolecular complexes of aroma compounds with ordered structures of polysaccharides of corn starch and its cryotextures, **2**, 300

Synthesis and magnetic properties of liquid crystalline lanthanide complexes with alkylsulfate counterions, **3**, 488

Complex formation between polyethylene oxide-containing nonionic surfactants and  $\alpha$ - and  $\beta$ -cyclodextrins, **4**, 620

Synthesis and liquid-crystalline properties of substituted  $\beta$ -aminovinyl ketones and their complexes with copper(II), **5**, 805

Micellar enzymology: methodology and technique (review), **10**, 1718

#### Diffusion

Cetylpyridinium bromide-based oil-in-water microemulsions as a medium for hydrolysis of esters of phosphorus acids in the presence of primary amines, **2**, 245

Diffusional transport of urokinase and acyl-urokinase into fibrin and plasma clots: time of contact and fibrinolytic response *in vitro*, **10**, 1885

#### (Difluoroamino)fluorodinitromethane

Reactions of (difluoroamino)trinitromethane with nucleophilic reagents, **4**, 736

**(Difluoroamino)trinitromethane**

Reactions of (difluoroamino)trinitromethane with nucleophilic reagents, **4**, 736

**Difluorobenzophenones**

Influence of isomerism of difluorobenzophenone on the synthesis and properties of poly(arylene ether ketones), **7**, 1208

**2,2-Difluoroethanal**

$S_1 \leftarrow S_0$  Vibronic spectrum and structure of 2,2-difluoroethanal in the  $S_1$  state, **7**, 1218

**Dihetarylethenes**

Photochromic dihetarylethenes. 7. Synthesis of bis(thienylazoles), photochromic analogs of diarylethenes, **1**, 116

Photochromic dihetarylethenes. 9. Dithienylperfluorocyclopentenes: a quantum-chemical study, **3**, 381

Cation-dependent pericyclic reactions of crown-containing photochromic compounds (review), **11**, 1970

Photochromic dihetarylethenes. 10. Photochromic 1,2-bis[2-(benzothiazol-2-yl)-3-thienyl]- and 1,2-bis[2-(benzothiazol-2-yl)benzothiophen-3-yl]ethenes, **12**, 2420

Photochromic dihetarylethenes. 11. Synthesis and photochromic properties of diarylethenes containing furan or furopyrimidine bridges, **12**, 2424

**2,3-Dihydro-1*H*-1,4-diazepine derivatives**

2-Polyfluoroalkylchromones. 8. 2-Trifluoromethyl- and 6-nitro-2-trifluoromethylchromones in reactions with amines, **8**, 1426

**Dihydrofolate reductase**

Dihydrofolate reductase: structural aspects of mechanisms of enzyme catalysis and inhibition (review), **10**, 1733

**2,5-Dihydro-1*H*-imidazole-1-oxyl**

Reactions of metallated 1-hydroxy-2,2,4,5,5-pentamethyl-2,5-dihydro-1*H*-imidazole with functionalized nitroxyl radicals derived from 2,5-dihydro-1*H*-imidazole and 2,5-dihydro-1*H*-imidazole 3-oxide, **4**, 665

**2,3-Dihydroperimidines**

*peri*-Naphthylenediamines. 31. Study of interconversions of 2,3-dihydroperimidines and 1,8-bis(dialkylamino)naphthalenes. Convenient synthesis of 1,2,2,3-tetramethyl-2,3-dihydroperimidine and a monoisopropyl analog of the "proton sponge", **5**, 846

**2-(3,4-Dihydro-2*H*-pyran-5-yl)-1,3-diphenyl-1,3-diaza-2 $\lambda^3$ -phospholidine**

10-(3-Hydroxypropyl)-1,4,6,8-tetraphenyl-1,4,7,8-tetraaza-5-phosphoniaspiro[4.5]deca-6,9-diene chloride: synthesis and molecular structure, **8**, 1461

**Dihydropyrazole**

Stereospecific formation of polycyclic ferrocenyldihydropyrazoles based on *Z*- and *E*-isomeric ferrocenyl-substituted  $\alpha,\beta$ -unsaturated ketones of the heterocyclic series, **5**, 895

**1,4-Dihydropyridines**

Reactions of cyclic enaminketones with benzylidene-malononitriles. Synthesis of new fused heterocyclic systems containing the 1,4-dihydropyridine fragment, **12**, 2428

**Dihydropyrimidine**

*N*-Substituted trifluoroacetimidoyl halides: synthesis and properties, **9**, 1639

**3,4-Dihydroquinazolines**

Amidines: synthesis from *o*-alkenylanilines and cyclization in polyphosphoric acid, **3**, 545

**1,2-Dihydroquinolines**

Studies of photoinduced addition of water and alcohols to substituted dihydroquinolines, **4**, 673

**1,7-Dihydroxynaphthalene**

Synthesis of cavity systems by cyclophosphorylation of 1,7-dihydroxynaphthalene with phosphorous triamides, **5**, 923

**Dihydroxynaphthazarins**

Chemistry of naphthazarin derivatives. 7. Determination of structures of substituted 2,6(7)-dihydroxynaphthazarins by UV and IR spectroscopy, **1**, 88

**5,8-Dihydroxy-1,4-naphthoquinone**

Chemistry of naphthazarin derivatives. 8. Determination of structures of substituted 2-hydroxy-6(7)-methoxynaphthazarins and 7(8)-hydroxypyranonaphthazarins by IR spectroscopy, **1**, 95

**(9,10-Dihydroxy)nitro-9,10-bis(2-oxopropyl)-9,10-dihydrophenanthrenes**

Reactions of 9,10-phenanthrenequinone and its nitro derivatives with acetone in the presence of  $Al_2O_3$ , **9**, 1625

**4,5-Dihydroxyphthalonitrile**

Synthesis of 4,5-dihydroxyphthalonitrile, **5**, 919

***E,E*-1,4-Diiodobuta-1,3-diene**

Cross-coupling of *E,E*-1,4-diiodobuta-1,3-diene with nucleophiles catalyzed by Pd or Ni complexes: a new route to functionalized dienes, **11**, 2095

**Diiodomethane**

One-step cyclopropanation of alkynes with diiodomethane and triethylaluminum, **8**, 1406

**Diketones**

Photochromic dihetarylethenes. 7. Synthesis of bis(thienylazoles), photochromic analogs of diarylethenes, **1**, 116

Synthesis of quinoxalines fused with triterpenes, ursolic acid and betulin derivatives, **2**, 304

Oxidation of alkylphenylacetylenes and dialkylacetylenes on palladium catalysts in DMSO, **4**, 649

Preparative synthesis of 3-cyano-4-difluoromethyl- and 3-cyano-4-trifluoromethyl-2(1*H*)-pyridones, **4**, 669

Unusual oxidative cleavage of the aryl-ethynyl bonds in (arylethynyl)polymethylbenzenes with iodine in dimethyl sulfoxide, **6**, 1051

Synthesis of bis(polyfluoroalkyl)-1,3,5-triketones, **7**, 1233

A new method for the synthesis of *N*-substituted (4-oxo-4,5,6,7-tetrahydroindol-3-yl)acetic acids, **7**, 1259

Reactions of cyanofurazans with  $\beta$ -dicarbonyl compounds, **7**, 1280

Reactions of cyclic enaminketones with benzylidene-malononitriles. Synthesis of new fused heterocyclic systems containing the 1,4-dihydropyridine fragment, **12**, 2428

**Dimedone**

$S_N^H$ -Reactions of triazolo[4,3-*b*]- and tetrazolo[1,5-*b*]-1,2,4-triazines with methylene-active carbonyl compounds, **11**, 2183

**Dimerization**

Stereoselective dimerization of chiral  $\alpha$ -bromoamides promoted by  $Fe(CO)_5$ , **3**, 548

Energochemical technologies: energy and bulk/basic chemicals in a single process (review), **11**, 2015

**4-(2,6-Dimethylheptyl)benzoic acid**

Stereodivergent synthesis of chiral low-molecular bio-regulators using readily available lipases (review), **11**, 1984

**Dimethyl ether**

Binary molecular complexes of silicon tetrafluoride with water, methanol, and dimethyl ether. Quantum-chemical study, **12**, 2316

**Dimethyl sulfoxide**

Oxidation of alkylphenylacetylenes and dialkylacetylenes on palladium catalysts in DMSO, **4**, 649

Unusual oxidative cleavage of the aryl–ethynyl bonds in (arylethynyl)polymethylbenzenes with iodine in dimethyl sulfoxide, **6**, 1051

Oxidative bromination of tricyclic sesquiterpenoids (1*S*,3*S*,5*R*,6*S*,9*S*)-5-hydroxy-6,10,10-trimethyltricyclo[7.2.0.0<sup>1,6</sup>]decan-2-one and clovane-2β,9α-diol with the HBr–DMSO system, **8**, 1419

***N,N*-Dimethylacetamide**

Coordination chemistry of macrocyclic multidentate Lewis acids. Synthesis and structures of complexes of cyclic trimeric perfluoro-*o*-phenylenemercury with *N,N*-dimethylacetamide and *n*-butyronitrile, **9**, 1673

**Dimethylaminodichlorophosphine**

Equilibrium conformation of dimethylaminodichlorophosphine molecule: the use of the results of quantum-chemical calculations and spectroscopic measurements in the analysis of gas-phase electron diffraction data, **9**, 1550

***N,N*-Dimethylaniline**

Influence of *o*-benzoquinone nature on initiation of radical polymerization by the *o*-benzoquinone–*tert*-amine system, **12**, 2366

**2,2-Dimethyl-1,3-benzodioxole**

Synthesis of 4,5-dihydroxyphthalonitrile, **5**, 919

***closo*-3-(η<sup>3</sup>-4,6-Dimethylbicyclo[3.3.0]oct-1-en-2-yl)-1,2-dimethyl-3,1,2-dicarbollyliridium**

*closo*-3-(η<sup>3</sup>-4,6-Dimethylbicyclo[3.3.0]oct-1-en-2-yl)-1,2-dimethyl-3,1,2-dicarbollyliridium with an agostic C–H...Ir bond, **11**, 2254

**Dimethyldecalins**

Oxidative transformations of cyclohexane, methylcyclopentane, and pentane on treatment with superelectrophiles based on polyhalomethane and aluminum halides, **1**, 81

**Dimethyldioxirane**

Oxidation of diterpenoid alkaloids with dimethyldioxirane, **4**, 720

**Dimethylgermylene**

Spin chemistry of short-lived intermediates in the reactions of germanorbornadiene derivatives and digermabicyclooctadiene (review), **11**, 1916

**1,1-Dimethylhydrazine**

Reactions of 1,3-dibromopropyne with 1-aryl-2,2-dimethylhydrazines as a new method for the synthesis of substituted 1,3,4-oxadiazinium bromides, **12**, 2475

**2,6-Dimethyloct-1-yl carboxylates**

Stereodivergent synthesis of chiral low-molecular bio-regulators using readily available lipases (review), **11**, 1984

***N,N*-Dimethylpiperidinium iodides**

Reductive mono- and dialylation of the bis(pyridine)dihydropyridyllithium dimer by triallylborane, **6**, 1078

**3,5-Dimethyl-1,2,4-triazolium 4-nitroimide**

Synthesis of 3,5-disubstituted 1*H*-1,2,4-triazolium 4-nitroimides, **12**, 2481

**5,5-Dimethyl-2-(4,4,4-trifluoro-3-oxobutyryl)cyclohexane-1,3-dione**

Trifluoroacetylation of 2-acetyldimedone, **3**, 568

**1,1-Dinitroalkanes**

*N*-Substituted tetrahydro-1,3-oxazines and oxazolidines. 1. A new version of the Mannich reaction involving amino alcohols, **1**, 104

**Dinitromethane**

Mechanism of formation and monomolecular decomposition of *aci*-nitromethanes: a quantum-chemical study, **6**, 952

**1,3-Dinitro-2-phenylpropane**

A new method for the synthesis of 3,7-diazabicyclo[3.3.1]nonanes, **4**, 753

**Diorganosilanone**

Intermediates of chemical assembling of oligoorganosiloxanes in hydrolysis of organochlorosilanes (review), **11**, 1998

**Dioxanes**

Rh<sub>2</sub>(OAc)<sub>4</sub>-Catalyzed reaction of 1,3-dioxanes with methyl diazoacetate, **5**, 865

Heterometallic zirconocene(III) aluminum hydride complex (Cp<sub>2</sub>ZrH)<sub>2</sub>AlCl<sub>2</sub>·C<sub>4</sub>H<sub>8</sub>O<sub>2</sub>·C<sub>6</sub>H<sub>6</sub>, **11**, 2200

**1,3,2-Dioxaphospholenes**

Structure and spectra of 1,3,2-dioxaphospholenes. 1. Microwave spectra of 2-chloro-4,5-dimethyl-1,3,2-dioxaphospholene and its isotopomers in the ground and excited vibrational states, **9**, 1605

**Dioxaziridine**

Quantum-chemical study of the singlet potential energy surface of the nitrene–dioxygen system, **12**, 2346

**1,4-Dioxepanes**

Rh<sub>2</sub>(OAc)<sub>4</sub>-Catalyzed reaction of 1,3-dioxanes with methyl diazoacetate, **5**, 865

***C,N*-Diphenylnitrimine**

10-(3-Hydroxypropyl)-1,4,6,8-tetraphenyl-1,4,7,8-tetraaza-5-phosphoniaspiro[4.5]deca-6,9-diene chloride: synthesis and molecular structure, **8**, 1461

***gem*-Diphosphonates**

Amino-substituted *gem*-diphosphonic acids: structures of complexes with divalent metal cations in aqueous solutions, **4**, 697

**Diphthalocyanines**

Synthesis and spectral and electrochemical properties of hexadecamethyl-substituted diphthalocyanines of rare-earth metals, **7**, 1299

**1,3-Dipolar cycloaddition**

Reactions of diazoalkanes with unsaturated compounds. 14. Reactions of diazomethane, diazocyclopropane, and methyl diazoacetate with 1,1,2,2-tetrafluoro-3-vinylcyclobutane and 2,3,3-trifluoro-1-vinylcyclobutene to form [3+2] and [1+2] cycloadducts, **11**, 2113

**Dipole moment**

Structure and spectra of 1,3,2-dioxaphospholenes. 1. Microwave spectra of 2-chloro-4,5-dimethyl-1,3,2-dioxaphospholene and its isotopomers in the ground and excited vibrational states, **9**, 1605

**1,3-Di(propargylimino)propane monoanion**

Unusual condensation of propargylamine. Generation of the 1,3-di(propargylimino)propane anion coordinated to the cobalt(III) atom, **11**, 2206

**Dissociation**

Possible intramolecular rearrangements of *O*-vinylloximes initiated by N–O bond dissociation: a quantum-chemical analysis, **5**, 764

**Disulfides**

Ternary metal sulfides M<sub>2</sub>MoS<sub>2</sub>: synthesis using single-layer dispersions of molybdenum disulfide and study of the structure, **12**, 2293

**Diterpene alkaloids**

Oxidation of diterpenoid alkaloids with dimethyldioxirane, **4**, 720

Study of alkaloids from the flora of the Siberian and Altai regions. 5. Synthesis of new elatidine derivatives, **5**, 907

Study of alkaloids from the flora of the Siberian and Altai regions. 6. Crystal and molecular structure of songorine *Z*-oxime, **11**, 2092

### 1,2-Dithienylethenes

Photochromic dihetarylethenes. 6. Photochromic derivatives of thieno[3,2-*b*]thiophene, **1**, 110

Photochromic dihetarylethenes. 7. Synthesis of bis(thienyl-azoles), photochromic analogs of diarylethenes, **1**, 116

Photochromic dihetarylethenes. 10. Photochromic 1,2-bis[2-(benzothiazol-2-yl)-3-thienyl]- and 1,2-bis[2-(benzothiazol-2-yl)benzothiophen-3-yl]ethenes, **12**, 2420

Photochromic dihetarylethenes. 11. Synthesis and photochromic properties of diarylethenes containing furan or furopyrimidine bridges, **12**, 2424

### Dithienylperfluorocyclopentenes

Photochromic dihetarylethenes. 9. Dithienylperfluorocyclopentenes: a quantum-chemical study, **3**, 381

### Dithioacetals

A new method for the synthesis of fluorinated vinyl sulfides and ketene dithioacetals, **6**, 1044

### Dithiophosphoric acid

Thioethynyl esters of phosphorus acids (review), **6**, 925

### Dithizone

Anomalous line broadening in the ESR spectra of copper(II) dithizonate, **3**, 413

### Di(triphenylmethyl) peroxide

Chemiluminescence during thermolysis of the  $(\text{Ph}_3\text{COOCPh}_3)_n\text{-Ph}_3\text{C}^\cdot$  peroxide containing captured triphenylmethyl radical, **7**, 1194

### Diynes

Oxidative dimerization of vinylbornylacetylenes under the action of mercuric acetate, **7**, 1238

### (±)-Dolichols

Fluorescent-labeled derivatives of dolichyl phosphate. Analogs of dolichyl phosphate with the 2-aminopyridine residue at the ω-end of the chain, **3**, 531

Derivatives of dolichyl phosphate with fluorescent label. Analogs of dolichyl phosphate with different lengths of isoprene chain, containing the (1-naphthyl)amino group in the ω-fragment, **11**, 2221

### Dolichyl phosphate

Fluorescent-labeled derivatives of dolichyl phosphate. Analogs of dolichyl phosphate with the 2-aminopyridine residue at the ω-end of the chain, **3**, 531

Derivatives of dolichyl phosphate with fluorescent label. Analogs of dolichyl phosphate with different lengths of isoprene chain, containing the (1-naphthyl)amino group in the ω-fragment, **11**, 2221

### (*R*)-Drim-7-en-15-ol

Stereodivergent synthesis of chiral low-molecular bioregulators using readily available lipases (review), **11**, 1984

### Drugs

Chemical aspects of influence of medical drugs on organism functions (review), **8**, 1356

### Dubinín—Radushkevich—Kaganer equation

Dubinín's theory and its contribution to adsorption science (review), **12**, 2265

### Dynamic NMR spectroscopy

Bis-(2-diphenylphosphinoethyl)cyclopentadienylchloro-lutetium: synthesis and dynamic behavior in solution, **7**, 1295

NMR studies of the dynamic behavior of 2-anilino-6-chloro-4-methoxy-1,3,5-triazine in solution, **12**, 2473

## E

### Ecotoxicology

Effect of methyltin trichloride on the activity of lactate dehydrogenase, **8**, 1485

### Eicosane

Pyrolysis of eicosane in supercritical water, **8**, 1478

### Elatidal

Study of alkaloids from the flora of the Siberian and Altai regions. 5. Synthesis of new elatidine derivatives, **5**, 907

### Elatidam

Study of alkaloids from the flora of the Siberian and Altai regions. 5. Synthesis of new elatidine derivatives, **5**, 907

### Elatidamic acid

Study of alkaloids from the flora of the Siberian and Altai regions. 5. Synthesis of new elatidine derivatives, **5**, 907

### Elatidine

Study of alkaloids from the flora of the Siberian and Altai regions. 5. Synthesis of new elatidine derivatives, **5**, 907

### Electrical conductivity

Molecular complex of  $\text{C}_{60}$  fullerene with an organic  $\pi$ -donor, bis(methylenedithiotetrathiafulvalene): synthesis, crystal structures, and properties, **8**, 1423

### Electrocatalysis

Electrochemical activation of freons using electron transfer mediators (review), **11**, 1929

### Electrochemical activity

Sulfurization of polymers. 4. Poly(4,5,6,7-tetrathiono-4,5,6,7-tetrahydrobenzothiophene-2,3-diyl) and related structures based on polystyrene and elemental sulfur, **2**, 253

### Electrochemistry

Electrochemical and electrochromic properties of rare-earth element diphthalocyanine complexes, **3**, 396

The synthesis of *N*-isocyanurato-substituted aziridino[1,2][60]fullerenes, **3**, 445

Fulleropyrrolidine-containing sterically hindered phenol. Synthesis, structure, and properties, **4**, 607

2,6-Di-*tert*-butylphenols and phenoxyl radicals with metal—metal bonds, **4**, 716

Molecular electrochemistry of hydrofullerenes  $\text{C}_{70}\text{H}_{36-46}$ , **6**, 996

Synthesis and spectral and electrochemical properties of hexadecamethyl-substituted diphthalocyanines of rare-earth metals, **7**, 1299

Electroanalytical applications of Prussian Blue and its analogs (review), **10**, 1811

Electrochemical activation of freons using electron transfer mediators (review), **11**, 1929

Electrochemical study of redox properties of 2,3,4,5-tetraphenyl-1-heterocyclopenta-2,4-dienes  $\text{Ph}_4\text{C}_4\text{ER}^1\text{R}^2$  (E = Si, Ge, Sn). A new method for generation of tetraphenylgermole dianion, **11**, 2071

### Electrocyclic reactions

Cation-dependent pericyclic reactions of crown-containing photochromic compounds (review), **11**, 1970

### Electron affinity

Molecular electrochemistry of hydrofullerenes  $\text{C}_{70}\text{H}_{36-46}$ , **6**, 996

Relationship between reduction potentials and electron affinities of fullerenes and their derivatives, **9**, 1593

#### Electron density

Electron density distribution in vanadocene ( $\eta^5\text{-C}_5\text{H}_5$ )<sub>2</sub>V and mixed metallocenes ( $\eta^5\text{-C}_5\text{H}_5$ )M( $\eta^5\text{-C}_7\text{H}_7$ ) (M = Ti, V, or Cr) and ( $\eta^5\text{-C}_5\text{H}_5$ )Ti( $\eta^8\text{-C}_8\text{H}_8$ ). Effect of the nature of the cyclic ligand on the character of the M—( $\pi$ -ligand) bond, **1**, 130

Hydrogen bond in 3-acetyl-4-hydroxycoumarin: X-ray diffraction study and quantum-chemical calculations, **3**, 418

The nature of the O—O bond in hydroperoxides, **9**, 1539

#### Electron transfer

Ligand oxidation as a method for intramolecular activation of metal complexes (review), **4**, 573

Influence of the linking chain length on the recombination kinetics of covalently bonded triplet radical pairs and magnetic field effects, **4**, 599

Electron transfer in the photochemical reactions of phenothiazine with halomethanes, **5**, 798

Electrochemical analysis of the coordination sphere of ruthenium(II) as electron transfer mediator in glucose oxidase catalysis in aqueous solutions, **10**, 1849

Electrochemical activation of freons using electron transfer mediators (review), **11**, 1929

Bis(1,4-di-*tert*-butyl-1,4-diazabutadiene)copper(I) [(3,6-di-*tert*-butyl-*o*-benzosemiquinono)(3,6-di-*tert*-butylcatecholato)cuprate(II)]. The molecular structure and intramolecular electron transfer, **11**, 2193

Influence of *o*-benzoquinone nature on initiation of radical polymerization by the *o*-benzoquinone—*tert*-amine system, **12**, 2366

Electron transfer-induced replacement of carbonyl ligands in cobalt clusters, **12**, 2483

#### Electronegativity

The reactivity of organoboranes in radical substitution reactions, **3**, 390

#### Electronic absorption spectroscopy

Chemistry of naphthazarin derivatives. 7. Determination of structures of substituted 2,6(7)-dihydroxynaphthazarins by UV and IR spectroscopy, **1**, 88

Photochromic dihetarylethenes. 6. Photochromic derivatives of thieno[3,2-*b*]thiophene, **1**, 110

Photochromic dihetarylethenes. 7. Synthesis of bis(thienylazoles), photochromic analogs of diarylethenes, **1**, 116

Kinetics of  $\eta^6 \rightarrow \eta^5$  isomerization of ( $\eta^6$ -fluorenyl)( $\eta^5$ -cyclopentadienyl)iron, **1**, 157

Electrochemical and electrochromic properties of rare-earth element diphthalocyanine complexes, **3**, 396

Complex formation between azacrown derivatives of dibenzylidene-cyclopentanone and alkali-earth metal ions, **3**, 404

The synthesis of *N*-isocyanurato-substituted aziridino[1,2][60]fullerenes, **3**, 445

Investigation of the regioselectivity of alkylation of 3-nitropyridin-2(1*H*)-ones, **3**, 460

Bromination of photochromic spironaphthoxazines, **3**, 470

Fulleropyrrolidine-containing sterically hindered phenol. Synthesis, structure, and properties, **4**, 607

Interaction of chlorine dioxide with nitroxyl radicals, **4**, 614

The nature of colloidal platinum in aqueous solution: features of catalytic reactions, **4**, 626

Structural features of sublimed layers of *meso*-mono-4-pyridyltriphenylporphyrinatocobalt(II) and reversible binding of molecular oxygen, **4**, 638

Solvent effects on the absorption spectrum and recombination kinetics of diphenylcarbonyl oxide, **5**, 793

Optical spectra of Pd-561 nanoclusters in aqueous solutions, **5**, 809

Merocyanine form of photochromic spirooxazines in acid solutions, **7**, 1214

Synthesis and spectral and electrochemical properties of hexadecamethyl-substituted diphthalocyanines of rare-earth metals, **7**, 1299

Reaction of the acrylic acid and 1-vinylimidazole copolymer with CuCl<sub>2</sub> in aqueous solution, **8**, 1382

A study of peralkylated derivatives of bis( $\eta^6$ -benzene)chromium by gas-phase electronic absorption spectroscopy, **8**, 1390

New approach to the functionalization of  $\delta$ -carboline derivatives, **8**, 1449

Micellar enzymology: methodology and technique (review), **10**, 1718

Spectral study of reactions of La@C<sub>82</sub> and Y@C<sub>82</sub> with amino-containing solvents, **11**, 2242

Photochromic dihetarylethenes. 11. Synthesis and photochromic properties of diarylethenes containing furan or furopyrimidine bridges, **12**, 2424

#### Electronic effects

Effect of substituents on ionization potentials of phosphorus compounds. Conjugation in radical cations, **1**, 35

First ionization potentials of amines and electronic effects in their radical cations, **1**, 43

#### Electronic states

*Ab initio* study of the structure and conformations of 2-fluoroethanol in the ground and lowest excited electronic states, **6**, 945

S<sub>1</sub>←S<sub>0</sub> Vibronic spectrum and structure of 2,2-difluoroethanol in the S<sub>1</sub> state, **7**, 1218

#### Electronic structure

Exohedral  $\eta^5$ - $\pi$ -complexes of fullerene C<sub>20</sub>, **2**, 180

Mercury and cadmium pnictidehalides: the inverted Zintl phases (review), **3**, 337

Crystal and electronic structure of Ni<sub>3</sub>Bi<sub>2</sub>S<sub>2</sub> (parkerite), **3**, 353

Fulleropyrrolidine-containing sterically hindered phenol. Synthesis, structure, and properties, **4**, 607

Interaction of chlorine dioxide with nitroxyl radicals, **4**, 614

Structural investigations of paramagnetic metalloproteins using high-resolution NMR spectroscopy: iron-sulfur and copper-proteins (review), **10**, 1762

Intramolecular Y←O (Y = N, P, As, Sb, Bi) coordination in organopnictogen compounds: an *ab initio* and DFT study, **11**, 2028

#### Electrophilic activation

Mechanisms of the reactions of propane with CBr<sub>3</sub><sup>+</sup> cation and superelectrophilic complex CBr<sub>4</sub><sup>+</sup>·AlBr<sub>3</sub><sup>-</sup> containing a bromine-centered cationic center: a theoretical study, **1**, 29

#### Electrophilic addition

New potentialities of electrophilic addition in the assembly of polyfunctional compounds from simple precursors (review), **11**, 1949

**Electrophilic cyanation**

Reactions of metallated 1-hydroxy-2,2,4,5,5-pentamethyl-2,5-dihydro-1*H*-imidazole with functionalized nitroxyl radicals derived from 2,5-dihydro-1*H*-imidazole and 2,5-dihydro-1*H*-imidazole 3-oxide, **4**, 665

**Electrophilic substitution**

*peri*-Naphthylenediamines. 33. Further studies of the reactions of 1,8-bis(dimethylamino)naphthalene with trifluoroacetic anhydride, **5**, 860

Electrophilic substitution in eleven-vertex metallocarborane 1,2,4-CpCoC<sub>2</sub>B<sub>8</sub>H<sub>10</sub>, **9**, 1683

Electrophilic aromatic trichloromethylation: intermediates and products, **11**, 2046

**Electrospray ionization mass spectrometry**

Cyclic lipopeptides with fungicidal activity from the sea isolate of the bacterium *Bacillus subtilis*, **11**, 2231

**Electrostatic interaction**

Intramolecular Y←O (Y = N, P, As, Sb, Bi) coordination in organonitrogen compounds: an *ab initio* and DFT study, **11**, 2028

**Electrosynthesis**

Reactions of some arenes and pyrazoles in MeCN under conditions of undivided-cell electrolysis, **7**, 1274

**Elemental sulfur**

Sulfurization of polymers. 4. Poly(4,5,6,7-tetrathiono-4,5,6,7-tetrahydrobenzothiothiophene-2,3-diyl) and related structures based on polystyrene and elemental sulfur, **2**, 253

**Eleutherobine**

(+)- $\delta$ -Cadinol as a promising starting compound in the synthesis of eleuthesides, **9**, 1699

**Eleuthesides**

(+)- $\delta$ -Cadinol as a promising starting compound in the synthesis of eleuthesides, **9**, 1699

**Elimination**

2,6-Di-*tert*-butylphenols and phenoxy radicals with metal-metal bonds, **4**, 716

Mechanism of formation and monomolecular decomposition of *aci*-nitromethanes: a quantum-chemical study, **6**, 952

*Ab initio* MP2 calculations of the products of acetylene addition to HgCl<sub>2</sub>, **6**, 958

Silylation as a new strategy of the use of aliphatic nitro compounds in organic synthesis (review), **11**, 1936

**Enamines**

Reactions of cyanofurazans with  $\beta$ -dicarbonyl compounds, **7**, 1280

A new method for the synthesis of CF<sub>3</sub>-containing aminovinyl ketones, **8**, 1395

Reactions of 1,3,3,3-tetrafluoro-2-methoxycarbonylpropene-sulfonyl chloride with enamines, **9**, 1645

**Enamino imines**

Reactions of metallated 1-hydroxy-2,2,4,5,5-pentamethyl-2,5-dihydro-1*H*-imidazole with functionalized nitroxyl radicals derived from 2,5-dihydro-1*H*-imidazole and 2,5-dihydro-1*H*-imidazole 3-oxide, **4**, 665

**Enamino ketones**

Reactions of metallated 1-hydroxy-2,2,4,5,5-pentamethyl-2,5-dihydro-1*H*-imidazole with functionalized nitroxyl radicals derived from 2,5-dihydro-1*H*-imidazole and 2,5-dihydro-1*H*-imidazole 3-oxide, **4**, 665

Synthesis and properties of monoimines of  $\alpha$ -diketones, derivatives of 3-imidazoline nitroxides, **5**, 874

Reactions of cyclic enaminketones with benzylidene-malononitriles. Synthesis of new fused heterocyclic systems containing the 1,4-dihydropyridine fragment, **12**, 2428

**Enantioselectivity**

Asymmetric transfer hydrogenation of ketones catalyzed by rhodium and iridium complexes with chiral bidentate Schiff's bases, **4**, 734

Asymmetric reduction of ketones with sodium aluminum hydride modified with chiral amino alcohols, **5**, 843

Polydentate coordination of the thallium atom in complexes with chiral amidinylcyclopentadienyl ligands, **5**, 890

Determination of the enantiomeric composition of *N,N*-dimethyl- $\alpha$ -ferrocenylethylamine by <sup>1</sup>H NMR spectroscopy, **7**, 1323

Transformations of the chiral diphosphine rhodium catalyst [(1,5-COD)Rh(-)R,R-DIOP]<sup>+</sup>CF<sub>3</sub>SO<sub>3</sub><sup>-</sup> under conditions of hydrogenation, **10**, 1855

Enantioselective hydrogenation in the presence of the rhodium(I) complex with (+)-4*S*,5*S*-*N*<sup>4</sup>,*N*<sup>4</sup>,*N*<sup>5</sup>,*N*<sup>5</sup>,2,2-hexamethyl-1,3-dioxolane-4,5-dimethaneamine, **10**, 1860

Single step, solvent-free processes: examples and prospects (review), **11**, 2010

2,5,6,7,8-Pentasubstituted (*S*)- and (*R*)-[2-chroman-2-yl]ethanols as intermediates for the synthesis of  $\alpha$ -tocopherol and its chiral analogs, **11**, 2121

**Enantiotopism**

Synthesis of stereoisomeric *d,l* and *meso* forms of *O,O'*-bis-(*O,O'*-dialkyl 1-phosphorylbenzyl)phenylphosphonites and -thionophosphonates containing a pseudo-chiral center and determination of their configurations by NMR spectroscopy, **2**, 287

**Endohedral metallofullerenes**

Spectral study of reactions of La@C<sub>82</sub> and Y@C<sub>82</sub> with amino-containing solvents, **11**, 2242

**Ene nitriles**

Silylation as a new strategy of the use of aliphatic nitro compounds in organic synthesis (review), **11**, 1936

**Ene oximes**

Silylation as a new strategy of the use of aliphatic nitro compounds in organic synthesis (review), **11**, 1936

**Energy of dissociation**

Determination of enthalpies of formation of organic free radicals based on bond dissociation energies. 4. Alkyl-substituted derivatives of phenyl and benzyl, **6**, 963

**Energy profile**

Electron transfer coupled with ATP hydrolysis in nitro-genase (review), **10**, 1789

Synthesis and transformations of metallocycles. 27. Quantum-chemical study of the mechanism of styrene catalytic cyclometallation with triethylaluminum in the presence of Cp<sub>2</sub>ZrCl<sub>2</sub>, **12**, 2336

**Energy transfer**

Luminescence properties of acridine dyes in micellar sodium dodecyl sulfate solutions containing thallium ions, **6**, 986

**Enthalpy**

Thermodynamic properties of carbynoid structures in the 0–340 K range, **9**, 1533

Thermodynamics of alternating copolymer of styrene and CO in the 0–600 K region, **12**, 2372

**Enthalpy of adsorption**

Estimation of hydrogen bond energy in *n*-alkanols from the gas chromatography data, **6**, 1023

**Enthalpy of formation**

First ionization potentials of amines and electronic effects in their radical cations, **1**, 43

Determination of enthalpies of formation of organic free radicals based on bond dissociation energies. 4. Alkyl-substituted derivatives of phenyl and benzyl, **6**, 963

Thermodynamics of copper, silver, gold, and mercury acetylenides (review), **7**, 1121

Thermodynamic properties and valence-force field of alkanethiols and dialkyl sulfides, **9**, 1563

The determination of enthalpies of formation of organic free radicals from bond dissociation energies. 5. Organosulfur radicals, **9**, 1570

**Enthalpy of immersion**

On the mechanisms of phenol adsorption by carbons, **11**, 2060

**Enthalpy of solvation**

Solvation of amides of carboxylic acids in aqueous solutions of ethylene glycol, **5**, 780

**Enthalpy of transfer**

Solvation of amides of carboxylic acids in aqueous solutions of ethylene glycol, **5**, 780

**Entropy**

First ionization potentials of amines and electronic effects in their radical cations, **1**, 43

Adsorption of chlorobenzene and benzene on  $\gamma$ -Al<sub>2</sub>O<sub>3</sub>, **1**, 68

Thermodynamic parameters of adsorption described by the logarithmic Temkin isotherm, **2**, 217

Thermodynamic properties of carbynoid structures in the 0–340 K range, **9**, 1533

Thermodynamics of alternating copolymer of styrene and CO in the 0–600 K region, **12**, 2372

**Entropy of adsorption**

Estimation of hydrogen bond energy in *n*-alkanols from the gas chromatography data, **6**, 1023

**Entropy of formation**

Thermodynamics of copper, silver, gold, and mercury acetylenides (review), **7**, 1121

**Environmental biotechnology**

Environmental biotechnology: a tandem of biocatalytic and engineering approaches (review), **10**, 1818

**Enzyme activity**

Effect of methyltin trichloride on the activity of lactate dehydrogenase, **8**, 1485

Relationship between the hydration degree of poly-*N*-isopropylacrylamide gel and activity of immobilized  $\alpha$ -chymotrypsin, **10**, 1891

**Enzymes**

Chemical aspects of influence of medical drugs on organism functions (review), **8**, 1356

Enzyme active sites: bioinformatics, architecture, and mechanisms of action (review), **10**, 1709

Micellar enzymology: methodology and technique (review), **10**, 1718

Dihydrofolate reductase: structural aspects of mechanisms of enzyme catalysis and inhibition (review), **10**, 1733

Organophosphate hydrolase — an enzyme catalyzing degradation of phosphorus-containing toxins and pesticides (review), **10**, 1826

Catalysis of noncomplementary reactions by transition metals clusters. Kinetic description, **10**, 1833

Structural and functional model of methane hydroxylase of membrane-bound methane monooxygenase from *Methylococcus capsulatus* (Bath), **10**, 1867

**Enzymology**

Micellar enzymology: methodology and technique (review), **10**, 1718

**Episulfonium ions**

New potentialities of electrophilic addition in the assembly of polyfunctional compounds from simple precursors (review), **11**, 1949

**Equation of state**

Thermodynamic parameters of adsorption described by the logarithmic Temkin isotherm, **2**, 217

**Equilibrium constants**

Protonation of 2-quinolythiazoles in the ground and excited states in ethanol, **7**, 1186

**ESR spectroscopy**

Quantum-chemical estimates of geometric parameters of free radicals, **2**, 188

Anomalous line broadening in the ESR spectra of copper(II) dithizonate, **3**, 413

The rate constants for the addition of radicals CCl<sub>3</sub>CH<sub>2</sub>·CHR (R = Ph, CO<sub>2</sub>Me, CONC<sub>4</sub>H<sub>8</sub>) to some unsaturated compounds, **3**, 557

Paramagnetic metal chelates of an *o*-quinone derivative of fullerene with Mn and Re carbonyls, **3**, 566

Ligand oxidation as a method for intramolecular activation of metal complexes (review), **4**, 573

Fulleropyrrolidine-containing sterically hindered phenol. Synthesis, structure, and properties, **4**, 607

2,6-Di-*tert*-butylphenols and phenoxyl radicals with metal—metal bonds, **4**, 716

EPR study of weak exchange interactions in binuclear copper(II) complexes with salicylaldehyde acyldihydrazones, **5**, 812

Reactions of photogenerated fluorine atoms with molecules trapped in solid argon. 4. Spectroscopic characteristics of  $\beta$ -C<sub>2</sub>H<sub>2</sub>F· radicals generated in reactions of mobile F atoms with C<sub>2</sub>H<sub>2</sub> molecules trapped in solid argon, **6**, 989

ESR spectra of trifluoromethyl radical formed during the solid-phase photodecomposition of long-lived perfluoro-2,4-dimethyl-3-ethylpentyl-3 radicals, **7**, 1198

Reaction of the acrylic acid and 1-vinylimidazole copolymer with CuCl<sub>2</sub> in aqueous solution, **8**, 1382

Micellar enzymology: methodology and technique (review), **10**, 1718

Intermediates of photolysis of 1,3,2,4-benzodithiadiazines studied by matrix isolation spectroscopy and quantum chemistry, **11**, 2064

Bis(1,4-di-*tert*-butyl-1,4-diazabutadiene)copper(I) [(3,6-di-*tert*-butyl-*o*-benzosemiquinono)(3,6-di-*tert*-butylcatecholato)cuprate(II)]. The molecular structure and intramolecular electron transfer, **11**, 2193

Spectral study of reactions of La@C<sub>82</sub> and Y@C<sub>82</sub> with amino-containing solvents, **11**, 2242

Reactivity of esters of 2-cyanoacrylic acid toward some free radicals, **12**, 2356

Formation and decay of trifluoromethyl radicals during photodecomposition of the long-lived perfluoro-2,4-dimethyl-3-ethylpent-3-yl radical, **12**, 2381

**Esters**

Increase in catalytic activity of *Pseudomonas fluorescens* lipase upon its coprecipitation with hexadecane-1,2-diol suspension, **1**, 152

Phosphorylation of heptafluorobutanol in the presence of metal chloride—ether catalytic systems, **8**, 1457

**Esters of 1-alkylcyclohexanecarboxylic acids**

Functionalization of alkanes and cycloalkanes by super-electrophiles. 15. Carbonylation of cycloheptane, cyclo-octane, and isomeric monoalkylcyclohexanes with CO in the presence of  $\text{CBr}_4 \cdot 2\text{AlBr}_3$  to form individual esters of tertiary carboxylic acids of the cyclohexane series, **12**, 2394

**Esters of cyanoacrylic acid**

Reactivity of esters of 2-cyanoacrylic acid toward some free radicals, **12**, 2356

**Esters of phenylpropionic acids**

Kinetics and mechanism of styrene hydrocarboalkoxylation catalyzed by  $\text{Pd}^0$  complex in the presence of toluenesulfonic acid, **10**, 1839

**Esters of phosphorus acids**

Thioethynyl esters of phosphorus acids (review), **6**, 925

**Esters of tertiary acids of the cyclohexane series**

Functionalization of alkanes and cycloalkanes by super-electrophiles. 15. Carbonylation of cycloheptane, cyclo-octane, and isomeric monoalkylcyclohexanes with CO in the presence of  $\text{CBr}_4 \cdot 2\text{AlBr}_3$  to form individual esters of tertiary carboxylic acids of the cyclohexane series, **12**, 2394

**Estrane nitrates**

Interaction of trimethylsilyl ions with nitrates of the estrane series in the gas phase, **2**, 250

**1,4-Ethano-2,3-dihydroisoquinolines**

Allylmethallation of benzoazaheterocycles with allylic derivatives of zinc. Synthesis of 1,4-ethano-2,3-dihydroisoquinolines and allylated heterocycles, **11**, 2172

**N-Ethoxycarbonylanilines**

Synthesis of 2'-bromo-8-methylspiro(4*H*-3,1-benzooxazine-4,1'-cyclopentan)-2(1*H*)-one and 2-amino-2'-bromo-8-methylspiro(4*H*-3,1-benzooxazine-4,1'-cyclopentane) from 6-(cyclopent-1-enyl)-2-methylaniline, **12**, 2466

**1-Ethoxycarbonyl-1-nitropolyspirocyclopropanes**

Synthesis of nitrosubstituted triangulanes, **11**, 2101

**Ethyl acetate**

Acidity function of methanesulfonic acid solutions in ethyl acetate, **6**, 1003

**Ethyl cyanoacetate**

$\text{S}_\text{N}^{\text{H}}$ -Reactions of triazolo[4,3-*b*]- and tetrazolo[1,5-*b*]-1,2,4-triazines with methylene-active carbonyl compounds, **11**, 2183

**Ethyl malonate**

Introduction of the 1*H*-indol-3-yl(phenyl)methyl residue into some CH acids, **3**, 543

$\text{S}_\text{N}^{\text{H}}$ -Reactions of triazolo[4,3-*b*]- and tetrazolo[1,5-*b*]-1,2,4-triazines with methylene-active carbonyl compounds, **11**, 2183

**Ethyl nitrate**

Synthesis of 3,5-disubstituted 1*H*-1,2,4-triazolium 4-nitroimides, **12**, 2481

**Ethyl nitrodiazoacetate**

Synthesis of nitrosubstituted triangulanes, **11**, 2101

**Ethyl 3-oxobutanoate**

Introduction of the 1*H*-indol-3-yl(phenyl)methyl residue into some CH acids, **3**, 543

Diastereoselective synthesis of (*R*\*,*R*\*)-ethyl 2-[1*H*-indol-3-yl(phenyl)methyl]-3-oxobutanoate, **3**, 570

**Ethyl trifluoroacetate**

Trifluoroacetylation of 2-acetyldimmedone, **3**, 568

**Ethylcyclohexane**

Functionalization of alkanes and cycloalkanes by super-electrophiles. 15. Carbonylation of cycloheptane, cyclo-octane, and isomeric monoalkylcyclohexanes with CO in the presence of  $\text{CBr}_4 \cdot 2\text{AlBr}_3$  to form individual esters of tertiary carboxylic acids of the cyclohexane series, **12**, 2394

**Ethylene**

Density functional theoretical studies of [2+2] cycloaddition of simple transient silenes and germenes to ethylene, formaldehyde, and thioformaldehyde, and vibrational analysis of spectra of reactants and cyclic products, **1**, 20

**Ethylene chlorophosphite**

Reaction of *R*-(+)-2-benzylideneaminobutan-1-ol with ethylene phosphorochloridite. Stereospecific formation of (3*R*,5*R*)-2-(2-chloroethoxy)-5-ethyl-2-oxo-3-phenyl-1,4,2-oxazaphosphorinane, **12**, 2468

**Ethylene glycol**

Solvation of amides of carboxylic acids in aqueous solutions of ethylene glycol, **5**, 780

**Ethylthioethynyl azide**

Reaction of alkylthiochloroacetylenes with sodium azide, **4**, 751

**3-Ethyl-2,5,8-trihydroxy-7-methoxy-1,4-naphthoquinones**

Chemistry of naphthazarin derivatives. 8. Determination of structures of substituted 2-hydroxy-6(7)-methoxy-naphthazarins and 7(8)-hydroxypyranonaphthazarins by IR spectroscopy, **1**, 95

**EXAFS spectroscopy**

Ternary metal sulfides  $\text{M}_2\text{MoS}_2$ : synthesis using single-layer dispersions of molybdenum disulfide and study of the structure, **12**, 2293

**Exchange interactions**

Peculiarities of NMR spectra of heterospin complexes, **11**, 2078

**Excimers**

Crystal structure and excimer fluorescence of dibenzoyl-methanatorboron difluoride, **9**, 1612

**Excision reactions**

Synthesis and structure of a new octahedral molybdenum thiocyanide cluster complex  $\text{K}_7[\text{Mo}_6(\mu_3\text{-S})_8(\text{CN})_6] \cdot 8\text{H}_2\text{O}$ , **7**, 1140

**Exoemission**

Exoemission near phase transitions of epitaxial films of manganites with colossal magnetic resistance, **3**, 359

**Exoergic reactions**

Energochemical technologies: energy and bulk/basic chemicals in a single process (review), **11**, 2015

**Exothermal reactions**

Energochemical technologies: energy and bulk/basic chemicals in a single process (review), **11**, 2015

**Extraction**

Micellar enzymology: methodology and technique (review), **10**, 1718

**F****Facultative marine bacteria *Bacillus subtilis***

Cyclic lipopeptides with fungicidal activity from the sea isolate of the bacterium *Bacillus subtilis*, **11**, 2231



**Ferrocenes**

Stereospecific formation of polycyclic ferrocenyldihydropyrazoles based on *Z*- and *E*-isomeric ferrocenyl-substituted  $\alpha,\beta$ -unsaturated ketones of the heterocyclic series, **5**, 895

Diastereoselectivity of the formation of planar chiral ruthenocenol in reactions of chiral tertiary phosphines with the ( $\eta^4$ -cyclopentadienone)( $\eta^5$ -cyclopentadienyl)ruthenium cation, **11**, 2212

Protonation and acylation of the heterometallic complexes ( $\mu$ -H)Os<sub>3</sub>( $\mu$ -O<sub>2</sub>CC<sub>5</sub>H<sub>4</sub>FeCp)(CO)<sub>10</sub> and Fe{( $\mu$ -O<sub>2</sub>CC<sub>5</sub>H<sub>4</sub>)( $\mu$ -H)Os<sub>3</sub>(CO)<sub>10</sub>}<sub>2</sub>, **12**, 2451

**Ferrocenylacetylenes**

Synthesis of the gold-dirhenium ferrocenylacetylidyde cluster. The crystal structure of Re<sub>2</sub>( $\mu$ -C≡CFc){Au(PPh<sub>3</sub>)}(CO)<sub>8</sub>, **12**, 2441

 **$\alpha$ -Ferrocenylethylamines**

Determination of the enantiomeric composition of *N,N*-dimethyl- $\alpha$ -ferrocenylethylamine by <sup>1</sup>H NMR spectroscopy, **7**, 1323

**Ferromagnetism**

Exoemission near phase transitions of epitaxial films of manganites with colossal magnetic resistance, **3**, 359

**Fibrinolysis**

Diffusional transport of urokinase and acyl-urokinase into fibrin and plasma clots: time of contact and fibrinolytic response *in vitro*, **10**, 1885

**Fireflies**

Relationship between the structure of the protein globule and bioluminescence spectra of firefly luciferase (review), **10**, 1752

**Fisher reaction**

Synthesis and study of the mutagenic activity of di(indeno[2,1-*b*]indolyl)- and di(indeno[2,1-*b*]pyrrolyl)methanes and -dimethylsilanes, **8**, 1439

**Five-coordinate silicon derivatives**

Bis(O—Si)-chelate fluorobis(2-oxohexahydroazepino-methyl)silylium tetrafluoroborate, a cation-anionic complex containing a silylium ion stabilized by O→Si coordination, **2**, 331

**Flash photolysis**

Solvent effects on the absorption spectrum and recombination kinetics of diphenylcarbonyl oxide, **5**, 793

**Flow-injection analysis**

Electroanalytical applications of Prussian Blue and its analogs (review), **10**, 1811

**Fluorenyl complexes**

Kinetics of  $\eta^6 \rightarrow \eta^5$  isomerization of ( $\eta^6$ -fluorenyl)( $\eta^5$ -cyclopentadienyl)iron, **1**, 157

**Fluorescence**

Photochromic dihetarylethenes. 6. Photochromic derivatives of thieno[3,2-*b*]thiophene, **1**, 110

Fluorescent-labeled derivatives of dolichyl phosphate. Analogs of dolichyl phosphate with the 2-aminopyridine residue at the  $\omega$ -end of the chain, **3**, 531

X-ray diffraction analysis and luminescence spectral study of crystal solvates of *N*-(*N'*-tosylanthranoyl)anthranilic acid with acetic acid and dimethylformamide, **4**, 728

Electron transfer in the photochemical reactions of phenothiazine with halomethanes, **5**, 798

Luminescence properties of acridine dyes in micellar sodium dodecyl sulfate solutions containing thallium ions, **6**, 986

Protonation of 2-quinolythiazoles in the ground and excited states in ethanol, **7**, 1186

Photochemical investigation of the triplet state of 3,3'-diethylthiarcobocyanine iodide in the presence of DNA, **7**, 1190

Crystal structure and excimer fluorescence of dibenzoyl-methanatorboron difluoride, **9**, 1612

Micellar enzymology: methodology and technique (review), **10**, 1718

Relationship between the structure of the protein globule and bioluminescence spectra of firefly luciferase (review), **10**, 1752

