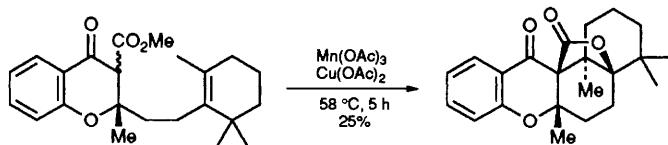


JOURNAL OF THE CHEMICAL SOCIETY

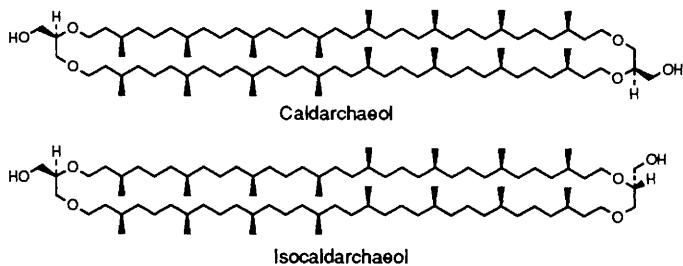
Chemical CommunicationsNumber 4
1995**CONTENTS**

- 403 A Conjugate Addition—Radical Cyclisation Approach to Sesquiterpene Phenols**



Barry S. Crombie, Alan D. Redhouse, Colin Smith, Timothy W. Wallace

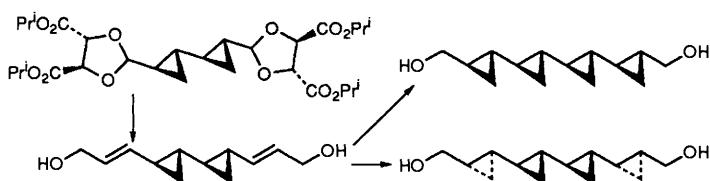
- 405 Detection of Regioisomeric Macrocylic Tetraethers in the Lipids of *Methanobacterium thermoautotrophicum* and other Archaeal Organisms**



Otto Gräther, Duilio Arigoni

- 407 Approaches to the Assembly of the Antifungal Agent FR-900848: Studies on the Synthesis of C₂ Symmetric Tetracyclopropane Derivatives and an X-Ray Crystallographic Study of (1*R*,3*S*,4*S*,6*R*)-Bicyclopentyl-1,6-di-{2-[{(4*R*,5*R*)-di-(isopropoxycarbonyl)-1,3-dioxolane]}}**

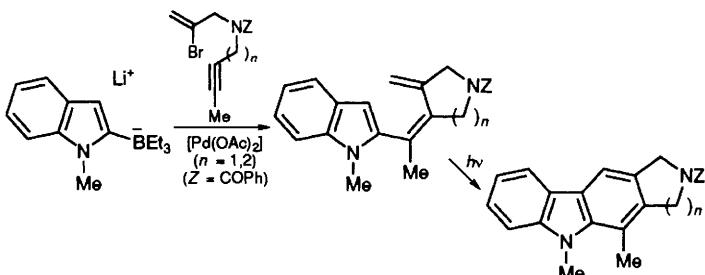
Anthony G. M. Barrett, Wendel W. Doubleday, Krista Kasdorf, Gary J. Tustin, Andrew J. P. White, David J. Williams



Two subsequent asymmetric bicyclopropanation reactions were used to synthesize structural models of the tetracyclopropane unit of FR-900848.

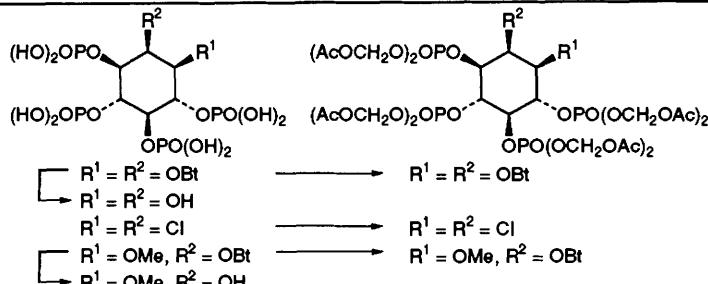
- 409 Palladium-catalysed Tandem Cyclisation–Cross-coupling Reaction with Triethyl-(1-methylindol-2-yl)borate**

Minoru Ishikura



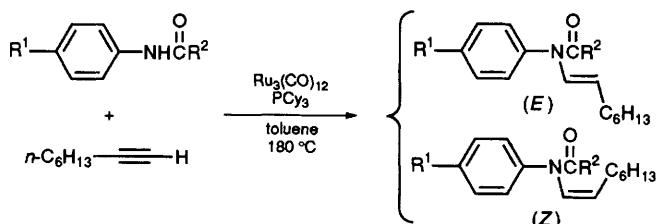
- 411 **Synthesis of D-*myo*-Inositol 3,4,5,6- and 1,4,5,6-Tetrakisphosphate Analogues and their Membrane-permeant Derivatives**

