ANNUAL LIST OF CONTENTS: VOLUME 20 (1999)

- Quantum Beats in Recombination of Spin-correlated Radical Pairs Yu. N. Molin
- 16 Ion-Sensing Property of an Ion Pair Amphiphile Yong-chan Chung* and Han-ju Lee
- A Morphological Study on a Spontaneous Photoelectrochemical Process of Cleaved CdTe(100) Ho Ryul Ryu and Choong Kyun Rhee*
- Direct Formation of Hydrogen Peroxide with H₂ and O₂ over Anthraquinone Encapsulated Pd-Y Zeolite Sang-Eon Park,* Jung Whan Yoo, Woo Jin Lee, Chul Wee Lee, Jong-San Chang, and Yong Ki Park
- Surface Mediated Optical Properties of Ag/NaF Hybrid Crystal Synthesized by Photochemical Process Min-Jin Ko, Waiping Ma, Joel Plawsky, and Heyer Birnboim
- Direct Hydroacylation of Polybutadiene by Wilkinson's Complex Jae-Hun Kim and Chul-Ho Jun*
- Catalytic Carbon-Nitrogen Bond Cleavage by Rh(I) So-Hee Jang and Chul-Ho Jun*
- Facile Synthesis of *p*-Phenyl Homooxacalix[4]arenes Kwanghyun No
- Hyperbolic Reaction-Diffusion Equation for a Reversible Brusselator: Solution by a Spectral Method II-Hie Lee, Kwang-Yon Kim, and Ung-In Cho*
- Quantum-chemical Study of Effects of Alkoxy Substitution on the Conformations and Electronic Properties of Poly(*p*-phenylenevinylenes) Sung Y. Hong
- Gif-KRICT Biomimetic Oxidation of Cyclohexane: The Influence of Metal Oxides Oei-Suk Park, Sang-Sung Nam, Seong-Bo Kim, and Kyu-Wan Lee*
- Structural and Electrochemical Characterization of the Spinel LiCr_xMn_{2-x}O₄ System Sung-Jae Hong, Soon-Ho Chang, and Chul-Hyun Yo*
- A Study on the Alkalimetric Titration with Gran Plot in Noncomplexing Media for the Determination of Free Acid in Spent Fuel Solutions
 - Moo Yul Suh,* Chang Heon Lee, Se Chul Sohn, Jung Suk Kim, Won Ho Kim, and Tae Yoon Eom
- Synthesis and Characterization of Group 13 Compounds of 2-Acetylpyridine Thiosemicarbazone. Single-Crystal Structure of (ⁱC₄H₉)₂Al(NC₅H₄C(CH₃)NNC(S)NHPh) Youngjin Kang, Sang Ook Kang, Jaejung Ko, and Jeong-In Sohn
- Silica-Pillared H-kenyaites: Interlamellar Base Catalyzed-Reaction of Tetraethylorthosilicate in Water Suspension Oh-Yun Kwon* and Sang-Won Choi
- 76 Intramolecular Photocycloaddition of 3-(3-Butenyl)cyclohex-2-enone and 3-(2-Propenoxy)cyclohex-2-enone in
 - Taehee Noh,* Hyeoksoon Kwon, Kyungsun Choi, and Kyungin Choi
- 81 Spectroscopic Properties and Ligand Field Analysis of Pentaammine(imidazole)chromium(III) Perchlorate Jong-Ha Choi
- Selective Deprotonation and Decarbonylation from Hydridocarbonyl-iridium(III) Compounds with Trimethylamine N-oxide
 - Chong Shik Chin,* Moonhyun Oh, Gyongshik Won, Haeyeon Cho, and Dongchan Shin
- Ni/γ-Al₂O₃ Catalyst Prepared by Liquid Phase Oxidation for Carbon Dioxide Reforming of Methane Kyoung Soo Jung, Byoung-Youl Coh, and Ho-In Lee*

95 Synthesis and Characterization of Thermally Stable Ln(hfa)₃(monoglyme) (Ln=Ho, Y, hfa=hexafluoroacetylacetone) Complexes

Seong-Joo Kang,* Young Sook Jung, and Il-Hwan Suh

99 A Facile Synthesis of Methyl (3-isocyano-2-cyclopent-2-enyl)acetate Cheol Keun Chung, Kyungae Kim, Young Ho Rhee, and Hyunho Lee*

101 Aldol-Type Self Condensation of α -Halo- α , α -difluoromethyl-ketones by Using the Bimetal Redox System [Cr(III)/Fe]

Kyu Yun Chai

Catalytic Formation of Cyclic Carbonates and Carbamates by [Cu(1)](BF₄)₂ (1=2,5,19,22-tetraaza[6,6](1,1') ferrocenophane-1,5-diene)

Soon-Chul Kwon, Chan-Sik Cho, Sang-Chul Shim, and Tae-Jeong Kim*

- Nonprotein Amino Acids: Preparation of 5-Substituted-2-Aminoadipic Acid Derivatives Kijun Hwang,* Namkyu Choi, and Inho Cho
- 109 Restriction Endonuclease *Eco*RV Mutants that Switch Metal Ion Requirement Eu Jene Joo, Wee Sung Park, Sang Kook Kim, Young Suk Bae, and Byung Jo Moon*
- 112 Synthesis and Evaluation of the Deoxycholic Acid Derivative with Two 4-Trifluoroacetylbenzoyl Groups as a Carbonate Ionophore

Hyung-Jung Pyun,* Junho Chu, Young Moo Jun, and Dong Jin Kim

117 A Minimum Flux Surface Tae Jun Park

...

- Ruthenium and Tin-Catalyzed Synthesis of Indoles from Anilines and Ethylene Glycol Chan Sik Cho, Myung Jin Lee, Sang Chul Shim,* and Myung Chul Kim
- Diastereoselective Reduction and Grignard Reaction of 3-Aryltetrahydropenta[d]isoxazol-4-ones **Hyoung Rae Kim,* Seung II Shin, Hyun Ju Park, Dong Ju Jeon, and Eung K. Ryu**
- 129 Complexation and Transport of Zwitterionic Amino Acids by an Artificial Receptor Kyu-Sung Jeong* and Tae-Yoon Park
- 132 Self-assembled Monolayers of Ferrocene-terminated Thiol on Gold: Reorientation Induced by Coadsorption of Dodecanethiol

Myunghee Lee and Chinkap Chung*

- 135 Terpyridyl Derivative Useful for Synthesis of DNA Crystal **Hogyu Han**
- 137 Synthesis of Tetraalkyl-bis(methoxycarbonylethyl) Amphiphilic Porphyrins **Deok-Keun Han, Guangzhu Jin, Bong Young Chung, and Young Key Shim***
- 139 Model Study for the Biogenesis of Benzastatins Sung-eun Yoo, * Jong-hwa Kim, and Kyu Yang Yi
- 141 Poly(amic ester-co-imides) with Different Ratios of Amic Ester and Imide Moieties: Thermally Stable Precursors for Copolyimides

Tae Ha Woo, Myongsoo Lee, Changjin Lee,* Suh Bong Rhee, and Myong-Hoon Lee

- 143 A Theoretical Study of ZnO Clusters in Beta Cage of Zeolite Y Hyung Mi Lim* and Chong Soo Han
- 147 Electronic Structure Study of Gold Selenides Wang Ro Lee and Dongwoon Jung*
- 151 Conformational Equilibrium Isotope Effects on Selectively Deuterated Cyclooctanone **Miewon Jung**

- 1562 Bull. Korean Chem. Soc. 1999, Vol. 20, No. 12
 - 159 Compositional Analysis of Naphtha by FT-Raman Spectroscopy Min-Sik Ku and Hoeil Chung*
 - Trinuclear Complexes M[Co(en)₂(SO₃)₂]₂(H₂O)₂·4H₂O (M=Mn, Fe, Co, Ni, Cu, Zn): Their Utilization for Stoichiometric Spinel Oxides and the Crystal Structure of Ni[Co(en)₂(SO₃)₂]₂(H₂O)₂·4H₂O Kun-Pyo Hong, Hee Sook Park, and Young-Uk Kwon*
 - Photocycloaddition of Cyclohexa-1,3-diene to Methyl Naphthoates
 Taehee Noh,* Sukjin Kang, Hyun Yu, and Sangick Lee
 - 173 Synthesis and Characterization of Zeolite L Yong Sig Ko and Wha Seung Ahn*
 - Synthesis and Evaluation of the Cholic Acid Derivatives with Multi-trifluoroacetylbenzoyl (TFAB) Groups as Carbonate Ionophores

Hyung-Jung Pyun,* Junho Chu, Woojin Yoon, Young Moo Jun, and Dong Jin Kim

- 187 Electrochemical Behavior of Viologens with Long Alkyl Chains Depending on Their Concentrations and the Concentration of Micelles and Cyclodextrins Youngmi Lee and Chongmok Lee*
- 195 Coupled Substitution of NiO and TiO₂ in Hematite **Bong-Hoon Park*** and Dong-Su Kim
- Structure-Contractile Activity Relationships of Neurokinin A on Guinea Pig Tracheal Smooth Muscle Tae Sik Jang, Song Yub Shin, Jong-Myung Ha, and Shin-Won Kang*
- 203 Influences of Aldehyde Type and p-Substituent Type on Structural Characteristics of p-Alkylphenol Aldehyde Resins Using a Molecular Simulation Sung-Seen Choi
- 211 Chiral Discrimination of Phenylacetic Acid Derivatives by Xylylenediamine-Modified β-Cyclodextrins Kwanghee Koh Park,* Han Sung Lim, and Joon Woo Park
- 214 1,2,4-Triazine(VIII): Oxidation of 6-Acetyl-1,2,4-triazine to 1,2,4-Triazin-6-yl-glyoxal and Its Application for the Synthesis of 6,5'- and 6,6'-*bis*-1,2,4-Triazinyls

