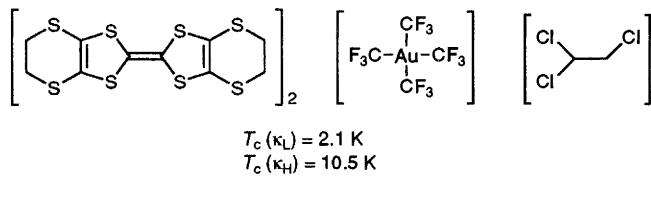


JOURNAL OF THE CHEMICAL SOCIETY

**Chemical Communications**Number 13  
1995**CONTENTS**

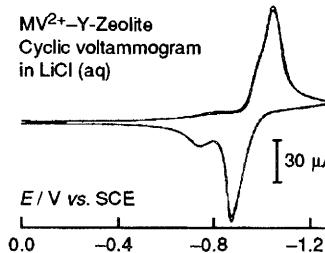
- 1311 Synthesis and Characterization of Two New Organic Superconductors,  $\kappa_L$ - and  $\kappa_H$ -[Bis-(ethylenedisulfanyl)tetraphiafulvalene]<sub>2</sub>Au(CF<sub>3</sub>)<sub>4</sub>·(1,1,2-Trichloroethane) via Microelectrococrystallization**

John A. Schlueter, Jack M. Williams, Urs Geiser, James D. Dudek, Scott A. Sirchio, Margaret E. Kelly, Joseph S. Gregar, Wai H. Kwok, John A. Fendrich, J. E. Schirber, W. R. Bayless, Dieter Naumann, Thomas Roy



- 1313 Methyl Viologen-Zeolite Electrodes: Intrazeolite Charge Transfer**

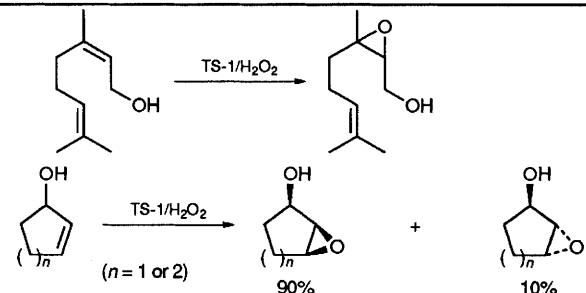
Gion Calzaferri, Martin Lanz, Jian-wei Li



Cyclic voltammograms of methyl viologen-exchanged zeolite Y as monograin layer on glassy carbon electrodes in different aqueous alkali electrolyte solutions indicate efficient intrazeolite charge transfer.

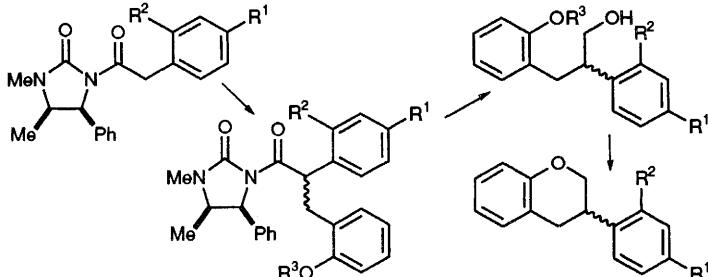
- 1315 Hydroxy-assisted Chemo- and Stereo-selective Epoxidation Catalysed by a Titanium Silicate Molecular Sieve (TS-1)/H<sub>2</sub>O<sub>2</sub> System**

Rajiv Kumar, Godwin C. G. Pais, Bipin Pandey, Pradeep Kumar

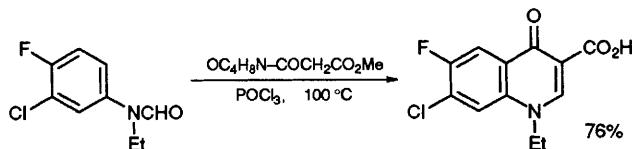


- 1317 The First Enantioselective Synthesis of Isoflavonoids: (R)- and (S)-Isoflavans**