Photochromic dihetarylethenes. 10. Photochromic 1,2-bis[2-(benzothiazol-2-yl)-3-thienyl]- and 1,2-bis[2-(benzothiazol-2-yl)benzothiophen-3-yl]ethenes, **12**, 2420

Photochromic dihetarylethenes. 11. Synthesis and photochromic properties of diarylethenes containing furan or furopyrimidine bridges, **12**, 2424

**Fluorescent label**

Derivatives of dolichyl phosphate with fluorescent label. Analogs of dolichyl phosphate with different lengths of isoprene chain, containing the (1-naphthyl)amino group in the  $\omega$ -fragment, **11**, 2221

**Fluorescent probes**

Complex formation between azacrown derivatives of dibenzylidenecyclopentanone and alkali-earth metal ions, **3**, 404

**Fluorides**

Crystal structure and excimer fluorescence of dibenzoyl-methanatorboron difluoride, **9**, 1612

**Fluorinated compounds**

A new method for the synthesis of fluorinated vinyl sulfides and ketene dithioacetals, **6**, 1044

**Fluorine**

Reactions of photogenerated fluorine atoms with molecules trapped in solid argon. 4. Spectroscopic characteristics of  $\beta$ -C<sub>2</sub>H<sub>2</sub>F<sup>•</sup> radicals generated in reactions of mobile F atoms with C<sub>2</sub>H<sub>2</sub> molecules trapped in solid argon, **6**, 989

**Fluoroalkylaryl sulfides**

Electrochemical activation of freons using electron transfer mediators (review), **11**, 1929

**2-Fluoroethanol**

*Ab initio* study of the structure and conformations of 2-fluoroethanol in the ground and lowest excited electronic states, **6**, 945

**Fluoroethyl-4*H*-chromenes**

2-Polyfluoroalkylchromones. 7. Reactions of 6-substituted 2-tetra- and 2-pentafluoroethylchromones with 2-aminoethanol, **7**, 1314

**Fluoroethylchromones**

2-Polyfluoroalkylchromones. 7. Reactions of 6-substituted 2-tetra- and 2-pentafluoroethylchromones with 2-aminoethanol, **7**, 1314

**Fluorofullerenes**

Relationship between reduction potentials and electron affinities of fullerenes and their derivatives, **9**, 1593

**Fluoropent-2-en-1-ones**

2-Polyfluoroalkylchromones. 7. Reactions of 6-substituted 2-tetra- and 2-pentafluoroethylchromones with 2-aminoethanol, **7**, 1314

**Force constants**

The reactivity of organoboranes in radical substitution reactions, **3**, 390

**Formaldehyde**

Density functional theoretical studies of [2+2] cycloaddition of simple transient silenes and germenes to ethylene, formaldehyde, and thioformaldehyde, and vibrational analysis of spectra of reactants and cyclic products, **1**, 20

5-Substituted 2-alkyl- and 2-arylsulfonyliminohexahydro-1,3,5-triazines, **3**, 480

Synthesis of *N*-nitrooxazolidines and *N*-nitrotetrahydro-1,3-oxazines from *N*-(2-hydroxyalkyl)- and *N*-(3-hydroxyalkyl)sulfamates, **5**, 911

**Formamide**

Solvation of amides of carboxylic acids in aqueous solutions of ethylene glycol, **5**, 780

**Fractionation**

Micellar enzymology: methodology and technique (review), **10**, 1718

**Fragmentation**

Synthetic approaches to homochiral bicyclo[5.2.1]decenes based on *d*-camphor, **4**, 654

Mass spectra of new groups of functionalized heterocycles. 4. 1-Alkyl-2-(alkylthio)pyrroles, **12**, 2390

**Frank—Meister—Hay modification**

Specific features of the chemical behavior of acetylenic derivatives of benzocrown ethers, **5**, 868

**Free energy**

First ionization potentials of amines and electronic effects in their radical cations, **1**, 43

Influence of *o*-benzoquinone nature on initiation of radical polymerization by the *o*-benzoquinone—*tert*-amine system, **12**, 2366

**Free radicals**

Free-radical chain decomposition of ozone initiated by di(*tert*-butyl) trioxide, **1**, 63

Quantum-chemical estimates of geometric parameters of free radicals, **2**, 188

Thermodynamic properties and valence—power field of thiyl radicals, **12**, 2310

**Freons**

Electrochemical activation of freons using electron transfer mediators (review), **11**, 1929

**D-Fucose**

A novel synthesis of *N*-acetyl- $\alpha$ -D-fucosamine 1-phosphate and uridine 5'-diphospho-*N*-acetyl- $\alpha$ -D-fucosamine, **7**, 1303

**L-Fucose**

Stereodivergent synthesis of chiral low-molecular bioregulators using readily available lipases (review), **11**, 1984

**Fulgides**

Cation-dependent pericyclic reactions of crown-containing photochromic compounds (review), **11**, 1970

**Fullerenes**

Modular design of icosahedral metal clusters (review), **1**, 1

Crystal structures of chloroform solvates of fullerenes, **1**, 78

Exohedral  $\eta^5$ - $\pi$ -complexes of fullerene C<sub>20</sub>, **2**, 180

Synthesis and transformations of metallacycles. 23. Cp<sub>2</sub>TiCl<sub>2</sub>-Catalyzed cyclometallation of fullerene C<sub>60</sub> with EtAlCl<sub>2</sub>, **2**, 297

The synthesis of *N*-isocyanurato-substituted aziridino[1,2][60]fullerenes, **3**, 445

Paramagnetic metal chelates of an *o*-quinone derivative of fullerene with Mn and Re carbonyls, **3**, 566

Fulleropyrrolidine-containing sterically hindered phenol. Synthesis, structure, and properties, **4**, 607

Chemiluminescence in the oxidation of Na<sub>2</sub>C<sub>60</sub> by the (NH<sub>4</sub>)<sub>2</sub>Ce(NO<sub>3</sub>)<sub>6</sub> complex in THF, **4**, 731

Molecular complex of C<sub>60</sub> fullerene with an organic  $\pi$ -donor, bis(methylenedithiotetrafulvalene): synthesis, crystal structures, and properties, **8**, 1423

Relationship between reduction potentials and electron affinities of fullerenes and their derivatives, **9**, 1593

Study of the factors determining the outcome of cycloaddition of isocyanurato-substituted azides to [60]fullerene, **11**, 2162

**[60]Fullerenoaziridines**

Study of the factors determining the outcome of cycloaddition of isocyanurato-substituted azides to [60]fullerene, **11**, 2162

**Fulleropyrrolidines**

Fulleropyrrolidine-containing sterically hindered phenol. Synthesis, structure, and properties, **4**, 607

**Furan**

Benzyfuran in the synthesis of benzo-annelated heterocycles (review), **9**, 1510

Photochromic dihetarylethenes. 11. Synthesis and photochromic properties of diarylethenes containing furan or furopyrimidine bridges, **12**, 2424

**Furazano[3,4-*b*]pyridines**

Reactions of cyanofurazans with  $\beta$ -dicarbonyl compounds, **7**, 1280

**Furazans**

Reactions of cyanofurazans with  $\beta$ -dicarbonyl compounds, **7**, 1280

**Furopyrimidines**

Photochromic dihetarylethenes. 11. Synthesis and photochromic properties of diarylethenes containing furan or furopyrimidine bridges, **12**, 2424

**Furopyrimidoquinolines**

Reactions of cyclic enaminoketones with benzylidene-malononitriles. Synthesis of new fused heterocyclic systems containing the 1,4-dihydropyridine fragment, **12**, 2428

**G****Gas liquid chromatography**

Chromatographic study of adsorption from binary and ternary solutions, **2**, 228

Polytrimethylsilylpropyne as adsorbent for separation of gases, **2**, 233

Reactions of chlorine dioxide with organic compounds. Selective oxidation of sulfides to sulfoxides by chlorine dioxide, **3**, 432

A new type of capillary column for gas chromatography, **4**, 641

Gas chromatography of halogenated adamantanes, **5**, 828

Estimation of hydrogen bond energy in *n*-alkanols from the gas chromatography data, **6**, 1023

The use of a nonlinear equation for calculation of the retention indices of polar substances in gas chromatography with linear temperature programming, **6**, 1027

Sorption of aliphatic ketones from aqueous solutions by starch cryotextures, **6**, 1032

Catalytic phosphorylation of polyfluoroalkanols. 17. Synthesis and the stereochemistry of tris( $\alpha$ -trifluoromethylbenzyl) phosphates, **6**, 1085

Influence of the carrier gas on retention factors of gaseous hydrocarbons on polytrimethylsilylpropyne using capillary gas chromatography, **7**, 1228

#### Gas solid chromatography

Experimental and molecular-statistical investigation of adsorption of aminoadamantanes on graphitized thermal carbon black, **6**, 980

#### Gas-phase electron diffraction

Equilibrium conformation of dimethylaminodichlorophosphine molecule: the use of the results of quantum-chemical calculations and spectroscopic measurements in the analysis of gas-phase electron diffraction data, **9**, 1550

#### Gels

Relationship between the hydration degree of poly-*N*-isopropylacrylamide gel and activity of immobilized  $\alpha$ -chymotrypsin, **10**, 1891

#### Germacyclopentadienes

Electrochemical study of redox properties of 2,3,4,5-tetraphenyl-1-heterocyclopenta-2,4-dienes  $\text{Ph}_4\text{C}_4\text{ER}^1\text{R}^2$  (E = Si, Ge, Sn). A new method for generation of tetraphenylgermole dianion, **11**, 2071

#### Germanium compounds

Organometallic derivatives of 2,6-di-*tert*-butylphenols as specific inhibitors of methyl oleate oxidation, **6**, 1097

#### Germenes

Density functional theoretical studies of [2+2] cycloaddition of simple transient silenes and germenes to ethylene, formaldehyde, and thioformaldehyde, and vibrational analysis of spectra of reactants and cyclic products, **1**, 20

#### Germylation

Silylation and germylation of trialkylsilyl(germyl)ethoxyacetylenes containing bulky substituents at the silicon or germanium atom, **6**, 1088

#### Germyl(silyl)ketenes

Silylation of silyl- and germylketenes containing bulky substituents at the silicon or germanium atom, **6**, 1093

#### Gibbs function

Thermodynamic properties of carbynoid structures in the 0–340 K range, **9**, 1533

Thermodynamics of alternating copolymer of styrene and CO in the 0–600 K region, **12**, 2372

#### Glass transition temperature

Influence of isomerism of difluorobenzophenone on the synthesis and properties of poly(arylene ether ketones), **7**, 1208

#### GLC-mass-spectrometry

Synthesis and the structure of tribromo(7-bromobicyclo[4.1.0]hept-7-yl)germane, **11**, 2203

#### 1-( $\beta$ -D-Glucopyranosyloxy)-2-*N*-(2-hydroxyacyl)-erythro-2-amino-9-methyloctadeca-4*E*,8*E*-dien-3-ol

Glycosphingolipid with a branched sphingosine base from soft corals from the Andaman Islands, **8**, 1474

#### Glucose oxidase

Electrochemical analysis of the coordination sphere of ruthenium(II) as electron transfer mediator in glucose oxidase catalysis in aqueous solutions, **10**, 1849

#### Glutamic acid

Stereoselective cyclization of alkyl *N*-phthaloyl-4-bromoglutamates to cyclopropane derivatives, **4**, 644

#### Glutaric acid

EPR study of weak exchange interactions in binuclear copper(II) complexes with salicylaldehyde acyldihydrazones, **5**, 812

#### Glycine

Enzyme active sites: bioinformatics, architecture, and mechanisms of action (review), **10**, 1709

#### Glycosides

Steroid compounds from the Pacific starfish *Lysastrosoma anthosticta*, **2**, 313

Sulfated steroid compounds from the starfish *Aphelasterias japonica* of the Kuril population, **4**, 724

#### Glycosphingolipids

Glycosphingolipid with a branched sphingosine base from soft corals from the Andaman Islands, **8**, 1474

#### Glycosyl nitrates

A novel synthesis of *N*-acetyl- $\alpha$ -D-fucosamine 1-phosphate and uridine 5'-diphospho-*N*-acetyl- $\alpha$ -D-fucosamine, **7**, 1303

#### Glycosyl phosphates

A novel synthesis of *N*-acetyl- $\alpha$ -D-fucosamine 1-phosphate and uridine 5'-diphospho-*N*-acetyl- $\alpha$ -D-fucosamine, **7**, 1303

#### Glycosylation

(+)- $\delta$ -Cadinol as a promising starting compound in the synthesis of eleuthesides, **9**, 1699

#### Glyoximates

Ligand oxidation as a method for intramolecular activation of metal complexes (review), **4**, 573

#### Gold compounds

Thermodynamics of copper, silver, gold, and mercury acetylenides (review), **7**, 1121

Synthesis of the gold-dirhenium ferrocenylacetylide cluster. The crystal structure of  $\text{Re}_2(\mu\text{-C}\equiv\text{CFC})\{\text{Au}(\text{PPh}_3)\}(\text{CO})_8$ , **12**, 2441

#### Grafted radicals

Magnetic parameters and rotational mobility of the  $\equiv\text{SiON}(\text{O}^\cdot)\text{CX}_3$  nitroxides (X = H, D) grafted on silica surface, **12**, 2384

#### Green function

Method for the calculation of the species balance in the reaction zone, **7**, 1166

#### Guaianolides

15-*O*-Deacetylrrhoserin and rhaserin — new components of a lactone mixture from *Rhaponticum serratuloides*, **3**, 537

Migration of the *O*-acetyl group in the acetonation of guaianolide rhaserin, **12**, 2459

#### Guanidine hydrochloride

Guanidine in the synthesis of perfluoroalkylpyrimidines and perfluoroalkyl-*s*-triazines, **3**, 476

## H

#### Hafnium compounds

Phosphorescence of Group IVB metal complexes, **2**, 329

#### Halide complexes

Synthesis of the iridacarborane halide complexes  $[(\eta\text{-9-SMe}_2\text{-7,8-C}_2\text{B}_9\text{H}_{10})\text{IrX}_2]_2$  (X = Cl, Br, or I), **7**, 1334

#### Haloadamantanes

Gas chromatography of halogenated adamantanes, **5**, 828

#### Halocarbenes

Molecular structure of carbene analogs (review), **11**, 1903

**Halocyclization**

Synthesis of 2'-bromo-8-methylspiro(4*H*-3,1-benzooxazine-4,1'-cyclopentan)-2(1*H*)-one and 2-amino-2'-bromo-8-methylspiro(4*H*-3,1-benzooxazine-4,1'-cyclopentane) from 6-(cyclopent-1-enyl)-2-methylaniline, **12**, 2466

**Halomethanes**

Electron transfer in the photochemical reactions of phenothiazine with halomethanes, **5**, 798

**Hammett constants**

Electrochemical and electrochromic properties of rare-earth element diphthalocyanine complexes, **3**, 396

**Heat capacity**

Thermodynamics of copper, silver, gold, and mercury acetylenides (review), **7**, 1121

Thermodynamic properties of carbynyd structures in the 0–340 K range, **9**, 1533

Thermodynamics of alternating copolymer of styrene and CO in the 0–600 K region, **12**, 2372

**Heat of adsorption**

Polytrimethylsilylpropyne as adsorbent for separation of gases, **2**, 233

Experimental and molecular-statistical investigation of adsorption of aminoadamantanes on graphitized thermal carbon black, **6**, 980

**Henry constant**

Adsorption of adamantanol isomers on graphitized thermal carbon black, **5**, 823

Gas chromatography of halogenated adamantanes, **5**, 828

Experimental and molecular-statistical investigation of adsorption of aminoadamantanes on graphitized thermal carbon black, **6**, 980

**Heptynoic acid**

Synthesis of  $\omega$ - and  $(\omega - 1)$ -acetylenic acids from five-, six-, or seven-membered cycloalkanones, **5**, 833

**Heterapentalenes**

Structure and isomerization of heterapentalene compounds containing hypervalent bonds with central nitrogen, phosphorus, or arsenic atom, **2**, 195

Intramolecular  $Y \leftarrow O$  ( $Y = N, P, As, Sb, Bi$ ) coordination in organopnictogen compounds: an *ab initio* and DFT study, **11**, 2028

**Heterocumulenes**

Synthesis of 4,5-dihydrothiazole derivatives by the reaction of perfluoro-2-methylpent-2-en-3-yl isothiocyanate with ambident N,O- and N,S-nucleophiles, **6**, 1072

**Heterocyclic compounds**

Spin-spin coupling constant  $^3J_{H,F}$  of the 1,1,2,2-tetrafluoroethyl group as a useful tool for recognition of regioisomeric and tautomeric pairs of organofluoric compounds, **7**, 1223

Reactions of 1,3,3,3-tetrafluoro-2-methoxycarbonyl-propenylsulfenyl chloride with aromatic and heterocyclic compounds, **7**, 1255

Benzylfuran in the synthesis of benzo-annelated heterocycles (review), **9**, 1510

New *N*-nitrosoamines. 1. Synthesis and nitrosative cleavage of the Mannich bases derived from nitrogen-containing heterocycles and primary aliphatic amines, **9**, 1630

First attempts at differential diastereoselection in catalytic reactions of *N*-chirally substituted dirhodium(II) tetrakis[methyl 2-oxoimidazolidine-4(*S*)-carboxylates] with diazoacetates, **11**, 2156

Mass spectra of new groups of functionalized heterocycles. 4. 1-Alkyl-2-(alkylthio)pyrroles, **12**, 2390

Chemistry of 2,4,6-trinitrobenzonitrile. 1. Substitution of nitro groups in 2,4,6-trinitrobenzonitrile under the action of anionic nucleophiles. Factors facilitating the replacement of the *ortho*-nitro group, **12**, 2401

Reactions of 3-substituted 1-aryl-5,6,7,8-tetrafluoroquinolones(cinnolones) with morpholine, **12**, 2416

Reaction of *R*-(+)-2-benzylideneaminobutan-1-ol with ethylene phosphorochloridite. Stereospecific formation of (3*R*,5*R*)-2-(2-chloroethoxy)-5-ethyl-2-oxo-3-phenyl-1,4,2-oxazaphosphorinane, **12**, 2468

**Heterocyclization**

Synthetic potential of substituted 7-alkylseleno-1,4-dihydro-1,6-naphthyridines, **1**, 122

A facile method for the synthesis of 3,1-benzooxazines from *N*-acyl-2-(alk-2-enyl)anilines, **4**, 659

Synthesis of 4,5-dihydrothiazole derivatives by the reaction of perfluoro-2-methylpent-2-en-3-yl isothiocyanate with ambident N,O- and N,S-nucleophiles, **6**, 1072

A new synthesis of spiro-fused 1,4-benzothiazines, **7**, 1264

Heterocyclization of *o*-(arylethynyl)arylhydrazines as a new procedure for the synthesis of substituted 1*H*- and 2*H*-indazoles and indoles, **7**, 1268

Synthesis of (2*E*)-2-(tetrafluoroethylidene)-3,3-bis(trifluoromethyl)-2,3-dihydrothiazolo[3,2-*a*]benzimidazole, **8**, 1446

**Heterofunctional condensation**

Intermediates of chemical assembling of oligoorganosiloxanes in hydrolysis of organochlorosilanes (review), **11**, 1998

**Heterogeneous catalysis**

Reduction of 3-(2-hydroxyethyl)-1,5-dinitro-3-azabicyclo[3.3.1]non-6-ene, **2**, 265

Hydrogenation of CO<sub>2</sub> conjugated with dehydrogenation of cyclohexane over an intermetallic catalyst, **7**, 1201

**Heterometallic clusters**

Molecular structure of a new palladium-containing vinylidene cluster  $[\eta^2\text{-Ph}_2\text{P}(\text{CH}_2)_3\text{PPh}_2]\text{PdFe}_3(\mu^4\text{-C}=\text{CHPh})(\text{CO})_9$ , **3**, 512

Synthesis, molecular structures, and thermal decomposition of heterometallic ( $\pi$ -cyclooctadiene)platinum-bis(tricarbonyliron- $\mu_3$ -chalcogenides)[Fe—Fe], ( $\pi\text{-C}_8\text{H}_{12}$ )Pt( $\mu_3\text{-X}$ )<sub>2</sub>Fe<sub>2</sub>(CO)<sub>6</sub>, where X = S, Se, or Te, **11**, 2215

**Heterometallic compounds**

Reactions of *N*-phenyl-*o*-semiquinonedimine complexes of nickel and platinum with carbonyl-containing low-valence iron and rhenium compounds, **1**, 142

Crystal and electronic structure of Ni<sub>3</sub>Bi<sub>2</sub>S<sub>2</sub> (parkerite), **3**, 353

Single step, solvent-free processes: examples and prospects (review), **11**, 2010

Protonation and acylation of the heterometallic complexes ( $\mu\text{-H}$ )Os<sub>3</sub>( $\mu\text{-O}_2\text{CC}_5\text{H}_4\text{FeCp})(\text{CO})_{10}$  and Fe{( $\mu\text{-O}_2\text{CC}_5\text{H}_4$ )( $\mu\text{-H}$ )Os<sub>3</sub>(CO)<sub>10</sub>}<sub>2</sub>, **12**, 2451

**Heteroorganic betaines**

Heteroorganic betaines. 7. Synthesis and structure of a germanium-containing organophosphorus betaine Et<sub>3</sub>P<sup>+</sup>—CHMe—GeMe<sub>2</sub>—S<sup>−</sup>, **9**, 1679

**Heteropoly acids**

Acidity of heteropoly acids with various structures and compositions studied by IR spectroscopy of the pyridinium salts, **4**, 587

A study of complexation of chloral hydrate with heteropoly anions having various structures, **9**, 1529

#### Hexaalkyldigermoxanes

Reactions of hexaorganoyldigermoxanes with *O*-trimethylsilyl carbamates, **4**, 743

#### Hexachlorocyclopentadiene

New chlorinated cyclopentenones prepared from hexachlorocyclopentadiene: synthesis, chemical properties, and application in the synthesis (review), **9**, 1489

#### Hexacyanoferrates

Electroanalytical applications of Prussian Blue and its analogs (review), **10**, 1811

#### Hexadecane-1,2-diol

Increase in catalytic activity of *Pseudomonas fluorescens* lipase upon its coprecipitation with hexadecane-1,2-diol suspension, **1**, 152

#### Hexafluoroacetylacetone

Reaction of 3*H*-perfluoroalk-2-enes with ammonia, **1**, 155

#### Hexafluorocyclopentene derivatives

Photochromic dihetarylethenes. 6. Photochromic derivatives of thieno[3,2-*b*]thiophene, **1**, 110

#### 1,1,1,10,10,10-Hexafluorodecane-2,4,7,9-tetrone

Unexpected reaction of 1,1,1,10,10,10-hexafluorodecane-2,4,7,9-tetrone with methyl trifluoroacetate, **1**, 101

#### Hexafluoropropylene

Formation and decay of trifluoromethyl radicals during photodecomposition of the long-lived perfluoro-2,4-dimethyl-3-ethylpent-3-yl radical, **12**, 2381

#### Hexamethylcyclotrigermatrithiane

Heteroorganic betaines. 7. Synthesis and structure of a germanium-containing organophosphorus betaine  $\text{Et}_3\text{P}^+ - \text{CHMe} - \text{GeMe}_2 - \text{S}^-$ , **9**, 1679

#### *n*-Hexane

Adsorption of vapor mixtures of water and organic substance on activated carbons, **4**, 595

#### Hexane-2,5-dione

Unexpected reaction of 1,1,1,10,10,10-hexafluorodecane-2,4,7,9-tetrone with methyl trifluoroacetate, **1**, 101

#### Hexynoic acid

Synthesis of  $\omega$ - and  $(\omega - 1)$ -acetylenic acids from five-, six-, or seven-membered cycloalkanones, **5**, 833

#### High-performance liquid chromatography

Hydrolysis of some imidazole, benzimidazole, and 1,2,3-benzotriazole derivatives according to HPLC and NMR diffusimetry data, **5**, 820

Influence of isomerism of difluorobenzophenone on the synthesis and properties of poly(arylene ether ketones), **7**, 1208

Migration of the *O*-acetyl group in the acetonation of guaianolide rhaposerin, **12**, 2459

#### Hindered internal rotation

NMR studies of the dynamic behavior of 2-anilino-6-chloro-4-methoxy-1,3,5-triazine in solution, **12**, 2473

#### Histidine

Enzyme active sites: bioinformatics, architecture, and mechanisms of action (review), **10**, 1709

#### Homofunctional condensation

Intermediates of chemical assembling of oligoorganosiloxanes in hydrolysis of organochlorosilanes (review), **11**, 1998

#### Homogeneous catalysis

Phosphorylation of heptafluorobutanol in the presence of metal chloride—ether catalytic systems, **8**, 1457

Simple and efficient synthesis of *closo*-rhoda- and *closo*-iridacarboranes with  $\pi$ -ligands based on cyclic dienes, **9**, 1702

Electrochemical activation of freons using electron transfer mediators (review), **11**, 1929

#### Homoserine analogs

Synthesis of phosphinic and phosphonic analogs of homoserine, **2**, 316

#### Hydration

Synthesis of bis(polyfluoroalkyl)-1,3,5-triketones, **7**, 1233

Hydration of calixarene-containing polymers, **8**, 1379

Relationship between the hydration degree of poly-*N*-isopropylacrylamide gel and activity of immobilized  $\alpha$ -chymotrypsin, **10**, 1891

#### Hydrazides

Ligand oxidation as a method for intramolecular activation of metal complexes (review), **4**, 573

#### Hydrazine

Reduction of 3-(2-hydroxyethyl)-1,5-dinitro-3-azabicyclo[3.3.1]non-6-ene, **2**, 265

Cyclocondensation of 5-ethynyl-1,4-naphthoquinone derivatives with hydrazine, **9**, 1668

#### Hydrazones

EPR study of weak exchange interactions in binuclear copper(II) complexes with salicylaldehyde acyldihydrazones, **5**, 812

Conversion of aromatic aldehydes into 1-aryl-2,2-dichloroethenes, **6**, 1047

New method for the synthesis of  $\beta$ -bromostyrenes, **8**, 1401

#### Hydride complexes

Heterometallic zirconocene(III) aluminum hydride complex  $(\text{Cp}_2\text{ZrH})_2\text{HAlCl}_2 \cdot \text{C}_4\text{H}_8\text{O}_2 \cdot \text{C}_6\text{H}_6$ , **11**, 2200

#### Hydride reduction

Synthesis of  $\alpha$ -tocopherol analogs with unsaturated side chain and their transformation into the corresponding chromans with  $\omega$ -functionalized side chain, **11**, 2227

#### Hydrides

Synthesis of bis(polyfluoroalkyl)-1,3,5-triketones, **7**, 1233

DFT study of the mechanism of alkane hydrogenolysis by transition metal hydrides. 1. Interaction of silica-supported zirconium hydrides with methane, **11**, 2050

Heterometallic zirconocene(III) aluminum hydride complex  $(\text{Cp}_2\text{ZrH})_2\text{HAlCl}_2 \cdot \text{C}_4\text{H}_8\text{O}_2 \cdot \text{C}_6\text{H}_6$ , **11**, 2200

#### Hydrobromic acid

Oxidative bromination of tricyclic sesquiterpenoids (1*S*,3*S*,5*R*,6*S*,9*S*)-5-hydroxy-6,10,10-trimethyltricyclo[7.2.0.0<sup>1,6</sup>]judecan-2-one and clovane-2 $\beta$ ,9 $\alpha$ -diol with the HBr—DMSO system, **8**, 1419

#### Hydrocarbon gases

Polytrimethylsilylpropyne as adsorbent for separation of gases, **2**, 233

#### Hydrocarbons

Oxidative transformations of cyclohexane, methylcyclopentane, and pentane on treatment with superelectrophiles based on polyhalomethane and aluminum halides, **1**, 81

Determination of enthalpies of formation of organic free radicals based on bond dissociation energies. 4. Alkyl-substituted derivatives of phenyl and benzyl, **6**, 963

Hydrogenation of  $\text{CO}_2$  conjugated with dehydrogenation of cyclohexane over an intermetallic catalyst, **7**, 1201

Influence of the carrier gas on retention factors of gaseous hydrocarbons on polytrimethylsilylpropyne using capillary gas chromatography, **7**, 1228

Pyrolysis of eicosane in supercritical water, **8**, 1478

Naphthalene oxidation in supercritical water, **8**, 1481

Catalytic properties of chromites with a spinel structure in the oxidation of CO and hydrocarbons and reduction of nitrogen oxides, **12**, 2377

#### Hydrochlorination

A facile method for the synthesis of 3,1-benzooxazines from *N*-acyl-2-(alk-2-enyl)anilines, **4**, 659

#### Hydrofullerenes

Molecular electrochemistry of hydrofullerenes C<sub>70</sub>H<sub>36–46</sub>, **6**, 996

Relationship between reduction potentials and electron affinities of fullerenes and their derivatives, **9**, 1593

#### Hydrogel

Estimation of oxyhydroxide specific surface area using the amounts of OH groups adsorbed, **9**, 1582

#### Hydrogen

The nature of colloidal platinum in aqueous solution: features of catalytic reactions, **4**, 626

Optical spectra of Pd-561 nanoclusters in aqueous solutions, **5**, 809

Hydrogenation of CO<sub>2</sub> conjugated with dehydrogenation of cyclohexane over an intermetallic catalyst, **7**, 1201

Reduction of nitrosoarene ligands in binuclear palladium(II) complexes, **9**, 1689

#### Hydrogen bonds

The role of intra- and intermolecular hydrogen bonds in the formation of β-cyclodextrin head-to-head and head-to-tail dimers. The results of *ab initio* and semiempirical quantum-chemical calculations, **2**, 206

Hydrogen bond in 3-acetyl-4-hydroxycoumarin: X-ray diffraction study and quantum-chemical calculations, **3**, 418

X-ray diffraction analysis and luminescence spectral study of crystal solvates of *N*-(*N'*-tosylanthranoyl)anthranilic acid with acetic acid and dimethylformamide, **4**, 728

The nature of the super-electron-releasing inductive effect of the silatranyl group and its spectroscopic and chemical consequences (review), **5**, 757

Structural parameters of concentrated aqueous solutions of LiCl under extreme conditions, as calculated by the method of integral equations. Effect of temperature, **6**, 935

Solvation of complexes with strong symmetric H bonds in the methanesulfonic acid–2-pyrrolidone system, **6**, 1008

Estimation of hydrogen bond energy in *n*-alkanols from the gas chromatography data, **6**, 1023

#### Hydrogen peroxide

Six-dimensional tunneling dynamics of internal rotation in hydrogen peroxide molecule and its isotopomers, **3**, 366

Electroanalytical applications of Prussian Blue and its analogs (review), **10**, 1811

Synthesis of nine-, ten-, and fifteen-membered alkenolides by the oxidative cleavage of the bridging C=C bond in 2-oxabicycloalkenes, **11**, 2149

#### Hydrogen transfer

Asymmetric transfer hydrogenation of ketones catalyzed by rhodium and iridium complexes with chiral bidentate Schiff's bases, **4**, 734

#### Hydrogenation

Asymmetric transfer hydrogenation of ketones catalyzed by rhodium and iridium complexes with chiral bidentate Schiff's bases, **4**, 734

Deprotonation of the peptide NH groups and diastereoselective hydrogenation of *N*-acetyl-α,β-dehydrodipeptides, **4**, 738

Hydrogenation of CO<sub>2</sub> conjugated with dehydrogenation of cyclohexane over an intermetallic catalyst, **7**, 1201

Pyrolysis of eicosane in supercritical water, **8**, 1478

Naphthalene oxidation in supercritical water, **8**, 1481

Transformations of 1-amino-2-(3-hydroxyalk-1-ynyl)-9,10-anthraquinones in the presence of amines, **9**, 1663

Transformations of the chiral diphosphine rhodium catalyst [(1,5-COD)Rh(–)R,R-DIOP]<sup>+</sup>CF<sub>3</sub>SO<sub>3</sub><sup>–</sup> under conditions of hydrogenation, **10**, 1855

Enantioselective hydrogenation in the presence of the rhodium(I) complex with (+)-4*S*,5*S*-*N*<sup>4</sup>,*N*<sup>4</sup>,*N*<sup>5</sup>,*N*<sup>5</sup>,2,2-hexamethyl-1,3-dioxolane-4,5-dimethanamine, **10**, 1860

Single step, solvent-free processes: examples and prospects (review), **11**, 2010

#### Hydrogenolysis

DFT study of the mechanism of alkane hydrogenolysis by transition metal hydrides. 1. Interaction of silica-supported zirconium hydrides with methane, **11**, 2050

#### Hydrolysis

Reaction of 3*H*-perfluoroalk-2-enes with ammonia, **1**, 155

Cetylpyridinium bromide-based oil-in-water microemulsions as a medium for hydrolysis of esters of phosphorus acids in the presence of primary amines, **2**, 245

Synthesis and transformations of metallacycles. 23. Cp<sub>2</sub>TiCl<sub>2</sub>-Catalyzed cyclometallation of fullerene C<sub>60</sub> with EtAlCl<sub>2</sub>, **2**, 297

Hydrophosphinoyl derivatives of calix[4]resorcinarenes, **4**, 748

Hydrolysis of some imidazole, benzimidazole, and 1,2,3-benzotriazole derivatives according to HPLC and NMR diffusimetry data, **5**, 820

*peri*-Naphthylenediamines. 31. Study of interconversions of 2,3-dihydroperimidines and 1,8-bis(dialkylamino)naphthalenes. Convenient synthesis of 1,2,2,3-tetramethyl-2,3-dihydroperimidine and a monoisopropyl analog of the "proton sponge", **5**, 846

The reactivity of phosphonic esters in aqueous micellar solutions of cationic surfactants, **7**, 1181

Catalytic ring opening of acetylcyclopropane by water and alcohols under the action of copper or palladium salts, **7**, 1242

A new method for the synthesis of *N*-substituted (4-oxo-4,5,6,7-tetrahydroindol-3-yl)acetic acids, **7**, 1259

Chemical modification of alumina and silica with alkylphosphonic acids and their esters, **9**, 1693

Organophosphate hydrolase — an enzyme catalyzing degradation of phosphorus-containing toxins and pesticides (review), **10**, 1826

Cycloplatinated aryl ketoximes as effective biomimicking catalysts for hydrolysis of esters of phosphorothioic acid, **10**, 1844

Some features of hydrolysis of organic and inorganic substrates by *Escherichia coli* inorganic pyrophosphatase in the presence of various activator cations, **10**, 1877

Stereodivergent synthesis of chiral low-molecular bio-regulators using readily available lipases (review), **11**, 1984

Intermediates of chemical assembling of oligoorganosiloxanes in hydrolysis of organochlorosilanes (review), **11**, 1998

Synthesis of nitrosubstituted triangulanes, **11**, 2101

#### Hydrolysis rate constant

Hydrolysis of some imidazole, benzimidazole, and 1,2,3-benzotriazole derivatives according to HPLC and NMR diffusimetry data, **5**, 820

#### Hydrometallation

A new route of the reaction of EtAlCl<sub>2</sub> with  $\alpha$ -olefins catalyzed by Ti complexes, **2**, 292

#### Hydroperoxidation

Synthesis of nine-, ten-, and fifteen-membered alkenolides by the oxidative cleavage of the bridging C=C bond in 2-oxabicycloalkenes, **11**, 2149

#### Hydroperoxides

Organometallic derivatives of 2,6-di-*tert*-butylphenols as specific inhibitors of methyl oleate oxidation, **6**, 1097

#### 1-Hydroperoxy-2-oxabicycloalkanes

Synthesis of nine-, ten-, and fifteen-membered alkenolides by the oxidative cleavage of the bridging C=C bond in 2-oxabicycloalkenes, **11**, 2149

#### Hydrospiroporphorane

Derivatives of phosphorous acid as a new class of ligands for Pd-catalyzed allylation, **3**, 554

#### Hydroxamates

Ligand oxidation as a method for intramolecular activation of metal complexes (review), **4**, 573

#### Hydroxide ion

Stereoselective cyclization of alkyl *N*-phthaloyl-4-bromoglutamates to cyclopropane derivatives, **4**, 644

#### $\alpha$ -Hydroxy acids

Membrane extraction of organic compounds. 3. A new receptor fragment for carboxylate groups based of the calix[4]arene platform, **11**, 2134

#### Hydroxy group

Estimation of oxyhydroxide specific surface area using the amounts of OH groups adsorbed, **9**, 1582

#### 2-(1-Hydroxyalkyl)naphtho[2,3-*g*]indole-6,11-diones

Transformations of 1-amino-2-(3-hydroxyalk-1-ynyl)-9,10-anthraquinones in the presence of amines, **9**, 1663

#### *N*-(Hydroxyalkyl)sulfamates

Synthesis of *N*-nitrooxazolidines and *N*-nitrotetrahydro-1,3-oxazines from *N*-(2-hydroxyalkyl)- and *N*-(3-hydroxyalkyl)sulfamates, **5**, 911

#### 5-(2-Hydroxyaryl)-7-polyfluoroalkyl-1,4,8-triazabicyclo[5.3.0]-dec-4-enes

2-Polyfluoroalkylchromones. 9. Synthesis and structures of 5-(2-hydroxyaryl)-7-polyfluoroalkyl-1,4,8-triazabicyclo[5.3.0]dec-4-enes, **8**, 1430

#### 3-(2-Hydroxyethyl)-1,5-dinitro-3-azabicyclo[3.3.1]non-6-ene

Reduction of 3-(2-hydroxyethyl)-1,5-dinitro-3-azabicyclo[3.3.1]non-6-ene, **2**, 265

#### 2-Hydroxy-4-hydroxymethyl-3-(indol-3-yl)cyclopent-2-enone

Study of the transformations of 2-*C*-(indol-3-yl)methyl- $\alpha$ -*L*-xylo-hex-3-ulofuranosonic acid (the open form of ascorbigen) in an acidic medium, **7**, 1309

#### $\alpha$ -Hydroxyketone

Photochromic dihetarylethenes. 7. Synthesis of bis(thienyl-azoles), photochromic analogs of diarylethenes, **1**, 116

Photochromic dihetarylethenes. 11. Synthesis and photochromic properties of diarylethenes containing furan or furopyrimidine bridges, **12**, 2424

#### Hydroxyl hydrogen atom

Adsorption of adamantanol isomers on graphitized thermal carbon black, **5**, 823

#### Hydroxylation

The role of metal-oxygen intermediates in biological and chemical monooxygenation of alkanes (review), **10**, 1795

#### 5-Hydroxymethyl-2-(indol-3-yl)methylidenetetrahydrofuran-3-one

Study of the transformations of 2-*C*-(indol-3-yl)methyl- $\alpha$ -*L*-xylo-hex-3-ulofuranosonic acid (the open form of ascorbigen) in an acidic medium, **7**, 1309

#### Hydroxynaphthazarins

Chemistry of naphthazarin derivatives. 8. Determination of structures of substituted 2-hydroxy-6(7)-methoxynaphthazarins and 7(8)-hydroxypyranonaphthazarins by IR spectroscopy, **1**, 95

#### 3-Hydroxy-4-nitrofurazan

Promotion effect of hypervalent iodine compounds on the reactions of 3-hydroxy-4-nitrofurazan with cycloalkenes, **12**, 2479

#### 10-Hydroxy-10-(2-oxopropyl)-9,10-dihydrophenanthren-9-ones

Reactions of 9,10-phenanthrenequinone and its nitro derivatives with acetone in the presence of Al<sub>2</sub>O<sub>3</sub>, **9**, 1625

#### 6-Hydroxy-9-oxo-2,4,10-tris(trifluoromethyl)-3,11,12-trioxatetracyclo[5.2.1.0<sup>2,6</sup>.0<sup>4,10</sup>]dodecane

Unexpected reaction of 1,1,1,10,10,10-hexafluorododecane-2,4,7,9-tetrone with methyl trifluoroacetate, **1**, 101

#### 5-Hydroxypentan-2-one

Catalytic ring opening of acetylcyclopropane by water and alcohols under the action of copper or palladium salts, **7**, 1242

#### 10-(3-Hydroxypropyl)-1,4,6,8-tetraphenyl-1,4,7,8-tetraaza-5-phosphoniaspiro[4.5]deca-6,9-diene chloride

10-(3-Hydroxypropyl)-1,4,6,8-tetraphenyl-1,4,7,8-tetraaza-5-phosphoniaspiro[4.5]deca-6,9-diene chloride: synthesis and molecular structure, **8**, 1461

#### (*S*)-2-[6-Hydroxy-2,5,7,8-tetramethylchroman-2-yl]ethanol

2,5,6,7,8-Pentasubstituted (*S*)- and (*R*)-[2-chroman-2-yl]ethanols as intermediates for the synthesis of  $\alpha$ -tocopherol and its chiral analogs, **11**, 2121

#### 2-[[6-Hydroxy-2,5,7,8-tetramethylchroman-2-yl]ethyl]trimethylammonium *p*-toluenesulfonate

2,5,6,7,8-Pentasubstituted (*S*)- and (*R*)-[2-chroman-2-yl]ethanols as intermediates for the synthesis of  $\alpha$ -tocopherol and its chiral analogs, **11**, 2121

#### Hyperconjugation

Effect of substituents on ionization potentials of phosphorus compounds. Conjugation in radical cations, **1**, 35

First ionization potentials of amines and electronic effects in their radical cations, **1**, 43

#### Hypervalent bond

Structure and isomerization of heterapentalene compounds containing hypervalent bonds with central nitrogen, phosphorus, or arsenic atom, **2**, 195

Intramolecular Y $\leftarrow$ O (Y = N, P, As, Sb, Bi) coordination in organonpictogen compounds: an *ab initio* and DFT study, **11**, 2028

#### Hypoidite

Synthetic approaches to homochiral bicyclo[5.2.1]decane based on *d*-camphor, **4**, 654

**Hypotensive activity**

Two-fragment  $\alpha$ -adrenolytics. 4. Synthesis of phosphorylated derivatives of 2-aryloxyethylamines and *N*-phenylpiperazine, **1**, 125

**I****Icosahedral clusters**

Modular design of icosahedral metal clusters (review), **1**, 1

**Imidate *N*-oxides**

1,3-Dipolar cycloaddition of cyclic  $\alpha$ -methoxynitrones, derivatives of 2*H*-imidazole 1-oxide and 4*H*-imidazole 3-oxide, **5**, 882

**Imidazoles**

Hydrolysis of some imidazole, benzimidazole, and 1,2,3-benzotriazole derivatives according to HPLC and NMR diffusimetry data, **5**, 820

Synthesis and properties of monoimines of  $\alpha$ -diketones, derivatives of 3-imidazoline nitroxides, **5**, 874

1,3-Dipolar cycloaddition of cyclic  $\alpha$ -methoxynitrones, derivatives of 2*H*-imidazole 1-oxide and 4*H*-imidazole 3-oxide, **5**, 882

**3-Imidazoline**

Synthesis and properties of monoimines of  $\alpha$ -diketones, derivatives of 3-imidazoline nitroxides, **5**, 874

**Imides**

*N*-Substituted tetrahydro-1,3-oxazines and oxazolidines. 1. A new version of the Mannich reaction involving amino alcohols, **1**, 104

**Imines**

Synthesis and structures of 1,1'-dialkyl-3,3'-bidiaziridines, **3**, 440

Study of alkaloids from the flora of the Siberian and Altai regions. 5. Synthesis of new elatidine derivatives, **5**, 907

Reaction of 6-amino-1,3-dimethyluracil with hexafluoroacetone and ethyl trifluoropyruvate benzoylimines, **6**, 1113

**Iminium cations**

*peri*-Naphthylenediamines. 31. Study of interconversions of 2,3-dihydroperimidines and 1,8-bis(dialkylamino)naphthalenes. Convenient synthesis of 1,2,2,3-tetramethyl-2,3-dihydroperimidine and a monoisopropyl analog of the "proton sponge", **5**, 846

**Iminoacetaldehyde**

Possible intramolecular rearrangements of *O*-vinyloximes initiated by N—O bond dissociation: a quantum-chemical analysis, **5**, 764

**1,2-Iminoalcohols**

Reaction of *R*-(+)-2-benzylideneaminobutan-1-ol with ethylene phosphorochloridite. Stereospecific formation of (3*R*,5*R*)-2-(2-chloroethoxy)-5-ethyl-2-oxo-3-phenyl-1,4,2-oxazaphosphorinane, **12**, 2468

**Imino-ene reaction**

Thermal ene reactions of methyl 3,3,3-trifluoro-2-*R*-sulfonyliminopropionates. Synthesis of  $\gamma,\delta$ -unsaturated derivatives of  $\alpha$ -amino  $\alpha$ -trifluoromethylcarboxylic acids, **6**, 1041

**Immersion heats**

Dubinín's theory and its contribution to adsorption science (review), **12**, 2265

**Immobilization**

Increase in catalytic activity of *Pseudomonas fluorescens* lipase upon its coprecipitation with hexadecane-1,2-diol suspension, **1**, 152

Proteinases immobilized on poly(vinyl alcohol) cryogel: novel biocatalysts for peptide synthesis in organic media, **10**, 1896

**Inclusion complexes**

Complex formation between polyethylene oxide-containing nonionic surfactants and  $\alpha$ - and  $\beta$ -cyclodextrins, **4**, 620

**Indazoles**

Heterocyclization of *o*-(arylethynyl)arylhydrazines as a new procedure for the synthesis of substituted 1*H*- and 2*H*-indazoles and indoles, **7**, 1268

**Indeno[2,1-*b*]indole and -pyrrole**

Synthesis and study of the mutagenic activity of di(indeno[2,1-*b*]indolyl)- and di(indeno[2,1-*b*]pyrrolyl)methanes and -dimethylsilanes, **8**, 1439

**Indium compounds**

Synthesis and the crystal structure of the supramolecular complex [Cl<sub>3</sub>InW<sub>3</sub>S<sub>4</sub>(H<sub>2</sub>O)<sub>9</sub>]<sup>2+</sup> with cucurbituril, **7**, 1144

Estimation of oxyhydroxide specific surface area using the amounts of OH groups adsorbed, **9**, 1582

**Indoles**

Heterocyclization of *o*-(arylethynyl)arylhydrazines as a new procedure for the synthesis of substituted 1*H*- and 2*H*-indazoles and indoles, **7**, 1268

Benzyfuran in the synthesis of benzo-annulated heterocycles (review), **9**, 1510

**Indolyacetic acids**

A new method for the synthesis of *N*-substituted (4-oxo-4,5,6,7-tetrahydroindol-3-yl)acetic acids, **7**, 1259

**2-(Indol-3-yl)acetyl furan**

Study of the transformations of 2-*C*-(indol-3-yl)methyl- $\alpha$ -*L*-xylo-hex-3-ulofuranosonic acid (the open form of ascorbigen) in an acidic medium, **7**, 1309

***o*-Indothiophenol**

A new synthesis of spiro-fused 1,4-benzothiazines, **7**, 1264

**Inductive effect**

Effect of substituents on ionization potentials of phosphorus compounds. Conjugation in radical cations, **1**, 35

First ionization potentials of amines and electronic effects in their radical cations, **1**, 43

The nature of the super-electron-releasing inductive effect of the silatranyl group and its spectroscopic and chemical consequences (review), **5**, 757

**Inert gases**

Characteristic features of phase diagrams describing condensation of adsorbate in narrow pores, **1**, 50

**Inhibition**

Effect of methyltin trichloride on the activity of lactate dehydrogenase, **8**, 1485

Dihydrofolate reductase: structural aspects of mechanisms of enzyme catalysis and inhibition (review), **10**, 1733

Some features of hydrolysis of organic and inorganic substrates by *Escherichia coli* inorganic pyrophosphatase in the presence of various activator cations, **10**, 1877

**Inhibitors**

Organometallic derivatives of 2,6-di-*tert*-butylphenols as specific inhibitors of methyl oleate oxidation, **6**, 1097

Chemical aspects of influence of medical drugs on organism functions (review), **8**, 1356

Organophosphate hydrolase — an enzyme catalyzing degradation of phosphorus-containing toxins and pesticides (review), **10**, 1826



Diffusional transport of urokinase and acyl-urokinase into fibrin and plasma clots: time of contact and fibrinolytic response *in vitro*, **10**, 1885

#### Insertion reactions

Intramolecular electrophilic rearrangements in saturated acyclic systems. Reactions of bis-carbanions with isocyanates, **5**, 838

Rh<sub>2</sub>(OAc)<sub>4</sub>-Catalyzed reaction of 1,3-dioxanes with methyl diazoacetate, **5**, 865

Reactions of methoxycarbonylcarbene with 3-ethyl-2-phenyl- and 2,3-diphenyloxazolidines, **11**, 2144

#### Integral equations method

Structural parameters of concentrated aqueous solutions of LiCl under extreme conditions, as calculated by the method of integral equations. Effect of temperature, **6**, 935

#### Interatomic interactions

The nature of the O—O bond in hydroperoxides, **9**, 1539

#### Intermediates

The role of metal-oxygen intermediates in biological and chemical monooxygenation of alkanes (review), **10**, 1795

New potentialities of electrophilic addition in the assembly of polyfunctional compounds from simple precursors (review), **11**, 1949

Intermediates of chemical assembling of oligoorganosiloxanes in hydrolysis of organochlorosilanes (review), **11**, 1998

Electrophilic aromatic trichloromethylation: intermediates and products, **11**, 2046

#### Intermetallic compounds

Hydrogenation of CO<sub>2</sub> conjugated with dehydrogenation of cyclohexane over an intermetallic catalyst, **7**, 1201

#### Intermolecular interactions

Solvation of amides of carboxylic acids in aqueous solutions of ethylene glycol, **5**, 780

Gas chromatography of halogenated adamantanes, **5**, 828

Molecular complex of C<sub>60</sub> fullerene with an organic  $\pi$ -donor, bis(methylenedithiotetrafulvalene): synthesis, crystal structures, and properties, **8**, 1423

#### Internal energy

Thermodynamic parameters of adsorption described by the logarithmic Temkin isotherm, **2**, 217

#### Internal rotation

Six-dimensional tunneling dynamics of internal rotation in hydrogen peroxide molecule and its isotopomers, **3**, 366

S<sub>1</sub>←S<sub>0</sub> Vibronic spectrum and structure of 2,2-difluoroethanal in the S<sub>1</sub> state, **7**, 1218

Thermodynamic properties and valence-force field of alkanethiols and dialkyl sulfides, **9**, 1563

Structure and spectra of 1,3,2-dioxaphospholenes. 1. Microwave spectra of 2-chloro-4,5-dimethyl-1,3,2-dioxaphospholene and its isotopomers in the ground and excited vibrational states, **9**, 1605

Thermodynamic properties and valence—power field of thiyl radicals, **12**, 2310

#### Intramolecular activation

Ligand oxidation as a method for intramolecular activation of metal complexes (review), **4**, 573