 Jae-Keun Lee,* Sam-Yong Lee, and Heon-Gon Kim
- 217 Chelation-Controlled Aldol Reaction of Silyl Dienolate Derived from Ethyl Crotonate with a Chiral Aldehyde Seunguk Paik
- A Facile Synthesis of Partly-fluorinated Ethers Using Perfluoropropoxyethylene and Aliphatic Alcohols Ki-Whan Chi* and G. G. Furin*
- 223 Relationship between the Optimum Flow Rate and the Column Temperature in Capillary Column Ion Chromatography **Dongjin Pyo***, **Hohyun Kim**, and **Purnendu K. Dasgupta**
- 226 Determination of Inorganic Species in the Solution Extracted from Cleanroom Gloves Used in Semiconductor Process Y. W. Heo* and H. B. Lim
- 229 A New Route to the Synthesis of Cortodoxon from Progesterone Sung-Hwa Yoon, Jang-Ha Park, Ho-Sang Moon, and Young Soo Kim
- 232 Synthesis of 3-Arylpropylamine Derivatives from Aryl Halides Using Heck Reaction Gi Hyeon Baek, Sung Ju Cho, Young Sik Jung, Churl-Min Seong, Chang-Woo Lee, and No-Sang Park*
- 237 Reduction of Organic Halides with Sodium and Potassium Gallium Hydrides and Chemoselective Reduction of Organic Halides with Potassium Gallium Hydride in Multifunctional Compounds
 Jung Sung Kim,* Jung Hoon Choi, Hyeon Don Kim, Jong Hoon Yun, Choong Yul Joo, and Dae Jin Baek
- 241 On the Effectiveness of Function Counterpoise Method in the Calculation of He-He Interaction Energies **Jae Shin Lee**

- 244 Facile Synthesis of 2-(4-Nitrophenylsulfonyl)ethoxycarbonyl-*O-t*-butyl-L-serine, Threonine, and Tyrosine Jin-Il Park, Seung-Han Lee, Yeon Sun Lee,* and Hack-Joo Kim
- 247 A Comparative Study of the Bonding of N_2 and CO to Ru(001) and the Role of 5σ Orbital in Their Molecular Vibrational Frequency Changes **Dae-Bok Kang**
- Synthesis and Antitumor Activity of Poly(organophosphazene)/Doxorubicin Conjugates Soo-Chang Song,* Chong Ok Lee, and Youn Soo Sohn
- 253 Synthesis of Highly Crosslinked Poly(vinyl ethers) Containing the Nonlinear Optical Chromophore Oxybenzylidenemalononitrile and Oxycyanocinnamate Ju-Yeon Lee* and Min-Jung Kim
- The Relative Hydrogen Bonding Strength of Oxygen and Nitrogen Atoms as a Proton Acceptor Jong Cheol Hyun, Ho-Jin Lee, Nak Kyoon Kim, Young Sang Choi,* Jeunghee Park, and Chang-Ju Yoon
- Asymmetric Synthesis and Epimerization of Aryloxazinones Seung-Han Lee* and Dae-Jun Ahn
- 267 Friedel-Crafts Reaction of Tosylamide Derivatives: A Useful Source of Carbocationic Species Hong Jung Lee, Mi Ra Seong, Hyun Nam Song, and Jae Nyoung Kim*
- 269 A Facile Synthesis of *dl*-Modhephene Hee-Yoon Lee,* Deog-Il Kim, and Sunggak Kim*
- Formation of 1-Sulfonyl-3-sulfinyl Pyrrole in the Reaction of Pyrrole with Phenylsulfonyl Chloride Jin Beom Kim, Guangzhu Jin, Seeyearl Seong, Chan-Mo Yu, and Young Key Shim*
- Hydrogen Bonding Patterns in Sulfonylureas: Pattern Dependence on the Nature of Amine Substituent Byeang Hyean Kim,* Mi Kyoung Ahn, and Gil Tae Hwang
- Synthesis of Core-Modified Porphyrins and Studies of Their Temperature-dependent Tautomerism Chang-Hee Lee,* Han-Je Kim, and Dae-Wi Yoon
- The Role of Oxygen for Expressing Superconductivity in La-Ca-Cu-O Compounds 281 **Dongwoon Jung**
- 285 Molecular Dynamics Simulation Studies of Zeolite A. VII. Structure and Dynamics of H⁺ ions in a Non-Rigid Dehydrated H₁₂-A Zeolite Framework Song Hi Lee* and Sang Gu Choi
- The Formation of Metal (M=Co(II), Ni(II), and Cu(II)) Complexes by Aminosilanes Immobilized within Mesoporous Molecular Sieves Dong Ho Park,* Sung Soo Park, and Sang Joon Choe
- Stability Constants of First-row Transition Metal and Trivalent Lanthanide Metal Ion Complexes with Macrocyclic Tetraazatetraacetic and Tetraazatetramethylacetic Acids Choon-pyo Hong,* Dong-won Kim, Ki-young Choi, Chang-suk Kim, and Yong-gyu Choi
- Solution Conformations of the Substrates and Inhibitor of Hepatitis C Virus NS3 Protease Jung-Hoon Lee, Keunsu Bang, Jin-Won Jung, In-Ae Ahn, Seonggu Ro, and Weontae Lee*
- 307 Synthesis and Cationic Polymerization of Multifunctional Vinyl Ethers Containing Dipolar Electronic Systems Ju-Yeon Lee,* Ji-Hyang Kim, and Min-Jung Kim
- Preparation, Structure, and Property of Re(NAr)(PR₃)₂Cl₃, (PR₃ = PMe₃, PEt₃, P(OMe)₃; Ar = C_6H_5 , $2,6-i-Pr_2-C_6H_3$) Byung-Gyu Park, Nam-Sun Choi, and Soon W. Lee*
- 321 Syntheses of Anisomycin Derivatives Guncheol Kim,* Hyun Woong Hong, and Sang Hee Lee
- Diastereoselectivity in the Reaction of 2-Piperidineacetates Hyun-Kyu Chung, Hyung-Woo Kim, and Kyoo-Hyun Chung*

- 1564 Bull. Korean Chem. Soc. 1999, Vol. 20, No. 12
 - 329 Determination of Water Soluble Trace Gases in Ambient Air by Condenser-type Diffusion Denuder Coupled Ion Chromatography

In-Hyoung Chang, Nak-Hyun Choi, Bo-Kyoung Lee, and Dong Soo Lee*

- Physicochemical and Electrical Characterization of Polyaniline Induced by Crosslinking, Stretching, and Doping Kwang Sun Ryu,* Soon Ho Chang, Seong-Gu Kang, Eung Ju Oh, and Chul Hyun Yo
- 337 Luminescence of CaS:Bi
 - Chang-Hong Kim,* Chong-Hong Pyun, Han Choi, and Sung-Jin Kim
- 341 Synthesis of 1,1-Diheteroaryl Ethylenes by a Tandem Appel's Dehydration/Thermal Rearrangement Methodology **Kee-Jung Lee,*** **Youl Her, and Jong-Gab Jun**
- 345 The Importance of Thermodynamic Quantities for the Determination of the Unknown Conformation: *Ab initio* Studies of $K^+(H_2O)_3$

Han Myoung Lee, Hyeon S. Son, and Byung Jin Mhin*

- Spectrophotometric Determination of Copper After Selective Extraction with α-(2-Benzimidazolyl)-α',α"-(*N*-5-nitro -2-pyridyl hydrazone)-toluene in the Presence of Brij 58

 Chan-il Park, Hyun-Soo Kim, and Ki-Won Cha*
- A Study of the Development of CVD Precursors III-Synthesis and Properties of New Lead β-diketonate Derivatives **Jong Tae Lim, Joong Cheol Lee, Wan In Lee, and Ik-Mo Lee***
- Molecular Structure of *rac-cis*-1,4-2-Butenylenebis(1-indenyl)zirconium Dichloride Youn Jaung Cho, Sung Cheol Yoon, Won Seok Seo, Byoung Won Woo, Byoung-Jae Bae, Il-Hwan Suh, and Joon T. Park*
- Fluorescence Excitation Spectroscopy of the Jet-cooled Dimethyldiazirine: the CH₃ Torsional Mode Assignment Goo-Il Lim, Min-Chul Yoon, Soon-Mi Lim, Taek-Soo Kim, Sang Kyu Kim, Young S. Choi, and Ilhwan Kwak
- Multiphoton Ionization/Dissociation of Ge(CH₃)₄ and Ge(C₂H₅)₄ **Jeunghee Park,* Yoo Nam Kang, Nam Ung Song, and Dongho Kim**
- 370 Investigation of Hydroxyl Radical-Induced Cross-Linking of Peptides and Its Inhibition by Matrix-Assisted Laser Desorption/Ionization Time-of-Flight Mass Spectrometry Hie-Joon Kim* and Sung-jun Park
- 373 Study on the Novel Rearrangement Reaction of Bicyclic Acetal Compound by Using AcCl-NaI **Dong Woo Lee, Kee-Jung Lee, Dae Yoon Chi, and Jong-Gab Jun***
- 376 Collision Energy Dependence of Vibrational Transition in $I_2(\upsilon = 5)$ + He Chang Soon Lee
- Photodissociation Dynamics of H_2S at 243 nm: Translational Anisotropy of the Fragments Measured by Doppler Broadened H Atom Spectra

Chan Ryang Park, Tae Yeon Kang, Seung Keun Shin, and Hong Lae Kim*

381 *In-Situ* UV-Visible Spectroscopic Behavior of Copper Tetrakis(*n*-butoxycarbonyl) phthalocyanine and Oxygen Reduction Catalysis