Marietjie Versteeg, Barend C. B. Bezuidenhoudt, Daneel Ferreira, Kenneth J. Swart

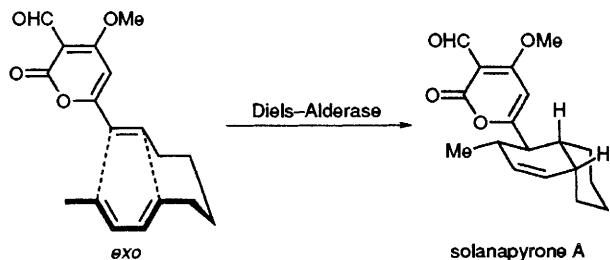


**1319 A New Short and Efficient Strategy for the Synthesis of Quinolone Antibiotics**



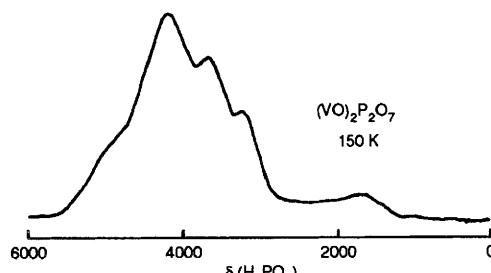
Andrew Jackson, Otto Meth-Cohn

**1321 Enzymatic Activity Catalysing *Exo*-selective Diels–Alder Reaction in Solanapyrone Biosynthesis**



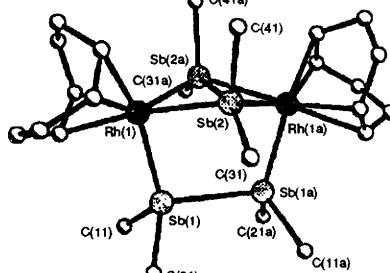
Hideaki Oikawa, Kinya Katayama, Yuichi Suzuki, Akitami Ichihara

**1323 Magnetic Properties of Vanadium Phosphorus Oxide Catalysts Studied by Spin Echo Mapping  $^{31}\text{P}$  NMR**



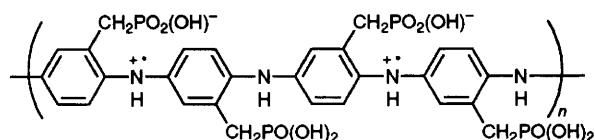
M. T. Sananes, A. Tuel

**1325 Novel Rhodium–Antimony Bimetallic Complexes containing an Unusual Distibine *cis*-Eclipsed Conformation**



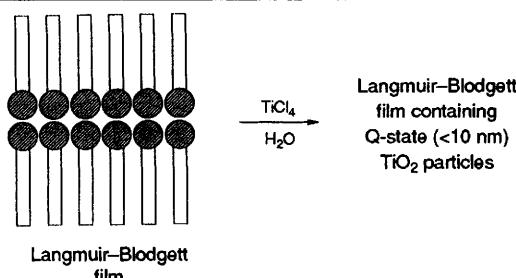
Pankaj Sharma, Noé Rosas, Simón Hernández, Armando Cabrera

**1327 Poly(*o*-aminobenzylphosphonic acid): a Novel Water Soluble, Self-doped Functionalized Polyaniline**



S. C. Ng, H. S. O. Chan, H. H. Huang, P. K. H. Ho

**1329 The Fabrication of Titania Q-State Particles in Langmuir–Blodgett Films**

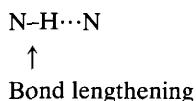


D. Neil Furlong, Robert S. Urquhart, Franz Grieser, Kazunori Matsuura, Yoshio Okahata

CONTENTS

---

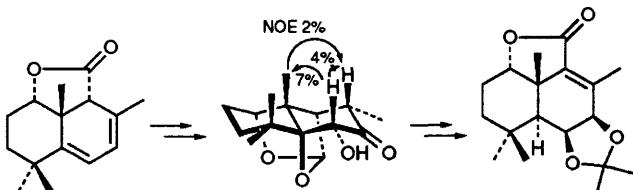
- 1331 Lengthening of the N–H Bond in N–H···N Hydrogen Bonds. Preliminary Structural Data and Implications of the Bond Valence Concept