2,6-Di-*tert*-butylphenols and phenoxy radicals with metal—metal bonds, **4**, 716

#### Intramolecular coordination

Intramolecular Y←O (Y = N, P, As, Sb, Bi) coordination in organopnictogen compounds: an *ab initio* and DFT study, **11**, 2028

#### Intramolecular cyclization

Amidines: synthesis from *o*-alkenylanilines and cyclization in polyphosphoric acid, **3**, 545

Chemistry of 2,4,6-trinitrobenzonitrile. 1. Substitution of nitro groups in 2,4,6-trinitrobenzonitrile under the action of anionic nucleophiles. Factors facilitating the replacement of the *ortho*-nitro group, **12**, 2401

#### Intramolecular heterocyclization

Reaction of *R*-(+)-2-benzylideneaminobutan-1-ol with ethylene phosphorochloridite. Stereospecific formation of (3*R*,5*R*)-2-(2-chloroethoxy)-5-ethyl-2-oxo-3-phenyl-1,4,2-oxazaphosphorinane, **12**, 2468

#### Intramolecular nonvalent interactions

Determination of enthalpies of formation of organic free radicals based on bond dissociation energies. 4. Alkyl-substituted derivatives of phenyl and benzyl, **6**, 963

#### Inversion

S<sub>1</sub>←S<sub>0</sub> Vibronic spectrum and structure of 2,2-difluoroethanal in the S<sub>1</sub> state, **7**, 1218

#### Iodides

1-Methyl-2(3,4)-(1-vinylpyrrol-2-yl)pyridinium iodides: some structural features revealed by <sup>1</sup>H and <sup>13</sup>C NMR spectroscopy, **3**, 551

#### Iodination

2,4,6,8-Tetraiodo-2,4,6,8-tetraazabicyclo[3.3.0]octane-3,7-dione as a mild and convenient reagent for iodination of aromatic compounds, **12**, 2411

#### Iodine

Cyclization of *ortho*-(alk-2-enyl)anilines under the action of iodine, **3**, 456

Unusual oxidative cleavage of the aryl—ethynyl bonds in (arylethynyl)polymethylbenzenes with iodine in dimethyl sulfoxide, **6**, 1051

#### 1-Iodo-1,2,3,4,4a,9a-hexahydrocarbazole

Cyclization of *ortho*-(alk-2-enyl)anilines under the action of iodine, **3**, 456

#### *o*-Iodoarylhidrazines

Heterocyclization of *o*-(arylethynyl)arylhidrazines as a new procedure for the synthesis of substituted 1*H*- and 2*H*-indazoles and indoles, **7**, 1268

#### 13-Iodo-2-azatricyclo[7.3.1.0<sup>2,7</sup>]trideca-3,5,7-triene

Cyclization of *ortho*-(alk-2-enyl)anilines under the action of iodine, **3**, 456

#### Iodolactonization

Synthetic approaches to homochiral bicyclo[5.2.1]decane based on *d*-camphor, **4**, 654

#### 3-Iodo-1,2,3,4-tetrahydroquinolines

Cyclization of *ortho*-(alk-2-enyl)anilines under the action of iodine, **3**, 456

#### Iodotrimethylsilane

Silylation and germylation of trialkylsilyl(germyl)ethoxyacetylenes containing bulky substituents at the silicon or germanium atom, **6**, 1088

#### Ionic medium

Estimation of oxyhydroxide specific surface area using the amounts of OH groups adsorbed, **9**, 1582

#### Ionic pairs

Protonation of 2-quinolythiazoles in the ground and excited states in ethanol, **7**, 1186

#### Ionization

Reactivity of benzenetricarbonylchromium derivatives under conditions of dissociative ionization in the gas phase, **6**, 970

**Ionization potentials**

Effect of substituents on ionization potentials of phosphorus compounds. Conjugation in radical cations, **1**, 35

First ionization potentials of amines and electronic effects in their radical cations, **1**, 43

A study of peralkylated derivatives of bis( $\eta^6$ -benzene)chromium by gas-phase electronic absorption spectroscopy, **8**, 1390

**IR spectroscopy**

Density functional theoretical studies of [2+2] cycloaddition of simple transient silenes and germenes to ethylene, formaldehyde, and thioformaldehyde, and vibrational analysis of spectra of reactants and cyclic products, **1**, 20

Chemistry of naphthazarin derivatives. 7. Determination of structures of substituted 2,6(7)-dihydroxynaphthazarins by UV and IR spectroscopy, **1**, 88

Chemistry of naphthazarin derivatives. 8. Determination of structures of substituted 2-hydroxy-6(7)-methoxynaphthazarins and 7(8)-hydroxypyranonaphthazarins by IR spectroscopy, **1**, 95

*N*-Substituted tetrahydro-1,3-oxazines and oxazolidines. 1. A new version of the Mannich reaction involving amino alcohols, **1**, 104

Synthetic potential of substituted 7-alkylseleno-1,4-dihydro-1,6-naphthyridines, **1**, 122

Reaction of 3*H*-perfluoroalk-2-enes with ammonia, **1**, 155

Sulfurization of polymers. 4. Poly(4,5,6,7-tetrathiono-4,5,6,7-tetrahydrobenzothiothiophene-2,3-diyl) and related structures based on polystyrene and elemental sulfur, **2**, 253

A tandem of the Cornforth rearrangements of 4-(1,2,3-triazol-1-yl)iminomethyl-1,2,3-thiadiazole, **2**, 268

Thioureas from 3-aminoquinazolin-4(3*H*)-one. 2. Unusual alkaline recyclization of 3-(*N'*,*N'*,*S*-trialkylisothio-ureido)quinazolin-4(3*H*)-ones into new 1,3,4-oxadiazoles, **2**, 272

The influence of the surface on conformational equilibrium in thin layers of nematic liquid crystal, **2**, 319

The synthesis of *N*-isocyanurato-substituted aziridino[1,2][60]fullerenes, **3**, 445

2-Polyfluoroalkylchromones. 6. Synthesis of substituted 2-morpholino-2-trifluoromethylchroman-4-ones, **3**, 453

Investigation of the regioselectivity of alkylation of 3-nitropyridin-2(1*H*)-ones, **3**, 460

Fluorescent-labeled derivatives of dolichyl phosphate. Analogs of dolichyl phosphate with the 2-aminopyridine residue at the  $\omega$ -end of the chain, **3**, 531

Trifluoroacetylation of 2-acetyldimmedone, **3**, 568

Acidity of heteropoly acids with various structures and compositions studied by IR spectroscopy of the pyridinium salts, **4**, 587

Structural features of sublimed layers of *meso*-mono-4-pyridyltriphenylporphyrinatocobalt(II) and reversible binding of molecular oxygen, **4**, 638

Preparative synthesis of 3-cyano-4-difluoromethyl- and 3-cyano-4-trifluoromethyl-2(1*H*)-pyridones, **4**, 669

Amino-substituted *gem*-diphosphonic acids: structures of complexes with divalent metal cations in aqueous solutions, **4**, 697

Reactions of (difluoroamino)trinitromethane with nucleophilic reagents, **4**, 736

The nature of the super-electron-releasing inductive effect of the silatranyl group and its spectroscopic and chemical consequences (review), **5**, 757

Synthesis of *N*-nitrooxazolidines and *N*-nitrotetrahydro-1,3-oxazines from *N*-(2-hydroxyalkyl)- and *N*-(3-hydroxyalkyl)sulfamates, **5**, 911

*Ab initio* MP2 calculations of the products of acetylene addition to HgCl<sub>2</sub>, **6**, 958

Reactions of photogenerated fluorine atoms with molecules trapped in solid argon. 4. Spectroscopic characteristics of  $\beta$ -C<sub>2</sub>H<sub>2</sub>F' radicals generated in reactions of mobile F atoms with C<sub>2</sub>H<sub>2</sub> molecules trapped in solid argon, **6**, 989

Solvation of complexes with strong symmetric H bonds in the methanesulfonic acid—2-pyrrolidone system, **6**, 1008

Silylation and germylation of trialkylsilyl(germyl)ethoxy-acetylenes containing bulky substituents at the silicon or germanium atom, **6**, 1088

Silylation of silyl- and germylketenes containing bulky substituents at the silicon or germanium atom, **6**, 1093

Cryosynthesis, structure, and IR spectra of aluminum chloride—nitromethane molecular complexes, **7**, 1159

Vibrational spectra of trinitromethane derivatives, **7**, 1173

Influence of isomerism of difluorobenzophenone on the synthesis and properties of poly(arylene ether ketones), **7**, 1208

2-Polyfluoroalkylchromones. 7. Reactions of 6-substituted 2-tetra- and 2-pentafluoroethylchromones with 2-aminoethanol, **7**, 1314

Molecular complex of C<sub>60</sub> fullerene with an organic  $\pi$ -donor, bis(methylenedithiotetrafulvalene): synthesis, crystal structures, and properties, **8**, 1423

2-Polyfluoroalkylchromones. 8. 2-Trifluoromethyl- and 6-nitro-2-trifluoromethylchromones in reactions with amines, **8**, 1426

2-Polyfluoroalkylchromones. 9. Synthesis and structures of 5-(2-hydroxyaryl)-7-polyfluoroalkyl-1,4,8-triazabicyclo[5.3.0]dec-4-enes, **8**, 1430

10-(3-Hydroxypropyl)-1,4,6,8-tetraphenyl-1,4,7,8-tetraaza-5-phosphoniaspiro[4.5]deca-6,9-diene chloride: synthesis and molecular structure, **8**, 1461

*P,O*-Ligands. Complexes of tetraphenylmethylenediphosphine oxide with silver nitrate, **8**, 1469

Equilibrium conformation of dimethylaminodichlorophosphine molecule: the use of the results of quantum-chemical calculations and spectroscopic measurements in the analysis of gas-phase electron diffraction data, **9**, 1550

Thermodynamic properties and valence-force field of alkanethiols and dialkyl sulfides, **9**, 1563

Reactions of 9,10-phenanthrenequinone and its nitro derivatives with acetone in the presence of Al<sub>2</sub>O<sub>3</sub>, **9**, 1625

New *N*-nitrosoamines. 1. Synthesis and nitrosative cleavage of the Mannich bases derived from nitrogen-containing heterocycles and primary aliphatic amines, **9**, 1630

Spirocyclohexadienones. 4. Synthesis and dienone-phenolic rearrangement of 1-R-3,3-dialkyl-2-azaspiro[4.5]deca-1,6,9-trien-8-ones, **9**, 1648

Coordination chemistry of macrocyclic multidentate Lewis acids. Synthesis and structures of complexes of cyclic trimeric perfluoro-*o*-phenylenemercury with *N,N*-dimethylacetamide and *n*-butyronitrile, **9**, 1673

Micellar enzymology: methodology and technique (review), **10**, 1718

Preparation of sphere-shaped nanoscale carbon nitride polymer, **11**, 2020

Intermediates of photolysis of 1,3,2,4-benzodithiadiazines studied by matrix isolation spectroscopy and quantum chemistry, **11**, 2064

Derivatives of dolichyl phosphate with fluorescent label. Analogs of dolichyl phosphate with different lengths of isoprene chain, containing the (1-naphthyl)amino group in the  $\omega$ -fragment, **11**, 2221

Reaction of *exo-nido*-ruthenacarborane [Cl(Ph<sub>3</sub>P)<sub>2</sub>Ru]-5,6,10-( $\mu$ -H)<sub>3</sub>-10-H-7,8-C<sub>2</sub>B<sub>9</sub>H<sub>8</sub> with bromine, **11**, 2245

Thermodynamic properties and valence—power field of thiyl radicals, **12**, 2310

Quantum-chemical study of the singlet potential energy surface of the nitrene—dioxygen system, **12**, 2346

Catalytic properties of chromites with a spinel structure in the oxidation of CO and hydrocarbons and reduction of nitrogen oxides, **12**, 2377

Protonation and acylation of the heterometallic complexes ( $\mu$ -H)Os<sub>3</sub>( $\mu$ -O<sub>2</sub>CC<sub>5</sub>H<sub>4</sub>FeCp)(CO)<sub>10</sub> and Fe{( $\mu$ -O<sub>2</sub>CC<sub>5</sub>H<sub>4</sub>)( $\mu$ -H)Os<sub>3</sub>(CO)<sub>10</sub>}<sub>2</sub>, **12**, 2451

Synthesis of 3,5-disubstituted 1*H*-1,2,4-triazolium 4-nitroimidates, **12**, 2481

#### Iridium compounds

Asymmetric transfer hydrogenation of ketones catalyzed by rhodium and iridium complexes with chiral bidentate Schiff's bases, **4**, 734

Synthesis of the iridacarborane halide complexes [( $\eta$ -9-SMe<sub>2</sub>-7,8-C<sub>2</sub>B<sub>9</sub>H<sub>10</sub>)IrX<sub>2</sub>]<sub>2</sub> (X = Cl, Br, or I), **7**, 1334

Metal-induced B—H activation in Cp\*Rh, Cp\*Ir, (*p*-cymene)Ru, and (*p*-cymene)Os half-sandwich complexes containing the 1,2-dicarba-*closo*-dodecaborane(12)-1,2-dichalcogenolato ligand (review), **9**, 1518

#### Iron compounds

Reactions of *N*-phenyl-*o*-semiquinonediimine complexes of nickel and platinum with carbonyl-containing low-valence iron and rhenium compounds, **1**, 142

Molecular structure of a new palladium-containing vinylidene cluster [ $\eta^2$ -Ph<sub>2</sub>P(CH<sub>2</sub>)<sub>3</sub>PPh<sub>2</sub>]<sub>2</sub>PdFe<sub>3</sub>( $\mu^4$ -C=CHPh)(CO)<sub>9</sub>, **3**, 512

Stereoselective dimerization of chiral  $\alpha$ -bromoamides promoted by Fe(CO)<sub>5</sub>, **3**, 548

Estimation of oxyhydroxide specific surface area using the amounts of OH groups adsorbed, **9**, 1582

Structural investigations of paramagnetic metalloproteins using high-resolution NMR spectroscopy: iron-sulfur and copper proteins (review), **10**, 1762

Electron transfer coupled with ATP hydrolysis in nitrogenase (review), **10**, 1789

The role of metal-oxygen intermediates in biological and chemical monooxygenation of alkanes (review), **10**, 1795

Synthesis, molecular structures, and thermal decomposition of heterometallic ( $\pi$ -cyclooctadiene)platinum-bis(tricarbonyliron- $\mu_3$ -chalcogenides)[Fe—Fe], ( $\pi$ -C<sub>8</sub>H<sub>12</sub>)Pt( $\mu_3$ -X)<sub>2</sub>Fe<sub>2</sub>(CO)<sub>6</sub>, where X = S, Se, or Te, **11**, 2215

Protonation and acylation of the heterometallic complexes ( $\mu$ -H)Os<sub>3</sub>( $\mu$ -O<sub>2</sub>CC<sub>5</sub>H<sub>4</sub>FeCp)(CO)<sub>10</sub> and Fe{( $\mu$ -O<sub>2</sub>CC<sub>5</sub>H<sub>4</sub>)( $\mu$ -H)Os<sub>3</sub>(CO)<sub>10</sub>}<sub>2</sub>, **12**, 2451

Electron transfer-induced replacement of carbonyl ligands in cobalt clusters, **12**, 2483

#### (*R*)-14 $\alpha$ *H*-Isoagat-12-en-15-ol

Stereodivergent synthesis of chiral low-molecular bioregulators using readily available lipases (review), **11**, 1984

#### Isobutylene

The influence of small additives of arenes on low-temperature isobutylene polymerization in an aliphatic solvent, **4**, 631

#### Isocyanates

Intramolecular electrophilic rearrangements in saturated acyclic systems. Reactions of bis-carbanions with isocyanates, **5**, 838

#### Isoindazoles

Heterocyclization of *o*-(arylethynyl)arylhydrazines as a new procedure for the synthesis of substituted 1*H*- and 2*H*-indazoles and indoles, **7**, 1268

#### Isomerism

Synthesis and stereochemistry of diastereomeric *closo*-( $\pi$ , $\sigma$ -dicyclopentenyl)rhodacarboranes with the agostic C—H...Rh bond, **3**, 504

Synthesis, structure and isomerism of "three-bridge" *exo-nido*-osmacarborane clusters, **4**, 706

Experimental and molecular-statistical investigation of adsorption of aminoadamantanes on graphitized thermal carbon black, **6**, 980

Reactions of photogenerated fluorine atoms with molecules trapped in solid argon. 4. Spectroscopic characteristics of  $\beta$ -C<sub>2</sub>H<sub>2</sub>F<sup>·</sup> radicals generated in reactions of mobile F atoms with C<sub>2</sub>H<sub>2</sub> molecules trapped in solid argon, **6**, 989

Influence of isomerism of difluorobenzophenone on the synthesis and properties of poly(arylene ether ketones), **7**, 1208

Reactions of diazoalkanes with unsaturated compounds. 14. Reactions of diazomethane, diazocyclopropane, and methyl diazoacetate with 1,1,2,2-tetrafluoro-3-vinylcyclobutane and 2,3,3-trifluoro-1-vinylcyclobutene to form [3+2] and [1+2] cycloadducts, **11**, 2113

#### Isomerization

Structure and isomerization of heterapentalene compounds containing hypervalent bonds with central nitrogen, phosphorus, or arsenic atom, **2**, 195

Heteroorganic betaines. 6. Structure and reactivity of silicon-containing organophosphorus betaines with the <sup>-</sup>S—Si—C—P<sup>+</sup> fragment: a DFT study, **5**, 771

Transformations of cycloalkanes under the action of organoaluminum compounds and transition metal complexes in the presence of polychloromethanes, **7**, 1326

Transformations of 1-amino-2-(3-hydroxyalk-1-ynyl)-9,10-anthraquinones in the presence of amines, **9**, 1663

Photochromism of single crystals of arylhydrazide derivatives, **12**, 2471

#### Isonicotinoyl chloride

Synthesis and the crystal structures of *N*-(2-nitroxyethyl)isonicotinamide and its complexes with PdCl<sub>2</sub> and PtCl<sub>2</sub> as potential antitumor medicines, **3**, 520

#### Isopiestic method

Hydration of calixarene-containing polymers, **8**, 1379

#### Isopropyl bromide

*peri*-Naphthylenediamines. 31. Study of interconversions of 2,3-dihydroperimidines and 1,8-bis(dialkylamino)naphthalenes. Convenient synthesis of 1,2,2,3-tetramethyl-2,3-dihydroperimidine and a monoisopropyl analog of the "proton sponge", **5**, 846

**Isoquinoline**

Allylmethallation of benzoazaheterocycles with allylic derivatives of zinc. Synthesis of 1,4-ethano-2,3-dihydroisoquinolines and allylated heterocycles, **11**, 2172

**Isoquinolone**

Benzylfuran in the synthesis of benzo-annelated heterocycles (review), **9**, 1510

**Isotherm of adsorption**

Adsorption of vapor mixtures of water and organic substance on activated carbons, **4**, 595

The fundamentals of adsorption theory for a mixture of bulky molecules in slit-shaped pores with heterogeneous wall surfaces, **5**, 786

Prediction of the micropore structure parameters and adsorption properties of activated carbons, **6**, 974

**Isothioureas**

Thioureas from 3-aminoquinazolin-4(3*H*)-one. 2. Unusual alkaline recyclization of 3-(*N'*,*N'*,*S*-trialkylisothioureido)quinazolin-4(3*H*)-ones into new 1,3,4-oxadiazoles, **2**, 272

**Isotope effects**

Effect of H/D-isotope substitution on the solubility and solvation thermodynamics of krypton in methanol solutions of carbamide, **12**, 2360

**Isotopomers**

Six-dimensional tunneling dynamics of internal rotation in hydrogen peroxide molecule and its isotopomers, **3**, 366

Multidimensional tunneling dynamics of proton transfer in malonaldehyde molecule and its isotopomers, **7**, 1148

**Iturins**

Cyclic lipopeptides with fungicidal activity from the sea isolate of the bacterium *Bacillus subtilis*, **11**, 2231

**K****Ketenes**

A new method for the synthesis of fluorinated vinyl sulfides and ketene dithioacetals, **6**, 1044

Bis(ketenyl)benzenes: preparation, observation, and reaction with tetramethylpiperidin-1-ylloxy, **11**, 2130

**Ketocyanine dyes**

Complex formation between azacrown derivatives of dibenzylidenecyclopentanone and alkali-earth metal ions, **3**, 404

**Keto-enol tautomerism**

Hydrogen bond in 3-acetyl-4-hydroxycoumarin: X-ray diffraction study and quantum-chemical calculations, **3**, 418

Synthesis of bis(polyfluoroalkyl)-1,3,5-triketones, **7**, 1233

**Ketones**

Stereoselective dimerization of chiral  $\alpha$ -bromoamides promoted by  $\text{Fe}(\text{CO})_5$ , **3**, 548

Asymmetric transfer hydrogenation of ketones catalyzed by rhodium and iridium complexes with chiral bidentate Schiff's bases, **4**, 734

Asymmetric reduction of ketones with sodium aluminum hydride modified with chiral amino alcohols, **5**, 843

Direct *C*-nitration of cyclic  $\alpha,\beta$ -unsaturated oximes under the action of sodium nitrite and acetic acid in methanol, **8**, 1410

Oxidative bromination of tricyclic sesquiterpenoids (1*S*,3*S*,5*R*,6*S*,9*S*)-5-hydroxy-6,10,10-trimethyltricyclo[7.2.0.0<sup>1,6</sup>]decane-2-one and clovane-2 $\beta$ ,9 $\alpha$ -diol with the HBr–DMSO system, **8**, 1419

**Kinetic method**

Fragmentation behavior of  $\text{Si}_2\text{Cl}_n^+$  cations ( $n = 1-6$ ), **11**, 2087

**Kinetics**

Free-radical chain decomposition of ozone initiated by di(*tert*-butyl) trioxide, **1**, 63

Kinetics of  $\eta^6 \rightarrow \eta^5$  isomerization of ( $\eta^6$ -fluorenyl)( $\eta^5$ -cyclopentadienyl)iron, **1**, 157

Cetylpyridinium bromide-based oil-in-water microemulsions as a medium for hydrolysis of esters of phosphorus acids in the presence of primary amines, **2**, 245

Influence of the linking chain length on the recombination kinetics of covalently bonded triplet radical pairs and magnetic field effects, **4**, 599

Solvent effects on the absorption spectrum and recombination kinetics of diphenylcarbonyl oxide, **5**, 793

Electron transfer in the photochemical reactions of phenothiazine with halomethanes, **5**, 798

The preparation and reactivity of metal-containing monomers. 54. Thermolysis of the acrylamide monomer  $[\text{Co}(\text{CH}_2=\text{CHCONH}_2)_4(\text{H}_2\text{O})_2](\text{NO}_3)_2$ , **5**, 901

The reactivity of phosphonic esters in aqueous micellar solutions of cationic surfactants, **7**, 1181

Protonation of 2-quinolythiazoles in the ground and excited states in ethanol, **7**, 1186

Deep oxidation of methane on granulated and monolith copper–manganese oxide catalysts, **9**, 1589

Micellar enzymology: methodology and technique (review), **10**, 1718

Catalysis of noncomplementary reactions by transition metals clusters. Kinetic description, **10**, 1833

Kinetics and mechanism of styrene hydrocarboalkoxylation catalyzed by  $\text{Pd}^0$  complex in the presence of toluenesulfonic acid, **10**, 1839

Electrochemical analysis of the coordination sphere of ruthenium(II) as electron transfer mediator in glucose oxidase catalysis in aqueous solutions, **10**, 1849

Diffusional transport of urokinase and acyl-urokinase into fibrin and plasma clots: time of contact and fibrinolytic response *in vitro*, **10**, 1885

Liquid-phase oxidation of thiols with chlorine dioxide, **12**, 2352

Formation and decay of trifluoromethyl radicals during photodecomposition of the long-lived perfluoro-2,4-dimethyl-3-ethylpent-3-yl radical, **12**, 2381

**Kiprianov effect**

Complex formation between azacrown derivatives of dibenzylidenecyclopentanone and alkali-earth metal ions, **3**, 404

**Knoevenagel reaction**

Vicarious nucleophilic substitution of hydrogen in aldehydes and Knoevenagel reaction of iminium salts with  $\alpha$ -halocarbanions, **11**, 2236

**Koopmans approximation**

Effect of substituents on ionization potentials of phosphorus compounds. Conjugation in radical cations, **1**, 35

First ionization potentials of amines and electronic effects in their radical cations, **1**, 43

### Krypton

Effect of H/D-isotope substitution on the solubility and solvation thermodynamics of krypton in methanol solutions of carbamide, **12**, 2360

## L

### Lactate dehydrogenase

Effect of methyltin trichloride on the activity of lactate dehydrogenase, **8**, 1485

### Lanthanides

Synthesis and magnetic properties of liquid crystalline lanthanide complexes with alkylsulfate counterions, **3**, 488

### Laser photolysis

Effect of medium on the rate constant of decarbonylation of phenylacetyl radical, **2**, 237

Influence of the linking chain length on the recombination kinetics of covalently bonded triplet radical pairs and magnetic field effects, **4**, 599

Electron transfer in the photochemical reactions of phenothiazine with halomethanes, **5**, 798

### Lattice-gas model

Characteristic features of phase diagrams describing condensation of adsorbate in narrow pores, **1**, 50

Concentration relationships of coefficients of self-diffusion and viscosity of the adsorbate in narrow slit-like pores, **9**, 1572

### Lead compounds

Solid-phase reactions of lead tetraacetate with tertiary cycloalkanols and pyridine, **6**, 1118

### Levoglucosan

Synthesis of a C(9)—C(13) fragment of acutiphycin from levoglucosan, **6**, 1101

### Lewis acids

Phosphorylation of heptafluorobutanol in the presence of metal chloride—ether catalytic systems, **8**, 1457

Coordination chemistry of macrocyclic multidentate Lewis acids. Synthesis and structures of complexes of cyclic trimeric perfluoro-*o*-phenylenemercury with *N,N*-dimethylacetamide and *n*-butyronitrile, **9**, 1673

### *P,N*-Ligands

Derivatives of phosphorous acid as a new class of ligands for Pd-catalyzed allylation, **3**, 554

### Linolenic acid

Secondary metabolites of *Astragalus danicus* Retz. and *A. inopinatus* Boriss., **6**, 1107

### Lipase

Increase in catalytic activity of *Pseudomonas fluorescens* lipase upon its coprecipitation with hexadecane-1,2-diol suspension, **1**, 152

Stereodivergent synthesis of chiral low-molecular bioregulators using readily available lipases (review), **11**, 1984  
2,5,6,7,8-Pentasubstituted (*S*)- and (*R*)-[2-chroman-2-yl]ethanols as intermediates for the synthesis of  $\alpha$ -tocopherol and its chiral analogs, **11**, 2121

### Liquid crystals

The influence of the surface on conformational equilibrium in thin layers of nematic liquid crystal, **2**, 319

Synthesis and liquid-crystalline properties of substituted  $\beta$ -aminovinyl ketones and their complexes with copper(II), **5**, 805

New aromatic azo compounds: syntheses and liquid-crystalline properties, **7**, 1248

### Lithium compounds

Structural parameters of concentrated aqueous solutions of LiCl under extreme conditions, as calculated by the method of integral equations. Effect of temperature, **6**, 935

Synthesis of bis(polyfluoroalkyl)-1,3,5-triketones, **7**, 1233

### Local order

Modular design of icosahedral metal clusters (review), **1**, 1

### Low-temperature anaerobic sewage treatment

Environmental biotechnology: a tandem of biocatalytic and engineering approaches (review), **10**, 1818

### Luciferase and luciferin

Relationship between the structure of the protein globule and bioluminescence spectra of firefly luciferase (review), **10**, 1752

### Luminescence

X-ray diffraction analysis and luminescence spectral study of crystal solvates of *N*-(*N'*-tosylanthranoyl)anthranilic acid with acetic acid and dimethylformamide, **4**, 728

### Luminol

Generation of an oscillating chemical reaction in a heterogeneous system by the oxidation of an alkaline solution of luminol with sodium(VI) ferrate in the presence of copper ions, **1**, 159

### Lutetium compounds

Bis-(2-diphenylphosphinoethyl)cyclopentadienylchloro-lutetium: synthesis and dynamic behavior in solution, **7**, 1295

## M

### Macrocyclic ligands

Binuclear and polynuclear transition metal complexes with macrocyclic ligands. 1. Synthesis and the structure of an antiferromagnetic binuclear nickel complex prepared by the reaction of *o*-phenylenediamine with pyrrole-2,5-dicarbaldehyde and nickel pivalate, **12**, 2445

### Magnesium

*peri*-Naphthylenediamines. 32. Reactions of 4,5-bis(dimethylamino)-1-naphthyllithium and 4,5-bis(dimethylamino)-1-naphthylmagnesium bromide with electrophilic agents. New representatives of double naphthalene "proton sponges" with the structures of 1,1'-binaphthyl ketone and 1,1'-binaphthylmethanol, **5**, 854

### Magnesium compounds

Activation by the Grignard reagent of the bis(2-phenylindenyl)zirconium dichloride—triisobutylaluminum catalytic system for propene polymerization, **9**, 1696

### Magnetic field effect

Influence of the linking chain length on the recombination kinetics of covalently bonded triplet radical pairs and magnetic field effects, **4**, 599

### Magnetic properties

Formation of a tetranuclear nickel(II) complex containing an unusual bridging ligand, **7**, 1336

Binuclear and polynuclear transition metal complexes with macrocyclic ligands. 1. Synthesis and the structure of an antiferromagnetic binuclear nickel complex prepared by the reaction of *o*-phenylenediamine with pyrrole-2,5-dicarbaldehyde and nickel pivalate, **12**, 2445

#### Magnetic resistance

Exoemission near phase transitions of epitaxial films of manganites with colossal magnetic resistance, **3**, 359

#### Magnetic resonance parameters

Quantum-chemical estimates of geometric parameters of free radicals, **2**, 188

Magnetic parameters and rotational mobility of the  $\equiv\text{SiON}(\text{O}^\cdot)\text{CX}_3$  nitroxides (X = H, D) grafted on silica surface, **12**, 2384

#### Magnetic susceptibility

Synthesis and magnetic properties of liquid crystalline lanthanide complexes with alkylsulfate counterions, **3**, 488

#### Malonaldehyde

Multidimensional tunneling dynamics of proton transfer in malonaldehyde molecule and its isotopomers, **7**, 1148

#### Malonic acid

EPR study of weak exchange interactions in binuclear copper(II) complexes with salicylaldehyde acyldihydrazones, **5**, 812

#### Malononitriles

Reactions of cyclic enaminketones with benzylidene-malononitriles. Synthesis of new fused heterocyclic systems containing the 1,4-dihydropyridine fragment, **12**, 2428

#### Maltose

The role of intra- and intermolecular hydrogen bonds in the formation of  $\beta$ -cyclodextrin head-to-head and head-to-tail dimers. The results of *ab initio* and semiempirical quantum-chemical calculations, **2**, 206

#### (S)-Mandelic acid

Determination of the enantiomeric composition of *N,N*-dimethyl- $\alpha$ -ferrocenylethylamine by  $^1\text{H}$  NMR spectroscopy, **7**, 1323

#### Manganese compounds

Molecular structure of a new palladium-containing vinylidene cluster  $[\eta^2\text{-Ph}_2\text{P}(\text{CH}_2)_3\text{PPh}_2]\text{PdFe}_3(\mu^4\text{-C}=\text{CHPh})(\text{CO})_9$ , **3**, 512

Deep oxidation of methane on granulated and monolith copper—manganese oxide catalysts, **9**, 1589

#### Manganites

Exoemission near phase transitions of epitaxial films of manganites with colossal magnetic resistance, **3**, 359

#### Mannich bases

New *N*-nitrosoamines. 1. Synthesis and nitrosative cleavage of the Mannich bases derived from nitrogen-containing heterocycles and primary aliphatic amines, **9**, 1630

#### Mannich reaction

*N*-Substituted tetrahydro-1,3-oxazines and oxazolidines. 1. A new version of the Mannich reaction involving amino alcohols, **1**, 104

A new method for the synthesis of 3,7-diazabicyclo[3.3.1]nonanes, **4**, 753

Specific features of the chemical behavior of acetylenic derivatives of benzocrown ethers, **5**, 868

#### Marine facultative fungus

$3\beta$ -Methoxyolean-18-ene (miliacin) from the marine fungus *Chaetomium olivaceum*, **12**, 2463

#### Mass spectrometry

Oxidative transformations of cyclohexane, methylcyclopentane, and pentane on treatment with superelectrophiles based on polyhalomethane and aluminum halides, **1**, 81

Photochromic dihetarylethenes. 6. Photochromic derivatives of thieno[3,2-*b*]thiophene, **1**, 110

Interaction of trimethylsilyl ions with nitrates of the estrane series in the gas phase, **2**, 250

Thioureas from 3-aminoquinazolin-4(3*H*)-one. 2. Unusual alkaline recyclization of 3-(*N'*,*N'*,*S*-trialkylisothio-ureido)quinazolin-4(3*H*)-ones into new 1,3,4-oxadiazoles, **2**, 272

A new norditerpenoid alkaloid acsonine from the roots of *Aconitum kusnezoffii* Reichb., **2**, 311

Bromination of photochromic spironaphthoxazines, **3**, 470

Synthesis of 1-aryl-1,2,3,4-tetrahydro-9*H*-pyrido[3,4-*b*]indoles (1,2,3,4-tetrahydro- $\beta$ -carbolines) under high pressures, **3**, 560

Oxidation of diterpenoid alkaloids with dimethyldioxirane, **4**, 720

Synthesis of *N*-nitrooxazolidines and *N*-nitrotetrahydro-1,3-oxazines from *N*-(2-hydroxyalkyl)- and *N*-(3-hydroxyalkyl)sulfamates, **5**, 911

Reactivity of benzenetricarbonylchromium derivatives under conditions of dissociative ionization in the gas phase, **6**, 970

Secondary metabolites of *Astragalus danicus* Retz. and *A. inopinatus* Boriss., **6**, 1107

Pyrolysis of eicosane in supercritical water, **8**, 1478

Naphthalene oxidation in supercritical water, **8**, 1481

Preparation of sphere-shaped nanoscale carbon nitride polymer, **11**, 2020

Fragmentation behavior of  $\text{Si}_2\text{Cl}_n^+$  cations ( $n = 1-6$ ), **11**, 2087

Study of alkaloids from the flora of the Siberian and Altai regions. 6. Crystal and molecular structure of songorine *Z*-oxime, **11**, 2092

Allylmetallation of benzoazaheterocycles with allylic derivatives of zinc. Synthesis of 1,4-ethano-2,3-dihydroisoquinolines and allylated heterocycles, **11**, 2172

Derivatives of dolichyl phosphate with fluorescent label. Analogs of dolichyl phosphate with different lengths of isoprene chain, containing the (1-naphthyl)amino group in the  $\omega$ -fragment, **11**, 2221

Mass spectra of new groups of functionalized heterocycles. 4. 1-Alkyl-2-(alkylthio)pyrroles, **12**, 2390

Functionalization of alkanes and cycloalkanes by super-electrophiles. 15. Carbonylation of cycloheptane, cyclooctane, and isomeric monoalkylcyclohexanes with CO in the presence of  $\text{CBr}_4 \cdot 2\text{AlBr}_3$  to form individual esters of tertiary carboxylic acids of the cyclohexane series, **12**, 2394

Promotion effect of hypervalent iodine compounds on the reactions of 3-hydroxy-4-nitrofurazan with cycloalkenes, **12**, 2479

#### Matrix isolation

Intermediates of photolysis of 1,3,2,4-benzodithiadiazines studied by matrix isolation spectroscopy and quantum chemistry, **11**, 2064

Binary molecular complexes of silicon tetrafluoride with water, methanol, and dimethyl ether. Quantum-chemical study, **12**, 2316

**Mediators**

Chemical aspects of influence of medical drugs on organism functions (review), **8**, 1356

**Meisenheimer complexes**

Regioselectivity in the reactions of the acetonate ion with electron-deficient arenes, **6**, 1056

**Membrane transport**

Membrane extraction of organic compounds. 3. A new receptor fragment for carboxylate groups based of the calix[4]arene platform, **11**, 2134

**Membranes**

Rapid characterization of ultrafiltration membranes by scanning electron microscopy, **7**, 1320

Chemical aspects of influence of medical drugs on organism functions (review), **8**, 1356

Structural and functional model of methane hydroxylase of membrane-bound methane monooxygenase from *Methylococcus capsulatus* (Bath), **10**, 1867

**(R)-4-Menthenone**

A useful chiral synthon from (*R*)-4-menthenone, **6**, 1117

**(-)-Menthol**

A useful chiral synthon from (*R*)-4-menthenone, **6**, 1117

**Mercuration**

Oxidative dimerization of vinylbornylacetylenes under the action of mercuric acetate, **7**, 1238

Electrophilic substitution in eleven-vertex metallacarborane 1,2,4-CpCoC<sub>2</sub>B<sub>8</sub>H<sub>10</sub>, **9**, 1683

**Mercuric chloride**

Intramolecular electrophilic rearrangements in saturated acyclic systems. Reactivity of the zwitterion derived from triisopropylphosphine and ethyl 2-cyanoacrylate with respect to different types of electrophiles, **2**, 279

**Mercury compounds**

Mercury and cadmium pnictidehalides: the inverted Zintl phases (review), **3**, 337

*Ab initio* MP2 calculations of the products of acetylene addition to HgCl<sub>2</sub>, **6**, 958

Thermodynamics of copper, silver, gold, and mercury acetylenides (review), **7**, 1121

Oxidative dimerization of vinylbornylacetylenes under the action of mercuric acetate, **7**, 1238

Coordination chemistry of macrocyclic multidentate Lewis acids. Synthesis and structures of complexes of cyclic trimeric perfluoro-*o*-phenylenemercury with *N,N*-dimethylacetamide and *n*-butyronitrile, **9**, 1673

**Merocyanine**

Merocyanine form of photochromic spirooxazines in acid solutions, **7**, 1214

**Mesaconitine**

A new norditerpenoid alkaloid aconitine from the roots of *Aconitum kusnezoffii* Reichb., **2**, 311

**Mesopores**

Characteristic features of phase diagrams describing condensation of adsorbate in narrow pores, **1**, 50

**Mesoporous mesophase materials**

Physicochemical features of the formation of siliceous porous mesophases. 4. Effect of duration and temperature of the hydrothermal treatment on the structural and textural properties, **2**, 175

**Metal carbene complexes**

First attempts at differential diastereoselection in catalytic reactions of *N*-chirally substituted dirhodium(II) tetra-

kis[methyl 2-oxoimidazolidine-4(*S*)-carboxylates] with diazoacetates, **11**, 2156

**Metal complex catalysis**

Carbonylation of chloroacetone to methyl acetoacetate, **11**, 2239

**Metal complexes**

Ligand oxidation as a method for intramolecular activation of metal complexes (review), **4**, 573

Structures and conformational behavior of phosphorothioites and their complexes with transition metals obtained from X-ray diffraction analysis (review), **7**, 1130

Kinetics and mechanism of styrene hydrocarboalkoxylation catalyzed by Pd<sup>0</sup> complex in the presence of toluenesulfonic acid, **10**, 1839

Cycloplatinated aryl ketoximes as effective biomimicking catalysts for hydrolysis of esters of phosphorothioic acid, **10**, 1844

Electrochemical analysis of the coordination sphere of ruthenium(II) as electron transfer mediator in glucose oxidase catalysis in aqueous solutions, **10**, 1849

Transformations of the chiral diphosphine rhodium catalyst [(1,5-COD)Rh(-)R,R-DIOP]<sup>+</sup>CF<sub>3</sub>SO<sub>3</sub><sup>-</sup> under conditions of hydrogenation, **10**, 1855

Enantioselective hydrogenation in the presence of the rhodium(I) complex with (+)-4*S*,5*S*-*N*<sup>4</sup>,*N*<sup>4</sup>,*N*<sup>5</sup>,*N*<sup>5</sup>,2,2-hexamethyl-1,3-dioxolane-4,5-dimethanamine, **10**, 1860

**Metal monohalides**

New polymolecular bismuth monohalides. Synthesis and crystal structures of Bi<sub>4</sub>Br<sub>x</sub>I<sub>4-x</sub> (*x* = 1, 2, or 3), **12**, 2304

**Metal oxides**

Deep oxidation of methane on granulated and monolith copper–manganese oxide catalysts, **9**, 1589

**Metal rings**

Cycloplatinated aryl ketoximes as effective biomimicking catalysts for hydrolysis of esters of phosphorothioic acid, **10**, 1844

**Metallacarboranes**

Synthesis of the iridacarborane halide complexes [(η-9-SMe<sub>2</sub>-7,8-C<sub>2</sub>B<sub>9</sub>H<sub>10</sub>)IrX<sub>2</sub>]<sub>2</sub> (X = Cl, Br, or I), **7**, 1334

Electrophilic substitution in eleven-vertex metallacarborane 1,2,4-CpCoC<sub>2</sub>B<sub>8</sub>H<sub>10</sub>, **9**, 1683

Synthesis and the structure of the triphenylphosphine complex of *o*-nickelacarborane, 3,3-(PPh<sub>3</sub>)<sub>2</sub>-3,1,2-NiC<sub>2</sub>B<sub>9</sub>H<sub>11</sub>, **11**, 2248

**Metallacycles**

Density functional theoretical studies of [2+2] cycloaddition of simple transient silenes and germenes to ethylene, formaldehyde, and thioformaldehyde, and vibrational analysis of spectra of reactants and cyclic products, **1**, 20

Synthesis and transformations of metallacycles. 24. Zr-Catalyzed cycloaluminum of asymmetrical disubstituted acetylenes, **3**, 484

**Metallation**

Reactions of metallated 1-hydroxy-2,2,4,5,5-pentamethyl-2,5-dihydro-1*H*-imidazole with functionalized nitroxyl radicals derived from 2,5-dihydro-1*H*-imidazole and 2,5-dihydro-1*H*-imidazole 3-oxide, **4**, 665

Allylmethallation of benzoazaheterocycles with allylic derivatives of zinc. Synthesis of 1,4-ethano-2,3-dihydroisoquinolines and allylated heterocycles, **11**, 2172

Synthesis and transformations of metallacycles. 27. Quantum-chemical study of the mechanism of styrene catalytic

cyclometallation with triethylaluminum in the presence of  $\text{Cp}_2\text{ZrCl}_2$ , **12**, 2336

#### Metallocenes

Electron density distribution in vanadocene ( $\eta^5\text{-C}_5\text{H}_5$ )<sub>2</sub>V and mixed metallocenes ( $\eta^5\text{-C}_5\text{H}_5$ )M( $\eta^5\text{-C}_7\text{H}_7$ ) (M = Ti, V, or Cr) and ( $\eta^5\text{-C}_5\text{H}_5$ )Ti( $\eta^8\text{-C}_8\text{H}_8$ ). Effect of the nature of the cyclic ligand on the character of the M—( $\pi$ -ligand) bond, **1**, 130

Heterometallic zirconocene(III) aluminum hydride complex ( $\text{Cp}_2\text{ZrH}$ )<sub>2</sub>HAICl<sub>2</sub>·C<sub>4</sub>H<sub>8</sub>O<sub>2</sub>·C<sub>6</sub>H<sub>6</sub>, **11**, 2200

#### Metallole dianions

Electrochemical study of redox properties of 2,3,4,5-tetraphenyl-1-heterocyclopenta-2,4-dienes  $\text{Ph}_4\text{C}_4\text{ER}^1\text{R}^2$  (E = Si, Ge, Sn). A new method for generation of tetraphenylgermole dianion, **11**, 2071

#### Metalloles

Electrochemical study of redox properties of 2,3,4,5-tetraphenyl-1-heterocyclopenta-2,4-dienes  $\text{Ph}_4\text{C}_4\text{ER}^1\text{R}^2$  (E = Si, Ge, Sn). A new method for generation of tetraphenylgermole dianion, **11**, 2071

#### Metallomesogens

Synthesis and magnetic properties of liquid crystalline lanthanide complexes with alkylsulfate counterions, **3**, 488

Synthesis and liquid-crystalline properties of substituted  $\beta$ -aminovinyl ketones and their complexes with copper(II), **5**, 805

#### Metallootropic tautomerism

Kinetics of  $\eta^6 \rightarrow \eta^5$  isomerization of ( $\eta^6$ -fluorenyl)( $\eta^5$ -cyclopentadienyl)iron, **1**, 157

#### Metal—metal bond

Synthesis, molecular structures, and thermal decomposition of heterometallic ( $\pi$ -cyclooctadiene)platinum-bis(tricarbonyliron- $\mu_3$ -chalcogenides)[Fe—Fe], ( $\pi\text{-C}_8\text{H}_{12}$ )Pt( $\mu_3\text{-X}$ )<sub>2</sub>Fe<sub>2</sub>(CO)<sub>6</sub>, where X = S, Se, or Te, **11**, 2215

#### Methane

Characteristic features of phase diagrams describing condensation of adsorbate in narrow pores, **1**, 50

Deep oxidation of methane on granulated and monolith copper—manganese oxide catalysts, **9**, 1589

Energochemical technologies: energy and bulk/basic chemicals in a single process (review), **11**, 2015

DFT study of the mechanism of alkane hydrogenolysis by transition metal hydrides. 1. Interaction of silica-supported zirconium hydrides with methane, **11**, 2050

#### Methane monooxygenase

The role of metal-oxygen intermediates in biological and chemical monooxygenation of alkanes (review), **10**, 1795

Structural and functional model of methane hydroxylase of membrane-bound methane monooxygenase from *Methylococcus capsulatus* (Bath), **10**, 1867

#### Methanesulfonic acid

Acidity function of methanesulfonic acid solutions in ethyl acetate, **6**, 1003

Solvation of complexes with strong symmetric H bonds in the methanesulfonic acid—2-pyrrolidone system, **6**, 1008

#### Methanol

The influence of small additives of arenes on low-temperature isobutylene polymerization in an aliphatic solvent, **4**, 631

Binary molecular complexes of silicon tetrafluoride with water, methanol, and dimethyl ether. Quantum-chemical study, **12**, 2316

Effect of H/D-isotope substitution on the solubility and solvation thermodynamics of krypton in methanol solutions of carbamide, **12**, 2360

#### Methodides of 2-derivatives of dimethylaminomethylferrocene

Synthetic approaches to trialkyl(ferrocenylmethyl)ammonium salts as cationic templates for the preparation of ferromagnets on the basis of bimetal oxalates, **3**, 497

#### $\alpha$ -Methoxynitrones

1,3-Dipolar cycloaddition of cyclic  $\alpha$ -methoxynitrones, derivatives of 2*H*-imidazole 1-oxide and 4*H*-imidazole 3-oxide, **5**, 882

#### $3\beta$ -Methoxy-olean-18-ene

$3\beta$ -Methoxyolean-18-ene (miliacin) from the marine fungus *Chaetomium olivaceum*, **12**, 2463

#### (1*R*,4*R*)-2-(4-Methoxyphenyl)benzylidene-*p*-menthan-3-ones

Conformations of *Z*- and *E*-isomers of some chiral (1*R*,4*R*)-2-arylidene-*p*-menthan-3-ones, **9**, 1596

#### Methyl acetoacetate

Carbonylation of chloroacetone to methyl acetoacetate, **11**, 2239

#### Methyl acrylate

The rate constants for the addition of radicals  $\text{CCl}_3\text{CH}_2\cdot\text{CHR}$  (R = Ph, CO<sub>2</sub>Me, CONC<sub>4</sub>H<sub>8</sub>) to some unsaturated compounds, **3**, 557

Catalytic *C*-phenylation of methyl acrylate with triphenylantimony(v) dicarboxylates, **7**, 1291

#### Methyl cinnamate

Catalytic *C*-phenylation of methyl acrylate with triphenylantimony(v) dicarboxylates, **7**, 1291

#### Methyl diazoacetate

Rh<sub>2</sub>(OAc)<sub>4</sub>-Catalyzed reaction of 1,3-dioxanes with methyl diazoacetate, **5**, 865

#### Methyl (*R*)-5,5-dimethoxy-3-methylpentanoate

A useful chiral synthon from (*R*)-4-menthenone, **6**, 1117

#### Methyl methacrylate

The rate constants for the addition of radicals  $\text{CCl}_3\text{CH}_2\cdot\text{CHR}$  (R = Ph, CO<sub>2</sub>Me, CONC<sub>4</sub>H<sub>8</sub>) to some unsaturated compounds, **3**, 557

#### Methyl oleate

Organometallic derivatives of 2,6-di-*tert*-butylphenols as specific inhibitors of methyl oleate oxidation, **6**, 1097

#### Methyl *N*-sulfonyl-4-oxo-2-trifluoromethyl-4-*R*-but-2-*E*-enimidates

Cascade rearrangement in the reaction of methyl trifluoropyruvate sulfonylimines with terminal alkynes, **7**, 1330

#### Methyl trifluoroacetate

Unexpected reaction of 1,1,1,10,10,10-hexafluorodecane-2,4,7,9-tetrone with methyl trifluoroacetate, **1**, 101

#### Methyl trifluoropyruvate sulfonylimines

Cascade rearrangement in the reaction of methyl trifluoropyruvate sulfonylimines with terminal alkynes, **7**, 1330

#### Methylation

New approach to the functionalization of  $\delta$ -carboline derivatives, **8**, 1449

#### 6-Methylcristazarin

Chemistry of naphthazarin derivatives. 8. Determination of structures of substituted 2-hydroxy-6(7)-methoxynaphthazarins and 7(8)-hydroxypyranonaphthazarins by IR spectroscopy, **1**, 95

#### Methylcyclohexane

Functionalization of alkanes and cycloalkanes by super-electrophiles. 15. Carbonylation of cycloheptane, cyclo-



octane, and isomeric monoalkylcyclohexanes with CO in the presence of  $\text{CBr}_4 \cdot 2\text{AlBr}_3$  to form individual esters of tertiary carboxylic acids of the cyclohexane series, **12**, 2394

#### Methylcyclopentane

Oxidative transformations of cyclohexane, methylcyclopentane, and pentane on treatment with superelectrophiles based on polyhalomethane and aluminum halides, **1**, 81

#### 1,1'-Methylenebis(2-naphthol)

Unexpected transformation of 1,1'-methylenebis(2-naphthol) into 1,2,1',2'-tetrahydrospiro(naphthalene-1,3'-naphtho[2,1-*b*]pyran)-2-one, a spirodimer of 1,2-naphthoquinone 1-methide, in the presence of boric acid and paraformaldehyde, **5**, 914

#### Methylenediphosphine oxide

*P,O*-Ligands. Complexes of tetraphenylmethylenediphosphine oxide with silver nitrate, **8**, 1469