Chang-Soo Jin and Yoon-Bo Shim*

- 389 *Exo*-Selectivity in the Diels-Alder Reaction of Cyclopentadiene with Activated Cyclic Dienophiles in Flexible Conformation **Kwan Soo Kim*** and **Yung Hyup Joo**
- The Effect of Solvent on Reaction Rates and Equilibria for the Reactions of *p*-Nitrophenyl Acetate with Alicyclic Secondary Amines in H₂O and DMSO

 Ik-Hwan Um,* Young-Min Park, and Eun-Hee Shin
- 395 Synergetic Effect in Benzyl Alcohol Oxidation Won K. Seok
- Catalytic Enantioselctive Reactions. Part 15. Oxazaborolidine-Catalyzed Asymmetric Reduction of α-Keto Acetals with *N*,*N*-Diethylaniline-Borane (DEANB) Complex
 Byung Tae Cho* and Yu Sung Chun

- 400 Preparation of Aldehydes from Carboxylic Acids by Reductive Oxidation with Lithium Aluminum Hydride and Pyridinium Chlorochromate or Pyridinium Dichromate Jin Soon Cha,* Joong Hyun Chun, Jong Mi Kim, Oh Oun Kwon, Sang Yong Kwon, and Jae Cheol Lee
- Synthesis toward Epothilone A: Coupling Reaction between the Sulfone of C1-C10 and the Allylic Bromide of C11-C21 Hyo Won Lee,* Yong Deog Hong, and Ihl-Young Choi Lee
- Addition of Water in Carbon Dioxide Mobile Phase for Supercritical Fluid Chromatography Dongjin Pyo* and Sanggyun Lee
- Beneficial Role of Ethylene Glycol in the Synthesis of MCM-41 Material under Microwave Irradiation Dae Sung Kim, Jong-San Chang, Woo Young Kim, Hee Young Kim, and Sang-Eon Park
- The Complex Travelling Wave by Two Directional Differential Flow Induced Chemical Instability Su-Bum Shin, Sang-Joon Choe, Do-Sung Huh,* and Kenneth Showalter
- 417 Crystal Structure and Thermal Properties of the Lanthanum(III) Complex with Triethylenetetraaminehexaacetic Acid: K₃[La(TTHA)]·5H₂O Chong-Hyeak Kim and Sueg-Geun Lee*
- Mechanistic Aspects in the Grignard Coupling Reaction of Bis(chloromethyl)dimethylsilane with Trimethylchlorosilane Yeon Seok Cho, Bok Ryul Yoo, Samyoung Ahn, and Il Nam Jung*
- 427 Grignard Coupling Reaction of Bis(chloromethyl)diorganosilanes with Dichloro(diorgano)silanes: Syntheses of 1,3-Disilacyclobutanes Yeon Seok Cho, Bok Ryul Yoo, Samyoung Ahn, and Il Nam Jung*
- Preconcentration and Determination of Trace Cd(II) and Pb(II) in a Water Sample by Organic Precipitate Flotation with 8-Hydroxyquinoline Young-Sang Kim,* Kee-Chan Kim, and Chi-Woo Lee
- 436 High Resolution Optical Spectroscopy of mer-[Cr(dpt)(Gly-Gly)]ClO₄ Jong-Ha Choi
- 441 Theoretical Study on the Regioselectivity of Tetrazolylimines with Alkyl Grignard Reagents Sung-eun Yoo,* Young-Dae Gong, and Soo-Kyung Kim
- Preliminary Molecular Dynamics Simulation Studies of H-Y Zeolite in a Non-Rigid Zeolite Framework 445 Sang Gu Choi and Song Hi Lee*
- Synthesis and Optical Properties of Poly[6'-(N-carbazolyl)hexyl-2-ethynylpyridinium bromide] Yeong-Soon Gal,* Sang-Seob Lee, Jang-Soon Bae, Bong-Sik Kim, Sang-Hee Jang, and Sung-Ho Jin
- 456 Synthesis of Pyrrolo[2,3-c]acridines Munawar Ali Munawar* and Paul W. Groundwater
- 459 Monte Carlo Simulation of Pure CO_2 , n-Butane and n-Decane in Supercritical CO_2 Sung-Doo Moon
- 463 Jet Collisional Excitation of Nitrogen Molecules in a Corona Excited Supersonic Expansion Dae Youl Baek and Sang Kuk Lee*
- The Duality of S_N1 and S_N2 Mechanisms for the Reaction of p-Methoxybenzyl Bromide with N,N-Dimethylanilines Soo Dong Yoh,* Mi-Kyung Lee, Ki-Joo Son, Duck-Young Cheong, In-Sook Han, and Kwang-Taik Shim
- Synthesis and Thermal Behaviors of Hindered Biphenols 469 Whan-Gi Kim* and Allan S. Hay
- Synthesis of Liquid Crystalline Monomers and Side-chain Polymers Containing 2-Phenylbenzoxazole in Mesogenic Unit Sehoon Kim, Jiwon Sohn, and Soo Young Park*
- Synthesis of C_2 -Symmetric 1,3-Imidazolidin-2-ones as Bifunctional Chiral Auxiliaries from Industrial Chiral Waste 478 Chun Rim Oh, Choong Eui Song,* Eun Joo Roh, Sang-gi Lee, and Jong Hwa Jeong

- 481 Investigation of Fluoroaluminate Complex Formation Using NMR Spectroscorpy Joon Hyung Sohn, Hyean-Woo Lee, Dong-Pyou Han, Byung-Il Yeh, Jong-Whan Choi, Seunho Jung, and Hyun-Won Kim*
- 484 An Asymmetric Synthesis of Alcohols Using Chiral 2-Piperidineethanols In-young Choi, Jae-yong Son, and Kyoo-Hyun Chung*
- 487 Selective Extraction of Silver(I) Ion by a New Acyclic Diazapolyether Compound Bearing Dicarboxylate Functional End-Groups
 - Yong-Ill Lee,* Seong-Ha Park, Jong-Seung Kim, Dong-Won Kim, and Ki-Young Choi
- 491 Preparation and Study of Dinuclear Zn(II) Complex for the Hydrolysis of Phosphate Esters Junghee Kim* and Hyujung Lim
- 499 A Facile Synthesis of Partly-fluorinated Organic Compounds Using Perfluoropropoxyethylene and Amines Ki-Whan Chi* and G. G. Furin
- 503 Synthesis of Pyranopyridines: LiCl Mediated Palladium-Catalyzed Cyclization of Iodo-(3-butenyloxy)pyridines Seung Kyu Kang and Eul Kgun Yum*
- 505 Synthesis and Characterization of Aromatic Dianhydrides Containing Imide Precursor Units **Dongki Keum, Kwang-Sup Lee, Yongku Kang, and Changjin Lee***
- 508 Synthesis of Li_xNi_{0.85}Co_{0.15}O₂ by the PVA-precursor Method and the Effect of Air Flow During the Pyrolysis **Ho-Jin Kweon, Geun Bae Kim, Sue Joo Kim, Me Young Song, Seon Hui Park, Hye Young Kwon, Dong Gon Park***
- 517 Crystallization of Forsterite Xerogel under Carbon Dioxide: A New Crystalline Material Synthesized by Homogeneous Distribution of Carbonaceous Component into Forsterite Xerogel Me Young Song, Sue Joo Kim, Hye Young Kwon, Seon Hui Park, Dong Gon Park,* Ho-Jin Kweon, Young-Uk Kwon, and James M. Burlitch
- 525 Application of Variable Selection for Prediction of Target Concentration Seonwoo Kim, Yoen-Joo Kim, Jong-Won Kim, and Gilwon Yoon*
- The Synthesis of 6-Aryl-2,4-dioxoperhydro-1,3,5-triazines

 Munawar Ali Munawar,* Azhar Masud Chaudhary, Makshoof Athar, Muhammad Siddiq, and Abdul Rauf
- 531 Photochemical Formation of 1,5-Diketones from Dibenzoylmethane and Some Quinones Sung Sik Kim,* Jin Sun Lim, Jong Myung Lee, and Sang Chul Shim
- Synthesis and Catalytic Activity of Water-Soluble Iridium-Sulfonated Triphenylphosphine Complex.
 Hydration of Nitriles
 Chong Shik Chin,* Sang Yull Kim, Kwang-Suk Joo, Gyongshik Won, and Daesung Chong
- Photocyclization of α-(o-Ethylphenyl)acetophenone in Zeolites

 Taehee Noh,* Kyungin Choi, Hyeoksoon Kwon, Dong Jo Chang, and Bong Ser Park
- ¹H NMR Studies of the Interaction between Cytochrome c_3 and Ferredoxin I from *D. vulgaris* Miyazaki F Jang-Su Park, *In-Chul Jeong, Andre Kim, Nam-Gyu Park, Dong-Koo Kim, Hongsuk Suh, and Shin-Won Kang
- 547 Photoreaction of 1-(o-Acetoxyphenyl)-2-pentamethyldisilanyl Ethyne Sang Chul Shim* and Seung Ki Park*
- Synthesis of 11-Deoxydaunomycinone and Novel 10-Fluoroanthracyclinone Derivatives Young S. Rho,* Younghee Choi, Gyuil Kim, Hongsig Sin, Dong Jin Yoo, Sun-Ha Kim, and Chaejoon Cheong
- Lead-selective PVC Membrane Electrodes Based on Bis(crown ether)s Kum-Chul Oh, Eun Chul Kang, Kyu-Sung Jeong, and Ki-Jung Paeng*
- Theoretical Studies on the Gas-Phase Alkylation of Delocalized Ambident Anions with Methyl Fluoride Ikchoon Lee,* Hyung Yeon Park, In-Suk Han, Chang Kon Kim, Chan Kyung Kim, and Bon-Su Lee
- 567 Synthesis and Cationic Polymerization of Vinyl Ethers Containing Oxynitrobenzylidenemalononitrile and Oxynitrobenzylidenecyanoacetate as the NLO-phores in the Side Chain **Ju-Yeon Lee,*** **Moo-Yong Kim, and Mi-Ra Ahn**