Thomas Steiner

---

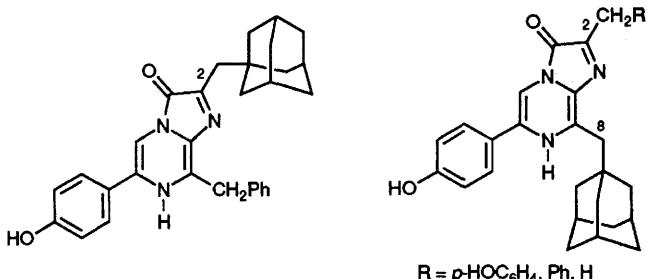
- 1333 Efficient Access to the ‘Ziegler Intermediate’ in the Total Synthesis of Forskolin



M. Leclaire, F. Pericaud, J. Y. Lallemand

---

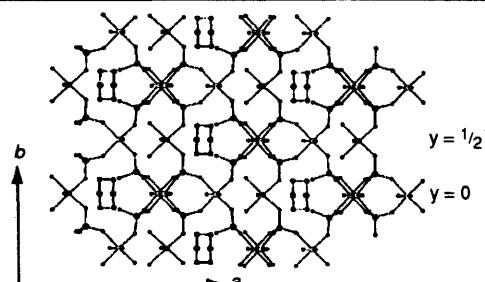
- 1335 Chemi- and Bio-luminescent Properties of Coelenterazine Analogues Possessing an Adamantyl Group



Takashi Hirano, Ryo Negishi, Mihoko Yamaguchi, Feng Qi Chen, Yoshihiro Ohmiya, Frederick I. Tsuji, Mamoru Ohashi

---

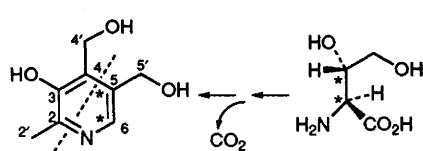
- 1337 Template Symmetry Effect in Open-framework Synthesis: a New Vanadium(IV) Phosphate



Xianhui Bu, Pingyun Feng, Galen D. Stucky

---

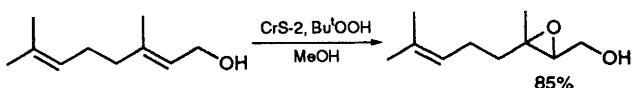
- 1339 4-Hydroxy-L-threonine, a Committed Precursor of Pyridoxol (Vitamin B<sub>6</sub>)



Eckardt Wolf, Robert E. Hill, Brian G. Sayer, Ian D. Spenser

---

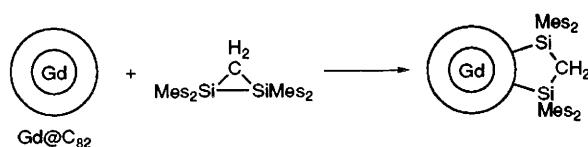
- 1341 Chromium Silicalite-2 (CrS-2): an Efficient Catalyst for the Chemoselective Epoxidation of Alkenes with TBHP



Reni Joseph, M. Sasidharan, R. Kumar, A. Sudalai, T. Ravindranathan

---

**1343 Exohedral Derivatization of an Endohedral Metallofullerene  $\text{Gd}@\text{C}_{82}$**



Takeshi Akasaka, Shigeru Nagase, Kaoru Kobayashi, Toshiyasu Suzuki, Tatsuhisa Kato, Kazunori Yamamoto, Hideyuki Funasaka, Takeshi Takahashi