Stefan Roemer, Marco T. Rudolf, Christoph Stadler, Carsten Schultz



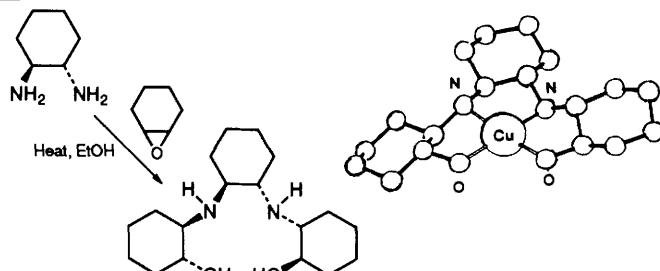
- 413 **Ruthenium Complex-catalysed Addition of N-Aryl substituted Amides to Alkynes: Novel Synthesis of Enamides**

Teruyuki Kondo, Atsushi Tanaka, Shinji Kotachi, Yoshihisa Watanabe



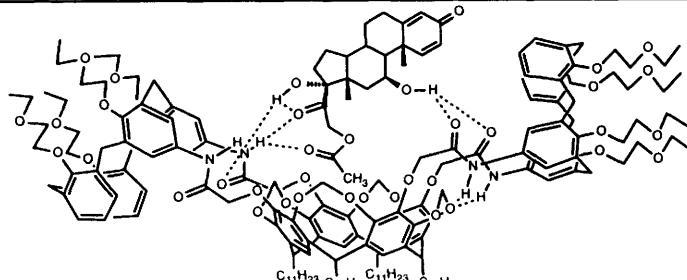
- 415 **Convenient Syntheses, based on Cyclohexene Oxide, of Ligands that are Highly Preorganised for Metal Ion Size-based Selectivity**

Alvaro S. de Sousa, Robert D. Hancock



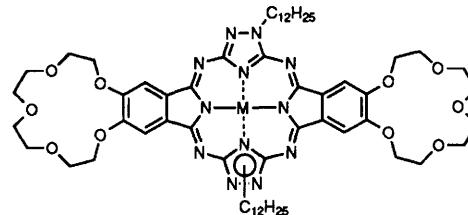
- 417 **Synthetic Receptors with Preorganized Cavities that Complex Prednisolone-21-acetate**

Peter Timmerman, Erik A. Brinks, Willem Verboom, David N. Reinhoudt



- 419 **Synthesis and Aggregation Properties of Novel Soluble ‘Crowned’ Metallotriazolehemiporphyrazines**

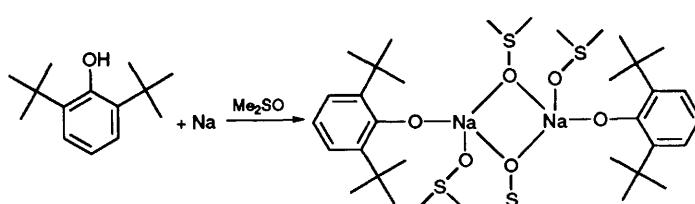
Fernando Fernández-Lázaro, Angela Sastre, Tomas Torres



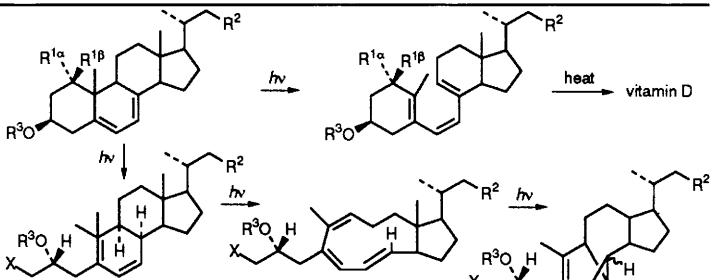
The synthesis and aggregation properties of novel ‘crowned’ metallotriazolehemiporphyrazines are described.

- 421 **An Alkali Metal Phenoxide with an Unusual Dimeric Crystal Structure: $[\text{Na}(\text{OC}_6\text{H}_3\text{Bu}^t-2,6)(\mu-\text{Me}_2\text{SO})(\text{Me}_2\text{SO})]_2$**

Leena Matilainen, Markku Leskelä, Martti Klinga

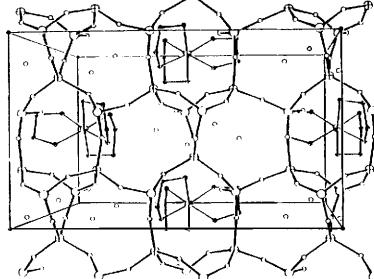


- 423 New Photoisomerization of Provitamin D caused by Hydroxylation at C(1)



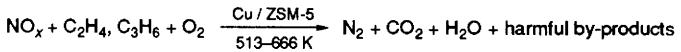
Sachiko Yamada, Hironobu Ishizaka, Hiroki Ishida, Keiko Yamamoto

- 425 A Novel Layered Aluminium Phosphate $[\text{Co-(en)}_3\text{Al}_3\text{P}_4\text{O}_{16}\cdot 3\text{H}_2\text{O}]$ Assembled about a Chiral Metal Complex



Keith Morgan, Graeme Gainsford, Neil Milestone

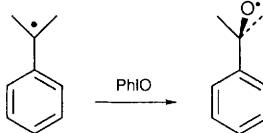
- 427 Formation of HNCO during Catalytic Reduction of NO_x with Olefins over Cu/ZSM-5



Frank Radtke, René A. Koeppel, Alfons Baiker

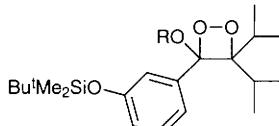
Gaseous cyanic acid (HNCO) is formed during the selective catalytic reduction of NO_x with olefins over Cu/ZSM-5 under dry conditions, whereas with ammonia, no HNCO is observed in the presence of water in the same temperature range. Other harmful by-products are hydrogen cyanide and formaldehyde.