- 573 The Studies on Substituent and Kinetic Solvent Isotope Effect in Solvolyses of Phenyl Chloroformates In Sun Koo,* Ji Sun Lee, Kiyull Yang, Keumduck Kang, and Ikchoon Lee
- Transition-State Variation in the Solvolyses of Phenyl Chlorothionoformate in Alcohol-Water Mixtures 577 In Sun Koo,* Kiyull Yang, Dae Ho Kang, Hye Jin Park, Keumduck Kang, and Ikchoon Lee
- 581 Syntheses and Potentiometric Properties of Polyethers Containing Thiazole and Oxazole Derivatives Jun-Hyeak Choi, Young Kook Koh, Il-Chun Kwon, Hong-Seok Kim,* Hyun Joo Park, Sang Jin Kim, Geun Sig Cha, and Hakhyun Nam
- Molecular Dynamics Simulation Studies of Zeolite A. VIII. Structure and Dynamics of Na⁺ ions in a Non-Rigid Dehydrated Zeolite-A Framework Song Hi Lee* and Sang Gu Choi
- Structure and Stability of Unprotonated Ammonia Cluster Cations $[(NH_3)_n^+ (n = 1-6)]$ Jong Keun Park
- The Characterization of Toluene-p-t-butylcalix[4]arene Complexes Using Thermal Analyses Sung-Seen Choi and Kye Chun Nam*
- Photocurrent Stability of CdS Sensitized TiO₂ Electrodes Jin Sup Hong, Jung Woo Jeong, Won-Seok Chae, and Kang-Jin Kim*
- Synthesis and Characterization of o-Carboranylmethylenephosphine. Crystal Structure of (C₂B₁₀H₁₁)CH₂PBu^t₂ 600 and $(C_2B_{10}H_{11})CH_2PMe_2$ Dae-Hyun Kim, Heung-Sae Lee, Jaejung Ko,* Kwonil Park, Sung-Il Cho, Jeong-In Shon, and Sang Ook Kang*
- Synthesis and Characterization of Novel One-dimensional Chalcogenide Compound of K₅NaTi₆Se₂₇ Younbong Park,* Hyesik Yun, and Hwasuk Oh
- Decarbonylative Diarylation Reaction of N-Substituted α -Amino Acids Mi Ra Seong, Tae Yi Kim, Hong Jung Lee, and Jae Nyoung Kim*
- Synthesis and Structural Aspects of Macrocyclic Compounds Containing 5-Amino-3H-1,3,4-thiadiazolin-2-one Nam Sook Cho,* Heung Soo Park, and Hye Jeong Hwang
- A Gradient μ LC/MS System Connected with a Glass Connector Cured by the Super-glue and Some Test Runs with It Won Jo Cheong,* Choong Sik Lee, Un Mi Bae, and Jong-Shin Yoo
- Total Synthesis of (R)-(-)-Sulcatol, (2R)-6-Methyl-5-hepten-2-ol Ge Hyeong Lee and Chwang Siek Pak
- DFT Studies of the Diels-Alder Reaction of 1,4-Diaza-1,3-butadiene with Acrolein 621 Gab-Yong Lee,* Ha-Young Kim, and In-Sook Han
- 629 The Reaction of [1.1.1]Propellane with Methylene Woo Bung Lee* and Dong Won Oh
- Difference in Reactivity during Alkylation of 2-(2-Hydroxyaryl)-1,3-indanedione and N-(2-Hydroxyphenyl) 631 phthalimide
 - Hyun Nam Song, Hyoung Shik Kim, and Jae Nyoung Kim*
- 633 Tandem in situ Generation of Azomethine Ylides and Nitro-ethylene: Synthesis of 3-Unsubstituted-4-nitropyrrolidines Chwang Siek Pak* and Miklos Nyerges*
- Identification of a Key Residue in *Drosophila* Heat Shock Factor-DNA Interaction by Analytical Ultracentrifugation Jinku Park, Seha Kim, and Soon-Jong Kim*
- Deodorization of tert-Butylmercaptan by Silica Aerogel Impregnated with Cu(II) and Mn(IV) 639 Seon Hui Park, Dong Gon Park, Ho-Jin Kweon, Sang Sung Nam, Sang-Bum Kim, Yeong-Beom Lee, and Kun-Hyung Choe

- 643 Stereoselective Palladium Catalyzed Cyclizations of Enediyne Compounds Chang Ho Oh,* Chul Yun Rhim, Hyung Hoon Jung, and Seung Hyun Jung
- Tautomeric Fluxional Process in Metal Complexes. Insight into Cobalt(III) and Pentamethylcyclopentadienyl-rhodium(III) Complexes of 2-Mercaptopyrimidine Ligand

 Ok-Sang Jung,* Yong Tae Kim, Yun Ju Kim, Jung-Kyoun Chon, and Hee K. Chae*
- Stabilization of Poly(dA)·[poly(dT)]₂ Triplex by Anthryl and Acridine Derivatives: Effect of Side Chains and Nitrogen Atom on the Polycyclic Aromatic Ring

 Gil-Jun Lee, Chang-Beom Cho, Dong-Jin Lee, Joon-Won Park, and Seog K. Kim*
- Time-Resolved Resonance Raman Spectroscopic Study on Metallotetraphenylporphyrins: Effects of Metal Sizes Sae Chae Jeoung, Dongho Kim,* Dae Won Cho, and Minjoong Yoon*
- 663 2-(Multimethoxy)phenyl-4-methylene-1,3-dioxolane (I): Preparation and Cationic Polymerization of 2-(Dimethoxy)phenyl-4-MDO Derivatives

 Jong-Tae Kim and Myoung-Seon Gong*
- 667 A ¹³C NMR Study of 7-Norbornadienyl Cation by Modified Hammett-Brown Equation **Jeongkyu Park and Jung-Hyu Shin***
- Gas Permeable Membranes Composed of Carboxylated Poly(vinyl chloride) and Polyurethane Chun-Won Lim, Chai-Gyun Kim, Wan-Young Kim, Yong-Seob Jeong, and Youn-Sik Lee*
- 677 Synthesis and Properties of Conjugated Polycarbosilanes with 1,4-Bis(thiophene or phenylene)-buta-1,3-diyne II Kwon Seo, Young Tae Park,* and Yong-Rok Kim
- Microdomain Formation in Phosphatidylethanolamine Bilayers Detected by ²H NMR Jang-Su Park,* Andre Kim, In-Chul Jeong, Hongsuk Suh, Yoon-Bo Shim, and Shin-Won Kang
- 689 Analytical Method for Dioxin and Organo-Chlorinated Compounds: (II) Comparison of Extraction Methods of Dioxins from XAD-2 Adsorbent
 Jeong Soo Yang, Sung Kwang Lee, Young Hun Park, and Dai Woon Lee*
- Determination of Trace Anions in Concentrated Hydrogen Peroxide by Direct Injection Ion Chromatography with Conductivity Detection after Pt-Catalyzed On-Line Decomposition

 Do-Hee Kim, Bo-Kyung Lee, and Dong Soo Lee*
- 701 Synthesis and Characterization of Phthalocyaninatometal (PcM, M=Fe²⁺, Co²⁺) Complexes with Monodentate Aromatic Isocyanide Ligands
 Youn-Mook Lim, Ha-Sun Park, Su-Ho Song, Chan-Jo Park, Haiil Ryu,* Jong-Gi Jee, Hyun-Soo Yang
- 705 Multiple Order Diffractions by Laser-Induced Transient Grating in Nematic MBBA Film Seong Kyu Kim* and Hackjin Kim*
- 712 Kinetic Studies on the Addition of Potassium Cyanide to α,*N*-Diphenylnitrone **Tae-Rin Kim, Young-Ho Kim, and Sang-Yong Pyun***
- Photoacoustic Spectroscopic Study on Cobalt Incorporation onto the Surface of Mesoporous Molecular Sieves **Dong Ho Park**, *Sung Soo Park, and Sang Joon Choe
- 720 The Gauge Invariant Formulation for the Interaction of the Quantized Radiation Field with Matter **Duckhwan Lee**
- Mechanism of DNA Gyrase Inhibition by Quinolones: I. Spectral Analysis for Nalidixic Acid Polymorphism Chang-Hwa Song, Hyeong-Won Ryu, Jin-Kyu Park, and Thong-Sung Ko*
- 731 Uniqueness of Guanosine among Nucleosides in Its Effect on RNA Folding and DNA Stability Hyun Jang, Hyeong-Won Ryu, and Thong-Sung Ko*
- 734 Stability of the Rydberg H₃O Radical **Jong Keun Park**
- Preparation of Potassium Diisobutylalkoxyaluminum Hydrides from Diisobutylalkoxyalanes. A New Class of Reducing Agents
 Jin Soon Cha,* Sang Yong Kwon, Jong Mi Kim, Oh Oun Kwon, and Kwang Woo Lee