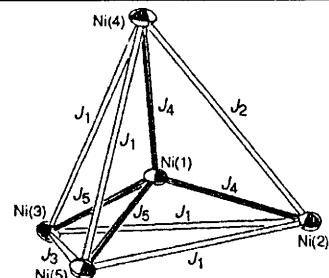
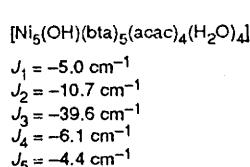
**1345 A Simple Approach to 1',1'a-Methano Carbocyclic Thymidine**



Abdallah Ezzitouni, Joseph J. Barchi, Victor E. Marquez

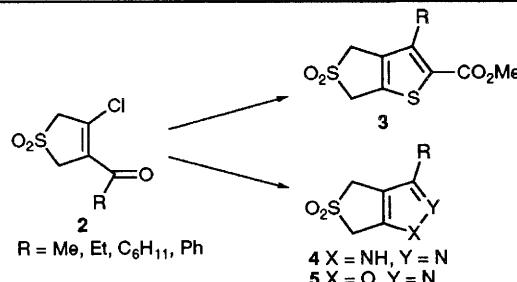
**1347 Benzotriazolate-mediated Assembly of the Discrete Asymmetric Pentanuclear Nickel Complex  $[\text{Ni}_5(\text{OH})(\text{bta})_5(\text{acac})_4(\text{H}_2\text{O})_4]$  (Hbta = benzotriazole, Hacac = pentane-2,4-dione)**

Evangelos G. Bakalbassis, Eleanna Diamantopoulou, Spyros P. Perlepes, Catherine P. Raptopoulou, Vasilis Tangoulis, Aris Terzis, Theodoros F. Zafiropoulos



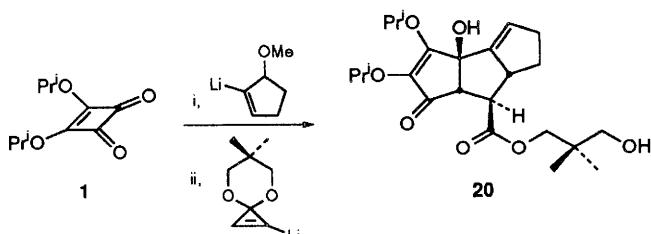
**1349 A Facile Preparation of 3-Chloro-4-acyl-3-sulfolenes as Common Intermediates for the Synthesis of Thieno-, Pyrazolo- and Isoxazolo-3-sulfolenes**

Hsi-Hwa Tso, Nien-Chi Yang, Yu-Min Chang



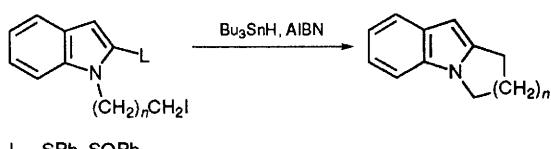
**1351 Successive Electrocyclic Rearrangements Initiated by the Addition of a Lithiated Cyclopropenone Acetal to a Squareate Ester**

Peter D. Wilson, Dirk Friedrich, Leo A. Paquette



**1353 Novel Intramolecular Radical Displacement Reactions of 2-Indolyl Aryl Sulfides and Sulfoxides**

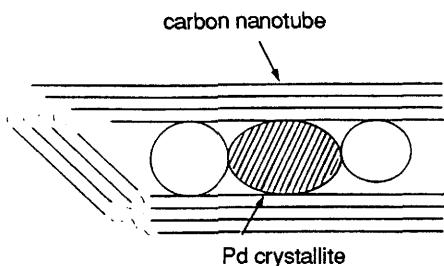
Stephen Caddick, Karim Aboutayab, Robert I. West



L = SPh, SOPh

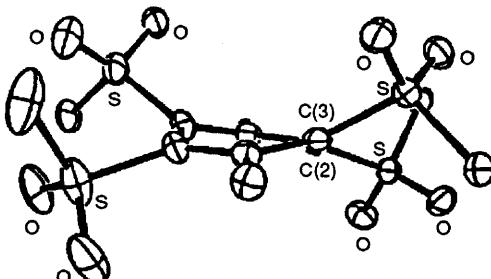
CONTENTS

- 1355 **Filling Carbon Nanotubes with Small Palladium Metal Crystallites: the Effect of Surface Acid Groups**