#### O-Methylinositol

Secondary metabolites of *Astragalus danicus* Retz. and *A. inopinatus* Boriss., **6**, 1107

#### (S)-2-Methylserine

Asymmetric synthesis of (*S*)- and (*R*)- $\alpha$ -methylserine based on the chiral recyclable reagent (*S*)-*N*-(2-benzoylphenyl)-1-benzylpyrrolidine-2-carboxamide, **6**, 1037

#### 2-Methyl-2,3,5,10-tetrahydroanthra[2,3-*d*]isothiazole-3,5,10-triones

Synthesis of linear and angular anthraquinonoisothiazol-3-ones, their *S*-oxides, and *S,S*-dioxides, **9**, 1657

#### Methyltin trichloride

Effect of methyltin trichloride on the activity of lactate dehydrogenase, **8**, 1485

#### 1-Methyl-(1-vinylpyrrol-2-yl)pyridinium iodides

1-Methyl-2(3,4)-(1-vinylpyrrol-2-yl)pyridinium iodides: some structural features revealed by  $^1\text{H}$  and  $^{13}\text{C}$  NMR spectroscopy, **3**, 551

#### Methylviologen

The nature of colloidal platinum in aqueous solution: features of catalytic reactions, **4**, 626

#### Micelles

Luminescence properties of acridine dyes in micellar sodium dodecyl sulfate solutions containing thallium ions, **6**, 986

The reactivity of phosphonic esters in aqueous micellar solutions of cationic surfactants, **7**, 1181

Micellar enzymology: methodology and technique (review), **10**, 1718

#### Michael reaction

Asymmetric Michael reaction of diethyl malonate with crotonaldehyde catalyzed by chiral aminocarboxylates, amino alcoholates, and amino phenolates, **9**, 1620

Reactions of cyclic enaminketones with benzylidene-malononitriles. Synthesis of new fused heterocyclic systems containing the 1,4-dihydropyridine fragment, **12**, 2428

#### Microemulsions

Cetylpyridinium bromide-based oil-in-water microemulsions as a medium for hydrolysis of esters of phosphorus acids in the presence of primary amines, **2**, 245

#### Micropores

Characteristic features of phase diagrams describing condensation of adsorbate in narrow pores, **1**, 50

Prediction of the micropore structure parameters and adsorption properties of activated carbons, **6**, 974

On the mechanisms of phenol adsorption by carbons, **11**, 2060

Dubinin's theory and its contribution to adsorption science (review), **12**, 2265

#### Microstructure effects

Structure determination from powder diffraction (review), **12**, 2273

#### Microwave spectrum

Structure and spectra of 1,3,2-dioxaphospholenes. 1. Microwave spectra of 2-chloro-4,5-dimethyl-1,3,2-dioxaphospholene and its isotopomers in the ground and excited vibrational states, **9**, 1605

#### Miliacin

3 $\beta$ -Methoxyolean-18-ene (miliacin) from the marine fungus *Chaetomium olivaceum*, **12**, 2463

#### Modification

Chemical modification of alumina and silica with alkylphosphonic acids and their esters, **9**, 1693

#### Molecular complexes

Cryosynthesis, structure, and IR spectra of aluminum chloride-nitromethane molecular complexes, **7**, 1159

Molecular complex of  $\text{C}_{60}$  fullerene with an organic  $\pi$ -donor, bis(methylenedithiotetrafulvalene): synthesis, crystal structures, and properties, **8**, 1423

#### Molecular hydrogen

Reduction of 3-(2-hydroxyethyl)-1,5-dinitro-3-azabicyclo[3.3.1]non-6-ene, **2**, 265

#### Molecular ion

Mass spectra of new groups of functionalized heterocycles. 4. 1-Alkyl-2-(alkylthio)pyrroles, **12**, 2390

#### Molecular oxygen

Synthesis of quinoxalines fused with triterpenes, ursolic acid and betulin derivatives, **2**, 304

#### Molecular simulation

Conformations of *Z*- and *E*-isomers of some chiral (1*R*,4*R*)-2-arylidene-*p*-menthan-3-ones, **9**, 1596

#### Molecular structure

Density functional theoretical studies of [2+2] cycloaddition of simple transient silenes and germenenes to ethylene, formaldehyde, and thioformaldehyde, and vibrational analysis of spectra of reactants and cyclic products, **1**, 20

Unexpected reaction of 1,1,1,10,10,10-hexafluorodecane-2,4,7,9-tetrone with methyl trifluoroacetate, **1**, 101

Photochromic dihetarylethenes. 6. Photochromic derivatives of thieno[3,2-*b*]thiophene, **1**, 110

Structure and isomerization of heterapentalene compounds containing hypervalent bonds with central nitrogen, phosphorus, or arsenic atom, **2**, 195

Effect of medium on the rate constant of decarbonylation of phenylacetyl radical, **2**, 237

Intramolecular electrophilic rearrangements in saturated acyclic systems. Reactivity of the zwitterion derived from triisopropylphosphine and ethyl 2-cyanoacrylate with respect to different types of electrophiles, **2**, 279

Synthesis of stereoisomeric *d,l* and *meso* forms of *O,O'*-bis-(*O,O'*-dialkyl 1-phosphorylbenzyl)phenylphosphonites and -thionophosphonates containing a pseudochiral center and determination of their configurations by NMR spectroscopy, **2**, 287

Photochromic dihetarylethenes. 9. Dithienylperfluorocyclopentenes: a quantum-chemical study, **3**, 381

Molecular structures of trinitromethane derivatives, **3**, 385

Synthesis and structures of 1,1'-dialkyl-3,3'-bidiaziridines, **3**, 440

- Guanidine in the synthesis of perfluoroalkylpyrimidines and perfluoroalkyl-*s*-triazines, **3**, 476
- Synthesis and stereochemistry of diastereomeric *closo*-( $\pi,\sigma$ -dicyclopentenyl)rhodacarboranes with the agostic C—H...Rh bond, **3**, 504
- Molecular structure of a new palladium-containing vinylidene cluster  $[\eta^2\text{-Ph}_2\text{P}(\text{CH}_2)_3\text{PPh}_2]\text{PdFe}_3(\mu^4\text{-C}=\text{CHPh})(\text{CO})_9$ , **3**, 512
- Oxidative dehydrogenation of *N*-methyl-*o*-phenylenediamine coordinated to the Pd<sup>II</sup> and Pt<sup>II</sup> atoms, **3**, 515
- 15-*O*-Deacetyl-rhaposerin and rhaserin — new components of a lactone mixture from *Rhaponticum serratuloides*, **3**, 537
- Diastereoselective synthesis of (*R*\*,*R*\*)-ethyl 2-[1*H*-indol-3-yl(phenyl)methyl]-3-oxobutanoate, **3**, 570
- Heteroorganic betaines. 6. Structure and reactivity of silicon-containing organophosphorus betaines with the <sup>-</sup>S—Si—C—P<sup>+</sup> fragment: a DFT study, **5**, 771
- Polydentate coordination of the thallium atom in complexes with chiral amidinylcyclopentadienyl ligands, **5**, 890
- Stereospecific formation of polycyclic ferrocenyldihydropyrazoles based on *Z*- and *E*-isomeric ferrocenyl-substituted  $\alpha,\beta$ -unsaturated ketones of the heterocyclic series, **5**, 895
- Ab initio* study of the structure and conformations of 2-fluoroethanal in the ground and lowest excited electronic states, **6**, 945
- Mechanism of formation and monomolecular decomposition of *aci*-nitromethanes: a quantum-chemical study, **6**, 952
- Ab initio* MP2 calculations of the products of acetylene addition to HgCl<sub>2</sub>, **6**, 958
- Regioselectivity in the reactions of the acetate ion with electron-deficient arenes, **6**, 1056
- Structures and conformational behavior of phosphorothioites and their complexes with transition metals obtained from X-ray diffraction analysis (review), **7**, 1130
- Synthesis and structure of a new octahedral molybdenum thiocyanide cluster complex K<sub>7</sub>[Mo<sub>6</sub>( $\mu_3$ -S)<sub>8</sub>(CN)<sub>6</sub>]·8H<sub>2</sub>O, **7**, 1140
- A new synthesis of spiro-fused 1,4-benzothiazines, **7**, 1264
- 2-Polyfluoroalkylchromones. 9. Synthesis and structures of 5-(2-hydroxyaryl)-7-polyfluoroalkyl-1,4,8-triazabicyclo[5.3.0]dec-4-enes, **8**, 1430
- 10-(3-Hydroxypropyl)-1,4,6,8-tetraphenyl-1,4,7,8-tetraaza-5-phosphoniaspiro[4.5]deca-6,9-diene chloride: synthesis and molecular structure, **8**, 1461
- P,O*-Ligands. Complexes of tetraphenylmethylenediphosphine oxide with silver nitrate, **8**, 1469
- Metal-induced B—H activation in Cp\*Rh, Cp\*Ir, (*p*-cymene)Ru, and (*p*-cymene)Os half-sandwich complexes containing the 1,2-dicarba-*closo*-dodecaborane(12)-1,2-dichalcogenolato ligand (review), **9**, 1518
- Synthesis and structure of the polymeric cluster compound [Mn(H<sub>2</sub>O)<sub>4</sub>]<sub>3</sub>[W<sub>4</sub>S<sub>4</sub>(CN)<sub>12</sub>]·*n*H<sub>2</sub>O containing very large cavities, **9**, 1525
- The nature of the O—O bond in hydroperoxides, **9**, 1539
- Equilibrium conformation of dimethylaminodichlorophosphine molecule: the use of the results of quantum-chemical calculations and spectroscopic measurements in the analysis of gas-phase electron diffraction data, **9**, 1550
- Crystal and molecular structures of salts of the secondary permethylmetallocenylmethyl cations (C<sub>5</sub>Me<sub>5</sub>MC<sub>5</sub>Me<sub>4</sub>CHR)<sup>+</sup>X<sup>-</sup> (M = Ru, Os; R = Ph, C<sub>6</sub>F<sub>5</sub>; X = BF<sub>4</sub>, PF<sub>6</sub>), **9**, 1616
- Reactions of 9,10-phenanthrenequinone and its nitro derivatives with acetone in the presence of Al<sub>2</sub>O<sub>3</sub>, **9**, 1625
- New *N*-nitrosoamines. 1. Synthesis and nitrosative cleavage of the Mannich bases derived from nitrogen-containing heterocycles and primary aliphatic amines, **9**, 1630
- Coordination chemistry of macrocyclic multidentate Lewis acids. Synthesis and structures of complexes of cyclic trimeric perfluoro-*o*-phenylenemercury with *N,N*-dimethylacetamide and *n*-butyronitrile, **9**, 1673
- Heteroorganic betaines. 7. Synthesis and structure of a germanium-containing organophosphorus betaine Et<sub>3</sub>P<sup>+</sup>—CHMe—GeMe<sub>2</sub>—S<sup>-</sup>, **9**, 1679
- Molecular structure of carbene analogs (review), **11**, 1903
- Intramolecular Y←O (Y = N, P, As, Sb, Bi) coordination in organopnictogen compounds: an *ab initio* and DFT study, **11**, 2028
- Peculiarities of NMR spectra of heterospin complexes, **11**, 2078
- Study of alkaloids from the flora of the Siberian and Altai regions. 6. Crystal and molecular structure of songorine *Z*-oxime, **11**, 2092
- Allylmetallation of benzoazaheterocycles with allylic derivatives of zinc. Synthesis of 1,4-ethano-2,3-dihydroisoquinolines and allylated heterocycles, **11**, 2172
- Bis(1,4-di-*tert*-butyl-1,4-diazabutadiene)copper(I) [(3,6-di-*tert*-butyl-*o*-benzosemiquinono)(3,6-di-*tert*-butylcatecholato)cuprate(II)]. The molecular structure and intramolecular electron transfer, **11**, 2193
- Heterometallic zirconocene(III) aluminum hydride complex (Cp<sub>2</sub>ZrH)<sub>2</sub>AlCl<sub>2</sub>·C<sub>4</sub>H<sub>8</sub>O<sub>2</sub>·C<sub>6</sub>H<sub>6</sub>, **11**, 2200
- Synthesis and the structure of tribromo(7-bromobicyclo[4.1.0]hept-7-yl)germane, **11**, 2203
- Unusual condensation of propargylamine. Generation of the 1,3-di(propargylimino)propane anion coordinated to the cobalt(III) atom, **11**, 2206
- Synthesis, molecular structures, and thermal decomposition of heterometallic ( $\pi$ -cyclooctadiene)platinum-bis(tricarbonyliron- $\mu_3$ -chalcogenides)[Fe—Fe], ( $\pi$ -C<sub>8</sub>H<sub>12</sub>)Pt( $\mu_3$ -X)<sub>2</sub>Fe<sub>2</sub>(CO)<sub>6</sub>, where X = S, Se, or Te, **11**, 2215
- Reaction of *exo-nido*-ruthenacarborane [Cl(Ph<sub>3</sub>P)<sub>2</sub>Ru]-5,6,10-( $\mu$ -H)<sub>3</sub>-10-H-7,8-C<sub>2</sub>B<sub>9</sub>H<sub>8</sub> with bromine, **11**, 2245
- Synthesis and the structure of the triphenylphosphine complex of *o*-nickelacarborane, 3,3-(PPh<sub>3</sub>)<sub>2</sub>-3,1,2-NiC<sub>2</sub>B<sub>9</sub>H<sub>11</sub>, **11**, 2248
- Unusual transformation of the urea molecule giving rise to the NCO<sup>-</sup> anion as a bridging ligand between two Co<sup>II</sup> atoms, **11**, 2251
- closo*-3-( $\eta^3$ -4,6-Dimethylbicyclo[3.3.0]oct-1-en-2-yl)-1,2-dimethyl-3,1,2-dicarbollyliridium with an agostic C—H...Ir bond, **11**, 2254
- Synthesis of the gold-dirhenium ferrocenylacetylide cluster. The crystal structure of Re<sub>2</sub>( $\mu$ -C≡CFC){Au(PPh<sub>3</sub>)}(CO)<sub>8</sub>, **12**, 2441
- Binuclear and polynuclear transition metal complexes with macrocyclic ligands. 1. Synthesis and the structure of an antiferromagnetic binuclear nickel complex prepared by the

reaction of *o*-phenylenediamine with pyrrole-2,5-dicarbaldehyde and nickel pivalate, **12**, 2445

First X-ray diffraction study of nitrosonium complexes of nitrogen-containing organic compounds: a complex of 1,10-phenanthroline with  $\text{NO}^+\text{BF}_4^-$ , **12**, 2477

Destruction of polymeric cobalt(II) trimethylacetate. Synthesis and structures of new complexes  $\text{Co}_9(\mu_3\text{-OH})_6(\mu\text{-OCCMe}_3)_{12}(\text{OCMe}_2)_4$  and  $\text{Co}_6(\mu_4\text{-O})_2(\mu\text{-OCCMe}_3)_{10}(\eta\text{-HOCCMe}_3)_4$ , **12**, 2485

#### Molybdenum compounds

Synthesis and the crystal structure of a supramolecular adduct of the  $[\text{Mo}_3\text{O}_4(\text{H}_2\text{O})_6\text{Cl}_3]^+$  cluster complex with macrocyclic cavitand cucurbituril, **3**, 494

Synthesis and structure of a new octahedral molybdenum thiocyanide cluster complex  $\text{K}_7[\text{Mo}_6(\mu_3\text{-S})_8(\text{CN})_6] \cdot 8\text{H}_2\text{O}$ , **7**, 1140

Ternary metal sulfides  $\text{M}_2\text{MoS}_2$ : synthesis using single-layer dispersions of molybdenum disulfide and study of the structure, **12**, 2293

#### Monohydroperfluoroolefins

Reaction of 3*H*-perfluoroalk-2-enes with ammonia, **1**, 155

#### Monoimines of $\alpha$ -diketones

Synthesis and properties of monoimines of  $\alpha$ -diketones, derivatives of 3-imidazoline nitroxides, **5**, 874

#### meso-Monopyridyltriphenylporphyrinatocobalt(II)

Structural features of sublimed layers of *meso*-mono-4-pyridyltriphenylporphyrinatocobalt(II) and reversible binding of molecular oxygen, **4**, 638

#### Monoterpenoids

Synthesis of  $\alpha$ -amino oximes and bis- $\alpha$ -amino oximes from the monoterpene hydrocarbons 3-carene and  $\alpha$ -pinene and  $\alpha,\omega$ -diamines, **11**, 2106

#### Monothiophosphoric acid

Thioethynyl esters of phosphorus acids (review), **6**, 925

#### Morpholine

2-Polyfluoroalkylchromones. 6. Synthesis of substituted 2-morpholino-2-trifluoromethylchroman-4-ones, **3**, 453

2-Polyfluoroalkylchromones. 8. 2-Trifluoromethyl- and 6-nitro-2-trifluoromethylchromones in reactions with amines, **8**, 1426

Reactions of 3-substituted 1-aryl-5,6,7,8-tetrafluoroquinolones(cinnolones) with morpholine, **12**, 2416

#### Morpholine derivatives

Reactions of methoxycarbonylcarbene with 3-ethyl-2-phenyl- and 2,3-diphenyloxazolidines, **11**, 2144

#### Multielectron processes

Catalysis of noncomplementary reactions by transition metals clusters. Kinetic description, **10**, 1833

## N

#### Nanoclusters

Optical spectra of Pd-561 nanoclusters in aqueous solutions, **5**, 809

#### Nanoparticles

The nature of colloidal platinum in aqueous solution: features of catalytic reactions, **4**, 626

Optical spectra of Pd-561 nanoclusters in aqueous solutions, **5**, 809

The preparation and reactivity of metal-containing monomers. 54. Thermolysis of the acrylamide monomer  $[\text{Co}(\text{CH}_2=\text{CHCONH}_2)_4(\text{H}_2\text{O})_2](\text{NO}_3)_2$ , **5**, 901

#### Naphthalene

Naphthalene oxidation in supercritical water, **8**, 1481

#### Naphthazarin

Chemistry of naphthazarin derivatives. 8. Determination of structures of substituted 2-hydroxy-6(7)-methoxynaphthazarins and 7(8)-hydroxypyranonaphthazarins by IR spectroscopy, **1**, 95

#### Naphtho[1,8-*cd*]-1,2-diazepin-8-ones

Cyclocondensation of 5-ethynyl-1,4-naphthoquinone derivatives with hydrazine, **9**, 1668

#### 5*H*-Naphtho[2,3-*c*]phenthiazine-8,13-diones

Synthesis of 5*H*-naphtho[2,3-*c*]phenthiazine-8,13-diones from 1-arythio-2-azidoanthraquinones, **4**, 678

#### Naphthopyrans

Cation-dependent pericyclic reactions of crown-containing photochromic compounds (review), **11**, 1970

#### 1,2-Naphthoquinone 1-methide

Unexpected transformation of 1,1'-methylenebis(2-naphthol) into 1,2,1',2'-tetrahydrospiro(naphthalene-1,3'-naphtho[2,1-*b*]pyran)-2-one, a spirodimer of 1,2-naphthoquinone 1-methide, in the presence of boric acid and paraformaldehyde, **5**, 914

#### peri-Naphthylenediamines

*peri*-Naphthylenediamines. 31. Study of interconversions of 2,3-dihydroperimidines and 1,8-bis(dialkylamino)naphthalenes. Convenient synthesis of 1,2,2,3-tetramethyl-2,3-dihydroperimidine and a monoisopropyl analog of the "proton sponge", **5**, 846

*peri*-Naphthylenediamines. 32. Reactions of 4,5-bis(dimethylamino)-1-naphthyllithium and 4,5-bis(dimethylamino)-1-naphthylmagnesium bromide with electrophilic agents. New representatives of double naphthalene "proton sponges" with the structures of 1,1'-binaphthyl ketone and 1,1'-binaphthylmethanol, **5**, 854

*peri*-Naphthylenediamines. 33. Further studies of the reactions of 1,8-bis(dimethylamino)naphthalene with trifluoroacetic anhydride, **5**, 860

#### Neurotoxins

Organophosphate hydrolase — an enzyme catalyzing degradation of phosphorus-containing toxins and pesticides (review), **10**, 1826

Cycloplatinated aryl ketoximes as effective biomimicking catalysts for hydrolysis of esters of phosphorothioic acid, **10**, 1844

#### Nickel compounds

Reactions of *N*-phenyl-*o*-semiquinonediimine complexes of nickel and platinum with carbonyl-containing low-valence iron and rhenium compounds, **1**, 142

Crystal and electronic structure of  $\text{Ni}_3\text{Bi}_2\text{S}_2$  (parkerite), **3**, 353

Anomalous line broadening in the ESR spectra of copper(II) dithizonate, **3**, 413

Phosphine  $\sigma$ -sydnonyl complexes of Ni, Pd, and Pt, **3**, 525

Asymmetric synthesis of (*S*)- and (*R*)- $\alpha$ -methylserine based on the chiral recyclable reagent (*S*)-*N*-(2-benzoylphenyl)-1-benzylpyrrolidine-2-carboxamide, **6**, 1037

Reactions of cyanofurazans with  $\beta$ -dicarbonyl compounds, **7**, 1280

Formation of a tetranuclear nickel(II) complex containing an unusual bridging ligand, **7**, 1336

Electrochemical activation of freons using electron transfer mediators (review), **11**, 1929

- Peculiarities of NMR spectra of heterospin complexes, **11**, 2078
- Cross-coupling of *E,E*-1,4-diiodobuta-1,3-diene with nucleophiles catalyzed by Pd or Ni complexes: a new route to functionalized dienes, **11**, 2095
- Synthesis and the structure of the triphenylphosphine complex of *o*-nickelacarborane, 3,3-(PPh<sub>3</sub>)<sub>2</sub>-3,1,2-NiC<sub>2</sub>B<sub>9</sub>H<sub>11</sub>, **11**, 2248
- Binuclear and polynuclear transition metal complexes with macrocyclic ligands. 1. Synthesis and the structure of an antiferromagnetic binuclear nickel complex prepared by the reaction of *o*-phenylenediamine with pyrrole-2,5-dicarbaldehyde and nickel pivalate, **12**, 2445
- β-Nicotinamide adenine dinucleotide**  
Electron transfer coupled with ATP hydrolysis in nitro-genase (review), **10**, 1789
- Ninhydrin**  
Structures of condensation products of *ortho*-aminophenols with ninhydrin, **6**, 1064
- Niobium compounds**  
Synthesis, structures, and properties of the niobium and tantalum telluride cubane clusters [M<sub>4</sub>(μ<sub>4</sub>-O)(μ<sub>3</sub>-Te)<sub>4</sub>(CN)<sub>12</sub>]<sup>6-</sup> (M = Nb or Ta), **6**, 930
- Nitrates**  
Nitroxyalkyl phosphates, **2**, 327  
The preparation and reactivity of metal-containing monomers. 54. Thermolysis of the acrylamide monomer [Co(CH<sub>2</sub>=CHCONH<sub>2</sub>)<sub>4</sub>(H<sub>2</sub>O)<sub>2</sub>](NO<sub>3</sub>)<sub>2</sub>, **5**, 901
- Nitration**  
Synthesis of *N*-nitrooxazolines and *N*-nitrotetrahydro-1,3-oxazines from *N*-(2-hydroxyalkyl)- and *N*-(3-hydroxy-alkyl)sulfamates, **5**, 911  
Direct *C*-nitration of cyclic α,β-unsaturated oximes under the action of sodium nitrite and acetic acid in methanol, **8**, 1410  
Synthesis of 3,5-disubstituted 1*H*-1,2,4-triazolium 4-nitroimides, **12**, 2481
- Nitrene**  
Quantum-chemical study of the singlet potential energy surface of the nitrene—dioxygen system, **12**, 2346
- Nitric oxide**  
Chemical aspects of influence of medical drugs on organism functions (review), **8**, 1356
- Nitriles**  
Spirocyclohexadienones. 4. Synthesis and dienone-phenolic rearrangement of 1-*R*-3,3-dialkyl-2-azaspiro[4.5]deca-1,6,9-trien-8-ones, **9**, 1648  
Coordination chemistry of macrocyclic multidentate Lewis acids. Synthesis and structures of complexes of cyclic trimeric perfluoro-*o*-phenylenemercury with *N,N*-dimethylacetamide and *n*-butyronitrile, **9**, 1673
- Nitrites**  
Direct *C*-nitration of cyclic α,β-unsaturated oximes under the action of sodium nitrite and acetic acid in methanol, **8**, 1410
- Nitro compounds**  
Synthesis of 4,6-dinitro-3-*R*-benzo[*d*]isoxazoles and their transformations under the action of nucleophiles, **3**, 464  
Silylation as a new strategy of the use of aliphatic nitro compounds in organic synthesis (review), **11**, 1936  
Chemistry of 2,4,6-trinitrobenzonitrile. 1. Substitution of nitro groups in 2,4,6-trinitrobenzonitrile under the action of anionic nucleophiles. Factors facilitating the replacement of the *ortho*-nitro group, **12**, 2401  
Silylation of γ,γ-bis(alkoxycarbonyl)-substituted aliphatic nitro compounds: synthesis of *N,N*-bis(trimethylsilyloxy)aminocyclopropanes, **12**, 2433
- Nitro group**  
Regioselective replacement of nitro groups in 2,4,6-trinitrotoluene under the action of alkanethiols. Synthesis of *ortho*-(alkylthio)-substituted nitrotoluenes and their oxidation to sulfoxides and sulfones, **2**, 261
- Nitroalkenes**  
Direct *C*-nitration of cyclic α,β-unsaturated oximes under the action of sodium nitrite and acetic acid in methanol, **8**, 1410
- Nitrocyclopropanes**  
Synthesis of nitrosubstituted triangulanes, **11**, 2101
- Nitrogen**  
Physicochemical features of the formation of siliceous porous mesophases. 4. Effect of duration and temperature of the hydrothermal treatment on the structural and textural properties, **2**, 175  
Statistical modeling of equilibrium adsorption of non-ideal mixtures on zeolites, **2**, 220  
Dubinin's theory and its contribution to adsorption science (review), **12**, 2265
- Nitrogen compounds**  
New *N*-nitrosoamines. 1. Synthesis and nitrosative cleavage of the Mannich bases derived from nitrogen-containing heterocycles and primary aliphatic amines, **9**, 1630
- Nitrogen fixation**  
Electron transfer coupled with ATP hydrolysis in nitro-genase (review), **10**, 1789  
On the coupled oxidation-reduction mechanism of molecular nitrogen fixation, **11**, 2054
- Nitrogen heterocycles**  
*N*-Substituted tetrahydro-1,3-oxazines and oxazolines. 1. A new version of the Mannich reaction involving amino alcohols, **1**, 104
- Nitrogen oxides**  
Catalytic properties of chromites with a spinel structure in the oxidation of CO and hydrocarbons and reduction of nitrogen oxides, **12**, 2377
- Nitrogenase**  
Electron transfer coupled with ATP hydrolysis in nitro-genase (review), **10**, 1789  
Catalysis of noncomplementary reactions by transition metals clusters. Kinetic description, **10**, 1833  
On the coupled oxidation-reduction mechanism of molecular nitrogen fixation, **11**, 2054
- Nitromethane**  
Mechanism of formation and monomolecular decomposition of *aci*-nitromethanes: a quantum-chemical study, **6**, 952  
Cryosynthesis, structure, and IR spectra of aluminum chloride—nitromethane molecular complexes, **7**, 1159
- Nitrones**  
Oxidation of diterpenoid alkaloids with dimethyldioxirane, **4**, 720  
1,3-Dipolar cycloaddition of cyclic α-methoxynitrones, derivatives of 2*H*-imidazole 1-oxide and 4*H*-imidazole 3-oxide, **5**, 882

Silylation of  $\gamma,\gamma$ -bis(alkoxycarbonyl)-substituted aliphatic nitro compounds: synthesis of *N,N*-bis(trimethylsilyloxy)aminocyclopropanes, **12**, 2433

#### ***N*-Nitrooxazolidines**

Synthesis of *N*-nitrooxazolidines and *N*-nitrotetrahydro-1,3-oxazines from *N*-(2-hydroxyalkyl)- and *N*-(3-hydroxyalkyl)sulfamates, **5**, 911

#### **3-Nitro-9,10-phenanthrenequinones**

Reactions of 9,10-phenanthrenequinone and its nitro derivatives with acetone in the presence of  $\text{Al}_2\text{O}_3$ , **9**, 1625

#### **3-Nitropyridin-2(1*H*)-ones**

Investigation of the regioselectivity of alkylation of 3-nitropyridin-2(1*H*)-ones, **3**, 460

#### **Nitrosation**

Direct *C*-nitration of cyclic  $\alpha,\beta$ -unsaturated oximes under the action of sodium nitrite and acetic acid in methanol, **8**, 1410

#### **Nitroso chlorides**

Synthesis of  $\alpha$ -amino oximes and bis- $\alpha$ -amino oximes from the monoterpene hydrocarbons 3-carene and  $\alpha$ -pinene and  $\alpha,\omega$ -diamines, **11**, 2106

#### **Nitroso compounds**

Quantum-chemical study of the singlet potential energy surface of the nitrene-dioxygen system, **12**, 2346

#### **Nitrosoalkenes**

Silylation as a new strategy of the use of aliphatic nitro compounds in organic synthesis (review), **11**, 1936

#### ***N*-Nitrosoamines**

New *N*-nitrosoamines. 1. Synthesis and nitrosative cleavage of the Mannich bases derived from nitrogen-containing heterocycles and primary aliphatic amines, **9**, 1630

#### **Nitrosoarenes**

Reduction of nitrosoarene ligands in binuclear palladium(II) complexes, **9**, 1689

#### **Nitrosodurene**

The rate constants for the addition of radicals  $\text{CCl}_3\text{CH}_2\cdot\text{CHR}$  ( $\text{R} = \text{Ph}, \text{CO}_2\text{Me}, \text{CONC}_4\text{H}_9$ ) to some unsaturated compounds, **3**, 557

Reactivity of esters of 2-cyanoacrylic acid toward some free radicals, **12**, 2356

#### **Nitrosonium complexes**

First X-ray diffraction study of nitrosonium complexes of nitrogen-containing organic compounds: a complex of 1,10-phenanthroline with  $\text{NO}^+\text{BF}_4^-$ , **12**, 2477

#### **Nitrosonium tetrafluoroborate**

First X-ray diffraction study of nitrosonium complexes of nitrogen-containing organic compounds: a complex of 1,10-phenanthroline with  $\text{NO}^+\text{BF}_4^-$ , **12**, 2477

#### **Nitrosubstituted triangulanes**

Synthesis of nitrosubstituted triangulanes, **11**, 2101

#### ***N*-Nitrotetrahydro-1,3-oxazines**

Synthesis of *N*-nitrooxazolidines and *N*-nitrotetrahydro-1,3-oxazines from *N*-(2-hydroxyalkyl)- and *N*-(3-hydroxyalkyl)sulfamates, **5**, 911

#### **Nitrous oxide**

On the coupled oxidation-reduction mechanism of molecular nitrogen fixation, **11**, 2054

#### **Nitroxides**

Synthesis and properties of monoimines of  $\alpha$ -diketones, derivatives of 3-imidazoline nitroxides, **5**, 874

Peculiarities of NMR spectra of heterospin complexes, **11**, 2078

Magnetic parameters and rotational mobility of the  $\equiv\text{SiON}(\text{O}^{\cdot})\text{CX}_3$  nitroxides ( $\text{X} = \text{H}, \text{D}$ ) grafted on silica surface, **12**, 2384

#### **Nitroxyalkyl phosphates**

Nitroxyalkyl phosphates, **2**, 327

#### **2-Nitroxyethylamine**

Synthesis and the crystal structures of *N*-(2-nitroxyethyl)isonicotinamide and its complexes with  $\text{PdCl}_2$  and  $\text{PtCl}_2$  as potential antitumor medicines, **3**, 520

#### ***N*-(2-Nitroxyethyl)isonicotinamide**

Synthesis and the crystal structures of *N*-(2-nitroxyethyl)isonicotinamide and its complexes with  $\text{PdCl}_2$  and  $\text{PtCl}_2$  as potential antitumor medicines, **3**, 520

#### **Nitroxyl radicals**

Interaction of chlorine dioxide with nitroxyl radicals, **4**, 614

Reactions of metallated 1-hydroxy-2,2,4,5,5-pentamethyl-2,5-dihydro-1*H*-imidazole with functionalized nitroxyl radicals derived from 2,5-dihydro-1*H*-imidazole and 2,5-dihydro-1*H*-imidazole 3-oxide, **4**, 665

Bis(ketenyl)benzenes: preparation, observation, and reaction with tetramethylpiperidin-1-yl-oxyl, **11**, 2130

#### **NMR diffusimetry**

Hydrolysis of some imidazole, benzimidazole, and 1,2,3-benzotriazole derivatives according to HPLC and NMR diffusimetry data, **5**, 820

#### **NMR spectroscopy, two-dimensional**

Synthesis of 4,6-dinitro-3-*R*-benzo[*d*]isoxazoles and their transformations under the action of nucleophiles, **3**, 464

15-*O*-Deacetyl-rhaposerin and rhaserin — new components of a lactone mixture from *Rhaponticum serratuloides*, **3**, 537

Synthetic approaches to homochiral bicyclo[5.2.1]decane based on *d*-camphor, **4**, 654

Reaction of 4,6-bis(*tert*-butyl)-2,2,2-trichlorobenzo[*d*]-1,3,2-dioxaphosphole with phenylacetylene. *ipso*-Substitution of the *tert*-butyl group, **4**, 693

Synthesis, structure and isomerism of "three-bridge" *exo-nido*-osmacarborane clusters, **4**, 706

Regiochemistry of the reactions of phenylenedioxytrichlorophosphorane with phenylacetylene and propargyl chloride in the presence of benzyltrimethylammonium chloride, **4**, 745

Synthesis of *N*-nitrooxazolidines and *N*-nitrotetrahydro-1,3-oxazines from *N*-(2-hydroxyalkyl)- and *N*-(3-hydroxyalkyl)sulfamates, **5**, 911

NMR study of diastereoisomerism of 2-(1-aminoethyl)bicyclo[2.2.1]heptane and its hydrochloride (deitoforin), **6**, 1014

Reductive mono- and diallylation of the bis(pyridine)dihydropyridyllithium dimer by triallylborane, **6**, 1078

Secondary metabolites of *Astragalus danicus* Retz. and *A. inopinatus* Boriss., **6**, 1107

*N*-Substituted trifluoroacetimidoyl halides: synthesis and properties, **9**, 1639

Electrophilic substitution in eleven-vertex metallocarborane 1,2,4-CpCoC<sub>2</sub>B<sub>8</sub>H<sub>10</sub>, **9**, 1683

(+)- $\delta$ -Cadinol as a promising starting compound in the synthesis of eleuthesides, **9**, 1699

Simple and efficient synthesis of *closo*-rhoda- and *closo*-iridacarboranes with  $\pi$ -ligands based on cyclic dienes, **9**, 1702

Study of alkaloids from the flora of the Siberian and Altai regions. 6. Crystal and molecular structure of songorine Z-oxime, **11**, 2092

Synthesis of nine-, ten-, and fifteen-membered alkenolides by the oxidative cleavage of the bridging C=C bond in 2-oxabicycloalkenes, **11**, 2149

Allylmetallation of benzoazaheterocycles with allylic derivatives of zinc. Synthesis of 1,4-ethano-2,3-dihydroisoquinolines and allylated heterocycles, **11**, 2172

Silylation of  $\gamma,\gamma$ -bis(alkoxycarbonyl)-substituted aliphatic nitro compounds: synthesis of *N,N*-bis(trimethylsilyloxy)aminocyclopropanes, **12**, 2433

Migration of the *O*-acetyl group in the acetonation of guaianolide rhaposerin, **12**, 2459

### <sup>27</sup>Al NMR spectroscopy

Study of complex formation between aluminum bromide and benzene by <sup>27</sup>Al NMR spectroscopy, **1**, 73

### <sup>11</sup>B NMR spectroscopy

Synthesis, structure and isomerism of "three-bridge" *exo-nido*-osmacarborane clusters, **4**, 706

Electrophilic substitution in eleven-vertex metallacarborane 1,2,4-CpCoC<sub>2</sub>B<sub>8</sub>H<sub>10</sub>, **9**, 1683

Reaction of *exo-nido*-ruthenacarborane [Cl(Ph<sub>3</sub>P)<sub>2</sub>Ru]-5,6,10-( $\mu$ -H)<sub>3</sub>-10-H-7,8-C<sub>2</sub>B<sub>9</sub>H<sub>8</sub> with bromine, **11**, 2245

*closo*-3-( $\eta^3$ -4,6-Dimethylbicyclo[3.3.0]oct-1-en-2-yl)-1,2-dimethyl-3,1,2-dicarbollyliridium with an agostic C—H...Rh bond, **11**, 2254

### <sup>13</sup>C NMR spectroscopy

A tandem of the Cornforth rearrangements of 4-(1,2,3-triazol-1-yl)iminomethyl-1,2,3-thiadiazole, **2**, 268

Efficient method for the synthesis of 1,2,3,8-tetrahydroindeno[2,1-*b*]phospholes and their derivatives, **2**, 276

A new route of the reaction of EtAlCl<sub>2</sub> with  $\alpha$ -olefins catalyzed by Ti complexes, **2**, 292

Synthesis and transformations of metallacycles. 23. Cp<sub>2</sub>TiCl<sub>2</sub>-Catalyzed cyclometallation of fullerene C<sub>60</sub> with EtAlCl<sub>2</sub>, **2**, 297

Synthesis of quinoxalines fused with triterpenes, ursolic acid and betulin derivatives, **2**, 304

A new norditerpenoid alkaloid acconine from the roots of *Aconitum kusnezoffii* Reichb., **2**, 311

Steroid compounds from the Pacific starfish *Lysastrosoma anthosticta*, **2**, 313

Bis(O—Si)-chelate fluorobis(2-oxohexahydroazepino-methyl)silylium tetrafluoroborate, a cation-anionic complex containing a silylium ion stabilized by O→Si coordination, **2**, 331

The synthesis of *N*-isocyanurato-substituted aziridino[1,2][60]fullerenes, **3**, 445

Synthesis of 4,6-dinitro-3-*R*-benzo[*d*]isoxazoles and their transformations under the action of nucleophiles, **3**, 464

Guanidine in the synthesis of perfluoroalkylpyrimidines and perfluoroalkyl-*s*-triazines, **3**, 476

Synthesis and transformations of metallacycles. 24. Zr-Catalyzed cycloalumination of asymmetrical disubstituted acetylenes, **3**, 484

Synthesis and stereochemistry of diastereomeric *closo*-( $\pi,\sigma$ -dicyclopentenyl)rhodacarboranes with the agostic C—H...Rh bond, **3**, 504

Fluorescent-labeled derivatives of dolichyl phosphate. Analogs of dolichyl phosphate with the 2-aminopyridine residue at the  $\omega$ -end of the chain, **3**, 531

15-*O*-Deacetylrrhaposerin and rhaserin — new components of a lactone mixture from *Rhaponticum serratulooides*, **3**, 537

1-Methyl-2(3,4)-(1-vinylpyrrol-2-yl)pyridinium iodides: some structural features revealed by <sup>1</sup>H and <sup>13</sup>C NMR spectroscopy, **3**, 551

Fulleropyrrolidine-containing sterically hindered phenol. Synthesis, structure, and properties, **4**, 607

Synthetic approaches to homochiral bicyclo[5.2.1]decenes based on *d*-camphor, **4**, 654

Reaction of 4,6-bis(*tert*-butyl)-2,2,2-trichlorobenzo[*d*]-1,3,2-dioxaphosphole with phenylacetylene. *ipso*-Substitution of the *tert*-butyl group, **4**, 693

Oxidation of diterpenoid alkaloids with dimethyldioxirane, **4**, 720

A new method for the synthesis of 3,7-diazabicyclo[3.3.1]nonanes, **4**, 753

Rh<sub>2</sub>(OAc)<sub>4</sub>-Catalyzed reaction of 1,3-dioxanes with methyl diazoacetate, **5**, 865

Synthesis of *N*-nitrooxazolidines and *N*-nitrotetrahydro-1,3-oxazines from *N*-(2-hydroxyalkyl)- and *N*-(3-hydroxyalkyl)sulfamates, **5**, 911

NMR study of diastereoisomerism of 2-(1-aminoethyl)bicyclo[2.2.1]heptane and its hydrochloride (deitiforin), **6**, 1014

Synthesis of 4,5-dihydrothiazole derivatives by the reaction of perfluoro-2-methylpent-2-en-3-yl isothiocyanate with ambident N,O- and N,S-nucleophiles, **6**, 1072

Reductive mono- and dialylation of the bis(pyridine)dihydropyridyllithium dimer by triallylborane, **6**, 1078

Catalytic phosphorylation of polyfluoroalkanols. 17. Synthesis and the stereochemistry of tris( $\alpha$ -trifluoromethylbenzyl) phosphates, **6**, 1085

Silylation and germylation of trialkylsilyl(germyl)ethoxyacetylenes containing bulky substituents at the silicon or germanium atom, **6**, 1088

Silylation of silyl- and germylketenes containing bulky substituents at the silicon or germanium atom, **6**, 1093

Secondary metabolites of *Astragalus danicus* Retz. and *A. inopinatus* Boriss., **6**, 1107

Influence of isomerism of difluorobenzophenone on the synthesis and properties of poly(arylene ether ketones), **7**, 1208

Reactions of cyanofurazans with  $\beta$ -dicarbonyl compounds, **7**, 1280

Bis-(2-diphenylphosphinoethyl)cyclopentadienylchlorotetium: synthesis and dynamic behavior in solution, **7**, 1295

Oxidative bromination of tricyclic sesquiterpenoids (1*S*,3*S*,5*R*,6*S*,9*S*)-5-hydroxy-6,10,10-trimethyltricyclo[7.2.0.0<sup>1,6</sup>]judecan-2-one and clovane-2 $\beta$ ,9 $\alpha$ -diol with the HBr—DMSO system, **8**, 1419

Synthesis and study of the mutagenic activity of di(indeno[2,1-*b*]indolyl)- and di(indeno[2,1-*b*]pyrrolyl)methanes and -dimethylsilanes, **8**, 1439

New approach to the functionalization of  $\delta$ -carboline derivatives, **8**, 1449

- Synthesis and transformation of metallacycles. 25. On a mechanism of the Ni(acac)<sub>2</sub>-catalyzed conversion of 3-alkyl-1-ethylalumacyclopentanes into 1,1-disubstituted cyclopropanes, **8**, 1465
- Glycosphingolipid with a branched sphingosine base from soft corals from the Andaman Islands, **8**, 1474
- Crystal and molecular structures of salts of the secondary permethylmetallocenylmethyl cations (C<sub>5</sub>Me<sub>3</sub>MC<sub>3</sub>Me<sub>4</sub>CHR)<sup>+</sup>X<sup>-</sup> (M = Ru, Os; R = Ph, C<sub>6</sub>F<sub>5</sub>; X = BF<sub>4</sub>, PF<sub>6</sub>), **9**, 1616
- N*-Substituted trifluoroacetimidoyl halides: synthesis and properties, **9**, 1639
- Spirocyclohexadienones. 4. Synthesis and dienone-phenolic rearrangement of 1-R-3,3-dialkyl-2-azaspiro[4.5]deca-1,6,9-trien-8-ones, **9**, 1648
- Heteroorganic betaines. 7. Synthesis and structure of a germanium-containing organophosphorus betaine Et<sub>3</sub>P<sup>+</sup>-CHMe-GeMe<sub>2</sub>-S<sup>-</sup>, **9**, 1679
- Micellar enzymology: methodology and technique (review), **10**, 1718
- Dihydrofolate reductase: structural aspects of mechanisms of enzyme catalysis and inhibition (review), **10**, 1733
- Structural investigations of paramagnetic metalloproteins using high-resolution NMR spectroscopy: iron-sulfur and copper proteins (review), **10**, 1762
- Preparation of sphere-shaped nanoscale carbon nitride polymer, **11**, 2020
- Cross-coupling of *E,E*-1,4-diiodobuta-1,3-diene with nucleophiles catalyzed by Pd or Ni complexes: a new route to functionalized dienes, **11**, 2095
- Synthesis of  $\alpha$ -amino oximes and bis- $\alpha$ -amino oximes from the monoterpene hydrocarbons 3-carene and  $\alpha$ -pinene and  $\alpha,\omega$ -diamines, **11**, 2106
- Reactions of diazoalkanes with unsaturated compounds. 14. Reactions of diazomethane, diazocyclopropane, and methyl diazoacetate with 1,1,2,2-tetrafluoro-3-vinylcyclobutane and 2,3,3-trifluoro-1-vinylcyclobutene to form [3+2] and [1+2] cycloadducts, **11**, 2113
- Study of the factors determining the outcome of cycloaddition of isocyanurato-substituted azides to [60]fullerene, **11**, 2162
- Synthesis and transformations of metallacycles. 26. Cp<sub>2</sub>ZrCl<sub>2</sub>-Catalyzed cycloalumination of substituted allenes with Et<sub>3</sub>Al, **11**, 2188
- Derivatives of dolichyl phosphate with fluorescent label. Analogs of dolichyl phosphate with different lengths of isoprene chain, containing the (1-naphthyl)amino group in the  $\omega$ -fragment, **11**, 2221
- Synthesis of  $\alpha$ -tocopherol analogs with unsaturated side chain and their transformation into the corresponding chromans with  $\omega$ -functionalized side chain, **11**, 2227
- closo*-3-( $\eta^3$ -4,6-Dimethylbicyclo[3.3.0]oct-1-en-2-yl)-1,2-dimethyl-3,1,2-dicarbollyliridium with an agostic C—H...Ir bond, **11**, 2254
- Functionalization of alkanes and cycloalkanes by super-electrophiles. 15. Carbonylation of cycloheptane, cyclo-octane, and isomeric monoalkylcyclohexanes with CO in the presence of CBr<sub>4</sub>·2AlBr<sub>3</sub> to form individual esters of tertiary carboxylic acids of the cyclohexane series, **12**, 2394
- Silylation of  $\gamma,\gamma$ -bis(alkoxycarbonyl)-substituted aliphatic nitro compounds: synthesis of *N,N*-bis(trimethylsilyloxy)aminocyclopropanes, **12**, 2433
- Migration of the *O*-acetyl group in the acetonation of guaianolide rhaposerin, **12**, 2459
- Promotion effect of hypervalent iodine compounds on the reactions of 3-hydroxy-4-nitrofurazan with cycloalkenes, **12**, 2479
- <sup>19</sup>F NMR spectroscopy**
- Reaction of 3*H*-perfluoroalk-2-enes with ammonia, **1**, 155
- Synthesis of 4,6-dinitro-3-R-benzo[*d*]isoxazoles and their transformations under the action of nucleophiles, **3**, 464
- Guanidine in the synthesis of perfluoroalkylpyrimidines and perfluoroalkyl-*s*-triazines, **3**, 476
- Reactions of (difluoroamino)trinitromethane with nucleophilic reagents, **4**, 736
- Deprotonation of the peptide NH groups and diastereoselective hydrogenation of *N*-acetyl- $\alpha,\beta$ -dehydridipeptides, **4**, 738
- peri*-Naphthylenediamines. 33. Further studies of the reactions of 1,8-bis(dimethylamino)naphthalene with trifluoroacetic anhydride, **5**, 860
- Synthesis of 4,5-dihydrothiazole derivatives by the reaction of perfluoro-2-methylpent-2-en-3-yl isothiocyanate with ambident N,O- and N,S-nucleophiles, **6**, 1072
- Catalytic phosphorylation of polyfluoroalkanols. 17. Synthesis and the stereochemistry of tris( $\alpha$ -trifluoromethylbenzyl) phosphates, **6**, 1085
- Reaction of 6-amino-1,3-dimethyluracil with hexafluoroacetone and ethyl trifluoropyruvate benzoylimines, **6**, 1113
- Reactions of 1,3,3,3-tetrafluoro-2-methoxycarbonylpropenylsulfenyl chloride with aromatic and heterocyclic compounds, **7**, 1255
- N*-Substituted trifluoroacetimidoyl halides: synthesis and properties, **9**, 1639
- Reactions of diazoalkanes with unsaturated compounds. 14. Reactions of diazomethane, diazocyclopropane, and methyl diazoacetate with 1,1,2,2-tetrafluoro-3-vinylcyclobutane and 2,3,3-trifluoro-1-vinylcyclobutene to form [3+2] and [1+2] cycloadducts, **11**, 2113
- <sup>1</sup>H NMR spectroscopy**
- N*-Substituted tetrahydro-1,3-oxazines and oxazolidines. 1. A new version of the Mannich reaction involving amino alcohols, **1**, 104
- Photochromic dihetarylethenes. 6. Photochromic derivatives of thieno[3,2-*b*]thiophene, **1**, 110
- Synthetic potential of substituted 7-alkylseleno-1,4-dihydro-1,6-naphthyridines, **1**, 122
- Reaction of 3*H*-perfluoroalk-2-enes with ammonia, **1**, 155
- Cetylpyridinium bromide-based oil-in-water microemulsions as a medium for hydrolysis of esters of phosphorus acids in the presence of primary amines, **2**, 245
- A tandem of the Cornforth rearrangements of 4-(1,2,3-triazol-1-yl)iminomethyl-1,2,3-thiadiazole, **2**, 268
- Thioureas from 3-aminoquinazolin-4(3*H*)-one. 2. Unusual alkaline recyclization of 3-(*N',N',S*-trialkylisothioureido)quinazolin-4(3*H*)-ones into new 1,3,4-oxadiazoles, **2**, 272
- Efficient method for the synthesis of 1,2,3,8-tetrahydroindeno[2,1-*b*]phospholes and their derivatives, **2**, 276
- Intramolecular electrophilic rearrangements in saturated acyclic systems. Reactivity of the zwitterion derived from triisopropylphosphine and ethyl 2-cyanoacrylate with respect to different types of electrophiles, **2**, 279