- 741 Capped Trigonal Prismatic Yttrium Complex with Mixed Tri- and Bi-dentate Ligands: Synthesis and X-ray Crystal Structure of Bis[dihydrobis(pyrazol-1-yl)borato] [(η^5 -Cp)tris(dimethylphosphito-P)cobalt-O,O',O'']yttrium Sang Ho Han, Soonheum Park, and Jong Hwa Jeong
- 744 A Short Synthesis of a Chiral Alcohol as a New Chiral Auxiliary for Asymmetric Reactions B. Moon Kim* and Jin Kyoon Park
- Highly Selective Epoxidation of 1-Pentene with H₂O₂ over TS-1 Lin Huang, Chul Wee Lee, Yong Ki Park, and Sang-Eon Park*
- The Crystal Structure of Dimeric Copper(II) Complex with Chiral Tetradentate N₄ Bis Amide Ligand, 1,6-bis(S)pyrrolidinyl-1,6-dioxo-2,5-diazahexane(S,S-proenH₂) Bae-Wook Lee, Jae-Ha Park, Dong-Kug Son, Bong-Gon Kim, Chang-Eon Oh, and Myung-Ki Doh*
- On the Unusual Homeoviscous Adaptation of the Membrane Fatty Acyl Components against the Thermal Stress in Rhizobium meliloti Yong-Hoon Choi, Sebyung Kang, Chul-Hak Yang, Hyun-Won Kim, and Seunho Jung*
- Unusual Directed Synthesis of a Carceplex or a Supramolecule Composed of Calix[4]arene and Resorcin[4]arene Moieties Using Solvent Templation Hyejae Ihm and Kyungsoo Paek*
- Dissymmetric Hemicarcerands and Reactions inside Chiral Hemicarcerands Juyoung Yoon* and Kensuke Nakamura*
- The Novel Synthesis of Fluorinated Unsaturated Phosphonates 768 In Howa Jeong* and Woo Jin Chung
- Generation of Diphenyldiazomethane by Oxidation of Benzophenone Hydrazone with MagtrieveTM 771 Kwang-Youn Ko* and Ji-Yeon Kim
- 773 Olefinic Reduction of α , β -Unsaturated Carbonyl Compounds Catalyzed by Activated Nickel Soon Ok Kim,* Sora Rhee, and Seon Hwa Lee
- Cycloadditions between Carbonyl Oxides Generated by the Ozonolyses of Cycloalkenes and Carbonyl Compounds: 775 Novel Method for the Synthesis of Bicyclic 1,2,4,6-Tetroxepanes Hyea Sook Shin and Tae Sung Huh*
- 777 Inactivation of Thermolysin with *N*-Chloroacetyl-*N*-hydroxy-β-L-phenylalanine *N*-methylamide Yonghao Jin and Dong H. Kim*
- The pH Effect on the Preparation of MFI Type Ferrisilicate Zeolites Young-Hoon Yeom, Sang-Sung Nam, Seong-Bo Kim, and Kyu-Wan Lee*
- Surface Modification of MgO Microcrystals by Cycles of Hydration-Dehydration Hae-Jin Kim, Jin Kang, Me Young Song, Seon Hui Park, Dong Gon Park, Ho-Jin Kweon, and Sang Sung Nam
- Crystal Structure of a Cyclopropane Sorption Complex of Dehydrated Fully Ca²⁺-Exchanged Zeolite X Eun Young Choi, Yang Kim*, and Seong Hwan Song
- Fluorescence Intensity Changes for Anthrylazacrown Ethers by Paramagnetic Metal Cations Jeong Ho Chang, Hae Joong Kim, Jeung Hee Park, Young-Kook Shin, and Yongseog Chung*
- Thermal and Photoinduced Silylallylation Reactions of Organic Halides with 3-Stannyl-2-(silylmethyl)propene 801 Kyung-Tae Kang,* Seong Sim Hwang, Woo Young Kwak, and Ung Chan Yoon
- Kinetics and Mechanism for the Reaction of 4-Nitrophenyl 2-Furoate with Secondary Alicyclic Amines Jong-Pal Lee,* Ji-Huli Yoon, and Ik-Hwan Um*
- Computational Study of Medium-Sized Cumulenones, H_2C_nO (n = 3-7) Kyungtae Park, Sungyul Lee*, and Yongsik Lee*
- 815 Calculation of the Free Energy from the Average of the Modified Effective Acceptance Ratio for the Two-Center-Lennard-Jones Liquid **Seung Do Hong**

- 1570 Bull. Korean Chem. Soc. 1999, Vol. 20, No. 12
 - 819 Antioxidant Activity of Ergosterol Peroxide (5,8-Epidioxy- 5α , 8α -ergosta-6,22E-dien- 3β -ol) in Armillariella mellea Sang-Wook Kim, Sang-Shin Park, Tae-Jin Min, and Kook-Hyun Yu*
 - Patterning of Rare-Earth Manganate Thin Layer Using Self-Assembled Organic Thin-Film Templates **Duk-Young Jung* and David A. Payne**
 - Fe₅(OH)₂(C₄H₄O₄)₄: Hydrothermal Synthesis of Microporous Iron(II) Dicarboxylate with an Inorganic Framework YooJin Kim and Duk-Young Jung*
 - Design and Synthesis of Binaphthol-Derived Chiral Ketone Catalysts for Dioxirane-Mediated Asymmetric 831 **Epoxidation of Olefins**
 - Yang Hee Kim, Kyo Chul Lee, Dae Yoon Chi, Sang-gi Lee, and Choong Eui Song
 - Formation and Solution Magnetic Behavior of Thioacetate-Ligated Iron(III) Porphyrin Complex Byungho Song,* Moosung Jun, and Byungsoo Yu
 - Simple Method of Changing the Permeation Property of Surfactant Vesicle by Ion Pairing Yong-Chan Chung* and Han-Ju Lee
 - Unusual Behaviour of N-Tosyl Pipecolinic Acid in Friedel-Crafts Reaction Conditions Jae Nyoung Kim,* Mi Ra Seong, Ka Young Lee, Hyoung Rae Kim, and Eung K. Ryu
 - Analysis of Natural Gas Using Single Capillary Column and a Pulsed Discharge Helium Ionization Detector Sung Ho Kim,* Sung Man Nam, Kwang Oh Koh, and Yong Wook Choi
 - Synthesis of DL-6-*O*-(2-Aminoethyl-1-phospho)-*myo*-inositol-1,3,4,5-tetrakisphosphate as a Precursor of Affinity Materials for I(1,3,4,5)P₄ Binding Proteins Sung-Kee Chung,* Li Min Zhao, and Youngha Ryu
 - Template Synthesis, Structure, and Properties of a New Five-Coordinate Copper(II) Complex of an Unsaturated Pentadentate Ligand Shin-Geol Kang, *Jeonghoon Song, and Jong Hwa Jeong
 - Investigation of Polystyrene, Polyisoprene, and Poly(2-vinylpyridine) Using Matrix-Assisted Laser Desorption/ Ionization Time-of-Flight Mass Spectrometry Hyuneui Lim, Yeonhee Lee,* Seunghee Han, Youngsook Yoo, and Kang-Jin Kim
 - Bioisoster of Capsaicin: Synthesis of 1-Hydroxy-2-pyridone Analogue Hye-Young Choi and Sung-Hwa Yoon*
 - Catalytic Dehalogenation of Monohalopyridines with Titanocene Complexes Hee-Gweon Woo,* Bo-Hye Kim, and Sun-Jung Song
 - 867 (Salen)Mn-Catalyzed Oxygenation of Vinyl Arenes to the Corresponding Alcohols in the Presence of Sodium Borohydride Nam Ho Lee,* Jong Seok Baik, and Sung-bin Han

 - Electrochemical Studies on the Mechanism of the Fabrication of Ceramic Films by Hydrothermal-Electrochemical
 - Zhibin Wu and Masahiro Yoshimura*
 - Soft Solution Processing: Low-Energy Direct Fabrication of Advanced Inorganic Materials Masahiro Yoshimura,* Kyoo-Seung Han, and Wojciech Suchanek
 - Tailoring of the Porosity in Sol-Gel Derived Silica Thin Layers M. Klotz, A. Ayral, C. Guizard, and L. Cot*
 - 885 PLR (Plastic Lithium Rechargeable) Batteries Using Nanoscale Materials: A Convenient Source of Electrical Energy for the Future?
 - G. Campet, N. Treuil, A. Poquet, S. J. Hwang, C. Labrugère, A. Deshayes, J. C. Frison, J. Portier, J. M. Reau, and J. H. Choy
 - Chemical Design of Highly Water-Soluble Ti, Nb and Ta Precursors for Multi-Component Oxides Masato Kakihana,* Judith Szanics, and Masaru Tada

- 897 Molecular Dynamics Simulation Studies of Physico Chemical Properties of Liquid Pentane Isomers Seng Kue Lee and Song Hi Lee*
- 905 Synthesis and Molecular Structure of Tetrahomodioxa *p*-Phenylcalix[4]arene Tetra Ester Derivative in 1,4-Alternate Conformation
 - Kwanhyun No,* Young Ja Park, and Eun Joo Choi
- 910 Quantitative Analysis of Trace *pp'*-DDE in Corn Oil by Isotope Dilution Mass Spectrometry : Uncertainty Evaluations
 - Byungjoo Kim,* Dal Ho Kim, Jong Oh Choi, and Hun-Young So
- 917 Synthesis of 6,13-Bis(thymidinyl)-5,12-dioxocyclams and the Molecular Structure of the (*R*,*S*)-Isomer **Jaiwook Park**,* **Louis S. Hegedus**, and **Melissa Hellman**
- 921 NMR Study of Poly(γ -Glutamic Acid) Hydrogels Prepared by γ -Irradiation : Characterization of Bond Formation and Scission
 - Oc Hee Han* and Hyuk Joon Choi
- 925 Suppression of AP-1 Activity by Tanshinone and Cancer Cell Growth Inhibition Seveon Park, Ji-Sung Song, Dug-Keun Lee, and Chul-Hak Yang*
- 929 Synthesis of 6-Alkoxy-3-(1-hydroxyalkyl)-5-nitro-4,5,6,7-tetrahydroindole-4-carboxylates **Ho Hyeon Kim, Yang Mo Goo, and Youn Young Lee***
- Reactivity and Reaction Mechanism for Reactions of 1,1'-(Azodicarbonyl)dipiperidine with Triphenylphosphines Dae Dong Sung,* Mi Jeong Choi, Keun Moon Ha, and Tae Seop Uhm
- 939 Thermodynamic Properties of NiCr₂O₄-NiFe₂O₄ Spinel Solid Solution **Bong-Hoon Park and Dong-Su Kim***
- Ligand Field Analyses of Tris(biuret)chromium(III) Chloride and Hexaureachromium(III) Bromide Sung-Jin Park, Byung-Keun Oh, Young-Dong Park, and Kyu-Wang Lee*
- 948 Molecular Orbital Calculations for the Reactions of 2,5-dimethyl Pyrrole with Phenylsulfonyl Chloride Mi-Kyung Seo, Jin-Beom Kim, Seeyearl Seong,* and Young-key Shim*
- 953 Urea Derivatives of *p-tert*-Butylcalix[4]arenes: Anion Selective Neutral Receptors **Kye Chun Nam,*** **Sung Ok Kang, and Seung Whan Ko**
- Photocatalytic Activity of Cu/TiO₂ with Oxidation State of Surface-loaded Copper Kang Yong Song, Young Tae Kwon, Guang Jin Choi, and Wan In Lee*
- Preparation and Properties of Dinickel(II) Complexes Bridged with μ-Oxalato Ligand: X-Ray Structure of (μ-Oxalato)bis((N,N'-bis(2-aminoethyl)-1,3-propanediamine)nickel(II))