- 429 Oxidation of Isopropylbenzene by Iron Tetraphenylporphyrin: Evidence for the Interaction of the Cumyl Radical with Oxygen Donors



Enrico Baciocchi, Francesca d'Acunzo, Carlo Galli, Marcella Iole

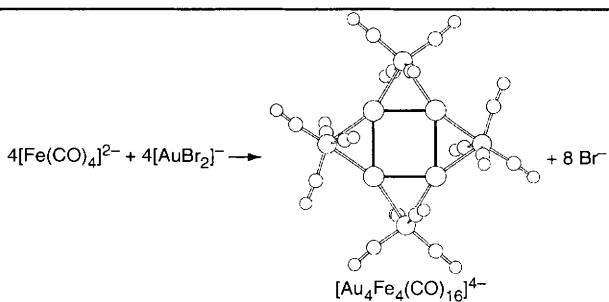
- 431 Thermal Stability and Chemiluminescence of 3-Alkoxy-3-aryl-4,4-diisopropyl-1,2-dioxetanes



R = Me, Et, Pr^t, Bu^t

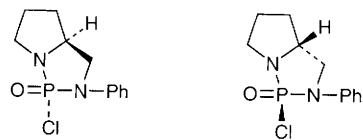
Masakatsu Matsumoto, Hiroyuki Suganuma, Yuriko Katao, Hiroshi Mutoh

- 433 Synthesis of $[\text{AuFe}_2(\text{CO})_8]^{3-}$ and $[\text{Au}_4\text{Fe}_4(\text{CO})_{16}]^{4-}$: X-Ray Structure of the $[\text{Au}_4\text{Fe}_4(\text{CO})_{16}]^{4-}$ Cluster Anion in its $[\text{NEt}_4]^+$ salt



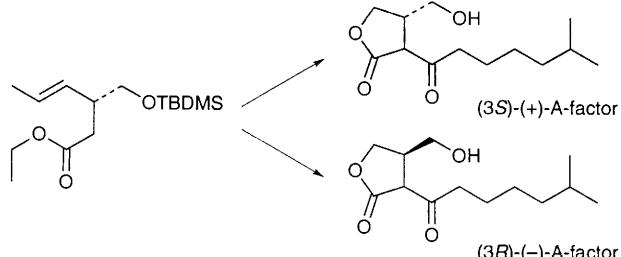
Vincenzo G. Albano, Francesca Calderoni, Maria Carmela Iapalucci, Giuliano Longoni, Magda Monari

- 435 Optically Active Diazacyclopophosphamides: Novel Efficient Reagents for the Determination of the Absolute Configuration of Amines and Alcohols



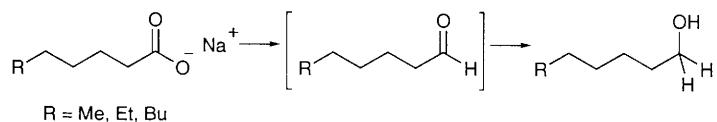
Tatsuo Oshikawa, Mitsuji Yamashita, Sadaaki Kumagai, Kuniaki Seo, Junichi Kobayashi

- 437 Synthesis of Optically Active A-Factor



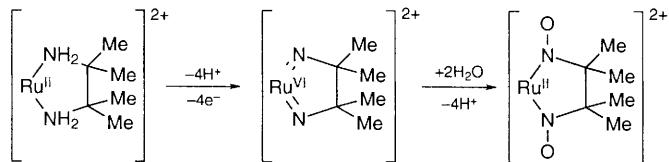
Philip J. Parsons, Pierre Lacourts, A. D. Buss

- 439 Reduction of Carboxylates to Alkanols catalysed by *Colletotrichum gloeosporioides*



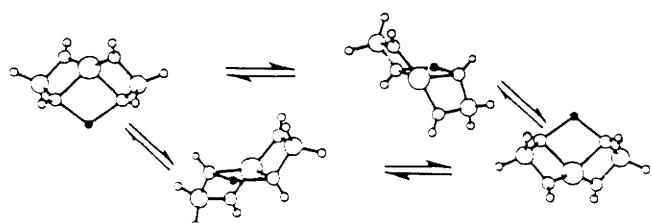
Giovanni Fronza, Claudio Fuganti, Piero Grasselli, Stefano Servi, Gioia Zucchi, Massimo Barbeni, Mario Villa