- Synthesis of stereoisomeric *d,l* and *meso* forms of *O,O'*-bis-(*O,O'*-dialkyl 1-phosphorylbenzyl)phenylphosphonites and -thionophosphonates containing a pseudochiral center and determination of their configurations by NMR spectroscopy, **2**, 287
- Synthesis of quinoxalines fused with triterpenes, ursolic acid and betulin derivatives, **2**, 304
- A new norditerpenoid alkaloid acsonine from the roots of *Aconitum kusnezoffii* Reichb., **2**, 311
- Steroid compounds from the Pacific starfish *Lysastrosoma anthosticta*, **2**, 313
- Synthesis of 1,3,4-trifluoroisoquinoline by copyrolysis of 2,3,5,6-tetrafluoropyridine-4-sulfonyl chloride with butadiene, **2**, 322
- Nitroxyalkyl phosphates, **2**, 327
- Bis(O—Si)-chelate fluorobis(2-oxohexahydroazepinomethyl)silylium tetrafluoroborate, a cation-anionic complex containing a silylium ion stabilized by O→Si coordination, **2**, 331
- The synthesis of *N*-isocyanurato-substituted aziridino[1,2][60]fullerenes, **3**, 445
- 2-Polyfluoroalkylchromones. 6. Synthesis of substituted 2-morpholino-2-trifluoromethylchroman-4-ones, **3**, 453
- Investigation of the regioselectivity of alkylation of 3-nitropyridin-2(1*H*)-ones, **3**, 460
- Synthesis of 4,6-dinitro-3-*R*-benzo[*d*]isoxazoles and their transformations under the action of nucleophiles, **3**, 464
- Bromination of photochromic spironaphthoxazines, **3**, 470
- Guanidine in the synthesis of perfluoroalkylpyrimidines and perfluoroalkyl-*s*-triazines, **3**, 476
- 5-Substituted 2-alkyl- and 2-arylsulfonyliminohexahydro-1,3,5-triazines, **3**, 480
- Synthesis and transformations of metallacycles. 24. Zr-Catalyzed cycloaluminum of asymmetrical disubstituted acetylenes, **3**, 484
- Synthesis and stereochemistry of diastereomeric *closo*-( $\pi,\sigma$ -dicyclopentenyl)rhodacarboranes with the agostic C—H...Rh bond, **3**, 504
- Synthesis and the crystal structures of *N*-(2-nitroxyethyl)isonicotinamide and its complexes with PdCl<sub>2</sub> and PtCl<sub>2</sub> as potential antitumor medicines, **3**, 520
- Fluorescent-labeled derivatives of dolichyl phosphate. Analogs of dolichyl phosphate with the 2-aminopyridine residue at the  $\omega$ -end of the chain, **3**, 531
- 15-*O*-Deacetylrrhoserin and rhaserin — new components of a lactone mixture from *Rhaponticum serratuloides*, **3**, 537
- 1-Methyl-2(3,4)-(1-vinylpyrrol-2-yl)pyridinium iodides: some structural features revealed by <sup>1</sup>H and <sup>13</sup>C NMR spectroscopy, **3**, 551
- Synthesis of 1-aryl-1,2,3,4-tetrahydro-9*H*-pyrido[3,4-*b*]indoles (1,2,3,4-tetrahydro- $\beta$ -carbolines) under high pressures, **3**, 560
- Trifluoroacetylation of 2-acetyldimedone, **3**, 568
- Diastereoselective synthesis of (*R*\*,*R*\*)-ethyl 2-[1*H*-indol-3-yl(phenyl)methyl]-3-oxobutanoate, **3**, 570
- Fulleropyrrolidine-containing sterically hindered phenol. Synthesis, structure, and properties, **4**, 607
- Synthetic approaches to homochiral bicyclo[5.2.1]decane based on *d*-camphor, **4**, 654
- Preparative synthesis of 3-cyano-4-difluoromethyl- and 3-cyano-4-trifluoromethyl-2(1*H*)-pyridones, **4**, 669
- Studies of photoinduced addition of water and alcohols to substituted dihydroquinolines, **4**, 673
- Synthesis, structure and isomerism of "three-bridge" *exo-nido*-osmacarborane clusters, **4**, 706
- 2,6-Di-*tert*-butylphenols and phenoxy radicals with metal—metal bonds, **4**, 716
- Oxidation of diterpenoid alkaloids with dimethyldioxirane, **4**, 720
- A new method for the synthesis of 3,7-diazabicyclo[3.3.1]nonanes, **4**, 753
- peri*-Naphthylenediamines. 33. Further studies of the reactions of 1,8-bis(dimethylamino)naphthalene with trifluoroacetic anhydride, **5**, 860
- Rh<sub>2</sub>(OAc)<sub>4</sub>-Catalyzed reaction of 1,3-dioxanes with methyl diazoacetate, **5**, 865
- Synthesis of *N*-nitrooxazolidines and *N*-nitrotetrahydro-1,3-oxazines from *N*-(2-hydroxyalkyl)- and *N*-(3-hydroxyalkyl)sulfamates, **5**, 911
- Synthesis of cavity systems by cyclophosphorylation of 1,7-dihydroxynaphthalene with phosphorous triamides, **5**, 923
- NMR study of diastereoisomerism of 2-(1-aminoethyl)bicyclo[2.2.1]heptane and its hydrochloride (deitiforin), **6**, 1014
- Synthesis of 4,5-dihydrothiazole derivatives by the reaction of perfluoro-2-methylpent-2-en-3-yl isothiocyanate with ambident N,O- and N,S-nucleophiles, **6**, 1072
- Reductive mono- and dialylation of the bis(pyridine)dihydropyridyllithium dimer by triallylborane, **6**, 1078
- Catalytic phosphorylation of polyfluoroalkanols. 17. Synthesis and the stereochemistry of tris( $\alpha$ -trifluoromethylbenzyl) phosphates, **6**, 1085
- Silylation and germylation of trialkylsilyl(germyl)ethoxyacetylenes containing bulky substituents at the silicon or germanium atom, **6**, 1088
- Silylation of silyl- and germylketenes containing bulky substituents at the silicon or germanium atom, **6**, 1093
- Secondary metabolites of *Astragalus danicus* Retz. and *A. inopinatus* Boriss., **6**, 1107
- Reaction of 6-amino-1,3-dimethyluracil with hexafluoroacetone and ethyl trifluoropyruvate benzoylimines, **6**, 1113
- Influence of isomerism of difluorobenzophenone on the synthesis and properties of poly(arylene ether ketones), **7**, 1208
- Merocyanine form of photochromic spirooxazines in acid solutions, **7**, 1214
- Spin-spin coupling constant <sup>3</sup>J<sub>H,F</sub> of the 1,1,2,2-tetrafluoroethyl group as a useful tool for recognition of regioisomeric and tautomeric pairs of organofluoric compounds, **7**, 1223
- Reactions of 1,3,3,3-tetrafluoro-2-methoxycarbonylpropenylsulfenyl chloride with aromatic and heterocyclic compounds, **7**, 1255
- A new method for the synthesis of *N*-substituted (4-oxo-4,5,6,7-tetrahydroindol-3-yl)acetic acids, **7**, 1259
- Reactions of cyanofurazans with  $\beta$ -dicarbonyl compounds, **7**, 1280



- Bis-(2-diphenylphosphinoethyl)cyclopentadienylchloro-lutetium: synthesis and dynamic behavior in solution, **7**, 1295
- 2-Polyfluoroalkylchromones. 7. Reactions of 6-substituted 2-tetra- and 2-pentafluoroethylchromones with 2-aminoethanol, **7**, 1314
- Determination of the enantiomeric composition of *N,N*-dimethyl- $\alpha$ -ferrocenylethylamine by  $^1\text{H}$  NMR spectroscopy, **7**, 1323
- Oxidative bromination of tricyclic sesquiterpenoids (1*S*,3*S*,5*R*,6*S*,9*S*)-5-hydroxy-6,10,10-trimethyltricyclo[7.2.0.0<sup>1,6</sup>]decan-2-one and clovane-2 $\beta$ ,9 $\alpha$ -diol with the HBr–DMSO system, **8**, 1419
- 2-Polyfluoroalkylchromones. 8. 2-Trifluoromethyl- and 6-nitro-2-trifluoromethylchromones in reactions with amines, **8**, 1426
- 2-Polyfluoroalkylchromones. 9. Synthesis and structures of 5-(2-hydroxyaryl)-7-polyfluoroalkyl-1,4,8-triazabicyclo[5.3.0]dec-4-enes, **8**, 1430
- Synthesis and study of the mutagenic activity of di(indeno[2,1-*b*]indolyl)- and di(indeno[2,1-*b*]pyrrolyl)methanes and -dimethylsilanes, **8**, 1439
- New approach to the functionalization of  $\delta$ -carboline derivatives, **8**, 1449
- 10-(3-Hydroxypropyl)-1,4,6,8-tetraphenyl-1,4,7,8-tetraaza-5-phosphoniaspiro[4.5]deca-6,9-diene chloride: synthesis and molecular structure, **8**, 1461
- Synthesis and transformation of metallacycles. 25. On a mechanism of the Ni(acac)<sub>2</sub>-catalyzed conversion of 3-alkyl-1-ethylalumacyclopentanes into 1,1-disubstituted cyclopropanes, **8**, 1465
- Glycosphingolipid with a branched sphingosine base from soft corals from the Andaman Islands, **8**, 1474
- A study of complexation of chloral hydrate with heteropoly anions having various structures, **9**, 1529
- Conformations of *Z*- and *E*-isomers of some chiral (1*R*,4*R*)-2-arylidene-*p*-menthan-3-ones, **9**, 1596
- Reactions of 9,10-phenanthrenequinone and its nitro derivatives with acetone in the presence of Al<sub>2</sub>O<sub>3</sub>, **9**, 1625
- New *N*-nitrosoamines. 1. Synthesis and nitrosative cleavage of the Mannich bases derived from nitrogen-containing heterocycles and primary aliphatic amines, **9**, 1630
- N*-Substituted trifluoroacetimidoyl halides: synthesis and properties, **9**, 1639
- Spirocyclohexadienones. 4. Synthesis and dienone-phenolic rearrangement of 1-*R*-3,3-dialkyl-2-azaspiro[4.5]deca-1,6,9-trien-8-ones, **9**, 1648
- Heteroorganic betaines. 7. Synthesis and structure of a germanium-containing organophosphorus betaine Et<sub>3</sub>P<sup>+</sup>–CHMe–GeMe<sub>2</sub>–S<sup>–</sup>, **9**, 1679
- Simple and efficient synthesis of *closo*-rhoda- and *closo*-iridacarboranes with  $\pi$ -ligands based on cyclic dienes, **9**, 1702
- Micellar enzymology: methodology and technique (review), **10**, 1718
- Dihydrofolate reductase: structural aspects of mechanisms of enzyme catalysis and inhibition (review), **10**, 1733
- Structural investigations of paramagnetic metalloproteins using high-resolution NMR spectroscopy: iron-sulfur and copper proteins (review), **10**, 1762
- Peculiarities of NMR spectra of heterospin complexes, **11**, 2078
- Cross-coupling of *E,E*-1,4-diiodobuta-1,3-diene with nucleophiles catalyzed by Pd or Ni complexes: a new route to functionalized dienes, **11**, 2095
- Synthesis of  $\alpha$ -amino oximes and bis- $\alpha$ -amino oximes from the monoterpene hydrocarbons 3-carene and  $\alpha$ -pinene and  $\alpha,\omega$ -diamines, **11**, 2106
- Reactions of diazoalkanes with unsaturated compounds. 14. Reactions of diazomethane, diazocyclopropane, and methyl diazoacetate with 1,1,2,2-tetrafluoro-3-vinylcyclobutane and 2,3,3-trifluoro-1-vinylcyclobutene to form [3+2] and [1+2] cycloadducts, **11**, 2113
- Study of the factors determining the outcome of cycloaddition of isocyanurato-substituted azides to [60]fullerene, **11**, 2162
- Allylmethallation of benzoazaheterocycles with allylic derivatives of zinc. Synthesis of 1,4-ethano-2,3-dihydroisoquinolines and allylated heterocycles, **11**, 2172
- Synthesis and transformations of metallacycles. 26. Cp<sub>2</sub>ZrCl<sub>2</sub>-Catalyzed cycloalumination of substituted allenes with Et<sub>3</sub>Al, **11**, 2188
- Synthesis and the structure of tribromo(7-bromobicyclo[4.1.0]hept-7-yl)germane, **11**, 2203
- Diastereoselectivity of the formation of planar chiral ruthenocenol in reactions of chiral tertiary phosphines with the ( $\eta^4$ -cyclopentadienone)( $\eta^5$ -cyclopentadienyl)ruthenium cation, **11**, 2212
- Derivatives of dolichyl phosphate with fluorescent label. Analogs of dolichyl phosphate with different lengths of isoprene chain, containing the (1-naphthyl)amino group in the  $\omega$ -fragment, **11**, 2221
- Synthesis of  $\alpha$ -tocopherol analogs with unsaturated side chain and their transformation into the corresponding chromans with  $\omega$ -functionalized side chain, **11**, 2227
- Reaction of *exo-nido*-ruthenacarborane [Cl(Ph<sub>3</sub>P)<sub>2</sub>Ru]-5,6,10-( $\mu$ -H)<sub>3</sub>-10-H-7,8-C<sub>2</sub>B<sub>9</sub>H<sub>8</sub> with bromine, **11**, 2245
- closo*-3-( $\eta^3$ -4,6-Dimethylbicyclo[3.3.0]oct-1-en-2-yl)-1,2-dimethyl-3,1,2-dicarbollyliridium with an agostic C–H...Ir bond, **11**, 2254
- Functionalization of alkanes and cycloalkanes by super-electrophiles. 15. Carbonylation of cycloheptane, cyclooctane, and isomeric monoalkylcyclohexanes with CO in the presence of CBr<sub>4</sub>·2AlBr<sub>3</sub> to form individual esters of tertiary carboxylic acids of the cyclohexane series, **12**, 2394
- Reactions of cyclic enamino ketones with benzylidene-malononitriles. Synthesis of new fused heterocyclic systems containing the 1,4-dihydropyridine fragment, **12**, 2428
- Silylation of  $\gamma,\gamma$ -bis(alkoxycarbonyl)-substituted aliphatic nitro compounds: synthesis of *N,N*-bis(trimethylsilyloxy)aminocyclopropanes, **12**, 2433
- Protonation and acylation of the heterometallic complexes ( $\mu$ -H)Os<sub>3</sub>( $\mu$ -O<sub>2</sub>CC<sub>5</sub>H<sub>4</sub>FeCp)(CO)<sub>10</sub> and Fe{( $\mu$ -O<sub>2</sub>CC<sub>5</sub>H<sub>4</sub>)( $\mu$ -H)Os<sub>3</sub>(CO)<sub>10</sub>}<sub>2</sub>, **12**, 2451
- Migration of the *O*-acetyl group in the acetonation of guaianolide rhaposerin, **12**, 2459
- Promotion effect of hypervalent iodine compounds on the reactions of 3-hydroxy-4-nitrofurazan with cycloalkenes, **12**, 2479
- Synthesis of 3,5-disubstituted 1*H*-1,2,4-triazolium 4-nitroimides, **12**, 2481

**<sup>15</sup>N NMR spectroscopy**

Structural investigations of paramagnetic metalloproteins using high-resolution NMR spectroscopy: iron-sulfur and copper proteins (review), **10**, 1762

Promotion effect of hypervalent iodine compounds on the reactions of 3-hydroxy-4-nitrofurazan with cycloalkenes, **12**, 2479

**<sup>31</sup>P NMR spectroscopy**

Efficient method for the synthesis of 1,2,3,8-tetrahydroindeno[2,1-*b*]phospholes and their derivatives, **2**, 276

Intramolecular electrophilic rearrangements in saturated acyclic systems. Reactivity of the zwitterion derived from triisopropylphosphine and ethyl 2-cyanoacrylate with respect to different types of electrophiles, **2**, 279

Synthesis of stereoisomeric *d,l* and *meso* forms of *O,O'*-bis-(*O,O'*-dialkyl 1-phosphorylbenzyl)phenylphosphonites and -thionophosphonates containing a pseudochiral center and determination of their configurations by NMR spectroscopy, **2**, 287

Fluorescent-labeled derivatives of dolichyl phosphate. Analogs of dolichyl phosphate with the 2-aminopyridine residue at the  $\omega$ -end of the chain, **3**, 531

Reaction of 4,6-bis(*tert*-butyl)-2,2,2-trichlorobenzo[*d*]-1,3,2-dioxaphosphole with phenylacetylene. *ipso*-Substitution of the *tert*-butyl group, **4**, 693

2,6-Di-*tert*-butylphenols and phenoxy radicals with metal-metal bonds, **4**, 716

Synthesis of cavity systems by cyclophosphorylation of 1,7-dihydroxynaphthalene with phosphorous triamides, **5**, 923

Bis-(2-diphenylphosphinoethyl)cyclopentadienylchlorotlutetium: synthesis and dynamic behavior in solution, **7**, 1295

10-(3-Hydroxypropyl)-1,4,6,8-tetraphenyl-1,4,7,8-tetraaza-5-phosphoniaspiro[4.5]deca-6,9-diene chloride: synthesis and molecular structure, **8**, 1461

*P,O*-Ligands. Complexes of tetraphenylmethylenediphosphine oxide with silver nitrate, **8**, 1469

Heteroorganic betaines. 7. Synthesis and structure of a germanium-containing organophosphorus betaine  $\text{Et}_3\text{P}^+-\text{CHMe}-\text{GeMe}_2-\text{S}^-$ , **9**, 1679

Micellar enzymology: methodology and technique (review), **10**, 1718

Transformations of the chiral diphosphine rhodium catalyst [(1,5-COD)Rh(-)R,R-DIOP]<sup>+</sup>CF<sub>3</sub>SO<sub>3</sub><sup>-</sup> under conditions of hydrogenation, **10**, 1855

Cross-coupling of *E,E*-1,4-diiodobuta-1,3-diene with nucleophiles catalyzed by Pd or Ni complexes: a new route to functionalized dienes, **11**, 2095

Diastereoselectivity of the formation of planar chiral ruthenocenol in reactions of chiral tertiary phosphines with the ( $\eta^4$ -cyclopentadienone)( $\eta^5$ -cyclopentadienyl)ruthenium cation, **11**, 2212

Derivatives of dolichyl phosphate with fluorescent label. Analogs of dolichyl phosphate with different lengths of isoprene chain, containing the (1-naphthyl)amino group in the  $\omega$ -fragment, **11**, 2221

Reaction of *exo-nido*-ruthenacarborane [Cl(Ph<sub>3</sub>P)<sub>2</sub>Ru]-5,6,10-( $\mu$ -H)<sub>3</sub>-10-H-7,8-C<sub>2</sub>B<sub>9</sub>H<sub>8</sub> with bromine, **11**, 2245

**<sup>77</sup>Se NMR spectroscopy**

Metal-induced B-H activation in Cp\*Rh, Cp\*Ir, (*p*-cymene)Ru, and (*p*-cymene)Os half-sandwich complexes

containing the 1,2-dicarba-*closo*-dodecaborane(12)-1,2-dichalcogenolato ligand (review), **9**, 1518

**<sup>29</sup>Si NMR spectroscopy**

Bis(O-Si)-chelate fluoro-bis(2-oxohexahydroazepino-methyl)silylium tetrafluoroborate, a cation-anionic complex containing a silylium ion stabilized by O→Si coordination, **2**, 331

Silylation of  $\gamma,\gamma$ -bis(alkoxycarbonyl)-substituted aliphatic nitro compounds: synthesis of *N,N*-bis(trimethylsilyloxy)aminocyclopropanes, **12**, 2433

**<sup>117/119</sup>Sn NMR spectroscopy**

2,6-Di-*tert*-butylphenols and phenoxy radicals with metal-metal bonds, **4**, 716

**Noncomplementary processes**

Catalysis of noncomplementary reactions by transition metals clusters. Kinetic description, **10**, 1833

**Norditerpenoid alkaloids**

A new norditerpenoid alkaloid aconine from the roots of *Aconitum kusnezoffii* Reichb., **2**, 311

**Normal coordinate analysis**

Equilibrium conformation of dimethylaminodichlorophosphine molecule: the use of the results of quantum-chemical calculations and spectroscopic measurements in the analysis of gas-phase electron diffraction data, **9**, 1550

**Nucleophiles**

Nucleophilic ring-opening of the azole and azine moieties in 6-nitro-1,2,4-triazolo[1,5-*a*]pyrimidin-7-ones, **4**, 682

Reactions of 1-aryl(alkyl)-3-ethoxalyl-5,6,7,8-tetrafluoro-1,4-dihydrocinnolin(quinolin)-4-ones with aromatic dinucleophiles, **4**, 689

New approach to the functionalization of  $\delta$ -carboline derivatives, **8**, 1449

**Nucleophilic addition**

$S_N^H$ -Reactions of triazolo[4,3-*b*]- and tetrazolo[1,5-*b*]-1,2,4-triazines with methylene-active carbonyl compounds, **11**, 2183

**Nucleophilic substitution**

New approach to nonracemic 1-alkylamino-3-aryloxypropan-2-ols belonging to  $\beta$ -blockers *via* cyclic sulfites, **3**, 436

Synthesis of 4,6-dinitro-3-*R*-benzo[*d*]isoxazoles and their transformations under the action of nucleophiles, **3**, 464

Reaction of alkylthiochloroacetylenes with sodium azide, **4**, 751

Synthesis and properties of monoimines of  $\alpha$ -diketones, derivatives of 3-imidazoline nitroxides, **5**, 874

$S_N^H$ -Reactions of 1,2,4-triazine *N*-oxides, pyrazine *N*-oxides, and pterin *N*-oxides with arenethiols, **6**, 1068

Synthesis of 4,5-dihydrothiazole derivatives by the reaction of perfluoro-2-methylpent-2-en-3-yl isothiocyanate with ambident N,O- and N,S-nucleophiles, **6**, 1072

Influence of isomerism of difluorobenzophenone on the synthesis and properties of poly(arylene ether ketones), **7**, 1208

Unusual scission of 3,7-dichlorobis(isothiazolo[4,5-*b*:4',5'-*e*]pyrazine by nucleophiles, **7**, 1287

A new method for the synthesis of CF<sub>3</sub>-containing aminovinyl ketones, **8**, 1395

Synthesis of (2*E*)-2-(tetrafluoroethylidene)-3,3-bis(trifluoromethyl)-2,3-dihydrothiazolo[3,2-*a*]benzimidazole, **8**, 1446

*N*-Substituted trifluoroacetimidoyl halides: synthesis and properties, **9**, 1639

Synthesis of linear and angular anthraquinonoisothiazol-3-ones, their *S*-oxides, and *S,S*-dioxides, **9**, 1657

$S_N^H$ -Reactions of triazolo[4,3-*b*]- and tetrazolo[1,5-*b*]-1,2,4-triazines with methylene-active carbonyl compounds, **11**, 2183

Vicarious nucleophilic substitution of hydrogen in aldehydes and Knoevenagel reaction of iminium salts with  $\alpha$ -halocarbanions, **11**, 2236

Chemistry of 2,4,6-trinitrobenzonitrile. 1. Substitution of nitro groups in 2,4,6-trinitrobenzonitrile under the action of anionic nucleophiles. Factors facilitating the replacement of the *ortho*-nitro group, **12**, 2401

Nitro group substitution in 2,4,6-trinitrotoluene under the action of arenethiols and transformations of the reaction products, **12**, 2406

Reactions of 3-substituted 1-aryl-5,6,7,8-tetrafluoroquinolones(cinnolones) with morpholine, **12**, 2416

## O

### *n*-Octanol

Thermodynamic characteristics of supramolecular complexes of aroma compounds with ordered structures of polysaccharides of corn starch and its cryotextures, **2**, 300

### *n*-Octyl acetate

Thermodynamic characteristics of supramolecular complexes of aroma compounds with ordered structures of polysaccharides of corn starch and its cryotextures, **2**, 300

### Oil pollution

Environmental biotechnology: a tandem of biocatalytic and engineering approaches (review), **10**, 1818

### Olefination

New method for the synthesis of  $\beta$ -bromostyrenes, **8**, 1401

### Oligoetherdimethacrylate

Influence of *o*-benzoquinone nature on initiation of radical polymerization by the *o*-benzoquinone-*tert*-amine system, **12**, 2366

### Optical absorption spectra

Photochromic dihetarylethenes. 6. Photochromic derivatives of thieno[3,2-*b*]thiophene, **1**, 110

### Optical activity

New aromatic azo compounds: syntheses and liquid-crystalline properties, **7**, 1248

Stereochemistry of optically active compounds. Problems and prospects (review), **8**, 1339

### Orbital interaction

Intramolecular  $Y \leftarrow O$  ( $Y = N, P, As, Sb, Bi$ ) coordination in organopnictogen compounds: an *ab initio* and DFT study, **11**, 2028

### Organoaluminum compounds

A new route of the reaction of  $EtAlCl_2$  with  $\alpha$ -olefins catalyzed by Ti complexes, **2**, 292

Synthesis and transformations of metallacycles. 23.  $Cp_2TiCl_2$ -Catalyzed cyclometallation of fullerene  $C_{60}$  with  $EtAlCl_2$ , **2**, 297

Synthesis and transformations of metallacycles. 24. Zr-Catalyzed cycloaluminum of asymmetrical disubstituted acetylenes, **3**, 484

Transformations of cycloalkanes under the action of organoaluminum compounds and transition metal complexes in the presence of polychloromethanes, **7**, 1326

Synthesis and transformation of metallacycles. 25. On a mechanism of the  $Ni(acac)_2$ -catalyzed conversion of 3-alkyl-1-ethylalumacyclopentanes into 1,1-disubstituted cyclopropanes, **8**, 1465

Synthesis and transformations of metallacycles. 26.  $Cp_2ZrCl_2$ -Catalyzed cycloaluminum of substituted allenes with  $Et_3Al$ , **11**, 2188

Synthesis and transformations of metallacycles. 27. Quantum-chemical study of the mechanism of styrene catalytic cyclometallation with triethylaluminum in the presence of  $Cp_2ZrCl_2$ , **12**, 2336

### Organoboron compounds

The reactivity of organoboranes in radical substitution reactions, **3**, 390

Induced aromaticity, **12**, 2325

### Organochlorohydroxysilanes

Intermediates of chemical assembling of oligoorganosiloxanes in hydrolysis of organochlorosilanes (review), **11**, 1998

### Organochlorosilanes

Intermediates of chemical assembling of oligoorganosiloxanes in hydrolysis of organochlorosilanes (review), **11**, 1998

### Organogermanium compounds

Heteroorganic betaines. 7. Synthesis and structure of a germanium-containing organophosphorus betaine  $Et_3P^+ - CHMe - GeMe_2 - S^-$ , **9**, 1679

Spin chemistry of short-lived intermediates in the reactions of germanorborene derivatives and digermabicyclooctadiene (review), **11**, 1916

### Organolithium compounds

*peri*-Naphthylenediamines. 32. Reactions of 4,5-bis(dimethylamino)-1-naphthyllithium and 4,5-bis(dimethylamino)-1-naphthylmagnesium bromide with electrophilic agents. New representatives of double naphthalene "proton sponges" with the structures of 1,1'-binaphthyl ketone and 1,1'-binaphthylmethanol, **5**, 854

### Organomagnesium compounds

*peri*-Naphthylenediamines. 32. Reactions of 4,5-bis(dimethylamino)-1-naphthyllithium and 4,5-bis(dimethylamino)-1-naphthylmagnesium bromide with electrophilic agents. New representatives of double naphthalene "proton sponges" with the structures of 1,1'-binaphthyl ketone and 1,1'-binaphthylmethanol, **5**, 854

### Organometallic compounds

Organometallic derivatives of 2,6-di-*tert*-butylphenols as specific inhibitors of methyl oleate oxidation, **6**, 1097

### Organophosphate hydrolase

Organophosphate hydrolase — an enzyme catalyzing degradation of phosphorus-containing toxins and pesticides (review), **10**, 1826

### Organophosphorus compounds

Effect of substituents on ionization potentials of phosphorus compounds. Conjugation in radical cations, **1**, 35

Organophosphate hydrolase — an enzyme catalyzing degradation of phosphorus-containing toxins and pesticides (review), **10**, 1826

Cycloplatinated aryl ketoximes as effective biomimicking catalysts for hydrolysis of esters of phosphorothioic acid, **10**, 1844

### Organopnictogen compounds

Intramolecular  $Y \leftarrow O$  ( $Y = N, P, As, Sb, Bi$ ) coordination in organopnictogen compounds: an *ab initio* and DFT study, **11**, 2028

**Organosilanols**

Intermediates of chemical assembling of oligoorganosiloxanes in hydrolysis of organochlorosilanes (review), **11**, 1998

**Organosilicon compounds**

The nature of the super-electron-releasing inductive effect of the silatranyl group and its spectroscopic and chemical consequences (review), **5**, 757

**Organosulfur compounds**

Thermodynamic properties and valence—power field of thiyl radicals, **12**, 2310

**Organotin compounds**

Effect of methyltin trichloride on the activity of lactate dehydrogenase, **8**, 1485

**Oscillating reaction**

Generation of an oscillating chemical reaction in a heterogeneous system by the oxidation of an alkaline solution of luminol with sodium(vi) ferrate in the presence of copper ions, **1**, 159

**exo-nido-Osmacarboranes**

Synthesis, structure and isomerism of "three-bridge" *exo-nido*-osmacarborane clusters, **4**, 706

**Osmium compounds**

Metal-induced B—H activation in Cp\*Rh, Cp\*Ir, (*p*-cymene)Ru, and (*p*-cymene)Os half-sandwich complexes containing the 1,2-dicarbido-*closo*-dodecaborane(12)-1,2-dichalcogenolato ligand (review), **9**, 1518

Crystal and molecular structures of salts of the secondary permethylmetallocenylmethyl cations (C<sub>5</sub>Me<sub>5</sub>MC<sub>3</sub>Me<sub>4</sub>CHR)<sup>+</sup>X<sup>-</sup> (M = Ru, Os; R = Ph, C<sub>6</sub>F<sub>5</sub>; X = BF<sub>4</sub>, PF<sub>6</sub>), **9**, 1616

Protonation and acylation of the heterometallic complexes (μ-H)Os<sub>3</sub>(μ-O<sub>2</sub>CC<sub>3</sub>H<sub>4</sub>FeCp)(CO)<sub>10</sub> and Fe{(μ-O<sub>2</sub>CC<sub>3</sub>H<sub>4</sub>)(μ-H)Os<sub>3</sub>(CO)<sub>10</sub>}<sub>2</sub>, **12**, 2451

**Overhauser effect**

Synthesis and structures of 1,1'-dialkyl-3,3'-bidiaziridines, **3**, 440

NMR studies of the dynamic behavior of 2-anilino-6-chloro-4-methoxy-1,3,5-triazine in solution, **12**, 2473

**2-Oxabicycloalkenes**

Synthesis of nine-, ten-, and fifteen-membered alkenolides by the oxidative cleavage of the bridging C=C bond in 2-oxabicycloalkenes, **11**, 2149

**1,3,4-Oxadiazinium bromides**

Reactions of 1,3-dibromopropyne with 1-aryl-2,2-dimethylhydrazines as a new method for the synthesis of substituted 1,3,4-oxadiazinium bromides, **12**, 2475

**1,4,2-Oxazaphosphorinanes**

Reaction of *R*-(+)-2-benzylideneaminobutan-1-ol with ethylene phosphorochloridite. Stereospecific formation of (3*R*,5*R*)-2-(2-chloroethoxy)-5-ethyl-2-oxo-3-phenyl-1,4,2-oxazaphosphorinane, **12**, 2468

**1,4-Oxazepane derivatives**

Reactions of methoxycarbonylcarbene with 3-ethyl-2-phenyl- and 2,3-diphenyloxazolidines, **11**, 2144

**Oxazole**

Synthesis and properties of monoimines of α-diketones, derivatives of 3-imidazoline nitroxides, **5**, 874

**Oxazolidines**

Reactions of methoxycarbonylcarbene with 3-ethyl-2-phenyl- and 2,3-diphenyloxazolidines, **11**, 2144

**Oxidases**

Electroanalytical applications of Prussian Blue and its analogs (review), **10**, 1811

**Oxidation**

Oxidative transformations of cyclohexane, methylcyclopentane, and pentane on treatment with superelectrophiles based on polyhalomethane and aluminum halides, **1**, 81

Synthetic potential of substituted 7-alkylseleno-1,4-dihydro-1,6-naphthyridines, **1**, 122

Regioselective replacement of nitro groups in 2,4,6-trinitrotoluene under the action of alkanethiols. Synthesis of *ortho*-(alkylthio)-substituted nitrotoluenes and their oxidation to sulfoxides and sulfones, **2**, 261

Synthesis of quinoxalines fused with triterpenes, ursolic acid and betulin derivatives, **2**, 304

Oxidative dehydrogenation of *N*-methyl-*o*-phenylenediamine coordinated to the Pd<sup>II</sup> and Pt<sup>II</sup> atoms, **3**, 515

Fulleropyrrolidine-containing sterically hindered phenol. Synthesis, structure, and properties, **4**, 607

Oxidation of alkylphenylacetylenes and dialkylacetylenes on palladium catalysts in DMSO, **4**, 649

Chemiluminescence in the oxidation of Na<sub>2</sub>C<sub>60</sub> by the (NH<sub>4</sub>)<sub>2</sub>Ce(NO<sub>3</sub>)<sub>6</sub> complex in THF, **4**, 731

Study of alkaloids from the flora of the Siberian and Altai regions. 5. Synthesis of new elatidine derivatives, **5**, 907

Unexpectedly high stability of benzaldehyde in the presence of Pd-561 giant cluster, **5**, 921

Synthesis of cavity systems by cyclophosphorylation of 1,7-dihydroxynaphthalene with phosphorous triamides, **5**, 923

Molecular electrochemistry of hydrofullerenes C<sub>70</sub>H<sub>36–46</sub>, **6**, 996

Unusual oxidative cleavage of the aryl—ethynyl bonds in (arylethynyl)polymethylbenzenes with iodine in dimethyl sulfoxide, **6**, 1051

Organometallic derivatives of 2,6-di-*tert*-butylphenols as specific inhibitors of methyl oleate oxidation, **6**, 1097

Chemiluminescence during thermolysis of the (Ph<sub>3</sub>COOCPh<sub>3</sub>)<sub>*n*</sub>—Ph<sub>3</sub>C· peroxide containing captured triphenylmethyl radical, **7**, 1194

Oxidative dimerization of vinylbornylacetylenes under the action of mercuric acetate, **7**, 1238

Oxidative bromination of tricyclic sesquiterpenoids (1*S*,3*S*,5*R*,6*S*,9*S*)-5-hydroxy-6,10,10-trimethyltricyclo[7.2.0.0<sup>1,6</sup>]judecan-2-one and clovane-2β,9α-diol with the HBr—DMSO system, **8**, 1419

Pyrolysis of eicosane in supercritical water, **8**, 1478

Naphthalene oxidation in supercritical water, **8**, 1481

Deep oxidation of methane on granulated and monolith copper—manganese oxide catalysts, **9**, 1589

Synthesis of linear and angular anthraquinonoisothiazol-3-ones, their *S*-oxides, and *S,S*-dioxides, **9**, 1657

Transformations of 1-amino-2-(3-hydroxyalk-1-ynyl)-9,10-anthraquinones in the presence of amines, **9**, 1663

Cyclocondensation of 5-ethynyl-1,4-naphthoquinone derivatives with hydrazine, **9**, 1668

(+)-δ-Cadinol as a promising starting compound in the synthesis of eleuthesides, **9**, 1699

Structural investigations of paramagnetic metalloproteins using high-resolution NMR spectroscopy: iron-sulfur and copper proteins (review), **10**, 1762

The role of metal-oxygen intermediates in biological and chemical monooxygenation of alkanes (review), **10**, 1795

Energochemical technologies: energy and bulk/basic chemicals in a single process (review), **11**, 2015

$S_N^H$ -Reactions of triazolo[4,3-*b*]- and tetrazolo[1,5-*b*]-1,2,4-triazines with methylene-active carbonyl compounds, **11**, 2183

Unusual condensation of propargylamine. Generation of the 1,3-di(propargylimino)propane anion coordinated to the cobalt(III) atom, **11**, 2206

Liquid-phase oxidation of thiols with chlorine dioxide, **12**, 2352

Catalytic properties of chromites with a spinel structure in the oxidation of CO and hydrocarbons and reduction of nitrogen oxides, **12**, 2377

Nitro group substitution in 2,4,6-trinitrotoluene under the action of arenethiols and transformations of the reaction products, **12**, 2406

#### Oxidative activation

On the coupled oxidation-reduction mechanism of molecular nitrogen fixation, **11**, 2054

#### Oxidative addition

Phosphine  $\sigma$ -sydnonyl complexes of Ni, Pd, and Pt, **3**, 525

#### Oxides

Quantum-chemical study of the singlet potential energy surface of the nitrene—dioxygen system, **12**, 2346

#### Oxidoreductates

Effect of methyltin trichloride on the activity of lactate dehydrogenase, **8**, 1485

#### Oximes

Direct *C*-nitration of cyclic  $\alpha,\beta$ -unsaturated oximes under the action of sodium nitrite and acetic acid in methanol, **8**, 1410

Silylation as a new strategy of the use of aliphatic nitro compounds in organic synthesis (review), **11**, 1936

Study of alkaloids from the flora of the Siberian and Altai regions. 6. Crystal and molecular structure of songorine *Z*-oxime, **11**, 2092

#### $\gamma$ -Oxo acids

Cascade rearrangement in the reaction of methyl trifluoropyruvate sulfonylimines with terminal alkynes, **7**, 1330

#### $\beta$ -Oxo esters

Reactions of cyanofurazans with  $\beta$ -dicarbonyl compounds, **7**, 1280

#### Oxoammonium salts

Interaction of chlorine dioxide with nitroxyl radicals, **4**, 614

#### 19-Oxoeldeline

Oxidation of diterpenoid alkaloids with dimethyldioxirane, **4**, 720

#### 19-Oxotalatizamine

Oxidation of diterpenoid alkaloids with dimethyldioxirane, **4**, 720

#### 1-Oxyalkylphosphonates

Synthesis of stereoisomeric *d,l* and *meso* forms of *O,O'*-bis-(*O,O'*-dialkyl 1-phosphorylbenzyl)phenylphosphonites and -thionophosphonates containing a pseudochiral center and determination of their configurations by NMR spectroscopy, **2**, 287

#### Oxygen

Structural features of sublimed layers of *meso*-mono-4-pyridyltriphenylporphyrinatocobalt(II) and reversible binding of molecular oxygen, **4**, 638

Quantum-chemical study of the singlet potential energy surface of the nitrene—dioxygen system, **12**, 2346

#### Oxygen transfer

The role of metal-oxygen intermediates in biological and chemical monooxygenation of alkanes (review), **10**, 1795

#### Oxyhydroxide

Estimation of oxyhydroxide specific surface area using the amounts of OH groups adsorbed, **9**, 1582

#### Ozone

Free-radical chain decomposition of ozone initiated by di(*tert*-butyl) trioxide, **1**, 63

#### Ozonolysis

A useful chiral synthon from (*R*)-4-menthenone, **6**, 1117

Synthesis of  $\alpha$ -tocopherol analogs with unsaturated side chain and their transformation into the corresponding chromans with  $\omega$ -functionalized side chain, **11**, 2227

## P

#### Palladium

Reduction of 3-(2-hydroxyethyl)-1,5-dinitro-3-azabicyclo[3.3.1]non-6-ene, **2**, 265

Optical spectra of Pd-561 nanoclusters in aqueous solutions, **5**, 809

#### Palladium compounds

Molecular structure of a new palladium-containing vinylidene cluster  $[\eta^2\text{-Ph}_2\text{P}(\text{CH}_2)_3\text{PPh}_2]\text{PdFe}_3(\mu^4\text{-C}=\text{CHPh})(\text{CO})_9$ , **3**, 512

Oxidative dehydrogenation of *N*-methyl-*o*-phenylenediamine coordinated to the Pd<sup>II</sup> and Pt<sup>II</sup> atoms, **3**, 515

Synthesis and the crystal structures of *N*-(2-nitroxyethyl)isonicotinamide and its complexes with PdCl<sub>2</sub> and PtCl<sub>2</sub> as potential antitumor medicines, **3**, 520

Phosphine  $\sigma$ -sydnonyl complexes of Ni, Pd, and Pt, **3**, 525

Derivatives of phosphorous acid as a new class of ligands for Pd-catalyzed allylation, **3**, 554

Oxidation of alkylphenylacetylenes and dialkylacetylenes on palladium catalysts in DMSO, **4**, 649

Unexpectedly high stability of benzaldehyde in the presence of Pd-561 giant cluster, **5**, 921

Catalytic ring opening of acetylcyclopropane by water and alcohols under the action of copper or palladium salts, **7**, 1242

Catalytic *C*-phenylation of methyl acrylate with triphenylantimony(V) dicarboxylates, **7**, 1291

Transformations of cycloalkanes under the action of organoaluminum compounds and transition metal complexes in the presence of polychloromethanes, **7**, 1326

Reduction of nitrosoarene ligands in binuclear palladium(II) complexes, **9**, 1689

Kinetics and mechanism of styrene hydrocarboalkoxylation catalyzed by Pd<sup>0</sup> complex in the presence of toluenesulfonic acid, **10**, 1839

Cycloplatinated aryl ketoximes as effective biomimicking catalysts for hydrolysis of esters of phosphorothioic acid, **10**, 1844

Cross-coupling of *E,E*-1,4-diiodobuta-1,3-diene with nucleophiles catalyzed by Pd or Ni complexes: a new route to functionalized dienes, **11**, 2095

- Carbonylation of chloroacetone to methyl acetoacetate, **11**, 2239
- D-Pantolactone**  
Stereodivergent synthesis of chiral low-molecular bio-regulators using readily available lipases (review), **11**, 1984
- Parabolic model**  
The reactivity of organoboranes in radical substitution reactions, **3**, 390
- Paraformaldehyde**  
Unexpected transformation of 1,1'-methylenebis(2-naphthol) into 1,2,1',2'-tetrahydrospiro(naphthalene-1,3'-naphtho[2,1-*b*]pyran)-2-one, a spirodimer of 1,2-naphthoquinone 1-methide, in the presence of boric acid and paraformaldehyde, **5**, 914
- Paramagnetism**  
Sulfurization of polymers. 4. Poly(4,5,6,7-tetrathiono-4,5,6,7-tetrahydrobenzothiophene-2,3-diyl) and related structures based on polystyrene and elemental sulfur, **2**, 253  
Exoemission near phase transitions of epitaxial films of manganites with colossal magnetic resistance, **3**, 359  
Paramagnetic metal chelates of an *o*-quinone derivative of fullerene with Mn and Re carbonyls, **3**, 566  
Ligand oxidation as a method for intramolecular activation of metal complexes (review), **4**, 573  
2,6-Di-*tert*-butylphenols and phenoxy radicals with metal-metal bonds, **4**, 716  
Structural investigations of paramagnetic metalloproteins using high-resolution NMR spectroscopy: iron-sulfur and copper proteins (review), **10**, 1762
- Parametric structures**  
Modular design of icosahedral metal clusters (review), **1**, 1
- Pauson-Khand reaction**  
New potentialities of electrophilic addition in the assembly of polyfunctional compounds from simple precursors (review), **11**, 1949
- n*-Pentane**  
Oxidative transformations of cyclohexane, methylcyclopentane, and pentane on treatment with superelectrophiles based on polyhalomethane and aluminum halides, **1**, 81
- Pentane-2,4-dione**  
Introduction of the 1*H*-indol-3-yl(phenyl)methyl residue into some CH acids, **3**, 543
- 4-Pentynoic acid**  
Synthesis of  $\omega$ - and  $(\omega - 1)$ -acetylenic acids from five-, six-, or seven-membered cycloalkanones, **5**, 833
- Peptides**  
Proteinases immobilized on poly(vinyl alcohol) cryogel: novel biocatalysts for peptide synthesis in organic media, **10**, 1896
- 3*H*-Perfluoroalk-2-enes**  
Reaction of 3*H*-perfluoroalk-2-enes with ammonia, **1**, 155
- Perfluoroalkyl radicals**  
Formation and decay of trifluoromethyl radicals during photodecomposition of the long-lived perfluoro-2,4-dimethyl-3-ethylpent-3-yl radical, **12**, 2381
- Perfluoroalkylpyrimidines**  
Guanidine in the synthesis of perfluoroalkylpyrimidines and perfluoroalkyl-*s*-triazines, **3**, 476
- Perfluoroalkyl-*s*-triazines**  
Guanidine in the synthesis of perfluoroalkylpyrimidines and perfluoroalkyl-*s*-triazines, **3**, 476
- Perfluoro-5-azanon-4-ene**  
Guanidine in the synthesis of perfluoroalkylpyrimidines and perfluoroalkyl-*s*-triazines, **3**, 476
- Perfluoro-2-methylpent-2-ene**  
Guanidine in the synthesis of perfluoroalkylpyrimidines and perfluoroalkyl-*s*-triazines, **3**, 476
- Perfluoro-2-methylpent-2-en-3-yl isothiocyanate**  
Synthesis of 4,5-dihydrothiazole derivatives by the reaction of perfluoro-2-methylpent-2-en-3-yl isothiocyanate with ambident N,O- and N,S-nucleophiles, **6**, 1072
- Perfluorotripropylamine**  
Adsorption of vapor mixtures of water and organic substance on activated carbons, **4**, 595
- Pericyclic reactions**  
Cation-dependent pericyclic reactions of crown-containing photochromic compounds (review), **11**, 1970
- Permethrine synergists**  
Synthesis and physiological activity of trialkyl phosphorothioates and trialkyl phosphorodithioates containing fragments of *N*-acylated amino acids, **1**, 147
- Permethylmetallocenylmethyl cations**  
Crystal and molecular structures of salts of the secondary permethylmetallocenylmethyl cations  $(C_5Me_5MC_5Me_4CHR)^+X^-$  (M = Ru, Os; R = Ph, C<sub>6</sub>F<sub>5</sub>; X = BF<sub>4</sub>, PF<sub>6</sub>), **9**, 1616
- Peroxides**  
Chemiluminescence during thermolysis of the  $(Ph_3COOCPh_3)_n-Ph_3C\cdot$  peroxide containing captured triphenylmethyl radical, **7**, 1194  
The nature of the O—O bond in hydroperoxides, **9**, 1539
- Perturbative instanton approach**  
Six-dimensional tunneling dynamics of internal rotation in hydrogen peroxide molecule and its isotopomers, **3**, 366
- Pharmacology**  
Chemical aspects of influence of medical drugs on organism functions (review), **8**, 1356
- Phase diagrams**  
Characteristic features of phase diagrams describing condensation of adsorbate in narrow pores, **1**, 50
- Phase equilibrium**  
Intermediates of chemical assembling of oligoorganosiloxanes in hydrolysis of organochlorosilanes (review), **11**, 1998
- Phase trajectory**  
Catalysis of noncomplementary reactions by transition metals clusters. Kinetic description, **10**, 1833
- Phase transitions**  
Exoemission near phase transitions of epitaxial films of manganites with colossal magnetic resistance, **3**, 359  
Synthesis and magnetic properties of liquid crystalline lanthanide complexes with alkylsulfate counterions, **3**, 488  
Synthesis and liquid-crystalline properties of substituted  $\beta$ -aminovinyl ketones and their complexes with copper(II), **5**, 805  
New aromatic azo compounds: syntheses and liquid-crystalline properties, **7**, 1248  
Relationship between the hydration degree of poly-*N*-isopropylacrylamide gel and activity of immobilized  $\alpha$ -chymotrypsin, **10**, 1891  
Thermodynamics of alternating copolymer of styrene and CO in the 0–600 K region, **12**, 2372

**9,10-Phenanthrenequinone**

Reactions of 9,10-phenanthrenequinone and its nitro derivatives with acetone in the presence of  $\text{Al}_2\text{O}_3$ , **9**, 1625

**1,10-Phenanthroline**

First X-ray diffraction study of nitrosonium complexes of nitrogen-containing organic compounds: a complex of 1,10-phenanthroline with  $\text{NO}^+\text{BF}_4^-$ , **12**, 2477

**Phenols**

Ligand oxidation as a method for intramolecular activation of metal complexes (review), **4**, 573

2,6-Di-*tert*-butylphenols and phenoxy radicals with metal—metal bonds, **4**, 716

The nature of the super-electron-releasing inductive effect of the silatranyl group and its spectroscopic and chemical consequences (review), **5**, 757

Oxidative bromination of tricyclic sesquiterpenoids (1*S*,3*S*,5*R*,6*S*,9*S*)-5-hydroxy-6,10,10-trimethyltricyclo[7.2.0.0<sup>1,6</sup>]decan-2-one and clovane-2 $\beta$ ,9 $\alpha$ -diol with the HBr—DMSO system, **8**, 1419

On the mechanisms of phenol adsorption by carbons, **11**, 2060

**Phenothiazine**

Electron transfer in the photochemical reactions of phenothiazine with halomethanes, **5**, 798

**Phenoxy radicals**

Ligand oxidation as a method for intramolecular activation of metal complexes (review), **4**, 573

Fulleropyrrolidine-containing sterically hindered phenol. Synthesis, structure, and properties, **4**, 607

2,6-Di-*tert*-butylphenols and phenoxy radicals with metal—metal bonds, **4**, 716

Organometallic derivatives of 2,6-di-*tert*-butylphenols as specific inhibitors of methyl oleate oxidation, **6**, 1097

**Phenylacetyl radicals**

Effect of medium on the rate constant of decarbonylation of phenylacetyl radical, **2**, 237

**Phenylacetylene**

Reaction of 4,6-bis(*tert*-butyl)-2,2,2-trichlorobenzo[*d*]-1,3,2-dioxaphosphole with phenylacetylene. *ipso*-Substitution of the *tert*-butyl group, **4**, 693

**Phenylation**

Catalytic *C*-phenylation of methyl acrylate with triphenylantimony(v) dicarboxylates, **7**, 1291

**Phenylcyanoacetic esters**

Intramolecular electrophilic rearrangements in saturated acyclic systems. Reactions of bis-carbanions with isocyanates, **5**, 838

***o*-Phenylenediamine**

Synthesis of quinoxalines fused with triterpenes, ursolic acid and betulin derivatives, **2**, 304

Nucleophilic ring-opening of the azole and azine moieties in 6-nitro-1,2,4-triazolo[1,5-*a*]pyrimidin-7-ones, **4**, 682

Reactions of 1-aryl(alkyl)-3-ethoxalyl-5,6,7,8-tetrafluoro-1,4-dihydrocinnolin(quinolin)-4-ones with aromatic dinucleophiles, **4**, 689

Formation of a tetranuclear nickel(II) complex containing an unusual bridging ligand, **7**, 1336

Binuclear and polynuclear transition metal complexes with macrocyclic ligands. 1. Synthesis and the structure of an antiferromagnetic binuclear nickel complex prepared by the reaction of *o*-phenylenediamine with pyrrole-2,5-dicarbaldehyde and nickel pivalate, **12**, 2445

 **$\alpha$ -Phenyl-*nor*-gramine**

Introduction of the 1*H*-indol-3-yl(phenyl)methyl residue into some CH acids, **3**, 543