 Chee-Hun Kwak,* Jinhee Jeong, and Jinkwon Kim
- A Facile Synthesis of [1,2]Oxazinane-3,5-diones

 Kyukwan Zong, Seung II Shin, Hyung Ki Kim, Hyoung Rae Kim, Dong Ju Jeon, and Eung K. Ryu*
- 969 Nonperoxidic Products from the Ozonolyses of Acenaphtylene and 4,5-Methylenephenanthrene Chi Won Lee and Tae Sung Huh*
- One-Pot Synthesis of Mannich Base Using Hydroxy Aromatic Rings and Secondary Amines Ki-Whan Chi,* Yoon Soo Ahn, Kwang Taeg Shim, Tae Ho Park, and Jeong Soo Ahn
- 977 Synthesis and Crystal Structure of [Sr₃{CH₃COCHCOOC(CH₃)₃}₆{CH₃OCH₂CH₂OCH₃}₂] Soo-Gyun Roh, Byung Jae Bae, Joon Taik Park,* and Jong Hwa Jeong*
- 985 SmI₂ Mediated Reaction of *N*-(Haloalkyl)-*N*-phenylformamide: Homologation Young Hae Roh, Joong Hyup Kim, Sung Hoon Kim, Byung Woo Yoo, and Cheol Min Yoon*
- 987 Low Energy Photodissociation of HCl : Theoretical Analysis Sungvul Lee

- 1572 Bull. Korean Chem. Soc. 1999, Vol. 20, No. 12
 - 989 Electrochemical Organyl Group Transfer of Triorganylboranes to Carboxylic Acid Chlorides and Carboxylic Acid Anhydrides Using Copper Sacrificial Anode

Jung Hoon Choi,* Seong Wook Cho, and Beom Sung Kim

- 991 Synthesis of New Soluble Subphthalocyanine Substituted with Crown Ethers Sungeun Lee and Hongsuk Suh*
- 993 Concurrent Production of Methanol and Dimethyl Ether from Carbon Dioxide Hydrogenation : Investigation of Reaction Conditions

Ki-Won Jun,* Wen-Jie Shen, and Kyu-Wan Lee

- 999 A Kinetic Study on the Adsorption of Compact, Water-soluble Proteins onto Aqueous Surfaces Daechul Cho* and Michel A. Cornec
- 1005 A New Synthetic Route to Wüstite Jung-Chul Park,* Don Kim, Choong-Sub Lee, and Dong-Kuk Kim
- 1010 Effect of Temperature on Photoinduced Reorientation of Azobenzene Chromophore in the Side Chain Copolymers **Dong Hoon Choi**
- 1017 Nucleophilic Substitution Reactions of Thiophenyl Phenylacetate with Benzylamines in Acetonitrile Hyuck Keun Oh, Sun Kyung Kim, and Ikchoon Lee*
- 1021 Rapid Identification of Petroleum Products by Near-Infrared Spectroscopy Hoeil Chung,* Hyuk-Jin Choi, and Min-Sik Ku
- 1026 Semiflexible Polymer Brushes: Most Probable Configuration Approach Based on Cotinuous Chain Model **Gwang Gyu Kim and Kookheon Char***
- 1031 The Growth Kinetics of Tin Oxide Films from Tetramethyltin Sang-Woon Lee and Cheonho Yoon*
- 1035 Photoluminescence of the Mn-doped ZnGa₂O₄ Phosphors Prepared by Coprecipitation of Metal Salts **Joong-Gon Kho, Hee-Dong Park, and Dong-Pyo Kim***
- Application of a Membrane Desolvator to the Analysis of Organic Solvents in Inductively Coupled Plasma Atomic Emission Spectrometry

J. S. Lee and H. B. Lim*

- Differences of Structural and Electronic Properties in $Ba_{1-x}K_xBiO_3$ (x = 0, 0.04, and 0.4) **Dongwoon Jung*** and Eun-Kuk Choi
- 1049 In-situ Monitoring of Anodic Oxidation of p-type Si(100) by Electrochemical Impedance Techniques in Nonaqueous and Aqueous Solutions
 Min-Soo Kim, Kyung-Ku Kim, Sang Youl Kim, Youngtae Kim, Young Hee Won, Yearn-Ik Choi, and Sun-il Mho*
- 1056 Electrocatalytic Reduction of Dioxygen by New Water Soluble Cobalt(II) Tetrakis-(1,2,5,6-tetrafluoro-4-*NN'N''*-trimethylanilinium)-β-octabromoporphyrin in Aqueous Solutions
 Eun Mi Choi, Haesang Jeong, Duck Hee Park, Yong-Kook Choi, and Seungwon Jeon*
- 1061 The Interaction of CO and W(111) Surface S. Y. Lee, Y. -D. Kim, S. N. Seo, C. Y. Park, H. T. Kwak, J. -H. Boo, and S. B. Lee*
- 1067 Structures of Ammonia Cluster Cations Jong Keun Park
- 1073 Synthesis and Antibiotic Activities of CRAMP, a Cathelin-related Antimicrobial Peptide and Its Fragments Jong-Myung Ha, Song Yub Shin, and Shin Won Kang*
- 1078 Influences of Hinge Region of a Synthetic Antimicrobial Peptide, Cecropin A(1-13)-Melittin(1-13) Hybrid on Antibiotic Activity
 Song Yub Shin, Joo Hyun Kang, Dong Gun Lee, So Yun Jang, Moo Yeol Seo, Kil Lyong Kim,

and Kyung-Soo Hahm

- 1085 Synthesis of Dihexadecyl N-[Monomethoxypoly(ethylene glycol)]-L-glutamate and Its Effect on Liposomes Youn-Sik Lee, *Un-Jeong Kim, Kuk-Haeng Lee, Soo-Chang Yu, and Sang Hee Lee
- 1089 Preparation and Structure of *trans*-Bis(phenylethynyl)bis(triethylphosphine)palladium(II) Hyo-Jean Kim and Soon W. Lee*
- Correlation between Energy Transfer and Phase Separation in Emissive Polymer Blends Jeong Hee Han, Youn-Sik Lee,* Ki Suk Nahm, Eeun-Ha Cho, Seok-Bum Ko, Cheol-Ju Kim, Il-Cheol Jeon, Won Hee Lee, Eun-Kyung Suh, and Young Hee Lee
- Rhodium-catalyzed Coupling Reaction of 2-Vinylpyridines with Allyl Ethers Yeong-Gweon Lim,* Jong-Soo Han, Bon Tak Koo, and Jung-Bu Kang
- 1101 Laser Ablation of a YBCO Target at 266 nm and 1064 nm: Reactive Scattering of a YBCO Plume and an Oxygen Jet Ji Youn Moon and Seung Min Park*
- Crystal Structure of Dinuclear Molybdenum(VI) Complex Involving trans-Dioxo Mo^{VI}O₂ Core 1105 Seong-Jong Mo and Bon-Kweon Koo*
- Upper Rim Urea Derivative of Calix[4]arene: Anion Selective Neutral Receptor 1108 Kye Chun Nam,* Jong Chul Chun, Sung Ok Kang, and Seung Whan Ko
- A Decanuclear Lithium Niobium(V) Heterometallic Oxo Phenoxide Complex: The Synthesis and Structural Characterization of $[\text{Li}_6\text{Nb}_4\text{O}_6(\text{OPh})_{14}(\text{THF})_6]\text{LL}'(\text{THF} = \text{tetrahydrofuran}, L = 1/2\text{hexane}, L = 1/2\text{H}_2\text{O})$ Seung Kju Park and Sang Man Koo*
- Binding Properties of an Allosteric Activator Site of Aspartase from Hafnia alvei Min-Sub Lee, Jeong-Rim Kim, and Moon-Young Yoon*
- 2-O-(α-D-Glucopyranosyl)glycerol, A New Glycerol Glycoside from the Marine Blue-green Alga Oscillatoria sp. Jin Souk Choi, Dong Ick Lee, Won Kap Lee, Dong-Soo Kim, Hong Dae Choi, and Byeng Wha Son*
- Synthetic Studies toward Dideoxynojirimycin Derivatives via Dehydroamino Acid as a Key Intermediate Jeeah Choi, Jeong E. Nam Shin, and Keun Ho Chun
- 1126 A Single Amino Acid Substitution Alters Substrate Sequence Specificity of the Yeast Protein Tyrosine Phosphatase YPTP1 Dongki Yang, Misook Choi, Junseo Park, Hwang-Keun Jun, Hee-Young Choi, Sun-Myoung Lee, Jae-Seung Kang, and Hyeongjin Cho*
- Alkali Metal Cation Selectivity of [17]Ketonand in Methanol: Free Energy Perturbation and Molecular Dynamics Simulation Studies Sungu Hwang, Yun Hee Jang, Gean Ha Ryu, and Doo Soo Chung*
- 1136 Dynamics of Gas-phase Hydrogen Atom Reaction with Chemisorbed Hydrogen Atoms on a Silicon Surface Sun-Hee Lim, Jongbaik Ree, and Yoo Hang Kim
- ¹H NMR Spectra of Some Amines Coordinated to the Paramagnetic Polyoxometalate, [SiW₁₁Co^{II}O₃₉]⁶-1145 Byung Ahn Kim and Hyunsoo So*
- ¹H NMR Study of 4-Aminopyrimidine Coordinated to the Paramagnetic Undecatungstocobalto(II)silicate Anion: 1149 Rates of Internal Rotation of the Amine Group Byung Ahn Kim and Hyunsoo So*
- 1153 Determination of Relative Reactivities of Free Hydroxyl Groups in β -Cyclodextrin, Amylose, and Cellulose by Reductive-Cleavage Method Chang Kiu Lee,* Eun Ju Kim, and Jung Ho Jun
- 1159 Retention Characteristics of Various Proteins in Flow Field-Flow Fractionation: Effects of pH, Ionic Strength, and Denaturation Jong Hee Song, Won-Suk Kim, Young Hun Park, Euy Kyung Yu, and Dai Woon Lee*
- 1165 Preconcentration and Detection of Herbicides in Water by Using the On-line SPE-HPLC System and Photochemical
 - Seung-Ho Lee, Sung Kwang Lee, Young Hun Park, Hyunjoo Kim, and Dai Woon Lee*