- 441 Formation of a Chelating Bidentate Nitrosoalkane Complex of Ruthenium(II) through Reaction of H₂O with a High-valent Bis(imido)ruthenium Intermediate and X-Ray Crystal Structure of [Ru-(bpy)₂(ONCMe₂CMe₂NO)][ClO₄]₂·Me₂CO



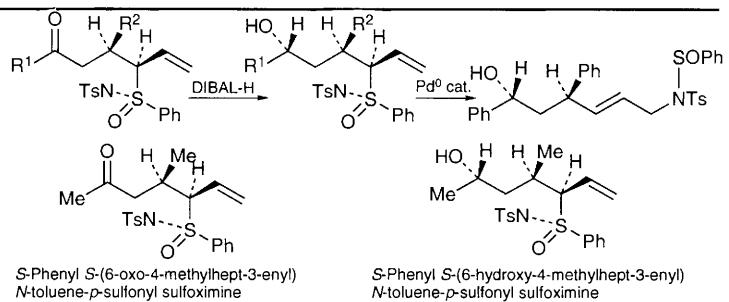
Wing-Hong Chiu, Kung-Kai Cheung, Chi-Ming Che

- 443 Orbiting of the Lithium Atom in the [Me₂Si-(NSiMe₃)₂]₂InLi Molecule: Theoretical Confirmation



Feliu Maseras, Agustí Lledós

- 445 Diastereoselective Reductions of β-Substituted-γ-Keto Sulfoximines and a Novel Palladium(0)-catalysed Allylic Sulfoxime to Allylic Sulfinamide Rearrangement



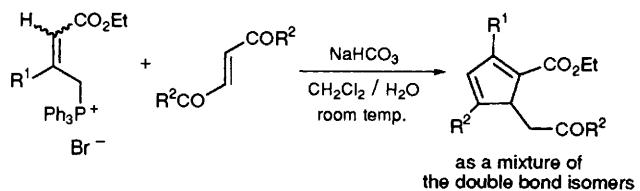
Stephen G. Pyne, Zemin Dong, Brian W. Skelton, Allan H. White

447 Colloidal Silver as a Quencher for the Fluorescence of 2-Naphthalenesulfonic Acid

Adsorption of 2-naphthalenesulfonic acid (NSA) on colloidal silver particle results in an effective fluorescence quenching of NSA, in addition to the optical effects on silver colloids, such as damping and shift of the plasmon absorption band.

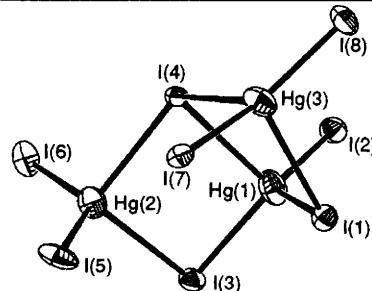
The late Ling Zang, Chun-Yan Liu, Xin-Min Ren

449 [3 + 2] Annulation of Allylidene(triphenyl)-phosphorane with 1,2-Diacylethylenes: Synthesis of Substituted Cyclopentadienes



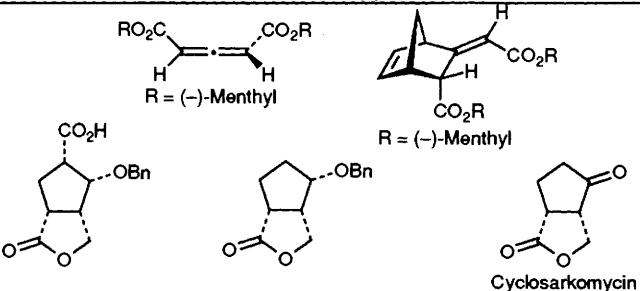
Yuichiro Hameda, Minoru Hatanaka, Ikuo Ueda

451 Reaction of Mercuric Iodide with Cryptand 222. Crystallographic Evidence for the Formation of Finite Octaiodotrimercuro(II) Ions $[Hg_3I_8]^{2-}$



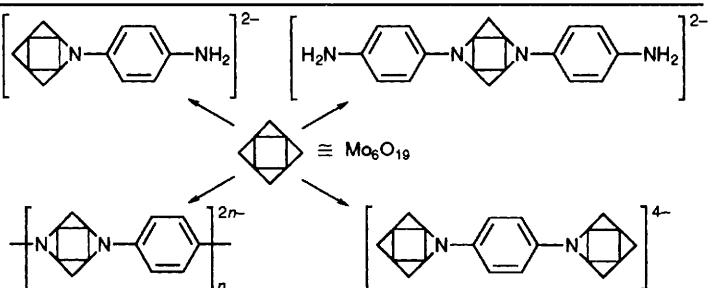
Joachim Pickardt, Britta Kühn

453 Access to an Optically Pure Cyclosarkomycin by Conversion of the *Endo* Adduct of (*R*)-Allene 1,3-Dicarboxylate and Cyclopentadiene



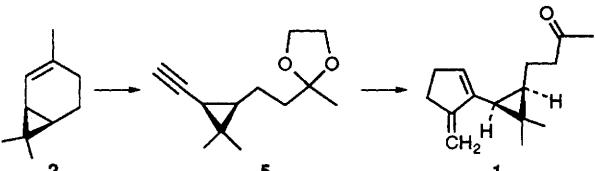
Izumi Ikeda, Ken Kanematsu

455 Functionalisation of $[Mo_6O_{19}]^{2-}$ with Aromatic Amines: Synthesis and Structure of a Hexamolybdate Building Block with Linear Difunctionality