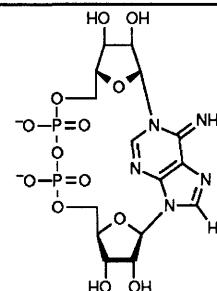
R. M. Lago, S. C. Tsang, K. L. Lu, Y. K. Chen,  
M. L. H. Green

- 1357 **Highly Twisted Substituted Arenes: X-Ray Structure and Dynamic  $^1\text{H}$  NMR Spectra of 1,4-Dialkyl-2,3,5,6-tetrakis(alkylsulphonyl)benzenes**



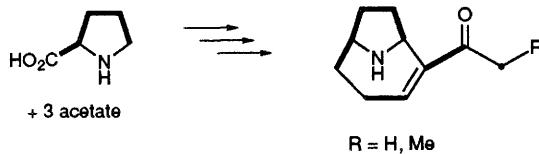
David M. Collard, Manijeh J. Sadri, Donald VanDerveer, Karl S. Hagen

- 1359 **Chemoenzymatic Synthesis of Analogues of the Second Messenger Candidate Cyclic Adenosine 5'-Diphosphate Ribose**



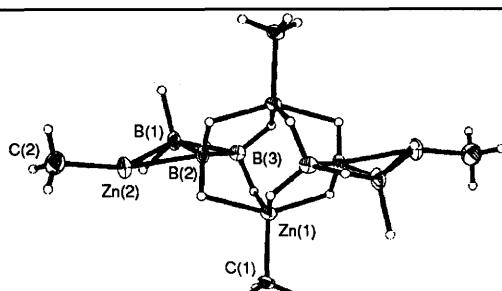
Gloria A. Ashamu, Antony Galione, Barry V. L. Potter

- 1361 **Biosynthesis of Anatoxin-a in *Anabaena flos-aquae* and Homoanatoxin-a in *Oscillatoria formosa***



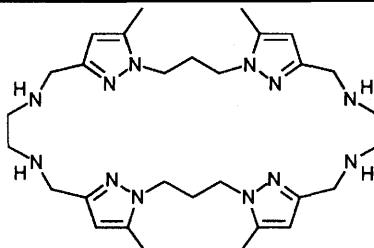
Thomas Hemscheidt, Jarkko Rapala, Kaarina Sivonen, Olav M. Skulberg

- 1363 **The Methylzinc Hydroborate Derivative  $[(\text{MeZn})_2\text{B}_3\text{H}_7]_2$ : Synthesis, Crystal Structure and Vibrational Spectra of an Unprecedented Cluster Compound**



Simon Aldridge, Alexander J. Blake, Anthony J. Downs, Simon Parsons

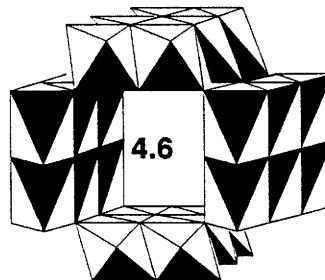
- 1365 **Synthesis and Crystal Structure of a Dinuclear Copper(II) Complex with a Novel Tetrapyrazolyl Macrocyclic Ligand**



Johan E. Bol, Willem L. Driessens, Jan Reedijk

A new macrocycle containing four neutral pyrazoles.

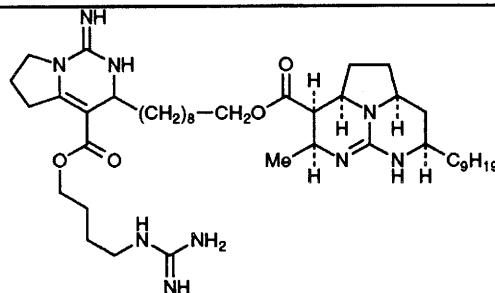
**1367 Sol-Gel Synthesis of Cryptomelane, an Octahedral Molecular Sieve**



Structure of OMS-2,  
synthetic cryptomelane.