- 1574 Bull. Korean Chem. Soc. 1999, Vol. 20, No. 12
- 1172 Kinetics and Mechanism of the Pyridinolysis of Benzyl Bromides in Dimethyl Sulfoxide Sung Wan Hong, Han Joong Koh, Hai Whang Lee, and Ikchoon Lee*
- Density Functional Theory Studies on the Electrophilic *versus* Electron Transfer Mechanisms of Aryl Vinyl Ethers Wang Ki Kim, Chang Kook Sohn, Sun Hee Lim, Soon Ki Rhee, Chang Kon Kim, and Ikchoon Lee*
- Reaction of FeC₅H₅⁺ Ion with Neutral Ferrocene: The Dependence of Reaction Pathways on Its Internal Energy **Byungjoo Kim*** and **Hun-Young So**
- Dynamic Behavior of Photoinduced Birefringence of Copolymers Containing Aminonitro Azobenzene Chromophore in the Side Chain

Dong Hoon Choi* and Suk Hoon Kang

- 2-(Multimethoxy)phenyl-4-methylene-1,3-dioxolane: II. Preparation and Cationic Polymerization of 2-(x,y,z-Trimethoxyphenyl)-4-methylene-1,3-dioxolane Derivatives

 Won-Cheoul Jang and Myoung-Seon Gong*
- 1200 Reaction of Ru(tpy)Cl₃ with *N*,*N*,*C*-Terdentates, 3,2'-Annulated-6-(2"-pyridyl)-2-phenylpyridines **Yurngdong Jahng*** and Jae Gyu Park
- 1205 Single-Crystal ²⁷Al NMR Study of Corundum α-Al₂O₃ **Ae Ja Woo**
- 1209 Calculation of the Entropies and Chemical Potentials of Hard-Sphere Solutes Solvated in Hard-Sphere Solids Using the Radial Free-Space Distribution Function Byoung Jip Yoon
- Mechanism of the Hydrolysis of 2-Phenyl-4H,5H,6H-3-methyl-3-thiazinium Perchlorate Derivatives Tae-Rin Kim,* So-Young Lee, Sang-Yong Pyun,* Ju Chang Kim, and Man-So Han
- 1218 Trifluoromethyl Group Effect in Chlorination of Dihydro-1,4-oxathiin-3-carboxanilide: Unusual Non-Stereospecific Addition Hoh-Gyu Hahn,* Kee Hyuk Chang, Kee Dal Nam, Jong Youn Jun, and Heduck Mah
- 1221 Deletion of the Last Five Amino Acid Residues in Human Dihydrolipoamide Dehydrogenase **Hakjung Kim**
- 1225 Crystal Structure of Manganese(III) Complex with 2-Salicylideneamino-4-t-butylphenol and Salicylaldehyde Seong-Jong Mo and Bon-Kweon Koo*
- The Reaction of Ninhydrin with Polymethylbenzenes in the Presence of Acid Catalyst: Formation of 2-Aryl-1,3-indanedione and Indenoindanone Derivatives
 Hyun Nam Song, Hong Jung Lee, Tae Yi Kim, and Jae Nyoung Kim*
- 1232 Electrochemistry and Anion Binding of Urea Functionalized Calix[4]monoquinone Haesang Jeong, Eun Mi Choi, Sung Ok Kang, Kye Chun Nam,* and Seungwon Jeon*
- 1235 Synthesis and Characterization of Ferric Complex of Biomimetic Tripodal Ligand, Bis(2-benzimidazolymethyl)ethanolamine Byunghoon Kwak, Hakjune Rhee, and Myoung Soo Lah*
- On the Isomerism of [1_n]Ketonand and [1_n]Starand Sungu Hwang, Gean Ha Ryu, Yun Hee Jang, and Doo Soo Chung*
- 1241 Synthetic, Spectroscopic, and X-ray Crystallographic Studies on Manganese (III)
 Complexes with a 14-Membered Tetraaza Macrocyclic Ligand
 Ju Chang Kim* and Alan J. Lough
- 1245 Resolution of Atropisomers of Hindered Naphthamides on an Improved HPLC Chiral Stationary Phase Derived from (S)-Leucine Myung Ho Hyun,* Gil Soo Lee, and Sang Cheol Han
- 1253 Triflic Anhydride Mediated Decarbonylative Arylation of Pyroglutamic Acid Mi Ra Seong and Jae Nyoung Kim*

- 1255 N.N-Dimethylformamide Dimethylacetal (DMF-DMA) Catalyzed Formation of 1,3,5-Trisubstituted Benzene Derivatives from α, β -Unsaturated Nitro Compounds
 - Tae Yi Kim, Hyoung Shik Kim, Ka Young Lee, and Jae Nyoung Kim*
- Dimeric Barium β -Diketonate Complexes with Polydentate Amine Adducts: The Synthesis and Structural 1257 Characterization of $[Ba(THD)_2(L)]_2$ (L = Diethylenetriamine and Triethylenetetramine) Complex Jung Woo Park and Sang Man Koo*
- 1261 New NiSO₄/ZrO₂ Catalyst for Ethylene Dimerization Jong Rack Sohn* and Won Cheon Park
- 1263 Fluorescence Properties and Photoisomerization Behavior of 1-(9-Anthryl)-2-(2-quinolinyl)ethene Eun Ju Shin
- 1269 Theoretical Models of Ethylene Polymerization Man Chai Chang
- Development of an Ultrasonic Nebulizer Using a Domestic Humidifier Pyung Heum Yeon, Young Min Cho, and Yong-Nam Pak*
- 1281 Theoretical Studies of the Low-Lying Electronic States of Diazirine and 3,3'-Dimethyldiazirine Min Su Han, Han-Gook Cho, and Byeong-Seo Cheong*
- Study of the Compressed and Expanded Liquid Rubidium with the Optimized Nonlocal Model Potential 1288 Hong Seok Kang* and Sung Ho Park
- 1295 Synthesis and Properties of Novel Platinum(IV) Complexes Involving Asymmetric Chiral Diamines as Carrier Ligands Eun Ju Lee, Moo-Jin Jun,* and Youn Soo Sohn*
- Investigation of Transglutaminase-Induced Peptide Cross-Linking by Matrix-Assisted Laser Desorption / Ionization 1299 Time-of-Flight Mass Spectrometry Hie-Joon Kim* and Hyo Sup Yim
- Poly(3,4-ethylenedioxythiophene) Electrodes Doped with Anionic Metalloporphyrins Eui-hwan Song, In-Hyeong Yeo, and Woon-kie Paik*
- 1309 Performance of HPLC Chiral Stationary Phases with Two Chiral Units and the Effect of the Stereochemistry of the Second Chiral Unit on the Chiral Recognition Myung Ho Hyun,* Seung-Ryul Hwang, and Sang Cheol Han
- 1313 Influence of Lewis Base on the Nonstoichiometry and the Properties of Magnetite Films Prepared by Aqueous Solution Method
 - Don Kim,* Kisoon Hwang, Chung Sub Lee, Jung Chul Sur, Hyun Kwan Shim, and Yeong Il Kim
- 1319 Leucine Zipper as a Fine Tuner for the DNA Binding; Revisited with Molecular Dynamics Simulation of the Fos-Jun bZIP Complex Yong-Hoon Choi, Chul-Hak Yang, Hyun-Won Kim, and Seunho Jung*
- Interdiffusion at Interfaces of Binary Polymer Mixtures with Different Molecular Weights Woon Chun Kim and Hyungsuk Pak^{*}
- Dielectric Changes During the Curing of Epoxy Resin Based on the Diglycidyl Ether of Bisphenol A (DGEBA) with 1329 Diamine Hongkyeong Kim and Kookheon Char*
- 1335 Probing the Functional Motifs of Escherichia coli 5S rRNA in Relation to 16S rRNA Using a SELEX Experiment Jae-hyeong Ko, Bongrae Cho, Jeong Keun Ahn, Younghoon Lee, and Inwon Park*
- 1340 Impedance Characteristics of Oxide Layers on Aluminium Han-Jun Oh,* Kyung-Wook Jang, and Choong-Soo Chi
- Nickel-Mediated Cross-Coupling of Benzyl- and 2-Methyl-2-phenylpropylmagnesium Chloride with Aryl Bromides 1345 Yong-Seok Seo, Hee-Sung Yun, and Kwangyong Park*