William Clegg, R. John Errington, Kelly A. Fraser, Stephen A. Holmes, Andreas Schäfer

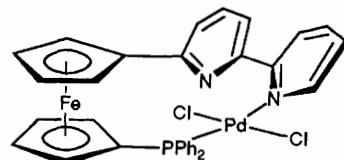
457 Total Synthesis of (+)-Taylorione utilising Modified Pauson–Khand Reaction Methodology



Craig Johnstone, William J. Kerr, Udo Lange

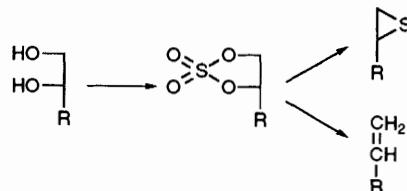
(+)-Taylorione 1 is synthesised in 12 steps from (+)-2-carene 2 via alkyne 5.

- 459 **The Palladium(II) Coordination Chemistry of Ferrocenylphosphinobipyridines: a Novel *trans*-Chelating Ligand System**



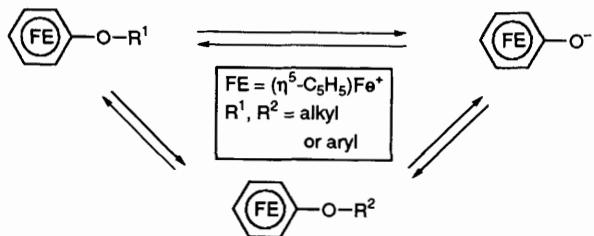
Ian R. Butler, Maher Kalaji, Louise Nehrlich,
Michael Hursthouse, Alexander I. Karaulov,
K. M. Abdul Malik

- 461 **Synthesis of Sugar Episulfides and Olefins from *vic*-Diols via Cyclic Sulfates**



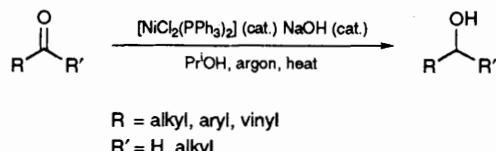
Francisco Santoyo-González, Francisco
García-Calvo-Flores, Pilar García-Mendoza,
Fernando Hernandez-Mateo, Joaquín Isac-
García, Mª Dolores Pérez-Alvarez

- 463 **Heterolytic C–O Cleavage in Arylethers Activated by $[\text{Fe}(\eta^5\text{-C}_5\text{H}_5)]^+$**



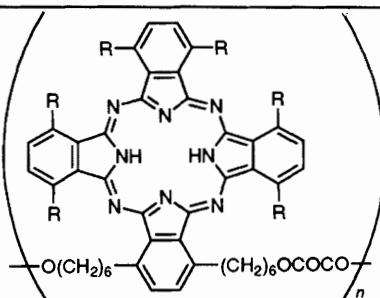
Françoise Moulines, Laurent Djakovitch,
Marie-Hélène Delville-Desbois, François Robert,
Pierre Gouzerh, Didier Astruc

- 465 **$[\text{NiCl}_2(\text{PPh}_3)_2]$ catalysed Transfer Hydrogenation of Ketones and Aldehydes by Propan-2-ol**



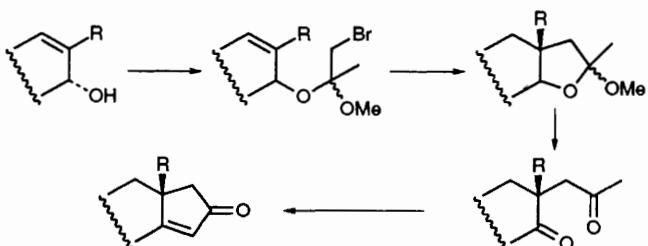
Suresh Iyer, Jos P. Varghese

- 467 **Liquid Crystalline Polymeric Phthalocyanines**



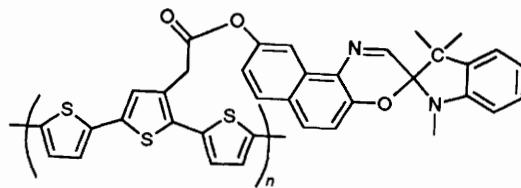
Geoffrey C. Bryant, Michael J. Cook, Timothy G.
Ryan, Andrew J. Thorne

- 469 **Cyclopentaannulation of Allyl Alcohols via a Radical Cyclisation Reaction. Total Synthesis of 4-Epibakkenolide-A**



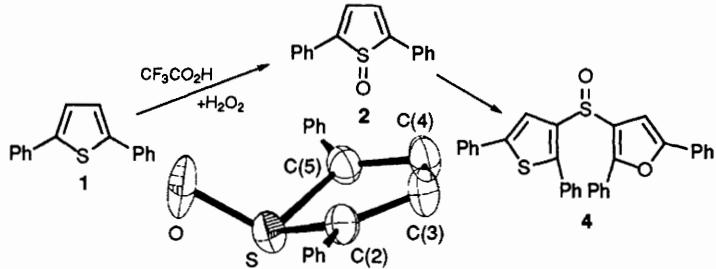
A. Srikrishna, R. Viswajanani, J. A. Sattigeri