Diastereoselective synthesis of (*R*\*,*R*\*)-ethyl 2-[1*H*-indol-3-yl(phenyl)methyl]-3-oxobutanoate, **3**, 570

***N*-Phenylpiperazine**

Two-fragment  $\alpha$ -adrenolytics. 4. Synthesis of phosphorylated derivatives of 2-aryloxyethylamines and *N*-phenylpiperazine, **1**, 125

**3-(4-Phenylpiperazin-1-yl)propylphosphonates and -phosphinates**

Two-fragment  $\alpha$ -adrenolytics. 4. Synthesis of phosphorylated derivatives of 2-aryloxyethylamines and *N*-phenylpiperazine, **1**, 125

**7-(Phenylthio)pterin**

$S_N^H$ -Reactions of 1,2,4-triazine *N*-oxides, pyrazine *N*-oxides, and pterin *N*-oxides with arenethiols, **6**, 1068

**Phosphates**

Nitroxyalkyl phosphates, **2**, 327

A novel synthesis of *N*-acetyl- $\alpha$ -D-fucosamine 1-phosphate and uridine 5'-diphospho-*N*-acetyl- $\alpha$ -D-fucosamine, **7**, 1303

**Phosphinates**

Hydrophosphinoyl derivatives of calix[4]resorcinarenes, **4**, 748

**Phosphines**

Cross-coupling of *E,E*-1,4-diiodobuta-1,3-diene with nucleophiles catalyzed by Pd or Ni complexes: a new route to functionalized dienes, **11**, 2095

Diastereoselectivity of the formation of planar chiral ruthenocenol in reactions of chiral tertiary phosphines with the ( $\eta^4$ -cyclopentadienone)( $\eta^5$ -cyclopentadienyl)ruthenium cation, **11**, 2212

**Phosphonates**

Cross-coupling of *E,E*-1,4-diiodobuta-1,3-diene with nucleophiles catalyzed by Pd or Ni complexes: a new route to functionalized dienes, **11**, 2095

**Phosphonic esters**

The reactivity of phosphonic esters in aqueous micellar solutions of cationic surfactants, **7**, 1181

**Phosphonioruthenocenols**

Diastereoselectivity of the formation of planar chiral ruthenocenol in reactions of chiral tertiary phosphines with the ( $\eta^4$ -cyclopentadienone)( $\eta^5$ -cyclopentadienyl)ruthenium cation, **11**, 2212

**Phosphoranes**

Derivatives of phosphorous acid as a new class of ligands for Pd-catalyzed allylation, **3**, 554

**Phosphorescence**

Phosphorescence of Group IVB metal complexes, **2**, 329

Chemiluminescence in the oxidation of  $\text{Na}_2\text{C}_{60}$  by the  $(\text{NH}_4)_2\text{Ce}(\text{NO}_3)_6$  complex in THF, **4**, 731

Luminescence properties of acridine dyes in micellar sodium dodecyl sulfate solutions containing thallium ions, **6**, 986

**Phosphorochloridites**

Reaction of *R*-(+)-2-benzylideneaminobutan-1-ol with ethylene phosphorochloridite. Stereospecific formation of (3*R*,5*R*)-2-(2-chloroethoxy)-5-ethyl-2-oxo-3-phenyl-1,4,2-oxazaphosphorinane, **12**, 2468

**Phosphorothioates**

Cycloplatinated aryl ketoximes as effective biomimicking catalysts for hydrolysis of esters of phosphorothioic acid, **10**, 1844

**Phosphorothioites**

Structures and conformational behavior of phosphorothioites and their complexes with transition metals obtained from X-ray diffraction analysis (review), **7**, 1130

**Phosphorus compounds**

Effect of substituents on ionization potentials of phosphorus compounds. Conjugation in radical cations, **1**, 35

Intramolecular electrophilic rearrangements in saturated acyclic systems. Reactivity of the zwitterion derived from triisopropylphosphine and ethyl 2-cyanoacrylate with respect to different types of electrophiles, **2**, 279

Reaction of 4,6-bis(*tert*-butyl)-2,2,2-trichlorobenzo[*d*]-1,3,2-dioxaphosphole with phenylacetylene. *ipso*-Substitution of the *tert*-butyl group, **4**, 693

Regiochemistry of the reactions of phenylenedioxytrichlorophosphorane with phenylacetylene and propargyl chloride in the presence of benzytrimethylammonium chloride, **4**, 745

Heteroorganic betaines. 6. Structure and reactivity of silicon-containing organophosphorus betaines with the  $^{-}\text{S}-\text{Si}-\text{C}-\text{P}^{+}$  fragment: a DFT study, **5**, 771

Synthesis of cavity systems by cyclophosphorylation of 1,7-dihydroxynaphthalene with phosphorous triamides, **5**, 923

Thioethynyl esters of phosphorus acids (review), **6**, 925

New approach to the functionalization of  $\delta$ -carboline derivatives, **8**, 1449

**Phosphorus oxychloride**

Catalytic phosphorylation of polyfluoroalkanols. 17. Synthesis and the stereochemistry of tris( $\alpha$ -trifluoromethylbenzyl) phosphates, **6**, 1085

Phosphorylation of heptafluorobutanol in the presence of metal chloride—ether catalytic systems, **8**, 1457

**Phosphorus ylides**

Heteroorganic betaines. 7. Synthesis and structure of a germanium-containing organophosphorus betaine  $\text{Et}_3\text{P}^{+}-\text{CHMe}-\text{GeMe}_2-\text{S}^{-}$ , **9**, 1679

**Phosphorylation**

Fluorescent-labeled derivatives of dolichyl phosphate. Analogs of dolichyl phosphate with the 2-aminopyridine residue at the  $\omega$ -end of the chain, **3**, 531

Hydrophosphinoyl derivatives of calix[4]resorcinarenes, **4**, 748

Catalytic phosphorylation of polyfluoroalkanols. 17. Synthesis and the stereochemistry of tris( $\alpha$ -trifluoromethylbenzyl) phosphates, **6**, 1085

A novel synthesis of *N*-acetyl- $\alpha$ -D-fucosamine 1-phosphate and uridine 5'-diphospho-*N*-acetyl- $\alpha$ -D-fucosamine, **7**, 1303

Phosphorylation of heptafluorobutanol in the presence of metal chloride—ether catalytic systems, **8**, 1457

Derivatives of dolichyl phosphate with fluorescent label. Analogs of dolichyl phosphate with different lengths of isoprene chain, containing the (1-naphthyl)amino group in the  $\omega$ -fragment, **11**, 2221

**Photoaddition**

Studies of photoinduced addition of water and alcohols to substituted dihydroquinolines, **4**, 673

**Photochemistry**

Photochemical investigation of the triplet state of 3,3'-diethylthiacarbocyanine iodide in the presence of DNA, **7**, 1190

Spin chemistry of short-lived intermediates in the reactions of germanorbornadiene derivatives and digermabicyclooctadiene (review), **11**, 1916

Formation and decay of trifluoromethyl radicals during photodecomposition of the long-lived perfluoro-2,4-dimethyl-3-ethylpent-3-yl radical, **12**, 2381

**Photochromic compounds**

Photochromic dihetarylethenes. 6. Photochromic derivatives of thieno[3,2-*b*]thiophene, **1**, 110

Photochromic dihetarylethenes. 7. Synthesis of bis(thienylazoles), photochromic analogs of diarylethenes, **1**, 116

Photochromic dihetarylethenes. 9. Dithienylperfluorocyclopentenes: a quantum-chemical study, **3**, 381

Cation-dependent pericyclic reactions of crown-containing photochromic compounds (review), **11**, 1970

Photochromic dihetarylethenes. 10. Photochromic 1,2-bis[2-(benzothiazol-2-yl)-3-thienyl]- and 1,2-bis[2-(benzothiazol-2-yl)benzothiophen-3-yl]ethenes, **12**, 2420

Photochromic dihetarylethenes. 11. Synthesis and photochromic properties of diarylethenes containing furan or furopyrimidine bridges, **12**, 2424

**Photochromism**

Photochromic dihetarylethenes. 9. Dithienylperfluorocyclopentenes: a quantum-chemical study, **3**, 381

Bromination of photochromic spironaphthoxazines, **3**, 470

Merocyanine form of photochromic spirooxazines in acid solutions, **7**, 1214

Photochromism of single crystals of arylhydrazide derivatives, **12**, 2471

**Photocyclization**

Photochromic dihetarylethenes. 6. Photochromic derivatives of thieno[3,2-*b*]thiophene, **1**, 110

**Photodecomposition**

Heteroorganic betaines. 6. Structure and reactivity of silicon-containing organophosphorus betaines with the  $^{-}\text{S}-\text{Si}-\text{C}-\text{P}^{+}$  fragment: a DFT study, **5**, 771

Formation and decay of trifluoromethyl radicals during photodecomposition of the long-lived perfluoro-2,4-dimethyl-3-ethylpent-3-yl radical, **12**, 2381

**Photoelectron spectroscopy**

The nature of the super-electron-releasing inductive effect of the silatranyl group and its spectroscopic and chemical consequences (review), **5**, 757

Preparation of sphere-shaped nanoscale carbon nitride polymer, **11**, 2020

**Photoisomerization**

Photochemical investigation of the triplet state of 3,3'-diethylthiacarbocyanine iodide in the presence of DNA, **7**, 1190

**Photoluminescence**

Chemiluminescence during thermolysis of the  $(\text{Ph}_3\text{COOCPh}_3)_n-\text{Ph}_3\text{C}^{\cdot}$  peroxide containing captured triphenylmethyl radical, **7**, 1194

**Photolysis**

Studies of photoinduced addition of water and alcohols to substituted dihydroquinolines, **4**, 673

Synthesis of 5*H*-naphtho[2,3-*c*]phenothiazine-8,13-diones from 1-aryltio-2-azidoanthraquinones, **4**, 678

Intermediates of photolysis of 1,3,2,4-benzodithiadiazines studied by matrix isolation spectroscopy and quantum chemistry, **11**, 2064



**Photooxidation**

Quantum-chemical study of the singlet potential energy surface of the nitrene—dioxygen system, **12**, 2346

**Photopolymerization**

Influence of *o*-benzoquinone nature on initiation of radical polymerization by the *o*-benzoquinone—*tert*-amine system, **12**, 2366

**Photoreaction**

Protonation of 2-quinolythiazoles in the ground and excited states in ethanol, **7**, 1186

ESR spectra of trifluoromethyl radical formed during the solid-phase photodecomposition of long-lived perfluoro-2,4-dimethyl-3-ethylpentyl-3 radicals, **7**, 1198

**Photosensibilization**

Electron transfer coupled with ATP hydrolysis in nitro-genase (review), **10**, 1789

**Photosynthesis**

Catalysis of noncomplementary reactions by transition metals clusters. Kinetic description, **10**, 1833

**Phthalocyanines**

Electrochemical and electrochromic properties of rare-earth element diphthalocyanine complexes, **3**, 396

Ligand oxidation as a method for intramolecular activation of metal complexes (review), **4**, 573

**Phthalonitrile**

Synthesis of 4,5-dihydroxyphthalonitrile, **5**, 919

**Physiological activity**

Synthesis and physiological activity of trialkyl phosphorothioates and trialkyl phosphorodithioates containing fragments of *N*-acylated amino acids, **1**, 147

**Pictet—Spengler reaction**

Synthesis of 1-aryl-1,2,3,4-tetrahydro-9*H*-pyrido[3,4-*b*]indoles (1,2,3,4-tetrahydro- $\beta$ -carbolines) under high pressures, **3**, 560

**Pimelic acid**

EPR study of weak exchange interactions in binuclear copper(II) complexes with salicylaldehyde acyldihydrazones, **5**, 812

 **$\alpha$ -Pinene**

Synthesis of  $\alpha$ -amino oximes and bis- $\alpha$ -amino oximes from the monoterpene hydrocarbons 3-carene and  $\alpha$ -pinene and  $\alpha,\omega$ -diamines, **11**, 2106

**Piperazine**

Synthesis of  $\alpha$ -amino oximes and bis- $\alpha$ -amino oximes from the monoterpene hydrocarbons 3-carene and  $\alpha$ -pinene and  $\alpha,\omega$ -diamines, **11**, 2106

**Piperidine**

2-Polyfluoroalkylchromones. 8. 2-Trifluoromethyl- and 6-nitro-2-trifluoromethylchromones in reactions with amines, **8**, 1426

**Pivalate complexes**

Unusual transformation of the urea molecule giving rise to the NCO<sup>-</sup> anion as a bridging ligand between two Co<sup>II</sup> atoms, **11**, 2251

Destruction of polymeric cobalt(II) trimethylacetate. Synthesis and structures of new complexes Co<sub>9</sub>( $\mu_3$ -OH)<sub>6</sub>( $\mu$ -OCCMe<sub>3</sub>)<sub>12</sub>(OCMe<sub>2</sub>)<sub>4</sub> and Co<sub>6</sub>( $\mu_4$ -O)<sub>2</sub>( $\mu$ -OCCMe<sub>3</sub>)<sub>10</sub>( $\eta$ -HOCCMe<sub>3</sub>)<sub>4</sub>, **12**, 2485

**Plasminogen**

Diffusional transport of urokinase and acyl-urokinase into fibrin and plasma clots: time of contact and fibrinolytic response *in vitro*, **10**, 1885

**Platinum compounds**

Reactions of *N*-phenyl-*o*-semiquinonediimine complexes of nickel and platinum with carbonyl-containing low-valence iron and rhenium compounds, **1**, 142

Oxidative dehydrogenation of *N*-methyl-*o*-phenylenediamine coordinated to the Pd<sup>II</sup> and Pt<sup>II</sup> atoms, **3**, 515

Synthesis and the crystal structures of *N*-(2-nitroxyethyl)isonicotinamide and its complexes with PdCl<sub>2</sub> and PtCl<sub>2</sub> as potential antitumor medicines, **3**, 520

Phosphine  $\sigma$ -sydnonyl complexes of Ni, Pd, and Pt, **3**, 525

The nature of colloidal platinum in aqueous solution: features of catalytic reactions, **4**, 626

Cycloplatinated aryl ketoximes as effective biomimicking catalysts for hydrolysis of esters of phosphorothioic acid, **10**, 1844

Synthesis, molecular structures, and thermal decomposition of heterometallic ( $\pi$ -cyclooctadiene)platinum-bis(tricarbonyliron- $\mu_3$ -chalcogenides)[Fe—Fe], ( $\pi$ -C<sub>8</sub>H<sub>12</sub>)Pt( $\mu_3$ -X)<sub>2</sub>Fe<sub>2</sub>(CO)<sub>6</sub>, where X = S, Se, or Te, **11**, 2215

**Pnictogens**

Mercury and cadmium pnictidehalides: the inverted Zintl phases (review), **3**, 337

**Pnictidehalides**

Mercury and cadmium pnictidehalides: the inverted Zintl phases (review), **3**, 337

 **$\beta$ -Pnictogenovinylaldehydes**

Intramolecular Y←O (Y = N, P, As, Sb, Bi) coordination in organopnictogen compounds: an *ab initio* and DFT study, **11**, 2028

**Polarity**

Possible intramolecular rearrangements of *O*-vinyloximes initiated by N—O bond dissociation: a quantum-chemical analysis, **5**, 764

**Polarizability**

Effect of substituents on ionization potentials of phosphorus compounds. Conjugation in radical cations, **1**, 35

First ionization potentials of amines and electronic effects in their radical cations, **1**, 43

**Polarization thermal microscopy**

Synthesis and magnetic properties of liquid crystalline lanthanide complexes with alkylsulfate counterions, **3**, 488

**Poly(arylene ether ketones)**

Influence of isomerism of difluorobenzophenone on the synthesis and properties of poly(arylene ether ketones), **7**, 1208

**Polychloromethanes**

Transformations of cycloalkanes under the action of organoaluminum compounds and transition metal complexes in the presence of polychloromethanes, **7**, 1326

**Polycondensation**

Influence of isomerism of difluorobenzophenone on the synthesis and properties of poly(arylene ether ketones), **7**, 1208

Intermediates of chemical assembling of oligoorganosiloxanes in hydrolysis of organochlorosilanes (review), **11**, 1998

**Polyethylene oxide**

Complex formation between polyethylene oxide-containing nonionic surfactants and  $\alpha$ - and  $\beta$ -cyclodextrins, **4**, 620

**Polyfluorinated  $\beta$ -diketones**

Reaction of 3*H*-perfluoroalk-2-enes with ammonia, **1**, 155

**Polyfluorinated iminoenamines**

Reaction of 3*H*-perfluoroalk-2-enes with ammonia, **1**, 155

**2-Polyfluoroacylcycloalkanones**

Preparative synthesis of 3-cyano-4-difluoromethyl- and 3-cyano-4-trifluoromethyl-2(1*H*)-pyridones, **4**, 669

**Polyfluoroalkanols**

Phosphorylation of heptafluorobutanol in the presence of metal chloride—ether catalytic systems, **8**, 1457

**Polyfluoroalkylchromones**

2-Polyfluoroalkylchromones. 6. Synthesis of substituted 2-morpholino-2-trifluoromethylchroman-4-ones, **3**, 453

2-Polyfluoroalkylchromones. 8. 2-Trifluoromethyl- and 6-nitro-2-trifluoromethylchromones in reactions with amines, **8**, 1426

2-Polyfluoroalkylchromones. 9. Synthesis and structures of 5-(2-hydroxyaryl)-7-polyfluoroalkyl-1,4,8-triazabicyclo[5.3.0]dec-4-enes, **8**, 1430

**Polyfluoroalkyl-1,3,5-triketones**

Synthesis of bis(polyfluoroalkyl)-1,3,5-triketones, **7**, 1233

**Polyhalomethanes**

Oxidative transformations of cyclohexane, methylcyclopentane, and pentane on treatment with superelectrophiles based on polyhalomethane and aluminum halides, **1**, 81

**Polyhydroxysteroids**

Steroid compounds from the Pacific starfish *Lysastrosoma anthosticta*, **2**, 313

Sulfated steroid compounds from the starfish *Aphelasterias japonica* of the Kuril population, **4**, 724

**Poly-*N*-isopropylacrylamide**

Relationship between the hydration degree of poly-*N*-isopropylacrylamide gel and activity of immobilized  $\alpha$ -chymotrypsin, **10**, 1891

**Polymerization**

The preparation and reactivity of metal-containing monomers. 54. Thermolysis of the acrylamide monomer [Co(CH<sub>2</sub>=CHCONH<sub>2</sub>)<sub>4</sub>(H<sub>2</sub>O)<sub>2</sub>](NO<sub>3</sub>)<sub>2</sub>, **5**, 901

Activation by the Grignard reagent of the bis(2-phenylindenyl)zirconium dichloride—triisobutylaluminum catalytic system for propene polymerization, **9**, 1696

**Polymers**

Hydration of calixarene-containing polymers, **8**, 1379

Preparation of sphere-shaped nanoscale carbon nitride polymer, **11**, 2020

**Polymolecular reaction**

Catalysis of noncomplementary reactions by transition metals clusters. Kinetic description, **10**, 1833

**Polynuclear complexes**

Binuclear and polynuclear transition metal complexes with macrocyclic ligands. 1. Synthesis and the structure of an antiferromagnetic binuclear nickel complex prepared by the reaction of *o*-phenylenediamine with pyrrole-2,5-dicarbaldehyde and nickel pivalate, **12**, 2445

**Polyphosphoric acid**

Amidines: synthesis from *o*-alkenylanilines and cyclization in polyphosphoric acid, **3**, 545

**Polypropylene**

Activation by the Grignard reagent of the bis(2-phenylindenyl)zirconium dichloride—triisobutylaluminum catalytic system for propene polymerization, **9**, 1696

**Polystyrene**

Sulfurization of polymers. 4. Poly(4,5,6,7-tetrathiono-4,5,6,7-tetrahydrobenzothiophene-2,3-diyl) and related structures based on polystyrene and elemental sulfur, **2**, 253

**Polysulfone**

Rapid characterization of ultrafiltration membranes by scanning electron microscopy, **7**, 1320

**Polythermal polarization microscopy**

Synthesis and liquid-crystalline properties of substituted  $\beta$ -aminovinyl ketones and their complexes with copper(II), **5**, 805

**Polytrimethylsilylpropyne**

Polytrimethylsilylpropyne as adsorbent for separation of gases, **2**, 233

Influence of the carrier gas on retention factors of gaseous hydrocarbons on polytrimethylsilylpropyne using capillary gas chromatography, **7**, 1228

**Poly(vinyl alcohol)**

Proteinases immobilized on poly(vinyl alcohol) cryogel: novel biocatalysts for peptide synthesis in organic media, **10**, 1896

**Porphyryns**

Ligand oxidation as a method for intramolecular activation of metal complexes (review), **4**, 573

Influence of the linking chain length on the recombination kinetics of covalently bonded triplet radical pairs and magnetic field effects, **4**, 599

**Potassium compounds**

Influence of isomerism of difluorobenzophenone on the synthesis and properties of poly(arylene ether ketones), **7**, 1208

**Potential energy surface**

Mechanisms of the reactions of propane with CBr<sub>3</sub><sup>+</sup> cation and superelectrophilic complex CBr<sub>4</sub><sup>+</sup> · AlBr<sub>3</sub><sup>-</sup> containing a bromine-centered cationic center: a theoretical study, **1**, 29

Six-dimensional tunneling dynamics of internal rotation in hydrogen peroxide molecule and its isotopomers, **3**, 366

*Ab initio* study of the structure and conformations of 2-fluoroethanol in the ground and lowest excited electronic states, **6**, 945

Multidimensional tunneling dynamics of proton transfer in malonaldehyde molecule and its isotopomers, **7**, 1148

S<sub>1</sub>←S<sub>0</sub> Vibronic spectrum and structure of 2,2-difluoroethanol in the S<sub>1</sub> state, **7**, 1218

Quantum-chemical study of the singlet potential energy surface of the nitrene—dioxygen system, **12**, 2346

**Potential functions of internal rotation**

*Ab initio* study of the structure and conformations of 2-fluoroethanol in the ground and lowest excited electronic states, **6**, 945

**Potential functions of inversion**

*Ab initio* study of the structure and conformations of 2-fluoroethanol in the ground and lowest excited electronic states, **6**, 945

**Potentiometric titration**

Reaction of the acrylic acid and 1-vinylimidazole copolymer with CuCl<sub>2</sub> in aqueous solution, **8**, 1382

**Powder diffraction**

Structure determination from powder diffraction (review), **12**, 2273

**Primary amines**

2-Polyfluoroalkylchromones. 8. 2-Trifluoromethyl- and 6-nitro-2-trifluoromethylchromones in reactions with amines, **8**, 1426

**Propane**

Mechanisms of the reactions of propane with  $\text{CBr}_3^+$  cation and superelectrophilic complex  $\text{CBr}_4^+ \cdot \text{AlBr}_3^-$  containing a bromine-centered cationic center: a theoretical study, **1**, 29

**Propargylamine**

Unusual condensation of propargylamine. Generation of the 1,3-di(propargylimino)propane anion coordinated to the cobalt(III) atom, **11**, 2206

**Propene**

Catalytic properties of chromites with a spinel structure in the oxidation of CO and hydrocarbons and reduction of nitrogen oxides, **12**, 2377

**(S)-Propranolol**

New approach to nonracemic 1-alkylamino-3-aryloxypropan-2-ols belonging to  $\beta$ -blockers *via* cyclic sulfites, **3**, 436

**Propylene**

Activation by the Grignard reagent of the bis(2-phenylindenyl)zirconium dichloride-triisobutylaluminum catalytic system for propene polymerization, **9**, 1696

**Propylthioethynyl azide**

Reaction of alkylthiochloroacetylenes with sodium azide, **4**, 751

**Protein structure**

Dihydrofolate reductase: structural aspects of mechanisms of enzyme catalysis and inhibition (review), **10**, 1733

Relationship between the structure of the protein globule and bioluminescence spectra of firefly luciferase (review), **10**, 1752

Structural investigations of paramagnetic metalloproteins using high-resolution NMR spectroscopy: iron-sulfur and copper proteins (review), **10**, 1762

Structural and functional model of methane hydroxylase of membrane-bound methane monooxygenase from *Methylococcus capsulatus* (Bath), **10**, 1867

**Proteinases**

Proteinases immobilized on poly(vinyl alcohol) cryogel: novel biocatalysts for peptide synthesis in organic media, **10**, 1896

**Proteins**

Micellar enzymology: methodology and technique (review), **10**, 1718

Dihydrofolate reductase: structural aspects of mechanisms of enzyme catalysis and inhibition (review), **10**, 1733

Structural investigations of paramagnetic metalloproteins using high-resolution NMR spectroscopy: iron-sulfur and copper proteins (review), **10**, 1762

Electron transfer coupled with ATP hydrolysis in nitrogenase (review), **10**, 1789

Structural and functional model of methane hydroxylase of membrane-bound methane monooxygenase from *Methylococcus capsulatus* (Bath), **10**, 1867

**"Proton sponges"**

*peri*-Naphthylenediamines. 31. Study of interconversions of 2,3-dihydroperimidines and 1,8-bis(dialkylamino)naphthalenes. Convenient synthesis of 1,2,2,3-tetramethyl-2,3-dihydroperimidine and a monoisopropyl analog of the "proton sponge", **5**, 846

*peri*-Naphthylenediamines. 32. Reactions of 4,5-bis(dimethylamino)-1-naphthyllithium and 4,5-bis(dimethylamino)-1-naphthylmagnesium bromide with electrophilic agents. New representatives of double naphthalene "proton sponges" with the structures of 1,1'-binaphthyl ketone and 1,1'-binaphthylmethanol, **5**, 854

*peri*-Naphthylenediamines. 33. Further studies of the reactions of 1,8-bis(dimethylamino)naphthalene with trifluoroacetic anhydride, **5**, 860

**Proton transfer**

Tautomerization of thiourea dioxide in aqueous solution, **2**, 203

Hydrogen bond in 3-acetyl-4-hydroxycoumarin: X-ray diffraction study and quantum-chemical calculations, **3**, 418

Multidimensional tunneling dynamics of proton transfer in malonaldehyde molecule and its isotopomers, **7**, 1148

**Protonation**

Protonation of 2-quinolythiazoles in the ground and excited states in ethanol, **7**, 1186

Determination of the enantiomeric composition of *N,N*-dimethyl- $\alpha$ -ferrocenylethylamine by  $^1\text{H}$  NMR spectroscopy, **7**, 1323

Protonation and acylation of the heterometallic complexes  $(\mu\text{-H})\text{Os}_3(\mu\text{-O}_2\text{CC}_5\text{H}_4\text{FeCp})(\text{CO})_{10}$  and  $\text{Fe}\{(\mu\text{-O}_2\text{CC}_5\text{H}_4)(\mu\text{-H})\text{Os}_3(\text{CO})_{10}\}_2$ , **12**, 2451

**Proton-donor properties**

Proton-donor properties of  $\text{HCCl}_3$ ,  $\text{HSiCl}_3$ , and  $\text{HGCl}_3$  molecules: a quantum-chemical study, **4**, 740

**Prussian Blue**

Electroanalytical applications of Prussian Blue and its analogs (review), **10**, 1811

**Pseudochirality**

Synthesis of stereoisomeric *d,l* and *meso* forms of *O,O'*-bis(*O,O'*-dialkyl 1-phosphorylbenzyl)phenylphosphonites and -thionophosphonates containing a pseudo-chiral center and determination of their configurations by NMR spectroscopy, **2**, 287

**Pseudo-rotation**

Bis-(2-diphenylphosphinoethyl)cyclopentadienylchlorotlutium: synthesis and dynamic behavior in solution, **7**, 1295

**Pterin 8-oxides**

$\text{S}_\text{N}^{\text{H}}$ -Reactions of 1,2,4-triazine *N*-oxides, pyrazine *N*-oxides, and pterin *N*-oxides with arenethiols, **6**, 1068

**Pyrazine**

Synthesis of quinoxalines fused with triterpenes, ursolic acid and betulin derivatives, **2**, 304

Synthesis and properties of monoimines of  $\alpha$ -diketones, derivatives of 3-imidazoline nitroxides, **5**, 874

**Pyrazine 1-oxides**

$\text{S}_\text{N}^{\text{H}}$ -Reactions of 1,2,4-triazine *N*-oxides, pyrazine *N*-oxides, and pterin *N*-oxides with arenethiols, **6**, 1068

**Pyrazoles**

Reactions of some arenes and pyrazoles in MeCN under conditions of undivided-cell electrolysis, **7**, 1274

**Pyridine**

Reductive mono- and dialylation of the bis(pyridine)dihydropyridyllithium dimer by triallylborane, **6**, 1078

Solid-phase reactions of lead tetraacetate with tertiary cycloalkanol and pyridine, **6**, 1118

**Pyrido[3,2-*b*]indole**

New approach to the functionalization of  $\delta$ -carboline derivatives, **8**, 1449

**Pyridylethylation**

Efficient method for the synthesis of new [2-(alkyl-arylthio)ethyl]pyridines, **3**, 563

**Pyrimido[4,5-*d*]pyrimidine-2,4-dione**

Reaction of 6-amino-1,3-dimethyluracil with hexafluoroacetone and ethyl trifluoropyruvate benzoylimines, **6**, 1113

**Pyrocatechol**

Synthesis of 4,5-dihydroxyphthalonitrile, **5**, 919

**Pyrolysis**

Naphthalene oxidation in supercritical water, **8**, 1481

**Pyrophosphatase**

Some features of hydrolysis of organic and inorganic substrates by *Escherichia coli* inorganic pyrophosphatase in the presence of various activator cations, **10**, 1877

**Pyrophosphate**

Some features of hydrolysis of organic and inorganic substrates by *Escherichia coli* inorganic pyrophosphatase in the presence of various activator cations, **10**, 1877

**Pyrrole-2,5-dicarbalddehyde**

Formation of a tetranuclear nickel(II) complex containing an unusual bridging ligand, **7**, 1336

Binuclear and polynuclear transition metal complexes with macrocyclic ligands. 1. Synthesis and the structure of an antiferromagnetic binuclear nickel complex prepared by the reaction of *o*-phenylenediamine with pyrrole-2,5-dicarbalddehyde and nickel pivalate, **12**, 2445

**Pyroledione**

Chemistry of acyl(imido)ketenes. 6. Synthesis and the molecular structure of ethyl 2-oxo-2,5-dihydrofuro[2,3-*b*]quinoxaline-3-carboxylate, **7**, 1317

**2-Pyrrolidone**

Solvation of complexes with strong symmetric H bonds in the methanesulfonic acid-2-pyrrolidone system, **6**, 1008

**1-Pyrrolines**

Spirocyclohexadienones. 4. Synthesis and dienone-phenolic rearrangement of 1-*R*-3,3-dialkyl-2-azaspiro[4.5]deca-1,6,9-trien-8-ones, **9**, 1648

**1*H*-Pyrrolo[2,3-*d*]pyrimidine**

Reaction of 6-amino-1,3-dimethyluracil with hexafluoroacetone and ethyl trifluoropyruvate benzoylimines, **6**, 1113

**Q****(*R*)-Quadrilure**

Stereodivergent synthesis of chiral low-molecular bioregulators using readily available lipases (review), **11**, 1984

**Quadrupole coupling**

Structure and spectra of 1,3,2-dioxaphospholenes. 1. Microwave spectra of 2-chloro-4,5-dimethyl-1,3,2-dioxaphospholene and its isotopomers in the ground and excited vibrational states, **9**, 1605

**Quantum yield**

Intermediates of photolysis of 1,3,2,4-benzodithiadiazines studied by matrix isolation spectroscopy and quantum chemistry, **11**, 2064

**Quantum-chemical calculations, non-empirical**

Density functional theoretical studies of [2+2] cycloaddition of simple transient silenes and germenes to ethylene, for-

maldehyde, and thioformaldehyde, and vibrational analysis of spectra of reactants and cyclic products, **1**, 20

Exohedral  $\eta^5$ - $\pi$ -complexes of fullerene C<sub>20</sub>, **2**, 180

Quantum-chemical estimates of geometric parameters of free radicals, **2**, 188

Structure and isomerization of heterapentalene compounds containing hypervalent bonds with central nitrogen, phosphorus, or arsenic atom, **2**, 195

The role of intra- and intermolecular hydrogen bonds in the formation of  $\beta$ -cyclodextrin head-to-head and head-to-tail dimers. The results of *ab initio* and semiempirical quantum-chemical calculations, **2**, 206

Activation of C—H bonds in C<sub>1</sub>—C<sub>3</sub> alkanes by titanium(IV) and zirconium(IV) cationic complexes: a DFT study, **3**, 376

Photochromic dihetarylethenes. 9. Dithienylperfluorocyclopentenes: a quantum-chemical study, **3**, 381

Molecular structures of trinitromethane derivatives, **3**, 385

Hydrogen bond in 3-acetyl-4-hydroxycoumarin: X-ray diffraction study and quantum-chemical calculations, **3**, 418

Synthesis and transformations of metallacycles. 24. Zr-Catalyzed cycloaluminum of asymmetrical disubstituted acetylenes, **3**, 484

Proton-donor properties of HCCl<sub>3</sub>, HSiCl<sub>3</sub>, and HGeCl<sub>3</sub> molecules: a quantum-chemical study, **4**, 740

Possible intramolecular rearrangements of *O*-vinyloximes initiated by N—O bond dissociation: a quantum-chemical analysis, **5**, 764

Heteroorganic betaines. 6. Structure and reactivity of silicon-containing organophosphorus betaines with the  $^-S-Si-C-P^+$  fragment: a DFT study, **5**, 771

Solvent effects on the absorption spectrum and recombination kinetics of diphenylcarbonyl oxide, **5**, 793

*Ab initio* study of the structure and conformations of 2-fluoroethanal in the ground and lowest excited electronic states, **6**, 945

Mechanism of formation and monomolecular decomposition of *aci*-nitromethanes: a quantum-chemical study, **6**, 952

*Ab initio* MP2 calculations of the products of acetylene addition to HgCl<sub>2</sub>, **6**, 958

Regioselectivity in the reactions of the acetate ion with electron-deficient arenes, **6**, 1056

Cryosynthesis, structure, and IR spectra of aluminum chloride—nitromethane molecular complexes, **7**, 1159

Vibrational spectra of trinitromethane derivatives, **7**, 1173

S<sub>1</sub>←S<sub>0</sub> Vibronic spectrum and structure of 2,2-difluoroethanal in the S<sub>1</sub> state, **7**, 1218

The nature of the O—O bond in hydroperoxides, **9**, 1539

Equilibrium conformation of dimethylaminodichlorophosphine molecule: the use of the results of quantum-chemical calculations and spectroscopic measurements in the analysis of gas-phase electron diffraction data, **9**, 1550

Molecular structure of carbene analogs (review), **11**, 1903

Intramolecular Y←O (Y = N, P, As, Sb, Bi) coordination in organopnictogen compounds: an *ab initio* and DFT study, **11**, 2028

DFT study of the mechanism of alkane hydrogenolysis by transition metal hydrides. 1. Interaction of silica-supported zirconium hydrides with methane, **11**, 2050

Intermediates of photolysis of 1,3,2,4-benzodithiadiazines studied by matrix isolation spectroscopy and quantum chemistry, **11**, 2064

Binary molecular complexes of silicon tetrafluoride with water, methanol, and dimethyl ether. Quantum-chemical study, **12**, 2316

Induced aromaticity, **12**, 2325

Synthesis and transformations of metallacycles. 27. Quantum-chemical study of the mechanism of styrene catalytic cyclometallation with triethylaluminum in the presence of  $\text{Cp}_2\text{ZrCl}_2$ , **12**, 2336

Quantum-chemical study of the singlet potential energy surface of the nitrene—dioxygen system, **12**, 2346

Binuclear and polynuclear transition metal complexes with macrocyclic ligands. 1. Synthesis and the structure of an antiferromagnetic binuclear nickel complex prepared by the reaction of *o*-phenylenediamine with pyrrole-2,5-dicarbaldehyde and nickel pivalate, **12**, 2445

### Quantum-chemical studies

Mechanisms of the reactions of propane with  $\text{CBr}_3^+$  cation and superelectrophilic complex  $\text{CBr}_4^+ \cdot \text{AlBr}_3^-$  containing a bromine-centered cationic center: a theoretical study, **1**, 29

Tautomerization of thiourea dioxide in aqueous solution, **2**, 203

The role of intra- and intermolecular hydrogen bonds in the formation of  $\beta$ -cyclodextrin head-to-head and head-to-tail dimers. The results of *ab initio* and semiempirical quantum-chemical calculations, **2**, 206

Effect of medium on the rate constant of decarbonylation of phenylacetyl radical, **2**, 237

The reactivity of *tert*-butoxyl radicals in reactions of hydrogen abstraction and  $\beta$ -elimination, **2**, 241

Intramolecular electrophilic rearrangements in saturated acyclic systems. Reactivity of the zwitterion derived from triisopropylphosphine and ethyl 2-cyanoacrylate with respect to different types of electrophiles, **2**, 279

Crystal and electronic structure of  $\text{Ni}_3\text{Bi}_2\text{S}_2$  (parkerite), **3**, 353

Six-dimensional tunneling dynamics of internal rotation in hydrogen peroxide molecule and its isotopomers, **3**, 366

Electrochemical and electrochromic properties of rare-earth element diphthalocyanine complexes, **3**, 396

Fulleropyrrolidine-containing sterically hindered phenol. Synthesis, structure, and properties, **4**, 607

Interaction of chlorine dioxide with nitroxyl radicals, **4**, 614

Mechanism of formation and monomolecular decomposition of *aci*-nitromethanes: a quantum-chemical study, **6**, 952

Regioselectivity in the reactions of the acetate ion with electron-deficient arenes, **6**, 1056

Hydration of calixarene-containing polymers, **8**, 1379

Conformations of *Z*- and *E*-isomers of some chiral (1*R*,4*R*)-2-arylidene-*p*-menthan-3-ones, **9**, 1596

Spirocyclohexadienones. 4. Synthesis and dienone-phenolic rearrangement of 1-*R*-3,3-dialkyl-2-azaspiro[4.5]deca-1,6,9-trien-8-ones, **9**, 1648

Electrophilic aromatic trichloromethylation: intermediates and products, **11**, 2046

### Quasichemical approximation

Characteristic features of phase diagrams describing condensation of adsorbate in narrow pores, **1**, 50

Concentration relationships of coefficients of self-diffusion and viscosity of the adsorbate in narrow slit-like pores, **9**, 1572

### Quasi-crystals

Modular design of icosahedral metal clusters (review), **1**, 1

### Quasiphosphonium salts

Efficient method for the synthesis of 1,2,3,8-tetrahydroindeno[2,1-*b*]phospholes and their derivatives, **2**, 276

### Quasi-steady-state processes

Method for the calculation of the species balance in the reaction zone, **7**, 1166

### Quaternization

1-Methyl-2(3,4)-(1-vinylpyrrol-2-yl)pyridinium iodides: some structural features revealed by  $^1\text{H}$  and  $^{13}\text{C}$  NMR spectroscopy, **3**, 551

### Quinoline

Allylmetallation of benzoazaheterocycles with allylic derivatives of zinc. Synthesis of 1,4-ethano-2,3-dihydroisoquinolines and allylated heterocycles, **11**, 2172

### 2-Quinolylthiazoles

Protonation of 2-quinolylthiazoles in the ground and excited states in ethanol, **7**, 1186

### *o*-Quinone

Paramagnetic metal chelates of an *o*-quinone derivative of fullerene with Mn and Re carbonyls, **3**, 566

### Quinoxalines

Synthesis of quinoxalines fused with triterpenes, ursolic acid and betulin derivatives, **2**, 304

Synthesis and properties of monoimines of  $\alpha$ -diketones, derivatives of 3-imidazoline nitroxides, **5**, 874

Structures of condensation products of *ortho*-aminophenols with ninhydrin, **6**, 1064

Allylmetallation of benzoazaheterocycles with allylic derivatives of zinc. Synthesis of 1,4-ethano-2,3-dihydroisoquinolines and allylated heterocycles, **11**, 2172

### Quinoxalones

Nucleophilic ring-opening of the azole and azine moieties in 6-nitro-1,2,4-triazolo[1,5-*a*]pyrimidin-7-ones, **4**, 682

Reactions of 1-aryl(alkyl)-3-ethoxalyl-5,6,7,8-tetrafluoro-1,4-dihydrocinnolin(quinolin)-4-ones with aromatic dinucleophiles, **4**, 689

## R

### Radical anions

Fulleropyrrolidine-containing sterically hindered phenol. Synthesis, structure, and properties, **4**, 607

### Radical cation

Effect of substituents on ionization potentials of phosphorus compounds. Conjugation in radical cations, **1**, 35

First ionization potentials of amines and electronic effects in their radical cations, **1**, 43

### Radical pair

Influence of *o*-benzoquinone nature on initiation of radical polymerization by the *o*-benzoquinone—*tert*-amine system, **12**, 2366

### Radicals

Exohedral  $\eta^5$ - $\pi$ -complexes of fullerene  $\text{C}_{20}$ , **2**, 180

Effect of medium on the rate constant of decarbonylation of phenylacetyl radical, **2**, 237

The rate constants for the addition of radicals  $\text{CCl}_3\text{CH}_2\cdot\text{CHR}$  ( $\text{R} = \text{Ph}, \text{CO}_2\text{Me}, \text{CONC}_4\text{H}_8$ ) to some unsaturated compounds, **3**, 557

Ligand oxidation as a method for intramolecular activation of metal complexes (review), **4**, 573

Influence of the linking chain length on the recombination kinetics of covalently bonded triplet radical pairs and magnetic field effects, **4**, 599

Thioethynyl esters of phosphorus acids (review), **6**, 925

Determination of enthalpies of formation of organic free radicals based on bond dissociation energies. 4. Alkyl-substituted derivatives of phenyl and benzyl, **6**, 963

Reactions of photogenerated fluorine atoms with molecules trapped in solid argon. 4. Spectroscopic characteristics of  $\beta\text{-C}_2\text{H}_2\text{F}\cdot$  radicals generated in reactions of mobile F atoms with  $\text{C}_2\text{H}_2$  molecules trapped in solid argon, **6**, 989

Chemiluminescence during thermolysis of the  $(\text{Ph}_3\text{COOCPh}_3)_n\text{-Ph}_3\text{C}\cdot$  peroxide containing captured triphenylmethyl radical, **7**, 1194

ESR spectra of trifluoromethyl radical formed during the solid-phase photodecomposition of long-lived perfluoro-2,4-dimethyl-3-ethylpentyl-3 radicals, **7**, 1198

The determination of enthalpies of formation of organic free radicals from bond dissociation energies. 5. Organosulfur radicals, **9**, 1570

#### Raman spectroscopy

Amino-substituted *gem*-diphosphonic acids: structures of complexes with divalent metal cations in aqueous solutions, **4**, 697

Vibrational spectra of trinitromethane derivatives, **7**, 1173

Equilibrium conformation of dimethylaminodichlorophosphine molecule: the use of the results of quantum-chemical calculations and spectroscopic measurements in the analysis of gas-phase electron diffraction data, **9**, 1550

Thermodynamic properties and valence-force field of alkanethiols and dialkyl sulfides, **9**, 1563

Preparation of sphere-shaped nanoscale carbon nitride polymer, **11**, 2020

Thermodynamic properties and valence—power field of thyl radicals, **12**, 2310

#### Raney nickel

Reduction of 3-(2-hydroxyethyl)-1,5-dinitro-3-azabicyclo[3.3.1]non-6-ene, **2**, 265

#### Rare-earth metals compounds

Electrochemical and electrochromic properties of rare-earth element diphthalocyanine complexes, **3**, 396

Synthesis and spectral and electrochemical properties of hexadecamethyl-substituted diphthalocyanines of rare-earth metals, **7**, 1299

#### Rate constants

Effect of medium on the rate constant of decarbonylation of phenylacetyl radical, **2**, 237

Cetylpyridinium bromide-based oil-in-water microemulsions as a medium for hydrolysis of esters of phosphorus acids in the presence of primary amines, **2**, 245

The rate constants for the addition of radicals  $\text{CCl}_3\text{CH}_2\cdot\text{CHR}$  ( $\text{R} = \text{Ph}, \text{CO}_2\text{Me}, \text{CONC}_4\text{H}_8$ ) to some unsaturated compounds, **3**, 557

Naphthalene oxidation in supercritical water, **8**, 1481

Diffusional transport of urokinase and acyl-urokinase into fibrin and plasma clots: time of contact and fibrinolytic response *in vitro*, **10**, 1885

Reactivity of esters of 2-cyanoacrylic acid toward some free radicals, **12**, 2356

#### Reaction mechanisms

Regioselectivity in the reactions of the acetate ion with electron-deficient arenes, **6**, 1056

The role of metal-oxygen intermediates in biological and chemical monooxygenation of alkanes (review), **10**, 1795

Organophosphate hydrolase — an enzyme catalyzing degradation of phosphorus-containing toxins and pesticides (review), **10**, 1826

Kinetics and mechanism of styrene hydrocarboalkoxylation catalyzed by  $\text{Pd}^0$  complex in the presence of toluenesulfonic acid, **10**, 1839

Electrophilic aromatic trichloromethylation: intermediates and products, **11**, 2046

DFT study of the mechanism of alkane hydrogenolysis by transition metal hydrides. 1. Interaction of silica-supported zirconium hydrides with methane, **11**, 2050

Synthesis and transformations of metallocycles. 27. Quantum-chemical study of the mechanism of styrene catalytic cyclometallation with triethylaluminum in the presence of  $\text{Cp}_2\text{ZrCl}_2$ , **12**, 2336

#### Reaction zone

Method for the calculation of the species balance in the reaction zone, **7**, 1166

#### Reactivity

The reactivity of *tert*-butoxyl radicals in reactions of hydrogen abstraction and  $\beta$ -elimination, **2**, 241

Heteroorganic betaines. 6. Structure and reactivity of silicon-containing organophosphorus betaines with the  $\text{-S-Si-C-P}^+$  fragment: a DFT study, **5**, 771

Thioethynyl esters of phosphorus acids (review), **6**, 925

Reactivity of benzenetricarbonylchromium derivatives under conditions of dissociative ionization in the gas phase, **6**, 970

The reactivity of phosphonic esters in aqueous micellar solutions of cationic surfactants, **7**, 1181

Metal-induced B—H activation in  $\text{Cp}^*\text{Rh}$ ,  $\text{Cp}^*\text{Ir}$ , (*p*-cymene) $\text{Ru}$ , and (*p*-cymene) $\text{Os}$  half-sandwich complexes containing the 1,2-dicarba-*closo*-dodecaborane(12)-1,2-dichalcogenolato ligand (review), **9**, 1518

Reduction of nitrosoarene ligands in binuclear palladium(II) complexes, **9**, 1689

Reactivity of esters of 2-cyanoacrylic acid toward some free radicals, **12**, 2356

Silylation of  $\gamma,\gamma$ -bis(alkoxycarbonyl)-substituted aliphatic nitro compounds: synthesis of *N,N*-bis(trimethylsilyloxy)aminocyclopropanes, **12**, 2433

#### Rearrangements

Possible intramolecular rearrangements of *O*-vinyloximes initiated by N—O bond dissociation: a quantum-chemical analysis, **5**, 764

Intramolecular electrophilic rearrangements in saturated acyclic systems. Reactions of bis-carbanions with isocyanates, **5**, 838

$\text{Rh}_2(\text{OAc})_4$ -Catalyzed reaction of 1,3-dioxanes with methyl diazoacetate, **5**, 865

Cascade rearrangement in the reaction of methyl trifluoropyruvate sulfonylimines with terminal alkynes, **7**, 1330

New approach to the functionalization of  $\delta$ -carboline derivatives, **8**, 1449

New chlorinated cyclopentenones prepared from hexachlorocyclopentadiene: synthesis, chemical properties, and application in the synthesis (review), **9**, 1489

Spirocyclohexadienones. 4. Synthesis and dienone-phenolic rearrangement of 1-R-3,3-dialkyl-2-azaspiro[4.5]deca-1,6,9-trien-8-ones, **9**, 1648

Mass spectra of new groups of functionalized heterocycles. 4. 1-Alkyl-2-(alkylthio)pyrroles, **12**, 2390

### Receptors

Chemical aspects of influence of medical drugs on organism functions (review), **8**, 1356

### Recombination

Solvent effects on the absorption spectrum and recombination kinetics of diphenylcarbonyl oxide, **5**, 793

### Recyclization

*peri*-Naphthylenediamines. 31. Study of interconversions of 2,3-dihydroperimidines and 1,8-bis(dialkylamino)naphthalenes. Convenient synthesis of 1,2,2,3-tetramethyl-2,3-dihydroperimidine and a monoisopropyl analog of the "proton sponge", **5**, 846

Benzylfuran in the synthesis of benzo-annelated heterocycles (review), **9**, 1510

### Redox potentials

Relationship between reduction potentials and electron affinities of fullerenes and their derivatives, **9**, 1593

### Redox properties

Sulfurization of polymers. 4. Poly(4,5,6,7-tetrathiono-4,5,6,7-tetrahydrobenzothiophene-2,3-diyl) and related structures based on polystyrene and elemental sulfur, **2**, 253

Molecular electrochemistry of hydrofullerenes  $C_{70}H_{36-46}$ , **6**, 996

Electrochemical study of redox properties of 2,3,4,5-tetraphenyl-1-heterocyclopenta-2,4-dienes  $Ph_4C_4ER^1R^2$  (E = Si, Ge, Sn). A new method for generation of tetraphenylgermole dianion, **11**, 2071

### Redox reactions

Thioethynyl esters of phosphorus acids (review), **6**, 925

On the coupled oxidation-reduction mechanism of molecular nitrogen fixation, **11**, 2054

Electron transfer-induced replacement of carbonyl ligands in cobalt clusters, **12**, 2483

### Redox transformations

Reactions of *N*-phenyl-*o*-semiquinonediimine complexes of nickel and platinum with carbonyl-containing low-valence iron and rhenium compounds, **1**, 142

### Redox transitions

Electrochemical and electrochromic properties of rare-earth element diphthalocyanine complexes, **3**, 396

### Reduction

Reduction of 3-(2-hydroxyethyl)-1,5-dinitro-3-azabicyclo[3.3.1]non-6-ene, **2**, 265

A tandem of the Cornforth rearrangements of 4-(1,2,3-triazol-1-yl)iminomethyl-1,2,3-thiadiazole, **2**, 268

Efficient method for the synthesis of 1,2,3,8-tetrahydroindeno[2,1-*b*]phospholes and their derivatives, **2**, 276

Selective reduction of the acyl group in cyclic  $\alpha$ -acyl- $\beta$ -dicarbonyl compounds with sodium cyanoborohydride. Efficient synthesis of cyclic  $\alpha$ -alkyl- $\beta$ -dicarbonyl compounds, **2**, 324