1576	Bull. Korean Chem. Soc. 1999, Vol. 20, No. 12
1348	Variation of Pyrolysis Pattern of Polyisoprene Depending on Temperature Sung-Seen Choi
1351	Photocycloaddition of Cyclo-1,3-dienes to 9-Cyanophenanthrene Taehee Noh,* Kyungmoon Jeon, Jeongae Yoon, and Youngmee Jeong
1355	Synthesis and Free Radical Polymerization of Vinyl Ethers Containing Two Electron Acceptors Ju-Yeon Lee,* Min-Jung Kim, Mi-Kyoung Jin, and Mi-Ra Ahn
1359	Synthesis and X-ray Crystal Structure of Hydantoin Derivatives Gun-Young Lee, You-Suk Lee, Sang Man Koo, and Kee-Jung Lee*
1363	Catalytic Activities of Glass-Encapsulated Horseradish Peroxidase at Extreme pHs and Temperatures Yong-wan Cho and Sanghwa Han*
1365	Electrochemical Study on the Dimerization of 2e ⁻ -Reduced N',N''-(Trimethylene)bis(N-methyl-4,4-bipyridinium) Ion within Zeolite Cavities Kyungmi Lee, Chongmok Lee,* Joon Woo Park, Yong Soo Park, and Kyung Byung Yoon
1368	Dimeric Mercury(II) Chloride Complex of Sulfur-rich Ligand : Synthesis and X-ray Crystal Structure of $trans$ -[{Hg(μ -Cl)Cl(dPhEDT-DTT)} ₂] · (CH ₃ CN) ₂ Ha-Jin Lee, Hye Jin Nam, and Dong-Youn Noh*
1371	Synthesis of a Porphyrin Having Eight Carborane Cages Jongho Lee, Yil Sung Park,* Yong Il Kim, and Han Chyul Kang
1373	Preparation of Aldehydes from Carboxylic Esters by Reductive Oxidation with Lithium Aluminum Hydride and Pyridinium Chlorochromate or Pyridinium Dichromate Jin Soon Cha,* Joong Hyun Chun, Jong Mi Kim, Dae Yon Lee, and Sung Dong Cho
1375	Self Condensation of β -Acylpyruvates and <i>in situ</i> Complexation with Some Amine Bases Jae Nyoung Kim , * Hong Jung Lee, Ka Young Lee, Hyoung Rae Kim, and Eung K. Ryu
1381	HF and MP2 Calculations on the Transition States of S_N ' O-Cyclizations Gyoosoon Park* and Soo Gyeong Cho*
1384	A Highly Regioselective Epoxide Ring Opening Reaction by Triorganylborane <i>via</i> Electrochemical Method Jung Hoon Choi, * Sung Jae Lee, Choong Ryul Joo, Jung Sung Kim, and Dae Jin Baek
1387	Chiral, Metallomacrocycles Kyung-Jun Kim and Seung Soo Yoon*
1389	C-2 Modified Taxol Analogs with Improved Aqueous Solubility Seok-Chan Kim,* Man-Sik Moon, and Chan-Seong Cheong
1391	Chiral, Metal Templated Self-Assembly Jae-Won Choi and Seung Soo Yoon*
1394	Structural Investigation of the Hydrolysis-Condensation Process of Modified Titanium Isopropoxide M. W. Jung,* H. J. Oh, J. C. Yang, and Y. G. Shul
1399	Theoretical Determination of Geometrical Structures of the Nitric Oxide Dimer, (NO) ₂ Jong Keun Park* and Hosung Sun*
1409	Spectrophotometric Determination of Scandium(III) in Monazite after Separation Using Amberlite IRC 718 Chalating Resin Chan-il Park and Ki-Won Cha*
1413	Chemical Poisoning of Ni/MgO Catalyst by Alkali Carbonate Vapor in the Steam Reforming Reaction of DIR-MCFC Hyeung-Dae Moon, Tae-Hoon Lim, and Ho-In Lee *
1418	Kinetics and Mechanism of the Aminolysis of Thiophenyl Acetates in Acetonitrile Hyuck Keun Oh, Jin Hee Yang, Hai Whang Lee, and Ikchoon Lee*

1421 Synthesis and Characterization of New Liquid Crystalline Fumarate and Maleate Monomers with Two Symmetrical Mesogens

Yang Kyoo Han* and Kyung Min Kim

1428 A New Functional Model Complex of Extradiol-cleaving Catechol Dioxygenases: Properties and Reactivity of $[Fe^{II}(BLPA)DBCH]BPh_4$

Ji H. Lim, Tae H. Park, Ho-Jin Lee, Kang-Bong Lee, and Ho G. Jang*

2-(Multimethoxyphenyl)-4-methylene-1,3-dioxolane: (III) Polymerization of 2-(2,4-Dimethoxyphenyl)-4-methylene -1,3-dioxolane with Various Cationic Catalysts

Won-Cheoul Jang, Jang-Soon Bae, and Myoung-Seon Gong*

- 1437 Ozonides from the Ozonolyses of Indene Kang-Ryul Lee, Chi Won Lee, and Tae Sung Huh*
- 1441 Studies of Radicals Generated in Supersonic Flash Pyrolysis by Laser Induced Fluorescence Spectroscopy Hee-Kyung Kim, Han-Cheol Kwon, Jong-Ho Park, Young-Sang Choi, and Jong-Ho Choi*
- 1447 Regeneration of Exhausted Activated Carbon by a Countercurrent Oxygen Reaction **Keon Sang Ryoo,*** **Tae-Dong Kim, and Yoo Hang Kim**
- Nucleophilic Substitution Reaction of α-Methoxy-α-(trifluoromethyl)phenylacetyl Chloride in Alcohol-Water Mixtures In Sun Koo,* Seong In Lee, Sun Kyoung An, Kiyull Yang, and Ikchoon Lee
- 1457 Redox Property of Vanadium Oxide and Its Behavior in Catalytic Oxidation **Young Ho Kim and Ho-In Lee***
- Nonactivated Arylazoindolinobenzospiropyran Derivatives. Part 2¹: Preparation and Kinetic Measurements of the Spiro-ring Formation from the Merocyanine Form Sam-Rok Keum* and Myung-Jin Lee
- 1469 Synthesis, Structure, and Antitumor Activity of Novel Platinum(II) Complexes Involving Asymmetric Chiral Diamines as Carrier Ligands
 - Eun Ju Lee, Moo-Jin Jun,* and Youn Soo Sohn*
- Sharp-line Electronic Spectroscopy and Ligand Field Analysis of Cr(III) Complexes with Amino Acid Ligands Sung-Jin Park, Young-Keun Choi, Seung-Suk Han, and Kyu-Wang Lee*
- 1479 Dynamics of Interdiffusion at Interface between Partially Miscible Polymers Woon Chun Kim and Hyungsuk Pak*
- 1483 Nonaqueous Capillary Electrophoresis of Chlorinated Phenols **Bojeong Kim, Man-Seog Chun, Sangmoo Shin, and Doo Soo Chung***
- 1487 Kinetics and Mechanism of Oxidation of Styryl Biphenyl and Styryl Fluorenyl Ketones by Pyridinium Chlorochromate **Dae Dong Sung* and P. Ananthakrishna Nadar**
- 1493 *Ab Initio* Quantum Mechanical Study for the Photolysis and Unimolecular Decomposition Reactions in the Atmosphere of CF₃OH

Seung-Joon Kim* and Hyun-Sup Song

- Temporal Evolution and Ablation Mechanism of Laser-induced Graphite Plume at 355 nm Young-Ku Choi, Hoong-Sun Im, and Kwang-Woo Jung*
- 1506 Dipole Moment of 4-Methylcyclohexanone Jung Eun Lee, Mi Kyung Ahn, and Jung Jin Oh*
- 1509 Synthesis and Characterization of Bis(ethylenedithio)tetrathiafulvalene Charge Transfer Compounds with Gold, Platinum and Osmium Chloride Chan-Kyou Jeong and Young-Inn Kim*
- 1513 Synthesis and X-ray Crystal Structure of *meso*-Octaalkyldithiaporphyrinogen **Koo Shin,*** **Jong Lack Choi, and Moon-Gun Choi**

- 1578 Bull. Korean Chem. Soc. 1999, Vol. 20, No. 12
- 1517 A Facile Total Synthesis of Idarubicinone Young S. Rho,* Hyun Kyoung Ko, Hongsig Sin, and Dong Jin Yoo
- Simulation Studies for Porosity and Specific Surface Area in the Penetrable-Concentric-Shell Model Pore Soong-Hyuck Suh,* Woong-Ki Min, and James M. D. MacElroy
- 1524 Benzotriazoles, Benzotriazines and Quinoxalines with Sulfone Functional Group (I): (Benzotriazol-1-yl)alkyl Arenesulfones
 Young-Seuk Hong,* Hyun-Muk Kim, Ho-Sik Kim, and Yong-Tae Park
- 1529 Assay of a Ceramic Sample by Neutron Activation and Proton-Induced X-ray Emission Yong Hee Chung,* Hyun Joong Kim, Chul-un Ro, Yong Soo Ahn, Keisuke Sueki, Hiromichi Nakahara, and Chushiro Yonezawa