- 471 Synthesis and Electropolymerization of Terthienyl Carrying a Photochromic Group



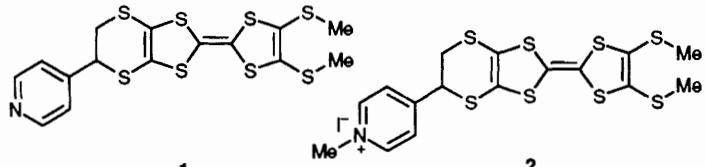
Abd errahim Yassar, Corrine Moustrou, Hafsa Korri Youssoufi, André Samat, Robert Guglielmetti, Francis Garnier

- 473 Thiophene S-Oxides: Convenient Preparation, First Complete Structural Characterization and Unexpected Dimerization of One of Them, 2,5-Diphenylthiophene-1-oxide



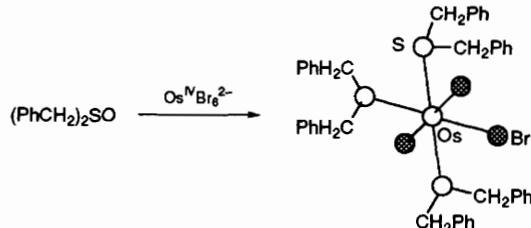
Pascale Pouzet, Irene Erdelmeier, Daria Ginderow, Jean-Paul Mornon, Patrick Dansette, Daniel Mansuy

- 475 Semiconducting Langmuir–Blodgett Films of Non-amphiphilic Ethylenedithio-Tetrathiafulvalene Derivatives Bearing Pyridine and Pyridinium Substituents



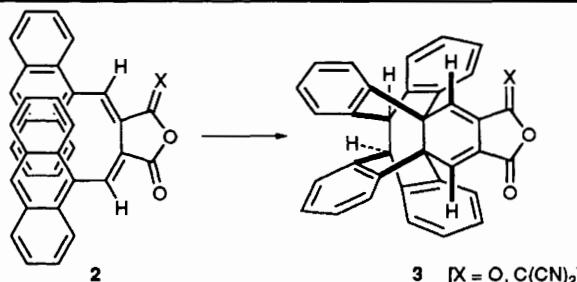
The study of two novel non-amphiphilic molecules, 4,5-dimethylthio-4',5'-(4-pyridyl)-ethylenedithio-TTF **1** and its *N*-methylpyridinium iodide salt **2** which form semiconducting LB films, is described.

- 477 A Method of Making Os–R₂ Bonds: Chemistry and Structure of Meridional [Os{S(CH₂Ph)₂}₃Br₃]



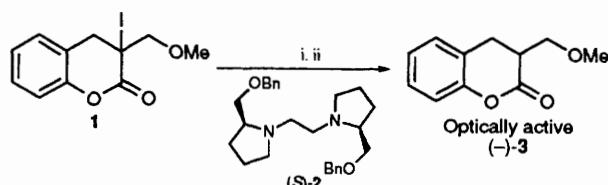
Prasanta Ghosh, Kausikisankar Pramanik, Animesh Chakravorty

- 479 Intramolecular [4 + 4] Photocycloaddition Reactions of the Photochromic Compounds, 3,4-Bis(9-anthrylmethylene)tetrahydrofuran-2,5-dione and its 5-Dicyanomethylene Derivative



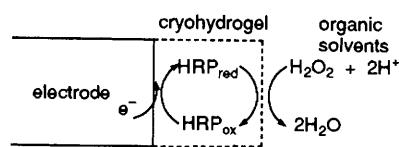
Harry G. Heller, Matthew J. Ottaway

- 481 Enantioselective Radical-mediated Reduction of α -Iadolactone using Tributyltin Hydride in the Presence of a Chiral Amine and a Lewis Acid



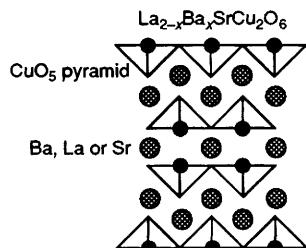
Masatoshi Murakata, Hideyuki Tsutsui, Osamu Hoshino

- 483 An Organic-phase Enzyme Electrode based on an Apparent Direct Electron Transfer between a Graphite Electrode and Immobilized Horseradish Peroxidase