Efficient method for the synthesis of new [2-(alkyl-arylthio)ethyl]pyridines, **3**, 563

Fulleropyrrolidine-containing sterically hindered phenol. Synthesis, structure, and properties, **4**, 607

The nature of colloidal platinum in aqueous solution: features of catalytic reactions, **4**, 626

Optical spectra of Pd-561 nanoclusters in aqueous solutions, **5**, 809

*peri*-Naphthylenediamines. 31. Study of interconversions of 2,3-dihydroperimidines and 1,8-bis(dialkylamino)naphthalenes. Convenient synthesis of 1,2,2,3-tetramethyl-2,3-dihydroperimidine and a monoisopropyl analog of the "proton sponge", **5**, 846

*peri*-Naphthylenediamines. 32. Reactions of 4,5-bis(dimethylamino)-1-naphthyllithium and 4,5-bis(dimethylamino)-1-naphthylmagnesium bromide with electrophilic agents. New representatives of double naphthalene "proton sponges" with the structures of 1,1'-binaphthyl ketone and 1,1'-binaphthylmethanol, **5**, 854

Molecular electrochemistry of hydrofullerenes  $C_{70}H_{36-46}$ , **6**, 996

Synthesis of a C(9)—C(13) fragment of acutiphycin from levoglucosan, **6**, 1101

Reduction of nitrosoarene ligands in binuclear palladium(II) complexes, **9**, 1689

Structural investigations of paramagnetic metalloproteins using high-resolution NMR spectroscopy: iron-sulfur and copper proteins (review), **10**, 1762

Electron transfer coupled with ATP hydrolysis in nitro-genase (review), **10**, 1789

Heterometallic zirconocene(III) aluminum hydride complex  $(Cp_2ZrH)_2AlCl_2 \cdot C_4H_8O_2 \cdot C_6H_6$ , **11**, 2200

Spectral study of reactions of  $La@C_{82}$  and  $Y@C_{82}$  with amino-containing solvents, **11**, 2242

Catalytic properties of chromites with a spinel structure in the oxidation of CO and hydrocarbons and reduction of nitrogen oxides, **12**, 2377

Nitro group substitution in 2,4,6-trinitrotoluene under the action of arenethiols and transformations of the reaction products, **12**, 2406

### Reduction potentials

Relationship between reduction potentials and electron affinities of fullerenes and their derivatives, **9**, 1593

### Reductive amination

Fluorescent-labeled derivatives of dolichyl phosphate. Analogs of dolichyl phosphate with the 2-aminopyridine residue at the  $\omega$ -end of the chain, **3**, 531

Derivatives of dolichyl phosphate with fluorescent label. Analogs of dolichyl phosphate with different lengths of isoprene chain, containing the (1-naphthyl)amino group in the  $\omega$ -fragment, **11**, 2221

### Reformatsky reaction

Stereoselective dimerization of chiral  $\alpha$ -bromoamides promoted by  $Fe(CO)_5$ , **3**, 548

Synthetic approaches to homochiral bicyclo[5.2.1]decenes based on *d*-camphor, **4**, 654

**Regioisomerism**

Spin-spin coupling constant  $^3J_{H,F}$  of the 1,1,2,2-tetrafluoroethyl group as a useful tool for recognition of regioisomeric and tautomeric pairs of organofluoric compounds, **7**, 1223

Synthesis of nine-, ten-, and fifteen-membered alkenolides by the oxidative cleavage of the bridging C=C bond in 2-oxabicycloalkenes, **11**, 2149

**Regioselectivity**

Regioselective replacement of nitro groups in 2,4,6-trinitrotoluene under the action of alkanethiols. Synthesis of *ortho*-(alkylthio)-substituted nitrotoluenes and their oxidation to sulfoxides and sulfones, **2**, 261

Investigation of the regioselectivity of alkylation of 3-nitropyridin-2(1*H*)-ones, **3**, 460

Synthesis of 4,6-dinitro-3-*R*-benzo[*d*]isoxazoles and their transformations under the action of nucleophiles, **3**, 464

Efficient method for the synthesis of new [2-(alkyl-arylthio)ethyl]pyridines, **3**, 563

Regiochemistry of the reactions of phenylenedioxytrichlorophosphorane with phenylacetylene and propargyl chloride in the presence of benzyltrimethylammonium chloride, **4**, 745

Regioselectivity in the reactions of the acetate ion with electron-deficient arenes, **6**, 1056

Synthesis of 4,5-dihydrothiazole derivatives by the reaction of perfluoro-2-methylpent-2-en-3-yl isothiocyanate with ambident N,O- and N,S-nucleophiles, **6**, 1072

Synthesis of a C(9)—C(13) fragment of acutiphycin from levoglucosan, **6**, 1101

Regioselective hydrogen—deuterium exchange in the [B<sub>10</sub>H<sub>10</sub>]<sup>2-</sup> anion. Syntheses of [1,10-B<sub>10</sub>H<sub>8</sub>D<sub>2</sub>]<sup>2-</sup> and [2,3,4,5,6,7,8,9-B<sub>10</sub>H<sub>2</sub>D<sub>8</sub>]<sup>2-</sup>, **6**, 1115

Metal-induced B—H activation in Cp\*Rh, Cp\*Ir, (*p*-cymene)Ru, and (*p*-cymene)Os half-sandwich complexes containing the 1,2-dicarba-*closo*-dodecaborane(12)-1,2-dichalcogenolato ligand (review), **9**, 1518

Electrophilic substitution in eleven-vertex metallacarborane 1,2,4-CpCoC<sub>2</sub>B<sub>8</sub>H<sub>10</sub>, **9**, 1683

**Regiospecificity**

Nitro group substitution in 2,4,6-trinitrotoluene under the action of arenethiols and transformations of the reaction products, **12**, 2406

**Relationships "structure—property"**

Thermodynamic properties and valence-force field of alkanethiols and dialkyl sulfides, **9**, 1563

The determination of enthalpies of formation of organic free radicals from bond dissociation energies. 5. Organosulfur radicals, **9**, 1570

**Relaxation**

Anomalous line broadening in the ESR spectra of copper(II) dithizonate, **3**, 413

**Replacement**

Regioselective replacement of nitro groups in 2,4,6-trinitrotoluene under the action of alkanethiols. Synthesis of *ortho*-(alkylthio)-substituted nitrotoluenes and their oxidation to sulfoxides and sulfones, **2**, 261

Electron transfer-induced replacement of carbonyl ligands in cobalt clusters, **12**, 2483

**Resonance effect**

Effect of substituents on ionization potentials of phosphorus compounds. Conjugation in radical cations, **1**, 35

First ionization potentials of amines and electronic effects in their radical cations, **1**, 43

**Retro-Favorsky reaction**

Specific features of the chemical behavior of acetylenic derivatives of benzocrown ethers, **5**, 868

**Reviews**

Modular design of icosahedral metal clusters (review), **1**, 1

Mercury and cadmium pnictidehalides: the inverted Zintl phases (review), **3**, 337

Ligand oxidation as a method for intramolecular activation of metal complexes (review), **4**, 573

The nature of the super-electron-releasing inductive effect of the silatranyl group and its spectroscopic and chemical consequences (review), **5**, 757

Thioethynyl esters of phosphorus acids (review), **6**, 925

Thermodynamics of copper, silver, gold, and mercury acetylenides (review), **7**, 1121

Structures and conformational behavior of phosphorothioites and their complexes with transition metals obtained from X-ray diffraction analysis (review), **7**, 1130

Stereochemistry of optically active compounds. Problems and prospects (review), **8**, 1339

Chemical aspects of influence of medical drugs on organism functions (review), **8**, 1356

New chlorinated cyclopentenones prepared from hexachlorocyclopentadiene: synthesis, chemical properties, and application in the synthesis (review), **9**, 1489

Benzylfuran in the synthesis of benzo-annelated heterocycles (review), **9**, 1510

Metal-induced B—H activation in Cp\*Rh, Cp\*Ir, (*p*-cymene)Ru, and (*p*-cymene)Os half-sandwich complexes containing the 1,2-dicarba-*closo*-dodecaborane(12)-1,2-dichalcogenolato ligand (review), **9**, 1518

Enzyme active sites: bioinformatics, architecture, and mechanisms of action (review), **10**, 1709

Micellar enzymology: methodology and technique (review), **10**, 1718

Dihydrofolate reductase: structural aspects of mechanisms of enzyme catalysis and inhibition (review), **10**, 1733

Relationship between the structure of the protein globule and bioluminescence spectra of firefly luciferase (review), **10**, 1752

Structural investigations of paramagnetic metalloproteins using high-resolution NMR spectroscopy: iron-sulfur and copper proteins (review), **10**, 1762

Electron transfer coupled with ATP hydrolysis in nitrogenase (review), **10**, 1789

The role of metal-oxygen intermediates in biological and chemical monooxygenation of alkanes (review), **10**, 1795

Electroanalytical applications of Prussian Blue and its analogs (review), **10**, 1811

Environmental biotechnology: a tandem of biocatalytic and engineering approaches (review), **10**, 1818

Organophosphate hydrolase — an enzyme catalyzing degradation of phosphorus-containing toxins and pesticides (review), **10**, 1826



- Molecular structure of carbene analogs (review), **11**, 1903
- Spin chemistry of short-lived intermediates in the reactions of germanorbornadiene derivatives and digermabicyclooctadiene (review), **11**, 1916
- Electrochemical activation of freons using electron transfer mediators (review), **11**, 1929
- Silylation as a new strategy of the use of aliphatic nitro compounds in organic synthesis (review), **11**, 1936
- New potentialities of electrophilic addition in the assembly of polyfunctional compounds from simple precursors (review), **11**, 1949
- Cation-dependent pericyclic reactions of crown-containing photochromic compounds (review), **11**, 1970
- Stereodivergent synthesis of chiral low-molecular bio-regulators using readily available lipases (review), **11**, 1984
- Intermediates of chemical assembling of oligoorganosiloxanes in hydrolysis of organochlorosilanes (review), **11**, 1998
- Single step, solvent-free processes: examples and prospects (review), **11**, 2010
- Energochemical technologies: energy and bulk/basic chemicals in a single process (review), **11**, 2015
- Dubinin's theory and its contribution to adsorption science (review), **12**, 2265
- Structure determination from powder diffraction (review), **12**, 2273
- Rhaposerin**  
Migration of the *O*-acetyl group in the acetonation of guaianolide rhaposerin, **12**, 2459
- Rhaserin**  
15-*O*-Deacetyl-rhaposerin and rhaserin — new components of a lactone mixture from *Rhaponticum serratuloides*, **3**, 537
- Rhenium compounds**  
Reactions of *N*-phenyl-*o*-semiquinonediimine complexes of nickel and platinum with carbonyl-containing low-valence iron and rhenium compounds, **1**, 142
- Synthesis of the gold-dirhenium ferrocenylacetylde cluster. The crystal structure of  $\text{Re}_2(\mu\text{-C}\equiv\text{CFC})\{\text{Au}(\text{PPh}_3)\}(\text{CO})_8$ , **12**, 2441
- Rhodacarboranes**  
Synthesis and stereochemistry of diastereomeric *closo*-( $\pi,\sigma$ -dicyclopentenyl)rhodacarboranes with the agostic C—H...Rh bond, **3**, 504
- Simple and efficient synthesis of *closo*-rhoda- and *closo*-iridacarboranes with  $\pi$ -ligands based on cyclic dienes, **9**, 1702
- Rhodium compounds**  
Synthesis and stereochemistry of diastereomeric *closo*-( $\pi,\sigma$ -dicyclopentenyl)rhodacarboranes with the agostic C—H...Rh bond, **3**, 504
- Asymmetric transfer hydrogenation of ketones catalyzed by rhodium and iridium complexes with chiral bidentate Schiff's bases, **4**, 734
- $\text{Rh}_2(\text{OAc})_4$ -Catalyzed reaction of 1,3-dioxanes with methyl diazoacetate, **5**, 865
- Synthesis of cavity systems by cyclophosphorylation of 1,7-dihydroxynaphthalene with phosphorous triamides, **5**, 923
- Synthesis of dicationic triple-decker complexes with a central *B*-cyclohexyl-substituted borole ligand, **7**, 1332
- Metal-induced B—H activation in  $\text{Cp}^*\text{Rh}$ ,  $\text{Cp}^*\text{Ir}$ , (*p*-cymene)Ru, and (*p*-cymene)Os half-sandwich complexes containing the 1,2-dicarba-*closo*-dodecaborane(12)-1,2-dichalcogenolato ligand (review), **9**, 1518
- Simple and efficient synthesis of *closo*-rhoda- and *closo*-iridacarboranes with  $\pi$ -ligands based on cyclic dienes, **9**, 1702
- Transformations of the chiral diphosphine rhodium catalyst [(1,5-COD)Rh(–)R,R-DIOP]<sup>+</sup>CF<sub>3</sub>SO<sub>3</sub><sup>–</sup> under conditions of hydrogenation, **10**, 1855
- Enantioselective hydrogenation in the presence of the rhodium(II) complex with (+)-4*S*,5*S*-*N*<sup>4</sup>,*N*<sup>5</sup>,*N*<sup>5</sup>,2,2-hexamethyl-1,3-dioxolane-4,5-dimethaneamine, **10**, 1860
- First attempts at differential diastereoselection in catalytic reactions of *N*-chirally substituted dirhodium(II) tetrakis[methyl 2-oxoimidazolidine-4(*S*)-carboxylates] with diazoacetates, **11**, 2156
- Rietveld method**  
Structure determination from powder diffraction (review), **12**, 2273
- Ritter reaction**  
Spirocyclohexadienones. 4. Synthesis and dienone-phenolic rearrangement of 1-*R*-3,3-dialkyl-2-azaspiro[4.5]deca-1,6,9-trien-8-ones, **9**, 1648
- Rotamers**  
Conformations of *Z*- and *E*-isomers of some chiral (1*R*,4*R*)-2-arylidene-*p*-menthan-3-ones, **9**, 1596
- Rotation barriers**  
Electron density distribution in vanadocene ( $\eta^5\text{-C}_5\text{H}_5$ )<sub>2</sub>V and mixed metallocenes ( $\eta^5\text{-C}_5\text{H}_5$ )M( $\eta^5\text{-C}_7\text{H}_7$ ) (M = Ti, V, or Cr) and ( $\eta^5\text{-C}_5\text{H}_5$ )Ti( $\eta^8\text{-C}_8\text{H}_8$ ). Effect of the nature of the cyclic ligand on the character of the M—( $\pi$ -ligand) bond, **1**, 130
- Rotational constants**  
Structure and spectra of 1,3,2-dioxaphospholenes. 1. Microwave spectra of 2-chloro-4,5-dimethyl-1,3,2-dioxaphospholene and its isotopomers in the ground and excited vibrational states, **9**, 1605
- Rotational mobility**  
Magnetic parameters and rotational mobility of the  $\equiv\text{SiON}(\text{O}^{\cdot})\text{CX}_3$  nitroxides (X = H, D) grafted on silica surface, **12**, 2384
- Ruthenacarborane**  
Reaction of *exo-nido*-ruthenacarborane [Cl(Ph<sub>3</sub>P)<sub>2</sub>Ru]-5,6,10-( $\mu\text{-H}$ )<sub>3</sub>-10-H-7,8-C<sub>2</sub>B<sub>9</sub>H<sub>8</sub> with bromine, **11**, 2245
- Ruthenium compounds**  
Synthesis of dicationic triple-decker complexes with a central *B*-cyclohexyl-substituted borole ligand, **7**, 1332
- Metal-induced B—H activation in  $\text{Cp}^*\text{Rh}$ ,  $\text{Cp}^*\text{Ir}$ , (*p*-cymene)Ru, and (*p*-cymene)Os half-sandwich complexes containing the 1,2-dicarba-*closo*-dodecaborane(12)-1,2-dichalcogenolato ligand (review), **9**, 1518
- Crystal and molecular structures of salts of the secondary permethylmetallocenylmethyl cations ( $\text{C}_5\text{Me}_5\text{MC}_5\text{Me}_4\text{CHR}$ )<sup>+</sup>X<sup>–</sup> (M = Ru, Os; R = Ph, C<sub>6</sub>F<sub>5</sub>; X = BF<sub>4</sub>, PF<sub>6</sub>), **9**, 1616
- Electrochemical analysis of the coordination sphere of ruthenium(II) as electron transfer mediator in glucose oxidase catalysis in aqueous solutions, **10**, 1849
- Diastereoselectivity of the formation of planar chiral ruthenocenol in reactions of chiral tertiary phosphines with the ( $\eta^4$ -cyclopentadienone)( $\eta^5$ -cyclopentadienyl)ruthenium cation, **11**, 2212

## S

**Salicylaldehyde**

EPR study of weak exchange interactions in binuclear copper(II) complexes with salicylaldehyde acyldihydrazones, **5**, 812

**Salts of chiral 2-amino-2'-hydroxy-1,1'-binaphthyls**

Asymmetric Michael reaction of diethyl malonate with crotonaldehyde catalyzed by chiral aminocarboxylates, amino alcoholates, and amino phenolates, **9**, 1620

**Sandwich compounds**

Exohedral  $\eta^5$ - $\pi$ -complexes of fullerene C<sub>20</sub>, **2**, 180

Synthesis of dicationic triple-decker complexes with a central *B*-cyclohexyl-substituted borole ligand, **7**, 1332

**Saponins**

Secondary metabolites of *Astragalus danicus* Retz. and *A. inopinatus* Boriss., **6**, 1107

**Sarcodictyines**

(+)- $\delta$ -Cadinol as a promising starting compound in the synthesis of eleuthesides, **9**, 1699

**Scanning electron microscopy**

Rapid characterization of ultrafiltration membranes by scanning electron microscopy, **7**, 1320

**Schiff's bases**

Asymmetric transfer hydrogenation of ketones catalyzed by rhodium and iridium complexes with chiral bidentate Schiff's bases, **4**, 734

Asymmetric synthesis of (*S*)- and (*R*)- $\alpha$ -methylserine based on the chiral recyclable reagent (*S*)-*N*-(2-benzoylphenyl)-1-benzylpyrrolidine-2-carboxamide, **6**, 1037

Binuclear and polynuclear transition metal complexes with macrocyclic ligands. 1. Synthesis and the structure of an antiferromagnetic binuclear nickel complex prepared by the reaction of *o*-phenylenediamine with pyrrole-2,5-dicarbaldehyde and nickel pivalate, **12**, 2445

**Sebacic acid**

EPR study of weak exchange interactions in binuclear copper(II) complexes with salicylaldehyde acyldihydrazones, **5**, 812

**Secondary alcohols**

Spirocyclohexadienones. 4. Synthesis and dienone-phenolic rearrangement of 1-*R*-3,3-dialkyl-2-azaspiro[4.5]deca-1,6,9-trien-8-ones, **9**, 1648

**Secondary amines**

2-Polyfluoroalkylchromones. 8. 2-Trifluoromethyl- and 6-nitro-2-trifluoromethylchromones in reactions with amines, **8**, 1426

**Sedimentation analysis**

Micellar enzymology: methodology and technique (review), **10**, 1718

**Selective oxidation**

Reactions of chlorine dioxide with organic compounds. Selective oxidation of sulfides to sulfoxides by chlorine dioxide, **3**, 432

**Selectivity**

Polytrimethylsilylpropyne as adsorbent for separation of gases, **2**, 233

Selective reduction of the acyl group in cyclic  $\alpha$ -acyl- $\beta$ -dicarbonyl compounds with sodium cyanoborohydride. Efficient synthesis of cyclic  $\alpha$ -alkyl- $\beta$ -dicarbonyl compounds, **2**, 324

Hydrogenation of CO<sub>2</sub> conjugated with dehydrogenation of cyclohexane over an intermetallic catalyst, **7**, 1201

**Selenazonaphthyridine**

Synthetic potential of substituted 7-alkylseleno-1,4-dihydro-1,6-naphthyridines, **1**, 122

**Selenium compounds**

Metal-induced B—H activation in Cp\*Rh, Cp\*Ir, (*p*-cymene)Ru, and (*p*-cymene)Os half-sandwich complexes containing the 1,2-dicarba-*closo*-dodecaborane(12)-1,2-dichalcogenolato ligand (review), **9**, 1518

**Self-diffusion coefficients**

Hydrolysis of some imidazole, benzimidazole, and 1,2,3-benzotriazole derivatives according to HPLC and NMR diffusimetry data, **5**, 820

**Semiconductors**

Exoemission near phase transitions of epitaxial films of manganites with colossal magnetic resistance, **3**, 359

**Semiquinonediimines**

Reactions of *N*-phenyl-*o*-semiquinonediimine complexes of nickel and platinum with carbonyl-containing low-valence iron and rhenium compounds, **1**, 142

Oxidative dehydrogenation of *N*-methyl-*o*-phenylenediamine coordinated to the Pd<sup>II</sup> and Pt<sup>II</sup> atoms, **3**, 515

**Sesquiterpenoids**

15-*O*-Deacetyl-rhaposerin and rhaserin — new components of a lactone mixture from *Rhaponticum serratuloides*, **3**, 537

Oxidative bromination of tricyclic sesquiterpenoids (1*S*,3*S*,5*R*,6*S*,9*S*)-5-hydroxy-6,10,10-trimethyltricyclo[7.2.0.0<sup>1,6</sup>]judecan-2-one and clovane-2 $\beta$ ,9 $\alpha$ -diol with the HBr—DMSO system, **8**, 1419

(+)- $\delta$ -Cadinol as a promising starting compound in the synthesis of eleuthesides, **9**, 1699

Migration of the *O*-acetyl group in the acetonation of guaianolide rhapsoserin, **12**, 2459

**Setchenov coefficients**

Effect of H/D-isotope substitution on the solubility and solvation thermodynamics of krypton in methanol solutions of carbamide, **12**, 2360

**Shannon's entropy**

Enzyme active sites: bioinformatics, architecture, and mechanisms of action (review), **10**, 1709

**Silacyclopentadienes**

Electrochemical study of redox properties of 2,3,4,5-tetraphenyl-1-heterocyclopenta-2,4-dienes Ph<sub>4</sub>C<sub>4</sub>ER<sup>1</sup>R<sup>2</sup> (E = Si, Ge, Sn). A new method for generation of tetraphenylgermole dianion, **11**, 2071

**Silanethione**

Heteroorganic betaines. 6. Structure and reactivity of silicon-containing organophosphorus betaines with the <sup>-</sup>S—Si—C—P<sup>+</sup> fragment: a DFT study, **5**, 771

**Silathiirane**

Heteroorganic betaines. 6. Structure and reactivity of silicon-containing organophosphorus betaines with the <sup>-</sup>S—Si—C—P<sup>+</sup> fragment: a DFT study, **5**, 771

**Silatranes**

The nature of the super-electron-releasing inductive effect of the silatranyl group and its spectroscopic and chemical consequences (review), **5**, 757

**Silenes**

Density functional theoretical studies of [2+2] cycloaddition of simple transient silenes and germenes to ethylene, formaldehyde, and thioformaldehyde, and vibrational analysis of spectra of reactants and cyclic products, **1**, 20

Heteroorganic betaines. 6. Structure and reactivity of silicon-containing organophosphorus betaines with the  $^{-}\text{S}-\text{Si}-\text{C}-\text{P}^{+}$  fragment: a DFT study, **5**, 771

### Silica

Chromatographic study of adsorption from binary and ternary solutions, **2**, 228

Chemical modification of alumina and silica with alkylphosphonic acids and their esters, **9**, 1693

Magnetic parameters and rotational mobility of the  $\equiv\text{SiON}(\text{O}^{\cdot})\text{CX}_3$  nitroxides (X = H, D) grafted on silica surface, **12**, 2384

### Silicate mesoporous mesophase

Physicochemical features of the formation of siliceous porous mesophases. 4. Effect of duration and temperature of the hydrothermal treatment on the structural and textural properties, **2**, 175

### Silicon compounds

Bis(O—Si)-chelate fluorobis(2-oxohexahydroazepino-methyl)silylium tetrafluoroborate, a cation-anionic complex containing a silylium ion stabilized by O→Si coordination, **2**, 331

Synthesis and study of the mutagenic activity of di(indeno[2,1-*b*]indolyl)- and di(indeno[2,1-*b*]pyrrolyl)methanes and -dimethylsilanes, **8**, 1439

Fragmentation behavior of  $\text{Si}_2\text{Cl}_n^{+}$  cations ( $n = 1-6$ ), **11**, 2087

### Silicon tetrafluoride

Binary molecular complexes of silicon tetrafluoride with water, methanol, and dimethyl ether. Quantum-chemical study, **12**, 2316

### Silver compounds

Thermodynamics of copper, silver, gold, and mercury acetylenides (review), **7**, 1121

*P,O*-Ligands. Complexes of tetraphenylmethylenediphosphine oxide with silver nitrate, **8**, 1469

### Silyl nitronates

Silylation as a new strategy of the use of aliphatic nitro compounds in organic synthesis (review), **11**, 1936

Silylation of  $\gamma,\gamma$ -bis(alkoxycarbonyl)-substituted aliphatic nitro compounds: synthesis of *N,N*-bis(trimethylsilyloxy)aminocyclopropanes, **12**, 2433

### Silylation

Silylation and germylation of trialkylsilyl(germyl)ethoxyacetylenes containing bulky substituents at the silicon or germanium atom, **6**, 1088

Silylation of silyl- and germylketenes containing bulky substituents at the silicon or germanium atom, **6**, 1093

Silylation as a new strategy of the use of aliphatic nitro compounds in organic synthesis (review), **11**, 1936

Silylation of  $\gamma,\gamma$ -bis(alkoxycarbonyl)-substituted aliphatic nitro compounds: synthesis of *N,N*-bis(trimethylsilyloxy)aminocyclopropanes, **12**, 2433

### (Silyloxy)silylacetylenes

Silylation of silyl- and germylketenes containing bulky substituents at the silicon or germanium atom, **6**, 1093

### Simulation

Simulation of adsorption dynamics in adsorbent layers of short length. Estimation of the concentration region of validity of Zeldovich's equality, **9**, 1578

### Single crystals

Photochromism of single crystals of arylhydrazide derivatives, **12**, 2471

### Single-layer dispersions

Ternary metal sulfides  $\text{M}_z\text{MoS}_2$ : synthesis using single-layer dispersions of molybdenum disulfide and study of the structure, **12**, 2293

### Sodium aluminum hydride

Asymmetric reduction of ketones with sodium aluminum hydride modified with chiral amino alcohols, **5**, 843

### Sodium compounds

Selective reduction of the acyl group in cyclic  $\alpha$ -acyl- $\beta$ -dicarbonyl compounds with sodium cyanoborohydride. Efficient synthesis of cyclic  $\alpha$ -alkyl- $\beta$ -dicarbonyl compounds, **2**, 324

Reaction of alkylthiochloroacetylenes with sodium azide, **4**, 751

Direct *C*-nitration of cyclic  $\alpha,\beta$ -unsaturated oximes under the action of sodium nitrite and acetic acid in methanol, **8**, 1410

New chlorinated cyclopentenones prepared from hexachlorocyclopentadiene: synthesis, chemical properties, and application in the synthesis (review), **9**, 1489

Asymmetric Michael reaction of diethyl malonate with crotonaldehyde catalyzed by chiral aminocarboxylates, amino alcohols, and amino phenolates, **9**, 1620

### Sodium ferrate(vi)

Generation of an oscillating chemical reaction in a heterogeneous system by the oxidation of an alkaline solution of luminol with sodium(vi) ferrate in the presence of copper ions, **1**, 159

### Sodium triacetoxylborohydride

Fluorescent-labeled derivatives of dolichyl phosphate. Analogs of dolichyl phosphate with the 2-aminopyridine residue at the  $\omega$ -end of the chain, **3**, 531

### Soft coral

Glycosphingolipid with a branched sphingosine base from soft corals from the Andaman Islands, **8**, 1474

### Solid-phase reaction

Solid-phase reactions of lead tetraacetate with tertiary cycloalkanol and pyridine, **6**, 1118

### Solid-state chemistry

Mercury and cadmium pnictidehalides: the inverted Zintl phases (review), **3**, 337

### Solubility

Effect of H/D-isotope substitution on the solubility and solvation thermodynamics of krypton in methanol solutions of carbamide, **12**, 2360

### Solutions

Chromatographic study of adsorption from binary and ternary solutions, **2**, 228

Hydrolysis of some imidazole, benzimidazole, and 1,2,3-benzotriazole derivatives according to HPLC and NMR diffusimetry data, **5**, 820

Acidity function of methanesulfonic acid solutions in ethyl acetate, **6**, 1003

Solvation of complexes with strong symmetric H bonds in the methanesulfonic acid—2-pyrrolidone system, **6**, 1008

Bis-(2-diphenylphosphinoethyl)cyclopentadienylchloroluthetium: synthesis and dynamic behavior in solution, **7**, 1295

Structural investigations of paramagnetic metalloproteins using high-resolution NMR spectroscopy: iron-sulfur and copper proteins (review), **10**, 1762

**Solvation**

Crystal structures of chloroform solvates of fullerenes, **1**, 78

Solvation of amides of carboxylic acids in aqueous solutions of ethylene glycol, **5**, 780

Solvation of complexes with strong symmetric H bonds in the methanesulfonic acid–2-pyrrolidone system, **6**, 1008

Effect of H/D-isotope substitution on the solubility and solvation thermodynamics of krypton in methanol solutions of carbamide, **12**, 2360

**Solvent effect**

Effect of medium on the rate constant of decarbonylation of phenylacetyl radical, **2**, 237

Synthesis of 1-aryl-1,2,3,4-tetrahydro-9*H*-pyrido[3,4-*b*]indoles (1,2,3,4-tetrahydro- $\beta$ -carboline) under high pressures, **3**, 560

Influence of the linking chain length on the recombination kinetics of covalently bonded triplet radical pairs and magnetic field effects, **4**, 599

Interaction of chlorine dioxide with nitroxyl radicals, **4**, 614

Solvent effects on the absorption spectrum and recombination kinetics of diphenylcarbonyl oxide, **5**, 793

A new method for the synthesis of CF<sub>3</sub>-containing aminovinyl ketones, **8**, 1395

Conformations of *Z*- and *E*-isomers of some chiral (1*R*,4*R*)-2-arylidene-*p*-menthan-3-ones, **9**, 1596

Asymmetric Michael reaction of diethyl malonate with crotonaldehyde catalyzed by chiral aminocarboxylates, amino alcoholates, and amino phenolates, **9**, 1620

Liquid-phase oxidation of thiols with chlorine dioxide, **12**, 2352

**Songorine**

Study of alkaloids from the flora of the Siberian and Altai regions. 6. Crystal and molecular structure of songorine *Z*-oxime, **11**, 2092

**Species balance**

Method for the calculation of the species balance in the reaction zone, **7**, 1166

**Specific interactions**

Dihydrofolate reductase: structural aspects of mechanisms of enzyme catalysis and inhibition (review), **10**, 1733

**Specific surface area**

Prediction of the micropore structure parameters and adsorption properties of activated carbons, **6**, 974

Estimation of oxyhydroxide specific surface area using the amounts of OH groups adsorbed, **9**, 1582

**Spectroelectrochemistry**

Electrochemical and electrochromic properties of rare-earth element diphthalocyanine complexes, **3**, 396

**Spin chemistry**

Spin chemistry of short-lived intermediates in the reactions of germanorbornadiene derivatives and digermabicyclooctadiene (review), **11**, 1916

**Spin trapping**

The rate constants for the addition of radicals CCl<sub>3</sub>CH<sub>2</sub>·CHR (R = Ph, CO<sub>2</sub>Me, CONC<sub>4</sub>H<sub>8</sub>) to some unsaturated compounds, **3**, 557

Reactivity of esters of 2-cyanoacrylic acid toward some free radicals, **12**, 2356

**Spin-spin coupling constants**

Spin-spin coupling constant <sup>3</sup>J<sub>H,F</sub> of the 1,1,2,2-tetrafluoroethyl group as a useful tool for recognition of regioisomeric and tautomeric pairs of organofluoric compounds, **7**, 1223

Conformations of *Z*- and *E*-isomers of some chiral (1*R*,4*R*)-2-arylidene-*p*-menthan-3-ones, **9**, 1596

**Spiro compounds**

Spirocyclohexadienones. 4. Synthesis and dienone-phenolic rearrangement of 1-*R*-3,3-dialkyl-2-azaspiro[4.5]deca-1,6,9-trien-8-ones, **9**, 1648

**Spirodihydroindolizines**

Cation-dependent pericyclic reactions of crown-containing photochromic compounds (review), **11**, 1970

**Spiroanthopyrans**

Bromination of photochromic spiroanthoxazines, **3**, 470

**Spiroanthoxazines**

Bromination of photochromic spiroanthoxazines, **3**, 470

Merocyanine form of photochromic spirooxazines in acid solutions, **7**, 1214

Cation-dependent pericyclic reactions of crown-containing photochromic compounds (review), **11**, 1970

**Spiropyrans**

Cation-dependent pericyclic reactions of crown-containing photochromic compounds (review), **11**, 1970

**Stability**

*Ab initio* MP2 calculations of the products of acetylene addition to HgCl<sub>2</sub>, **6**, 958

**Stability constants**

Amino-substituted *gem*-diphosphonic acids: structures of complexes with divalent metal cations in aqueous solutions, **4**, 697

**Stannacyclopentadienes**

Electrochemical study of redox properties of 2,3,4,5-tetraphenyl-1-heterocyclopenta-2,4-dienes Ph<sub>4</sub>C<sub>4</sub>ER<sup>1</sup>R<sup>2</sup> (E = Si, Ge, Sn). A new method for generation of tetraphenylgermole dianion, **11**, 2071

**Starfishes**

Steroid compounds from the Pacific starfish *Lysastrosoma anthosticta*, **2**, 313

Sulfated steroid compounds from the starfish *Aphelasterias japonica* of the Kuril population, **4**, 724

**Statistical thermodynamics**

Statistical modeling of equilibrium adsorption of non-ideal mixtures on zeolites, **2**, 220

**Stereochemistry**

Synthesis and stereochemistry of diastereomeric *closo*-( $\pi$ , $\sigma$ -dicyclopentenyl)rhodacarboranes with the agostic C–H...Rh bond, **3**, 504

Synthesis, structure and isomerism of "three-bridge" *exo-nido*-osmacarborane clusters, **4**, 706

Reductive mono- and dialylation of the bis(pyridine)di-hydropyridyllithium dimer by triallylborane, **6**, 1078

Catalytic phosphorylation of polyfluoroalkanols. 17. Synthesis and the stereochemistry of tris( $\alpha$ -trifluoromethylbenzyl) phosphates, **6**, 1085

Stereochemistry of optically active compounds. Problems and prospects (review), **8**, 1339

A new method for the synthesis of CF<sub>3</sub>-containing aminovinyl ketones, **8**, 1395

Allylmethylation of benzoazaheterocycles with allylic derivatives of zinc. Synthesis of 1,4-ethano-2,3-dihydroisoquinolines and allylated heterocycles, **11**, 2172

Reaction of *R*-(+)-2-benzylideneaminobutan-1-ol with ethylene phosphorochloridite. Stereospecific formation of (3*R*,5*R*)-2-(2-chloroethoxy)-5-ethyl-2-oxo-3-phenyl-1,4,2-oxazaphosphorinane, **12**, 2468

#### Stereoselectivity

Synthetic approaches to homochiral bicyclo[5.2.1]decenes based on *d*-camphor, **4**, 654

Dihydrofolate reductase: structural aspects of mechanisms of enzyme catalysis and inhibition (review), **10**, 1733

Organophosphate hydrolase — an enzyme catalyzing degradation of phosphorus-containing toxins and pesticides (review), **10**, 1826

Cross-coupling of *E,E*-1,4-diiodobuta-1,3-diene with nucleophiles catalyzed by Pd or Ni complexes: a new route to functionalized dienes, **11**, 2095

#### Stereospecificity

Stereospecific formation of polycyclic ferrocenyldihydropyrazoles based on *Z*- and *E*-isomeric ferrocenyl-substituted  $\alpha,\beta$ -unsaturated ketones of the heterocyclic series, **5**, 895

Reaction of *R*-(+)-2-benzylideneaminobutan-1-ol with ethylene phosphorochloridite. Stereospecific formation of (3*R*,5*R*)-2-(2-chloroethoxy)-5-ethyl-2-oxo-3-phenyl-1,4,2-oxazaphosphorinane, **12**, 2468

#### Steric effects

The reactivity of organoboranes in radical substitution reactions, **3**, 390

Adsorption of vapor mixtures of water and organic substance on activated carbons, **4**, 595

Synthesis, molecular structures, and thermal decomposition of heterometallic ( $\pi$ -cyclooctadiene)platinum-bis(tricarbonyliron- $\mu_3$ -chalcogenides)[Fe—Fe], ( $\pi$ -C<sub>8</sub>H<sub>12</sub>)Pt( $\mu_3$ -X)<sub>2</sub>Fe<sub>2</sub>(CO)<sub>6</sub>, where X = S, Se, or Te, **11**, 2215

#### Structural and textural parameters

Physicochemical features of the formation of siliceous porous mesophases. 4. Effect of duration and temperature of the hydrothermal treatment on the structural and textural properties, **2**, 175

#### Structure—property relationship

Determination of enthalpies of formation of organic free radicals based on bond dissociation energies. 4. Alkyl-substituted derivatives of phenyl and benzyl, **6**, 963

Thermodynamic properties and valence—power field of thyl radicals, **12**, 2310

#### Styrene

Kinetics and mechanism of styrene hydrocarboalkoxylation catalyzed by Pd<sup>0</sup> complex in the presence of toluenesulfonic acid, **10**, 1839

Thermodynamics of alternating copolymer of styrene and CO in the 0–600 K region, **12**, 2372

#### Styryl dyes

Cation-dependent pericyclic reactions of crown-containing photochromic compounds (review), **11**, 1970

#### Suberic acid

EPR study of weak exchange interactions in binuclear copper(II) complexes with salicylaldehyde acyldihydrazones, **5**, 812

#### Substituent effect

A study of peralkylated derivatives of bis( $\eta^6$ -benzene)chromium by gas-phase electronic absorption spectroscopy, **8**, 1390

#### Substituted benzo[de]cinnolin-7-ones

Cyclocondensation of 5-ethyl-1,4-naphthoquinone derivatives with hydrazine, **9**, 1668

#### 2-Substituted dialkylaminomethylferrocene

Synthetic approaches to trialkyl(ferrocenylmethyl)ammonium salts as cationic templates for the preparation of ferromagnets on the basis of bimetal oxalates, **3**, 497

#### Substituted prolines

Asymmetric Michael reaction of diethyl malonate with crotonaldehyde catalyzed by chiral aminocarboxylates, amino alcohols, and amino phenolates, **9**, 1620

#### 2-Substituted trialkyl(ferrocenylmethyl)ammonium salts

Synthetic approaches to trialkyl(ferrocenylmethyl)ammonium salts as cationic templates for the preparation of ferromagnets on the basis of bimetal oxalates, **3**, 497

#### Substitution

The reactivity of organoboranes in radical substitution reactions, **3**, 390

Reaction of 4,6-bis(*tert*-butyl)-2,2,2-trichlorobenzo[*d*]-1,3,2-dioxaphosphole with phenylacetylene. *ipso*-Substitution of the *tert*-butyl group, **4**, 693

Reactions of (difluoroamino)trinitromethane with nucleophilic reagents, **4**, 736

New chlorinated cyclopentenones prepared from hexachlorocyclopentadiene: synthesis, chemical properties, and application in the synthesis (review), **9**, 1489

#### Substrate specificity

The reactivity of phosphonic esters in aqueous micellar solutions of cationic surfactants, **7**, 1181

Organophosphate hydrolase — an enzyme catalyzing degradation of phosphorus-containing toxins and pesticides (review), **10**, 1826

#### Subtilisin

Proteinases immobilized on poly(vinyl alcohol) cryogel: novel biocatalysts for peptide synthesis in organic media, **10**, 1896

#### Succinic acid

EPR study of weak exchange interactions in binuclear copper(II) complexes with salicylaldehyde acyldihydrazones, **5**, 812

#### Sugar nucleotides

A novel synthesis of *N*-acetyl- $\alpha$ -D-fucosamine 1-phosphate and uridine 5'-diphospho-*N*-acetyl- $\alpha$ -D-fucosamine, **7**, 1303

#### Sulfenylation

Reactions of 1,3,3,3-tetrafluoro-2-methoxycarbonylpropenylsulfenyl chloride with aromatic and heterocyclic compounds, **7**, 1255

Reactions of 1,3,3,3-tetrafluoro-2-methoxycarbonylpropenylsulfenyl chloride with enamines, **9**, 1645

#### Sulfide clusters

Synthesis and the crystal structure of the supramolecular complex [Cl<sub>3</sub>InW<sub>3</sub>S<sub>4</sub>(H<sub>2</sub>O)<sub>9</sub>]<sup>2+</sup> with cucurbituril, **7**, 1144

Synthesis and structure of the polymeric cluster compound [Mn(H<sub>2</sub>O)<sub>4</sub>]<sub>3</sub>[W<sub>4</sub>S<sub>4</sub>(CN)<sub>12</sub>] · *n*H<sub>2</sub>O containing very large cavities, **9**, 1525

#### Sulfides

Crystal and electronic structure of Ni<sub>3</sub>Bi<sub>2</sub>S<sub>2</sub> (parkerite), **3**, 353

Reactions of chlorine dioxide with organic compounds. Selective oxidation of sulfides to sulfoxides by chlorine dioxide, **3**, 432

Nitro group substitution in 2,4,6-trinitrotoluene under the action of arenethiols and transformations of the reaction products, **12**, 2406

#### Sulfites

New approach to nonracemic 1-alkylamino-3-aryloxypropan-2-ols belonging to  $\beta$ -blockers *via* cyclic sulfites, **3**, 436

#### Sulfoguanidines

5-Substituted 2-alkyl- and 2-arylsulfonylimino-hexahydro-1,3,5-triazines, **3**, 480

#### Sulfones

Regioselective replacement of nitro groups in 2,4,6-trinitrotoluene under the action of alkanethiols. Synthesis of *ortho*-(alkylthio)-substituted nitrotoluenes and their oxidation to sulfoxides and sulfones, **2**, 261

Nitro group substitution in 2,4,6-trinitrotoluene under the action of arenethiols and transformations of the reaction products, **12**, 2406

#### Sulfonyl ketone

Synthesis of a C(9)—C(13) fragment of acutiphycin from levoglucosan, **6**, 1101

#### Sulfonyliminopropionates

Thermal ene reactions of methyl 3,3,3-trifluoro-2-R-sulfonyliminopropionates. Synthesis of  $\gamma,\delta$ -unsaturated derivatives of  $\alpha$ -amino  $\alpha$ -trifluoromethylcarboxylic acids, **6**, 1041

#### $\beta$ -Sulfonylvinyl(trifluoromethyl)methanediols

A new method for the synthesis of CF<sub>3</sub>-containing aminovinyl ketones, **8**, 1395

#### Sulfoxides

Regioselective replacement of nitro groups in 2,4,6-trinitrotoluene under the action of alkanethiols. Synthesis of *ortho*-(alkylthio)-substituted nitrotoluenes and their oxidation to sulfoxides and sulfones, **2**, 261

Reactions of chlorine dioxide with organic compounds. Selective oxidation of sulfides to sulfoxides by chlorine dioxide, **3**, 432

Nitro group substitution in 2,4,6-trinitrotoluene under the action of arenethiols and transformations of the reaction products, **12**, 2406

#### Sulfur compounds

Metal-induced B—H activation in Cp\*Rh, Cp\*Ir, (*p*-cymene)Ru, and (*p*-cymene)Os half-sandwich complexes containing the 1,2-dicarba-*closo*-dodecaborane(12)-1,2-dichalcogenolato ligand (review), **9**, 1518

The determination of enthalpies of formation of organic free radicals from bond dissociation energies. 5. Organosulfur radicals, **9**, 1570

#### Sulfur recovery

Environmental biotechnology: a tandem of biocatalytic and engineering approaches (review), **10**, 1818

#### Sulfuric acid

Merocyanine form of photochromic spirooxazines in acid solutions, **7**, 1214

#### Sulfurization

Sulfurization of polymers. 4. Poly(4,5,6,7-tetrathiono-4,5,6,7-tetrahydrobenzothiophene-2,3-diyl) and related structures based on polystyrene and elemental sulfur, **2**, 253

Synthesis of cavity systems by cyclophosphorylation of 1,7-dihydroxynaphthalene with phosphorous triamides, **5**, 923

#### Superacids

Proton-donor properties of HCCl<sub>3</sub>, HSiCl<sub>3</sub>, and HGeCl<sub>3</sub> molecules: a quantum-chemical study, **4**, 740

#### Superelectrophiles

Mechanisms of the reactions of propane with CBr<sub>3</sub><sup>+</sup> cation and superelectrophilic complex CBr<sub>4</sub><sup>+</sup>·AlBr<sub>3</sub><sup>-</sup> containing a bromine-centered cationic center: a theoretical study, **1**, 29

Oxidative transformations of cyclohexane, methylcyclopentane, and pentane on treatment with superelectrophiles based on polyhalomethane and aluminum halides, **1**, 81

Functionalization of alkanes and cycloalkanes by super-electrophiles. 15. Carbonylation of cycloheptane, cyclo-octane, and isomeric monoalkylcyclohexanes with CO in the presence of CBr<sub>4</sub>·2AlBr<sub>3</sub> to form individual esters of tertiary carboxylic acids of the cyclohexane series, **12**, 2394

#### Supramolecular complexes

Thermodynamic characteristics of supramolecular complexes of aroma compounds with ordered structures of polysaccharides of corn starch and its cryotextures, **2**, 300

#### Surface

The influence of the surface on conformational equilibrium in thin layers of nematic liquid crystal, **2**, 319

On the mechanisms of phenol adsorption by carbons, **11**, 2060

#### Surfactants

Complex formation between polyethylene oxide-containing nonionic surfactants and  $\alpha$ - and  $\beta$ -cyclodextrins, **4**, 620

Luminescence properties of acridine dyes in micellar sodium dodecyl sulfate solutions containing thallium ions, **6**, 986

The reactivity of phosphonic esters in aqueous micellar solutions of cationic surfactants, **7**, 1181

Micellar enzymology: methodology and technique (review), **10**, 1718

#### Sydnone

Phosphine  $\sigma$ -sydnone complexes of Ni, Pd, and Pt, **3**, 525

## T

#### Tandem conversions

New chlorinated cyclopentenones prepared from hexachloro-cyclopentadiene: synthesis, chemical properties, and application in the synthesis (review), **9**, 1489

#### Tantalum compounds

Synthesis, structures, and properties of the niobium and tantalum telluride cubane clusters [M<sub>4</sub>( $\mu_4$ -O)( $\mu_3$ -Te)<sub>4</sub>(CN)<sub>12</sub>]<sup>6-</sup> (M = Nb or Ta), **6**, 930

#### Tautomeric equilibria

Tautomerization of thiourea dioxide in aqueous solution, **2**, 203

Amino-substituted *gem*-diphosphonic acids: structures of complexes with divalent metal cations in aqueous solutions, **4**, 697

#### Tautomers

Spin-spin coupling constant <sup>3</sup>J<sub>H,F</sub> of the 1,1,2,2-tetrafluoroethyl group as a useful tool for recognition of regioisomeric and tautomeric pairs of organofluoric compounds, **7**, 1223

#### Telluride complexes

Synthesis, structures, and properties of the niobium and tantalum telluride cubane clusters [M<sub>4</sub>( $\mu_4$ -O)( $\mu_3$ -Te)<sub>4</sub>(CN)<sub>12</sub>]<sup>6-</sup> (M = Nb or Ta), **6**, 930

**g-Tensors**

Quantum-chemical estimates of geometric parameters of free radicals, **2**, 188

**Terminal alkynes**

Cascade rearrangement in the reaction of methyl trifluoropyruvate sulfonylimines with terminal alkynes, **7**, 1330

**Ternary metal sulfides**

Ternary metal sulfides  $M_2MoS_2$ : synthesis using single-layer dispersions of molybdenum disulfide and study of the structure, **12**, 2293

**Tertiary cycloalkanols**

Solid-phase reactions of lead tetraacetate with tertiary cycloalkanols and pyridine, **6**, 1118

**Tetrabromomethane**

Functionalization of alkanes and cycloalkanes by super-electrophiles. 15. Carbonylation of cycloheptane, cyclooctane, and isomeric monoalkylcyclohexanes with CO in the presence of  $CBr_4 \cdot 2AlBr_3$  to form individual esters of tertiary carboxylic acids of the cyclohexane series, **12**, 2394

**Tetrachloromethane**

Adsorption of vapor mixtures of water and organic substance on activated carbons, **4**, 595

**3,5,5,5-Tetrachloropentan-2-one**

A new method for the synthesis of *N*-substituted (4-oxo-4,5,6,7-tetrahydroindol-3-yl)acetic acids, **7**, 1259

**5,6,7,8-Tetrafluorocinnolones**

Nucleophilic ring-opening of the azole and azine moieties in 6-nitro-1,2,4-triazolo[1,5-*a*]pyrimidin-7-ones, **4**, 682

Reactions of 1-aryl(alkyl)-3-ethoxalyl-5,6,7,8-tetrafluoro-1,4-dihydrocinnolin(quinolin)-4-ones with aromatic dinucleophiles, **4**, 689

Reactions of 3-substituted 1-aryl-5,6,7,8-tetrafluoroquinolones(cinnolones) with morpholine, **12**, 2416

**Tetrafluorocyclobutylpyrazolines**

Reactions of diazoalkanes with unsaturated compounds. 14. Reactions of diazomethane, diazocyclopropane, and methyl diazoacetate with 1,1,2,2-tetrafluoro-3-vinylcyclobutane and 2,3,3-trifluoro-1-vinylcyclobutene to form [3+2] and [1+2] cycloadducts, **11**, 2113

**(2E)-2-(Tetrafluoroethylidene)-3,3-bis(trifluoromethyl)-2,3-dihydrothiazolo[3,2-*a*]benzimidazole**

Synthesis of (2E)-2-(tetrafluoroethylidene)-3,3-bis(trifluoromethyl)-2,3-dihydrothiazolo[3,2-*a*]benzimidazole, **8**, 1446

**1,3,3,3-Tetrafluoro-2-methoxycarbonylpropenesulfonyl chloride**

Reactions of 1,3,3,3-tetrafluoro-2-methoxycarbonylpropenylsulfonyl chloride with aromatic and heterocyclic compounds, **7**, 1255

Reactions of 1,3,3,3-tetrafluoro-2-methoxycarbonylpropene-sulfonyl chloride with enamines, **9**, 1645