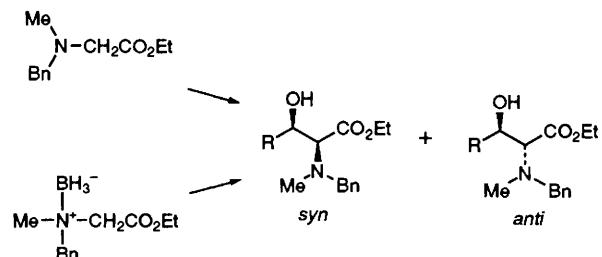
Shaojun Dong, Yizhu Guo

- 485 Intercalation of Nitric Oxide into Double-layered Cuprate Superstructure



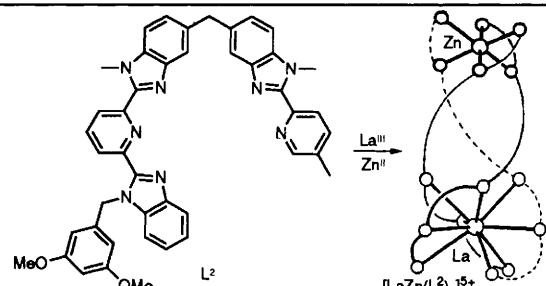
Masato Machida, Hirotaka Murakami, Takeshi Kitsubayashi, Tsuyoshi Kijima

- 487 Aldol Reactions of Ethyl *N*-Benzyl-*N*-methylglycinate and of its Borane Adduct: Selective Access to *Syn* or *Anti* α -Amino- β -hydroxyesters



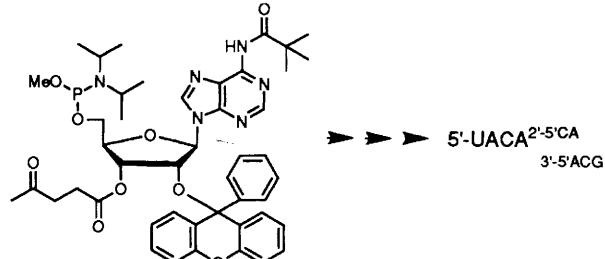
Vincent Ferey, Thierry Le Gall, Charles Mioskowski

- 491 Self-assembly of the First Heterodinuclear d-f Triple Helix in Solution



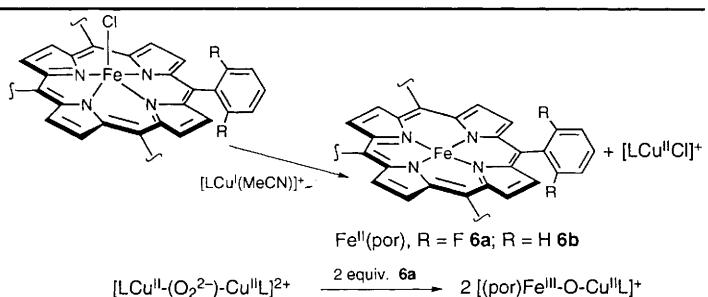
Claude Piguet, Gérard Hopfgartner, Alan F. Williams, Jean-Claude G. Bünzli

- 495 A Universal Solid-phase Synthesis of Branched Oligoribonucleotides



Morten Grøtli, Brian S. Sproat

- 499 Copper-Dioxygen Reactivity Involved in the Formation of μ -oxo $[(\text{por})\text{Fe}^{\text{III}}-\text{O}-\text{Cu}^{\text{II}}\text{L}]^+$ Heterodinuclear Complexes (por = porphyrinate, L = tetradeятate ligand), and Novel Synthesis of Square-Planar $\text{Fe}^{\text{II}}(\text{por})$ Species



Alaganandan Nanthakumar, Stephen Fox, Kenneth D. Karlin

Corrigenda

- 503 **Self-assembly of Square Multiporphyrin Arrays by Metal Ion Coordination**

Charles Michael Drain, Jean-Marie Lehn

- 503 **Intramolecular Generation and Rearrangement of Ammonium Ylides from Copper Carbenoids: a General Method for the Synthesis of Cyclic Amines**