**2,3,5,6-Tetrafluoropyridine-4-sulfonyl chlorid**

Synthesis of 1,3,4-trifluoroisoquinoline by copyrolysis of 2,3,5,6-tetrafluoropyridine-4-sulfonyl chloride with butadiene, **2**, 322

**5,6,7,8-Tetrafluoroquinolones**

Nucleophilic ring-opening of the azole and azine moieties in 6-nitro-1,2,4-triazolo[1,5-*a*]pyrimidin-7-ones, **4**, 682

Reactions of 1-aryl(alkyl)-3-ethoxalyl-5,6,7,8-tetrafluoro-1,4-dihydrocinnolin(quinolin)-4-ones with aromatic dinucleophiles, **4**, 689

Reactions of 3-substituted 1-aryl-5,6,7,8-tetrafluoroquinolones(cinnolones) with morpholine, **12**, 2416

**2,3,6,11-Tetrahydroanthra[2,1-*d*]isothiazole-3,6,11-triones**

Synthesis of linear and angular anthraquinonoisothiazol-3-ones, their *S*-oxides, and *S,S*-dioxides, **9**, 1657

**1,2,3,8-Tetrahydroindeno[2,1-*b*]phospholes**

Efficient method for the synthesis of 1,2,3,8-tetrahydroindeno[2,1-*b*]phospholes and their derivatives, **2**, 276

**1,2,3,8-Tetrahydro-1 $\lambda^5$ -indeno[2,1-*b*]phosphol-1-ones and -thiones**

Efficient method for the synthesis of 1,2,3,8-tetrahydroindeno[2,1-*b*]phospholes and their derivatives, **2**, 276

**Tetrahydro-1,3-oxazines and tetrahydro-1,3-oxazolidines**

*N*-Substituted tetrahydro-1,3-oxazines and oxazolidines. 1. A new version of the Mannich reaction involving amino alcohols, **1**, 104

**Tetrahydroxy-1,4-naphthoquinones**

Chemistry of naphthazarin derivatives. 7. Determination of structures of substituted 2,6(7)-dihydroxynaphthazarins by UV and IR spectroscopy, **1**, 88

**Tetraiodoglycoluril**

2,4,6,8-Tetraiodo-2,4,6,8-tetraazabicyclo[3.3.0]octane-3,7-dione as a mild and convenient reagent for iodination of aromatic compounds, **12**, 2411

**Tetramethylcalix[4]resorcinarene**

Hydration of calixarene-containing polymers, **8**, 1379

**Tetramethyldigermene**

Spin chemistry of short-lived intermediates in the reactions of germanorbornadiene derivatives and digermabicyclooctadiene (review), **11**, 1916

**Tetramethylpiperidin-1-yloxy**

Bis(ketenyl)benzenes: preparation, observation, and reaction with tetramethylpiperidin-1-yloxy, **11**, 2130

**Tetraphenylcalix[4]resorcinarene**

Hydration of calixarene-containing polymers, **8**, 1379

**Tetrazolo[1,5-*b*]-1,2,4-triazine**

$S_N^H$ -Reactions of triazolo[4,3-*b*]- and tetrazolo[1,5-*b*]-1,2,4-triazines with methylene-active carbonyl compounds, **11**, 2183

**Texture**

Structure determination from powder diffraction (review), **12**, 2273

**Thallium compounds**

Polydentate coordination of the thallium atom in complexes with chiral amidinylcyclopentadienyl ligands, **5**, 890

**Thermal decomposition**

Heteroorganic betaines. 6. Structure and reactivity of silicon-containing organophosphorus betaines with the  $-S-Si-C-P^+$  fragment: a DFT study, **5**, 771

*peri*-Naphthylenediamines. 31. Study of interconversions of 2,3-dihydroperimidines and 1,8-bis(dialkylamino)naphthalenes. Convenient synthesis of 1,2,2,3-tetramethyl-2,3-dihydroperimidine and a monoisopropyl analog of the "proton sponge", **5**, 846

Mechanism of formation and monomolecular decomposition of *aci*-nitromethanes: a quantum-chemical study, **6**, 952

Crystal defects and stability of RDX, **6**, 1000

Synthesis, molecular structures, and thermal decomposition of heterometallic ( $\pi$ -cyclooctadiene)platinum-bis(tricarbonyliron- $\mu_3$ -chalcogenides)[Fe-Fe], ( $\pi$ -C<sub>8</sub>H<sub>12</sub>)Pt( $\mu_3$ -X)<sub>2</sub>Fe<sub>2</sub>(CO)<sub>6</sub>, where X = S, Se, or Te, **11**, 2215

**Thermal desorption**

Hydrogenation of CO<sub>2</sub> conjugated with dehydrogenation of cyclohexane over an intermetallic catalyst, **7**, 1201

**Thermal dinitrogen elimination**

Reactions of diazoalkanes with unsaturated compounds. 14. Reactions of diazomethane, diazocyclopropane, and methyl diazoacetate with 1,1,2,2-tetrafluoro-3-vinylcyclobutane and 2,3,3-trifluoro-1-vinylcyclobutene to form [3+2] and [1+2] cycloadducts, **11**, 2113

**Thermal explosion**

Naphthalene oxidation in supercritical water, **8**, 1481

**Thermal motion**

Hydrogen bond in 3-acetyl-4-hydroxycoumarin: X-ray diffraction study and quantum-chemical calculations, **3**, 418

**Thermal stability**

The synthesis of *N*-isocyanurato-substituted aziridino[1,2][60]fullerenes, **3**, 445

Study of the factors determining the outcome of cycloaddition of isocyanurato-substituted azides to [60]fullerene, **11**, 2162

Photochromic dihetarylethenes. 10. Photochromic 1,2-bis[2-(benzothiazol-2-yl)-3-thienyl]- and 1,2-bis[2-(benzothiazol-2-yl)benzothiophen-3-yl]ethenes, **12**, 2420

**Thermal transformations**

The preparation and reactivity of metal-containing monomers. 54. Thermolysis of the acrylamide monomer  $[\text{Co}(\text{CH}_2=\text{CHCONH}_2)_4(\text{H}_2\text{O})_2](\text{NO}_3)_2$ , **5**, 901

**Thermodynamic parameters**

First ionization potentials of amines and electronic effects in their radical cations, **1**, 43

Adsorption of chlorobenzene and benzene on  $\gamma\text{-Al}_2\text{O}_3$ , **1**, 68

Study of complex formation between aluminum bromide and benzene by  $^{27}\text{Al}$  NMR spectroscopy, **1**, 73

Thermodynamic parameters of adsorption described by the logarithmic Temkin isotherm, **2**, 217

The reactivity of *tert*-butoxyl radicals in reactions of hydrogen abstraction and  $\beta$ -elimination, **2**, 241

Thermodynamic characteristics of supramolecular complexes of aroma compounds with ordered structures of polysaccharides of corn starch and its cryotextures, **2**, 300

Interaction of chlorine dioxide with nitroxyl radicals, **4**, 614

Adsorption of adamantanol isomers on graphitized thermal carbon black, **5**, 823

Gas chromatography of halogenated adamantanes, **5**, 828

Experimental and molecular-statistical investigation of adsorption of aminoadamantanes on graphitized thermal carbon black, **6**, 980

Estimation of hydrogen bond energy in *n*-alkanols from the gas chromatography data, **6**, 1023

The use of a nonlinear equation for calculation of the retention indices of polar substances in gas chromatography with linear temperature programming, **6**, 1027

Thermodynamics of copper, silver, gold, and mercury acetylenides (review), **7**, 1121

Thermodynamic properties of carbynoid structures in the 0–340 K range, **9**, 1533

Thermodynamic properties and valence-force field of alkanethiols and dialkyl sulfides, **9**, 1563

The determination of enthalpies of formation of organic free radicals from bond dissociation energies. 5. Organosulfur radicals, **9**, 1570

Thermodynamic properties and valence—power field of thiyl radicals, **12**, 2310

Effect of H/D-isotope substitution on the solubility and solvation thermodynamics of krypton in methanol solutions of carbamide, **12**, 2360

Thermodynamics of alternating copolymer of styrene and CO in the 0–600 K region, **12**, 2372

**Thermodynamics of adsorption**

Adsorption of chlorobenzene and benzene on  $\gamma\text{-Al}_2\text{O}_3$ , **1**, 68

**Thermoinactivation**

Micellar enzymology: methodology and technique (review), **10**, 1718

**Thermolysis**

Proteinases immobilized on poly(vinyl alcohol) cryogel: novel biocatalysts for peptide synthesis in organic media, **10**, 1896

**Thermolysis**

Synthesis of 5*H*-naphtho[2,3-*c*]phenothiazine-8,13-diones from 1-arylthio-2-azidoanthraquinones, **4**, 678

Chemiluminescence during thermolysis of the  $(\text{Ph}_3\text{COOCPh}_3)_n\text{-Ph}_3\text{C}^\cdot$  peroxide containing captured triphenylmethyl radical, **7**, 1194

**Thermooxidative destruction**

The preparation and reactivity of metal-containing monomers. 54. Thermolysis of the acrylamide monomer  $[\text{Co}(\text{CH}_2=\text{CHCONH}_2)_4(\text{H}_2\text{O})_2](\text{NO}_3)_2$ , **5**, 901

**1,2,3-Thiadiazole**

A tandem of the Cornforth rearrangements of 4-(1,2,3-triazol-1-yl)iminomethyl-1,2,3-thiadiazole, **2**, 268

**Thienopyrimidoquinolines**

Reactions of cyclic enaminketones with benzyldene-malononitriles. Synthesis of new fused heterocyclic systems containing the 1,4-dihydropyridine fragment, **12**, 2428

**Thiocyanide complexes**

Synthesis and structure of a new octahedral molybdenum thiocyanide cluster complex  $\text{K}_7[\text{Mo}_6(\mu_3\text{-S})_8(\text{CN})_6] \cdot 8\text{H}_2\text{O}$ , **7**, 1140

**Thiols**

A new method for the synthesis of fluorinated vinyl sulfides and ketene dithioacetals, **6**, 1044

Liquid-phase oxidation of thiols with chlorine dioxide, **12**, 2352

**Thiophanium ions**

New potentialities of electrophilic addition in the assembly of polyfunctional compounds from simple precursors (review), **11**, 1949

**Thiophenol**

$\text{S}_\text{N}^\text{H}$ -Reactions of 1,2,4-triazine *N*-oxides, pyrazine *N*-oxides, and pterin *N*-oxides with arenethiols, **6**, 1068

**Thiourea dioxide**

Tautomerization of thiourea dioxide in aqueous solution, **2**, 203

**Thioureidoquinazolin-4(3*H*)-ones**

Thioureas from 3-aminoquinazolin-4(3*H*)-one. 2. Unusual alkaline recyclization of 3-(*N'*,*N'*,*S*-trialkylisothio-ureido)quinazolin-4(3*H*)-ones into new 1,3,4-oxadiazoles, **2**, 272

**(*S*)-Timolol**

New approach to nonracemic 1-alkylamino-3-aryloxypropan-2-ols belonging to  $\beta$ -blockers *via* cyclic sulfites, **3**, 436

**Thioformaldehyde**

Density functional theoretical studies of [2+2] cycloaddition of simple transient silenes and germenes to ethylene, formaldehyde, and thioformaldehyde, and vibrational analysis of spectra of reactants and cyclic products, **1**, 20



**Titanium compounds**

A new route of the reaction of  $\text{EtAlCl}_2$  with  $\alpha$ -olefins catalyzed by Ti complexes, **2**, 292

Activation of C—H bonds in  $\text{C}_1$ — $\text{C}_3$  alkanes by titanium(IV) and zirconium(IV) cationic complexes: a DFT study, **3**, 376

Heterometallic zirconocene(III) aluminum hydride complex  $(\text{Cp}_2\text{ZrH})_2\text{HAlCl}_2 \cdot \text{C}_4\text{H}_8\text{O}_2 \cdot \text{C}_6\text{H}_6$ , **11**, 2200

 **$\alpha$ -Tocopherol analogs**

Synthesis of  $\alpha$ -tocopherol analogs with unsaturated side chain and their transformation into the corresponding chromans with  $\omega$ -functionalized side chain, **11**, 2227

**Toluenesulfonic acid**

Kinetics and mechanism of styrene hydrocarboalkoxylation catalyzed by  $\text{Pd}^0$  complex in the presence of toluenesulfonic acid, **10**, 1839

**Topographic analysis**

Rapid characterization of ultrafiltration membranes by scanning electron microscopy, **7**, 1320

**Transducer**

Electroanalytical applications of Prussian Blue and its analogs (review), **10**, 1811

**Transesterification**

Stereoselective cyclization of alkyl *N*-phthaloyl-4-bromoglutamates to cyclopropane derivatives, **4**, 644

**Transition metals**

Catalysis of noncomplementary reactions by transition metals clusters. Kinetic description, **10**, 1833

**Transition metal complexes**

Exohedral  $\eta^5$ - $\pi$ -complexes of fullerene  $\text{C}_{20}$ , **2**, 180

Transformations of cycloalkanes under the action of organoaluminum compounds and transition metal complexes in the presence of polychloromethanes, **7**, 1326

Binuclear and polynuclear transition metal complexes with macrocyclic ligands. 1. Synthesis and the structure of an antiferromagnetic binuclear nickel complex prepared by the reaction of *o*-phenylenediamine with pyrrole-2,5-dicarbaldehyde and nickel pivalate, **12**, 2445

**Transition states**

Density functional theoretical studies of [2+2] cycloaddition of simple transient silenes and germenes to ethylene, formaldehyde, and thioformaldehyde, and vibrational analysis of spectra of reactants and cyclic products, **1**, 20

The reactivity of *tert*-butoxyl radicals in reactions of hydrogen abstraction and  $\beta$ -elimination, **2**, 241

$\text{Rh}_2(\text{OAc})_4$ -Catalyzed reaction of 1,3-dioxanes with methyl diazoacetate, **5**, 865

**Trialkyl phosphorodithioates**

Synthesis and physiological activity of trialkyl phosphorodithioates and trialkyl phosphorothioates containing fragments of *N*-acylated amino acids, **1**, 147

**Trialkyl phosphorothioates**

Synthesis and physiological activity of trialkyl phosphorothioates and trialkyl phosphorodithioates containing fragments of *N*-acylated amino acids, **1**, 147

**Trialkylamines**

Synthetic approaches to trialkyl(ferrocenylmethyl)ammonium salts as cationic templates for the preparation of ferromagnets on the basis of bimetal oxalates, **3**, 497

**Trialkylsilyl triflates**

Silylation of silyl- and germylketenes containing bulky substituents at the silicon or germanium atom, **6**, 1093

**Trialkylsilyl(germyl)ethoxyacetylenes**

Silylation and germylation of trialkylsilyl(germyl)ethoxyacetylenes containing bulky substituents at the silicon or germanium atom, **6**, 1088

**Trialkylsilyl(germyl)ketenes**

Silylation of silyl- and germylketenes containing bulky substituents at the silicon or germanium atom, **6**, 1093

**1,2,4-Triazine 4-oxides**

$\text{S}_\text{N}^\text{H}$ -Reactions of 1,2,4-triazine *N*-oxides, pyrazine *N*-oxides, and pterin *N*-oxides with arenethiols, **6**, 1068

**Triazines**

Synthesis and properties of monoimines of  $\alpha$ -diketones, derivatives of 3-imidazoline nitroxides, **5**, 874

$\text{S}_\text{N}^\text{H}$ -Reactions of triazolo[4,3-*b*]- and tetrazolo[1,5-*b*]-1,2,4-triazines with methylene-active carbonyl compounds, **11**, 2183

NMR studies of the dynamic behavior of 2-anilino-6-chloro-4-methoxy-1,3,5-triazine in solution, **12**, 2473

**Triazoles**

A tandem of the Cornforth rearrangements of 4-(1,2,3-triazol-1-yl)iminomethyl-1,2,3-thiadiazole, **2**, 268

Hydrolysis of some imidazole, benzimidazole, and 1,2,3-benzotriazole derivatives according to HPLC and NMR diffusimetry data, **5**, 820

**Triazolo[4,3-*b*]-1,2,4-triazine**

$\text{S}_\text{N}^\text{H}$ -Reactions of triazolo[4,3-*b*]- and tetrazolo[1,5-*b*]-1,2,4-triazines with methylene-active carbonyl compounds, **11**, 2183

**Trichlorocyclopentenones**

New chlorinated cyclopentenones prepared from hexachlorocyclopentadiene: synthesis, chemical properties, and application in the synthesis (review), **9**, 1489

**3-(2,2,2-Trichloroethyl)-4,5,6,7-tetrahydroindol-4-ones**

A new method for the synthesis of *N*-substituted (4-oxo-4,5,6,7-tetrahydroindol-3-yl)acetic acids, **7**, 1259

**Trichlorogermane**

Proton-donor properties of  $\text{HCCl}_3$ ,  $\text{HSiCl}_3$ , and  $\text{HGeCl}_3$  molecules: a quantum-chemical study, **4**, 740

**Trichloromethylarenes**

Electrophilic aromatic trichloromethylation: intermediates and products, **11**, 2046

**(Trichloromethyl)arenium ions**

Electrophilic aromatic trichloromethylation: intermediates and products, **11**, 2046

**Trichloromethylation**

Electrophilic aromatic trichloromethylation: intermediates and products, **11**, 2046

**Trichlorosilane**

Proton-donor properties of  $\text{HCCl}_3$ ,  $\text{HSiCl}_3$ , and  $\text{HGeCl}_3$  molecules: a quantum-chemical study, **4**, 740

**Tricyclanes**

Transformations of cycloalkanes under the action of organoaluminum compounds and transition metal complexes in the presence of polychloromethanes, **7**, 1326

**Triethylaluminum**

One-step cyclopropanation of alkynes with diiodomethane and triethylaluminum, **8**, 1406

**Triethylamine**

Stereoselective cyclization of alkyl *N*-phthaloyl-4-bromoglutamates to cyclopropane derivatives, **4**, 644

Synthesis of (2*E*)-2-(tetrafluoroethylidene)-3,3-bis(trifluoromethyl)-2,3-dihydrothiazolo[3,2-*a*]benzimidazole, **8**, 1446

**Trifluoroacetic acid**

Merocyanine form of photochromic spirooxazines in acid solutions, **7**, 1214

**Trifluoroacetic anhydride**

*peri*-Naphthylenediamines. 33. Further studies of the reactions of 1,8-bis(dimethylamino)naphthalene with trifluoroacetic anhydride, **5**, 860

**Trifluoroacetimidoyl halides**

*N*-Substituted trifluoroacetimidoyl halides: synthesis and properties, **9**, 1639

 **$\beta$ -Trifluoroacetylvinylamines**

A new method for the synthesis of CF<sub>3</sub>-containing aminovinyl ketones, **8**, 1395

**Trifluorochloroethylene**

Electrochemical activation of freons using electron transfer mediators (review), **11**, 1929

**Trifluorocyclobutenyl-1-pyrazolines**

Reactions of diazoalkanes with unsaturated compounds. 14. Reactions of diazomethane, diazocyclopropane, and methyl diazoacetate with 1,1,2,2-tetrafluoro-3-vinylcyclobutane and 2,3,3-trifluoro-1-vinylcyclobutene to form [3+2] and [1+2] cycloadducts, **11**, 2113

**1,3,4-Trifluoroisoquinoline**

Synthesis of 1,3,4-trifluoroisoquinoline by copyrolysis of 2,3,5,6-tetrafluoropyridine-4-sulfonyl chloride with butadiene, **2**, 322

**2-(2,2,2-Trifluoro-1-methoxycarbonylethylidene)-1,3-oxathioles**

Reactions of 1,3,3,3-tetrafluoro-2-methoxycarbonylpropenylsulfenyl chloride with aromatic and heterocyclic compounds, **7**, 1255

**Trifluoromethylchroman-4-ones**

2-Polyfluoroalkylchromones. 8. 2-Trifluoromethyl- and 6-nitro-2-trifluoromethylchromones in reactions with amines, **8**, 1426

**2-Trifluoromethylchromones**

2-Polyfluoroalkylchromones. 8. 2-Trifluoromethyl- and 6-nitro-2-trifluoromethylchromones in reactions with amines, **8**, 1426

**2,5,8-Trihydroxy-6(7)-methoxy-1,4-naphthoquinone**

Chemistry of naphthazarin derivatives. 8. Determination of structures of substituted 2-hydroxy-6(7)-methoxy-naphthazarins and 7(8)-hydroxypyranonaphthazarins by IR spectroscopy, **1**, 95

**5,7(8),10-Trihydroxy-2-methyl-2-(4-methyl-3-penten-1-yl)-2H-naphtho[2,3-*b*]pyran-6,9-dione**

Chemistry of naphthazarin derivatives. 8. Determination of structures of substituted 2-hydroxy-6(7)-methoxy-naphthazarins and 7(8)-hydroxypyranonaphthazarins by IR spectroscopy, **1**, 95

**Triisopropylphosphine**

Intramolecular electrophilic rearrangements in saturated acyclic systems. Reactivity of the zwitterion derived from triisopropylphosphine and ethyl 2-cyanoacrylate with respect to different types of electrophiles, **2**, 279

**Trimethylacetate complexes**

Unusual transformation of the urea molecule giving rise to the NCO<sup>-</sup> anion as a bridging ligand between two Co<sup>II</sup> atoms, **11**, 2251

Destruction of polymeric cobalt(II) trimethylacetate. Synthesis and structures of new complexes Co<sub>9</sub>( $\mu_3$ -OH)<sub>6</sub>( $\mu$ -OCCMe<sub>3</sub>)<sub>12</sub>(OCMe<sub>2</sub>)<sub>4</sub> and Co<sub>6</sub>( $\mu_4$ -O)<sub>2</sub>( $\mu$ -OCCMe<sub>3</sub>)<sub>10</sub>( $\eta$ -HOCCMe<sub>3</sub>)<sub>4</sub>, **12**, 2485

**Trimethylbromosilane**

Silylation of  $\gamma,\gamma$ -bis(alkoxycarbonyl)-substituted aliphatic nitro compounds: synthesis of *N,N*-bis(trimethylsilyloxy)aminocyclopropanes, **12**, 2433

**Trimethylhydroquinone**

Synthesis of  $\alpha$ -tocopherol analogs with unsaturated side chain and their transformation into the corresponding chromans with  $\omega$ -functionalized side chain, **11**, 2227

**Trimethylsilyl cation**

Interaction of trimethylsilyl ions with nitrates of the estrane series in the gas phase, **2**, 250

***O*-Trimethylsilyl *N,N*-dialkylcarbamates**

Reactions of hexaorganoyldigermoxanes with *O*-trimethylsilyl carbamates, **4**, 743

**2,4,6-Trinitrobenzonitrile**

Chemistry of 2,4,6-trinitrobenzonitrile. 1. Substitution of nitro groups in 2,4,6-trinitrobenzonitrile under the action of anionic nucleophiles. Factors facilitating the replacement of the *ortho*-nitro group, **12**, 2401

**Tritromethane**

Molecular structures of trinitromethane derivatives, **3**, 385

Mechanism of formation and monomolecular decomposition of *aci*-nitromethanes: a quantum-chemical study, **6**, 952

Vibrational spectra of trinitromethane derivatives, **7**, 1173

**Tritromethane derivatives**

Molecular structures of trinitromethane derivatives, **3**, 385

**2,4,6-Trinitrotoluene**

Regioselective replacement of nitro groups in 2,4,6-trinitrotoluene under the action of alkanethiols. Synthesis of *ortho*-(alkylthio)-substituted nitrotoluenes and their oxidation to sulfoxides and sulfones, **2**, 261

Nitro group substitution in 2,4,6-trinitrotoluene under the action of arenethiols and transformations of the reaction products, **12**, 2406

**Triphenylantimony diacetate**

Catalytic *C*-phenylation of methyl acrylate with triphenylantimony(v) dicarboxylates, **7**, 1291

**Triphenylantimony dipropionate**

Catalytic *C*-phenylation of methyl acrylate with triphenylantimony(v) dicarboxylates, **7**, 1291

**Triphenylphosphine**

Kinetics and mechanism of styrene hydrocarboalkoxylation catalyzed by Pd<sup>0</sup> complex in the presence of toluenesulfonic acid, **10**, 1839

**Triple-decker complexes**

Synthesis of dicationic triple-decker complexes with a central *B*-cyclohexyl-substituted borole ligand, **7**, 1332

**Triplet repulsion**

The reactivity of organoboranes in radical substitution reactions, **3**, 390

**Tris( $\alpha$ -trifluoromethylbenzyl) phosphates**

Catalytic phosphorylation of polyfluoroalkanols. 17. Synthesis and the stereochemistry of tris( $\alpha$ -trifluoromethylbenzyl) phosphates, **6**, 1085

**Tris(triphenylphosphine)osmium dichloride**

Synthesis, structure and isomerism of "three-bridge" *exo-nido*-osmacarborane clusters, **4**, 706

**Triterpenes**

Synthesis of quinoxalines fused with triterpenes, ursolic acid and betulin derivatives, **2**, 304

**Triterpenoids**

3 $\beta$ -Methoxyolean-18-ene (miliacin) from the marine fungus *Chaetomium olivaceum*, **12**, 2463

**Tryptamine**

Synthesis of 1-aryl-1,2,3,4-tetrahydro-9*H*-pyrido[3,4-*b*]indoles (1,2,3,4-tetrahydro- $\beta$ -carbolines) under high pressures, **3**, 560

**Tungsten**

Synthesis and structure of the polymeric cluster compound [Mn(H<sub>2</sub>O)<sub>4</sub>]<sub>3</sub>[W<sub>4</sub>S<sub>4</sub>(CN)<sub>12</sub>]·*n*H<sub>2</sub>O containing very large cavities, **9**, 1525

**Tungsten compounds**

Synthesis and the crystal structure of the supramolecular complex [Cl<sub>3</sub>InW<sub>3</sub>S<sub>4</sub>(H<sub>2</sub>O)<sub>9</sub>]<sup>2+</sup> with cucurbituril, **7**, 1144

Synthesis and structure of the polymeric cluster compound [Mn(H<sub>2</sub>O)<sub>4</sub>]<sub>3</sub>[W<sub>4</sub>S<sub>4</sub>(CN)<sub>12</sub>]·*n*H<sub>2</sub>O containing very large cavities, **9**, 1525

**Tunneling**

Six-dimensional tunneling dynamics of internal rotation in hydrogen peroxide molecule and its isotopomers, **3**, 366

Multidimensional tunneling dynamics of proton transfer in malonaldehyde molecule and its isotopomers, **7**, 1148

**Tunneling splittings**

Multidimensional tunneling dynamics of proton transfer in malonaldehyde molecule and its isotopomers, **7**, 1148

**U****Ultrafiltration**

Rapid characterization of ultrafiltration membranes by scanning electron microscopy, **7**, 1320

**Unpaired electrons**

Exohedral  $\eta^5$ - $\pi$ -complexes of fullerene C<sub>20</sub>, **2**, 180

**Ureas**

Solvation of amides of carboxylic acids in aqueous solutions of ethylene glycol, **5**, 780

Synthesis of 2'-bromo-8-methylspiro(4*H*-3,1-benzooxazine-4,1'-cyclopentan)-2(1*H*)-one and 2-amino-2'-bromo-8-methylspiro(4*H*-3,1-benzooxazine-4,1'-cyclopentane) from 6-(cyclopent-1-enyl)-2-methylaniline, **12**, 2466

**Urokinase**

Diffusional transport of urokinase and acyl-urokinase into fibrin and plasma clots: time of contact and fibrinolytic response *in vitro*, **10**, 1885

**Ursolic acid**

Synthesis of quinoxalines fused with triterpenes, ursolic acid and betulin derivatives, **2**, 304

**UV spectroscopy**

Amino-substituted *gem*-diphosphonic acids: structures of complexes with divalent metal cations in aqueous solutions, **4**, 697

The nature of the super-electron-releasing inductive effect of the silatranyl group and its spectroscopic and chemical consequences (review), **5**, 757

Preparation of sphere-shaped nanoscale carbon nitride polymer, **11**, 2020

Intermediates of photolysis of 1,3,2,4-benzodithiadiazines studied by matrix isolation spectroscopy and quantum chemistry, **11**, 2064

**V****Van Tamelen epoxidation**

Fluorescent-labeled derivatives of dolichyl phosphate. Analogs of dolichyl phosphate with the 2-aminopyridine residue at the  $\omega$ -end of the chain, **3**, 531

Derivatives of dolichyl phosphate with fluorescent label. Analogs of dolichyl phosphate with different lengths of isoprene chain, containing the (1-naphthyl)amino group in the  $\omega$ -fragment, **11**, 2221

**Vanadocene**

Electron density distribution in vanadocene ( $\eta^5$ -C<sub>5</sub>H<sub>5</sub>)<sub>2</sub>V and mixed metallocenes ( $\eta^5$ -C<sub>5</sub>H<sub>5</sub>)M( $\eta^5$ -C<sub>7</sub>H<sub>7</sub>) (M = Ti, V, or Cr) and ( $\eta^5$ -C<sub>5</sub>H<sub>5</sub>)Ti( $\eta^8$ -C<sub>8</sub>H<sub>8</sub>). Effect of the nature of the cyclic ligand on the character of the M-( $\pi$ -ligand) bond, **1**, 130

**Vibrational analysis**

Density functional theoretical studies of [2+2] cycloaddition of simple transient silenes and germenes to ethylene, formaldehyde, and thioformaldehyde, and vibrational analysis of spectra of reactants and cyclic products, **1**, 20

**Vibrational frequencies**

Structure and spectra of 1,3,2-dioxaphospholenes. 1. Microwave spectra of 2-chloro-4,5-dimethyl-1,3,2-dioxaphospholene and its isotopomers in the ground and excited vibrational states, **9**, 1605

**Vibrational spectra**

Thermodynamic properties and valence-force field of alkanethiols and dialkyl sulfides, **9**, 1563

**Vibration-tunneling spectra**

Six-dimensional tunneling dynamics of internal rotation in hydrogen peroxide molecule and its isotopomers, **3**, 366

Multidimensional tunneling dynamics of proton transfer in malonaldehyde molecule and its isotopomers, **7**, 1148

**Vibronic spectra**

S<sub>1</sub>←S<sub>0</sub> Vibronic spectrum and structure of 2,2-difluoroethanal in the S<sub>1</sub> state, **7**, 1218

**Vinyl ethers**

New potentialities of electrophilic addition in the assembly of polyfunctional compounds from simple precursors (review), **11**, 1949

**Vinyl sulfides**

A new method for the synthesis of fluorinated vinyl sulfides and ketene dithioacetals, **6**, 1044

**O-Vinylacetoxime**

Possible intramolecular rearrangements of *O*-vinylloximes initiated by N—O bond dissociation: a quantum-chemical analysis, **5**, 764

**Vinylcarbinols**

Synthesis of  $\alpha$ -tocopherol analogs with unsaturated side chain and their transformation into the corresponding chromans with  $\omega$ -functionalized side chain, **11**, 2227

**Vinylcyclobutanes**

Reactions of diazoalkanes with unsaturated compounds. 14. Reactions of diazomethane, diazocyclopropane, and methyl diazoacetate with 1,1,2,2-tetrafluoro-3-vinylcyclobutane and 2,3,3-trifluoro-1-vinylcyclobutene to form [3+2] and [1+2] cycloadducts, **11**, 2113

**Vinylcyclobutenes**

Reactions of diazoalkanes with unsaturated compounds. 14. Reactions of diazomethane, diazocyclopropane, and methyl diazoacetate with 1,1,2,2-tetrafluoro-3-vinylcyclobutane and 2,3,3-trifluoro-1-vinylcyclobutene to form [3+2] and [1+2] cycloadducts, **11**, 2113

**Vinylidene complexes**

Molecular structure of a new palladium-containing vinylidene cluster  $[\eta^2\text{-Ph}_2\text{P}(\text{CH}_2)_3\text{PPh}_2]\text{PdFe}_3(\mu^4\text{-C}=\text{CHPh})(\text{CO})_9$ , **3**, 512

**1-Vinylimidazole**

Reaction of the acrylic acid and 1-vinylimidazole copolymer with  $\text{CuCl}_2$  in aqueous solution, **8**, 1382

**Vinylpyridines**

Efficient method for the synthesis of new [2-(alkyl-arylthio)ethyl]pyridines, **3**, 563

**(1-Vinylpyrrol-2-yl)pyridines**

1-Methyl-2(3,4)-(1-vinylpyrrol-2-yl)pyridinium iodides: some structural features revealed by  $^1\text{H}$  and  $^{13}\text{C}$  NMR spectroscopy, **3**, 551

**Viologen**

Influence of the linking chain length on the recombination kinetics of covalently bonded triplet radical pairs and magnetic field effects, **4**, 599

**Volume filling of pores**

Characteristic features of phase diagrams describing condensation of adsorbate in narrow pores, **1**, 50

**W****Water**

Adsorption of vapor mixtures of water and organic substance on activated carbons, **4**, 595

Studies of photoinduced addition of water and alcohols to substituted dihydroquinolines, **4**, 673

Solvation of amides of carboxylic acids in aqueous solutions of ethylene glycol, **5**, 780

Structural parameters of concentrated aqueous solutions of  $\text{LiCl}$  under extreme conditions, as calculated by the method of integral equations. Effect of temperature, **6**, 935

Sorption of aliphatic ketones from aqueous solutions by starch cryotextures, **6**, 1032

Catalytic ring opening of acetylcyclopropane by water and alcohols under the action of copper or palladium salts, **7**, 1242

Pyrolysis of eicosane in supercritical water, **8**, 1478

Naphthalene oxidation in supercritical water, **8**, 1481

Binary molecular complexes of silicon tetrafluoride with water, methanol, and dimethyl ether. Quantum-chemical study, **12**, 2316

**Wolff rearrangement**

Bis(ketenyl)benzenes: preparation, observation, and reaction with tetramethylpiperidin-1-yloxy, **11**, 2130

**X****X-ray diffraction analysis**

Crystal structures of chloroform solvates of fullerenes, **1**, 78

Unexpected reaction of 1,1,1,10,10,10-hexafluorodecane-2,4,7,9-tetrone with methyl trifluoroacetate, **1**, 101

Photochromic dihetarylethenes. 6. Photochromic derivatives of thieno[3,2-*b*]thiophene, **1**, 110

Electron density distribution in vanadocene ( $\eta^5\text{-C}_5\text{H}_5$ )<sub>2</sub>V and mixed metallocenes ( $\eta^5\text{-C}_5\text{H}_5$ )M( $\eta^5\text{-C}_7\text{H}_7$ ) (M = Ti, V, or Cr) and ( $\eta^5\text{-C}_5\text{H}_5$ )Ti( $\eta^8\text{-C}_8\text{H}_8$ ). Effect of the nature of the cyclic ligand on the character of the M—( $\pi$ -ligand) bond, **1**, 130

Reactions of *N*-phenyl-*o*-semiquinonediimine complexes of nickel and platinum with carbonyl-containing low-valence iron and rhenium compounds, **1**, 142

Intramolecular electrophilic rearrangements in saturated acyclic systems. Reactivity of the zwitterion derived from triisopropylphosphine and ethyl 2-cyanoacrylate with respect to different types of electrophiles, **2**, 279

Synthesis of stereoisomeric *d,l* and *meso* forms of *O,O'*-bis-(*O,O'*-dialkyl 1-phosphorylbenzyl)phenylphosphonites and -thionophosphonates containing a pseudochiral center and determination of their configurations by NMR spectroscopy, **2**, 287

Bis(O—Si)-chelate fluorobis(2-oxohexahydroazepino-methyl)silylium tetrafluoroborate, a cation-anionic complex containing a silylium ion stabilized by O→Si coordination, **2**, 331

Crystal and electronic structure of  $\text{Ni}_3\text{Bi}_2\text{S}_2$  (parkerite), **3**, 353

Hydrogen bond in 3-acetyl-4-hydroxycoumarin: X-ray diffraction study and quantum-chemical calculations, **3**, 418

Synthesis and structures of 1,1'-dialkyl-3,3'-bidiaziridines, **3**, 440

Guanidine in the synthesis of perfluoroalkylpyrimidines and perfluoroalkyl-*s*-triazines, **3**, 476

Synthesis and the crystal structure of a supramolecular adduct of the  $[\text{Mo}_3\text{O}_4(\text{H}_2\text{O})_6\text{Cl}_3]^+$  cluster complex with macrocyclic cavitand cucurbituril, **3**, 494

Synthesis and stereochemistry of diastereomeric *closo*-( $\pi,\sigma$ -dicyclopentenyl)rhodacarboranes with the agostic C—H...Rh bond, **3**, 504

Molecular structure of a new palladium-containing vinylidene cluster  $[\eta^2\text{-Ph}_2\text{P}(\text{CH}_2)_3\text{PPh}_2]\text{PdFe}_3(\mu^4\text{-C}=\text{CHPh})(\text{CO})_9$ , **3**, 512

Oxidative dehydrogenation of *N*-methyl-*o*-phenylenediamine coordinated to the  $\text{Pd}^{\text{II}}$  and  $\text{Pt}^{\text{II}}$  atoms, **3**, 515

Synthesis and the crystal structures of *N*-(2-nitroxyethyl)isonicotinamide and its complexes with  $\text{PdCl}_2$  and  $\text{PtCl}_2$  as potential antitumor medicines, **3**, 520

15-*O*-Deacetylrrhaposerin and rhaserin — new components of a lactone mixture from *Rhaponticum serratuloides*, **3**, 537

Diastereoselective synthesis of (*R*\*,*R*\*)-ethyl 2-[1*H*-indol-3-yl(phenyl)methyl]-3-oxobutanoate, **3**, 570

Complex formation between polyethylene oxide-containing nonionic surfactants and  $\alpha$ - and  $\beta$ -cyclodextrins, **4**, 620

Preparative synthesis of 3-cyano-4-difluoromethyl- and 3-cyano-4-trifluoromethyl-2(1*H*)-pyridones, **4**, 669

Reaction of 4,6-bis(*tert*-butyl)-2,2,2-trichlorobenzo[*d*]-1,3,2-dioxaphosphole with phenylacetylene. *ipso*-Substitution of the *tert*-butyl group, **4**, 693

X-ray diffraction analysis and luminescence spectral study of crystal solvates of *N*-(*N'*-tosylanthranoyl)anthranilic acid with acetic acid and dimethylformamide, **4**, 728

Polydentate coordination of the thallium atom in complexes with chiral amidinylcyclopentadienyl ligands, **5**, 890

Stereospecific formation of polycyclic ferrocenyldihydropyrazoles based on *Z*- and *E*-isomeric ferrocenyl-substituted  $\alpha,\beta$ -unsaturated ketones of the heterocyclic series, **5**, 895

Synthesis, structures, and properties of the niobium and tantalum telluride cubane clusters  $[\text{M}_4(\mu_4\text{-O})(\mu_3\text{-Te})_4(\text{CN})_{12}]^{6-}$  (M = Nb or Ta), **6**, 930

- Regioselectivity in the reactions of the acetate ion with electron-deficient arenes, **6**, 1056
- Synthesis of 4,5-dihydrothiazole derivatives by the reaction of perfluoro-2-methylpent-2-en-3-yl isothiocyanate with ambident N,O- and N,S-nucleophiles, **6**, 1072
- Reductive mono- and diallylation of the bis(pyridine)dihydropyridyllithium dimer by triallylborane, **6**, 1078
- Structures and conformational behavior of phosphorothioites and their complexes with transition metals obtained from X-ray diffraction analysis (review), **7**, 1130
- Synthesis and structure of a new octahedral molybdenum thiocyanide cluster complex  $K_7[Mo_6(\mu_3-S)_8(CN)_6] \cdot 8H_2O$ , **7**, 1140
- Synthesis and the crystal structure of the supramolecular complex  $[Cl_3InW_3S_4(H_2O)_9]^{2+}$  with cucurbituril, **7**, 1144
- A new synthesis of spiro-fused 1,4-benzothiazines, **7**, 1264
- Unusual scission of 3,7-dichlorobisothiazolo[4,5-*b*:4',5'-*e*]pyrazine by nucleophiles, **7**, 1287
- Chemistry of acyl(imidoyl)ketenes. 6. Synthesis and the molecular structure of ethyl 2-oxo-2,5-dihydrofuro[2,3-*b*]quinoxaline-3-carboxylate, **7**, 1317
- Formation of a tetranuclear nickel(II) complex containing an unusual bridging ligand, **7**, 1336
- Molecular complex of  $C_{60}$  fullerene with an organic  $\pi$ -donor, bis(methylenedithiotetrafulvalene): synthesis, crystal structures, and properties, **8**, 1423
- 2-Polyfluoroalkylchromones. 9. Synthesis and structures of 5-(2-hydroxyaryl)-7-polyfluoroalkyl-1,4,8-triazabicyclo[5.3.0]dec-4-enes, **8**, 1430
- Synthesis of (2*E*)-2-(tetrafluoroethylidene)-3,3-bis(trifluoromethyl)-2,3-dihydrothiazolo[3,2-*a*]benzimidazole, **8**, 1446
- New approach to the functionalization of  $\delta$ -carboline derivatives, **8**, 1449
- 10-(3-Hydroxypropyl)-1,4,6,8-tetraphenyl-1,4,7,8-tetraaza-5-phosphoniaspiro[4.5]deca-6,9-diene chloride: synthesis and molecular structure, **8**, 1461
- P,O*-Ligands. Complexes of tetraphenylmethylenediphosphine oxide with silver nitrate, **8**, 1469
- Metal-induced B—H activation in  $Cp^*Rh$ ,  $Cp^*Ir$ , (*p*-cymene)Ru, and (*p*-cymene)Os half-sandwich complexes containing the 1,2-dicarba-*closo*-dodecaborane(12)-1,2-dichalcogenolato ligand (review), **9**, 1518
- Synthesis and structure of the polymeric cluster compound  $[Mn(H_2O)_4]_3[W_4S_4(CN)_{12}] \cdot nH_2O$  containing very large cavities, **9**, 1525
- The nature of the O—O bond in hydroperoxides, **9**, 1539
- Crystal structure and excimer fluorescence of dibenzoyl-methanoboron difluoride, **9**, 1612
- Crystal and molecular structures of salts of the secondary permethylmetallocenylmethyl cations  $(C_5Me_5MC_5Me_4CHR)^+X^-$  (M = Ru, Os; R = Ph,  $C_6F_5$ ; X =  $BF_4$ ,  $PF_6$ ), **9**, 1616
- Reactions of 9,10-phenanthrenequinone and its nitro derivatives with acetone in the presence of  $Al_2O_3$ , **9**, 1625
- New *N*-nitrosoamines. 1. Synthesis and nitrosative cleavage of the Mannich bases derived from nitrogen-containing heterocycles and primary aliphatic amines, **9**, 1630
- Coordination chemistry of macrocyclic multidentate Lewis acids. Synthesis and structures of complexes of cyclic trimeric perfluoro-*o*-phenylenemercury with *N,N*-dimethylacetamide and *n*-butyronitrile, **9**, 1673
- Heteroorganic betaines. 7. Synthesis and structure of a germanium-containing organophosphorus betaine  $Et_3P^+—CHMe—GeMe_2—S^-$ , **9**, 1679
- Electrophilic substitution in eleven-vertex metallocarborane 1,2,4-CpCoC<sub>2</sub>B<sub>8</sub>H<sub>10</sub>, **9**, 1683
- Dihydrofolate reductase: structural aspects of mechanisms of enzyme catalysis and inhibition (review), **10**, 1733
- Peculiarities of NMR spectra of heterospin complexes, **11**, 2078
- Study of alkaloids from the flora of the Siberian and Altai regions. 6. Crystal and molecular structure of songorine *Z*-oxime, **11**, 2092
- Allylmethylation of benzoazaheterocycles with allylic derivatives of zinc. Synthesis of 1,4-ethano-2,3-dihydroisoquinolines and allylated heterocycles, **11**, 2172
- Bis(1,4-di-*tert*-butyl-1,4-diazabutadiene)copper(II) [(3,6-di-*tert*-butyl-*o*-benzosemiquinono)(3,6-di-*tert*-butylcatecholato)cuprate(II)]. The molecular structure and intramolecular electron transfer, **11**, 2193
- Heterometallic zirconocene(III) aluminum hydride complex  $(Cp_2ZrH)_2HAiCl_2 \cdot C_4H_8O_2 \cdot C_6H_6$ , **11**, 2200
- Synthesis and the structure of tribromo(7-bromobicyclo[4.1.0]hept-7-yl)germane, **11**, 2203
- Unusual condensation of propargylamine. Generation of the 1,3-di(propargylimino)propane anion coordinated to the cobalt(III) atom, **11**, 2206
- Synthesis, molecular structures, and thermal decomposition of heterometallic ( $\pi$ -cyclooctadiene)platinum-bis(tricarbonyliron- $\mu_3$ -chalcogenides)[Fe—Fe], ( $\pi$ -C<sub>8</sub>H<sub>12</sub>)Pt( $\mu_3$ -X)<sub>2</sub>Fe<sub>2</sub>(CO)<sub>6</sub>, where X = S, Se, or Te, **11**, 2215
- Reaction of *exo-nido*-ruthenacarborane  $[Cl(Ph_3P)_2Ru]-5,6,10-(\mu-H)_3-10-H-7,8-C_2B_9H_8$  with bromine, **11**, 2245
- Synthesis and the structure of the triphenylphosphine complex of *o*-nickelacarborane, 3,3-(PPh<sub>3</sub>)<sub>2</sub>-3,1,2-NiC<sub>2</sub>B<sub>9</sub>H<sub>11</sub>, **11**, 2248
- Unusual transformation of the urea molecule giving rise to the NCO<sup>-</sup> anion as a bridging ligand between two Co<sup>II</sup> atoms, **11**, 2251
- closo*-3-( $\eta^3$ -4,6-Dimethylbicyclo[3.3.0]oct-1-en-2-yl)-1,2-dimethyl-3,1,2-dicarbollyliridium with an agostic C—H...Ir bond, **11**, 2254
- Structure determination from powder diffraction (review), **12**, 2273
- New polymolecular bismuth monohalides. Synthesis and crystal structures of  $Bi_4Br_xI_{4-x}$  ( $x = 1, 2, \text{ or } 3$ ), **12**, 2304
- Synthesis of the gold-dirhenium ferrocenylacetylide cluster. The crystal structure of  $Re_2(\mu-C\equiv CFc)\{Au(PPh_3)\}(CO)_8$ , **12**, 2441
- Binuclear and polynuclear transition metal complexes with macrocyclic ligands. 1. Synthesis and the structure of an antiferromagnetic binuclear nickel complex prepared by the reaction of *o*-phenylenediamine with pyrrole-2,5-dicarbaldehyde and nickel pivalate, **12**, 2445
- Migration of the *O*-acetyl group in the acetonation of guaianolide rhaposerin, **12**, 2459
- Reaction of *R*-(+)-2-benzylideneaminobutan-1-ol with ethylene phosphorochloridite. Stereospecific formation of (3*R*,5*R*)-2-(2-chloroethoxy)-5-ethyl-2-oxo-3-phenyl-1,4,2-oxazaphosphorinane, **12**, 2468

First X-ray diffraction study of nitrosonium complexes of nitrogen-containing organic compounds: a complex of 1,10-phenanthroline with  $\text{NO}^+\text{BF}_4^-$ , **12**, 2477

Destruction of polymeric cobalt(II) trimethylacetate. Synthesis and structures of new complexes  $\text{Co}_9(\mu_3\text{-OH})_6(\mu\text{-OCCMe}_3)_{12}(\text{OCMe}_2)_4$  and  $\text{Co}_6(\mu_4\text{-O})_2(\mu\text{-OCCMe}_3)_{10}(\eta\text{-HOCCMe}_3)_4$ , **12**, 2485

#### X-ray phase analysis

Synthesis and magnetic properties of liquid crystalline lanthanide complexes with alkylsulfate counterions, **3**, 488

Structure determination from powder diffraction (review), **12**, 2273

#### *o*-Xylene

Catalytic properties of chromites with a spinel structure in the oxidation of CO and hydrocarbons and reduction of nitrogen oxides, **12**, 2377

#### L-Xylose

Stereodivergent synthesis of chiral low-molecular bioregulators using readily available lipases (review), **11**, 1984

### Y

#### Ylides

Reactions of methoxycarbonylcarbene with 3-ethyl-2-phenyl- and 2,3-diphenyloxazolidines, **11**, 2144

#### Ynol ethers

Silylation and germylation of trialkylsilyl(germyl)ethoxyacetylenes containing bulky substituents at the silicon or germanium atom, **6**, 1088

### Z

#### Zeldovich's equality

Simulation of adsorption dynamics in adsorbent layers of short length. Estimation of the concentration region of validity of Zeldovich's equality, **9**, 1578

#### Zeolites

Adsorption and adsorption-induced deformation of NaX zeolite under high pressures of carbon dioxide, **1**, 60

Statistical modeling of equilibrium adsorption of non-ideal mixtures on zeolites, **2**, 220

#### Zero-charge point

Estimation of oxyhydroxide specific surface area using the amounts of OH groups adsorbed, **9**, 1582

#### Zinc compounds

Anomalous line broadening in the ESR spectra of copper(II) dithizonate, **3**, 413

Catalytic properties of chromites with a spinel structure in the oxidation of CO and hydrocarbons and reduction of nitrogen oxides, **12**, 2377

#### Zintl phases

Mercury and cadmium pnictidehalides: the inverted Zintl phases (review), **3**, 337

#### Zirconium compounds

Phosphorescence of Group IVB metal complexes, **2**, 329

Activation of C—H bonds in  $\text{C}_1\text{—C}_3$  alkanes by titanium(IV) and zirconium(IV) cationic complexes: a DFT study, **3**, 376

Estimation of oxyhydroxide specific surface area using the amounts of OH groups adsorbed, **9**, 1582

DFT study of the mechanism of alkane hydrogenolysis by transition metal hydrides. 1. Interaction of silica-supported zirconium hydrides with methane, **11**, 2050

Heterometallic zirconocene(III) aluminum hydride complex  $(\text{Cp}_2\text{ZrH})_2\text{HAlCl}_2 \cdot \text{C}_4\text{H}_8\text{O}_2 \cdot \text{C}_6\text{H}_6$ , **11**, 2200

#### Zirconocenes

Activation by the Grignard reagent of the bis(2-phenylindenyl)zirconium dichloride—triisobutylaluminum catalytic system for propene polymerization, **9**, 1696

#### Zongoramine

Oxidation of diterpenoid alkaloids with dimethyldioxirane, **4**, 720

#### Zwitterions

Intramolecular electrophilic rearrangements in saturated acyclic systems. Reactivity of the zwitterion derived from triisopropylphosphine and ethyl 2-cyanoacrylate with respect to different types of electrophiles, **2**, 279