J. Stephen Clark, Paul B. Hodgson

AUTHOR INDEX

- Albano, Vincenzo G., 433
 Arigoni, Duilio, 405
 Astruc, Didier, 463
 Baciocchi, Enrico, 429
 Baiker, Alfons, 427
 Barbeni, Massimo, 439
 Barrett, Anthony G. M., 407
 Becker, James Y., 475
 Brinks, Erik A., 417
 Bryant, Geoffrey C., 467
 Bryce, Martin R., 475
 Bünzli, Jean-Claude G., 491
 Buss, A. D., 437
 Butler, Ian R., 459
 Calderoni, Francesca, 433
 Chakravorty, Animesh, 477
 Che, Chi-Ming, 441
 Cheung, Kung-Kai, 441
 Chiu, Wing-Hong, 441
 Clark, J. Stephen, 503
 Clegg, William, 455
 Cook, Michael J., 467
 Crombie, Barry S., 403
 d'Acunzo, Francesca, 429
 Dansette, Patrick, 473
 de Sousa, Alvaro S., 415
 Delville-Desbois,
 Marie-Hélène, 463
 Djakovitch, Laurent, 463
 Dong, Shaojun, 483
 Dong, Zemin, 445
 Doubleday, Wendel W., 407
 Drain, Charles Michael, 503
 Erdelmeier, Irene, 473
 Errington, R. John, 455
 Ferey, Vincent, 487
 Fernández-Lázaro, Fernando,
 419
 Fox, Stephen, 499
 Fraser, Kelly A., 455
 Fronza, Giovanni, 439
 Fuganti, Claudio, 439
 Gainsford, Graeme, 425
 Galli, Carlo, 429
 García-Calvo-Flores,
 Francisco, 461
 García-Mendoza, Pilar, 461
 Garnier, Francis, 471
 Ghosh, Prasanta, 477
 Ginderow, Daria, 473
 Goldenberg, Leonid M., 475
 Gouzerh, Pierre, 463
 Grasselli, Piero, 439
 Gräther, Otto, 405
 Grøtlid, Morten, 495
 Guglielmetti, Robert, 471
 Guo, Yizhu, 483
 Hancock, Robert D., 415
 Hatanaka, Minoru, 449
 Heller, Harry G., 479
 Hernandez-Mateo, Fernando,
 461
 Himeda, Yuichiro, 449
 Hodgson, Paul B., 503
 Holmes, Stephen A., 455
 Hopfgartner, Gérard, 491
 Hoshino, Osamu, 481
 Hursthouse, Michael, 459
 Iapalucci, Maria Carmela, 433
 Ikeda, Izumi, 453
 Ioele, Marcella, 429
 Isac-García, Joaquín, 461
 Ishida, Hiroki, 423
 Ishikura, Minoru, 409
 Ishizaka, Hironobu, 423
 Iyer, Suresh, 465
 Johnstone, Craig, 457
 Kalaji, Maher, 459
 Kanematsu, Ken, 453
 Karaulov, Alexander I., 459
 Karlin, Kenneth D., 499
 Kasdorf, Krista, 407
 Katao, Yuriko, 431
 Kerr, William J., 457
 Khodorkovsky, Vladimir Yu.,
 475
 Kijima, Tsuyoshi, 485
 Kitsabayashi, Takeshi, 485
 Klinga, Martti, 421
 Kobayashi, Junichi, 435
 Koeppel, René A., 427
 Kondo, Teruyuki, 413
 Kotachi, Shinji, 413
 Kühn, Britta, 451
 Kumagai, Sadaaki, 435
 Lacroute, Pierre, 437
 Lange, Udo, 457
 Le Gall, Thierry, 487
 Lehn, Jean-Marie, 503
 Leskelä, Markku, 421
 Levi, O. Paz-Tal, 475
 Liu, Chun-Yan, 447
 Lledós, Agustí, 443
 Longoni, Giuliano, 433
 Machida, Masato, 485
 Malik, K. M. Abdul, 459
 Mansuy, Daniel, 473
 Maseras, Feliu, 443
 Matilainen, Leena, 421
 Matsumoto, Masakatsu, 431
 Milestone, Neil, 425
 Mioskowski, Charles, 487
 Monari, Magda, 433
 Morgan, Keith, 425
 Mornon, Jean-Paul, 473
 Moulines, Françoise, 463
 Moustrou, Corrine, 471
 Murakami, Hirotaka, 485
 Murakata, Masatoshi, 481
 Mutoh, Hiroshi, 431
 Nanthakumar, Alaganandan,
 499
 Nehrlich, Louise, 459
 Oshikawa, Tatsuo, 435
 Ottaway, Matthew J., 479
 Parsons, Philip J., 437
 Pérez-Alvarez, Ma Dolores,
 461
 Petty, Michael C., 475
 Pickardt, Joachim, 451
 Piguet, Claude, 491
 Pouzet, Pascale, 473
 Pramanik, Kausikisankar, 477
 Pyne, Stephen G., 445
 Radtke, Frank, 427
 Redhouse, Alan D., 403
 Reinhoudt, David N., 417
 Ren, Xin-Min, 447
 Robert, François, 463
 Roemer, Stefan, 411
 Rudolf, Marco T., 411
 Ryan, Timothy G., 467
 Samat, André, 471
 Santoyo-González, Francisco,
 461
 Sastre, Angela, 419
 Sattigeri, J. A., 469
 Schäfer, Andreas, 455
 Schultz, Carsten, 411
 Seo, Kuniaki, 435
 Servi, Stefano, 439
 Skelton, Brian W., 445
 Smith, Colin, 403
 Sproat, Brian S., 495
 Srikrishna, A., 469
 Stadler, Christoph, 411
 Suganuma, Hiroyuki, 431
 Tanaka, Atushi, 413
 Thorne, Andrew J., 467
 Timmerman, Peter, 417
 Torres, Tomas, 419
 Tsutsui, Hideyuki, 481
 Tustin, Gary J., 407
 Ueda, Ikuo, 449
 Varghese, Jos P., 465
 Verboom, Willem, 417
 Villa, Mario, 439
 Viñayanani, R., 469
 Wallace, Timothy W., 403
 Watanabe, Yoshihisa, 413
 White, Allan H., 445
 White, Andrew J. P., 407
 Williams, Alan F., 491
 Williams, David J., 407
 Yamada, Sachiko, 423
 Yamamoto, Keiko, 423
 Yamashita, Mitsui, 435
 Yassar, Abd errahim, 471
 Youssoufi, Hafsa Korri, 471
 Zang, The late Ling, 447
 Zucchi, Gioia, 439