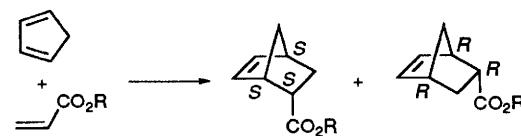
Niangao Duan, Steven L. Suib, Chi-Lin O'Young

**1369 An Enantiospecific Synthesis of the Tricyclic Guanidine Segment of the Anti-HIV Marine Alkaloid Batzelladine A**



A. V. Rama Rao, Mukund K. Gurjar, Jayasree Vasudevan

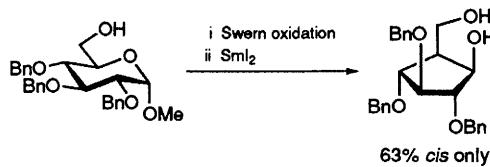
**1371 Importance of Electronic and Nuclear Polarization Energy on Distereofacial Selectivity of Diels–Alder Reactions in Aqueous Solution**



X. Assfeld, M. F. Ruiz-López, J. I. García, J. A. Mayoral, L. Salvatella

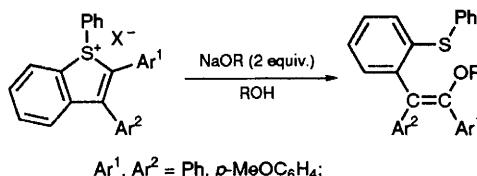


**1373 Samarium(II) Iodide Promoted Ring Contraction of Carbohydrate Derivatives: an Expedited Synthesis of Functionalised Cyclopentanes**



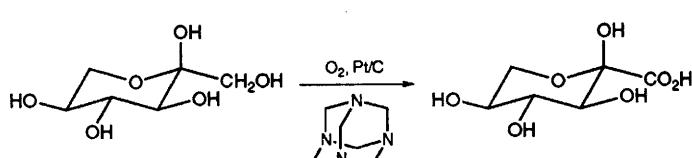
Alain Chénedé, Paul Pothier, Matthieu Sollogoub, Antony J. Fairbanks, Pierre Sinay

**1375 Complete Retention of Configuration in the Nucleophilic Substitution of 1-Phenylbenzo[*b*]-thiophenium Salts by Alkoxide Anions**



Tsugio Kitamura, Masa-aki Miyaji, Shin-ichi Soda, Hiroshi Taniguchi

**1377 Localized Basification of Catalytic Surfaces enhances the Selective Oxidation of L-Sorbose over Supported Pt Catalysts modified with Tertiary Amines**

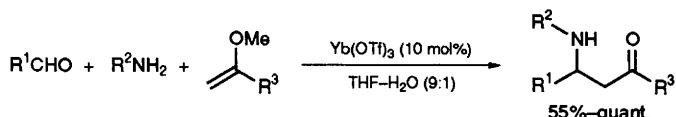


C. Brönnimann, T. Mallat, A. Baiker

Selectivities of 95 and 81%  
at 30 and 50% conversion

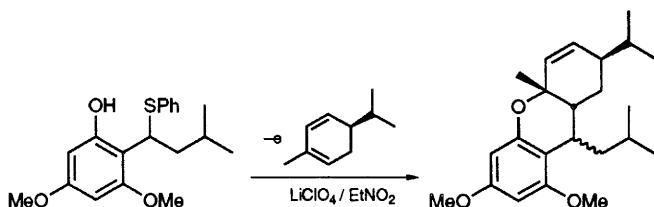
CONTENTS

- 1379 A Novel Mannich-type Reaction in Aqueous Media. Lanthanide Triflate-catalysed Condensation of Aldehydes, Amines and Vinyl Ethers for the Synthesis of  $\beta$ -Amino Ketones



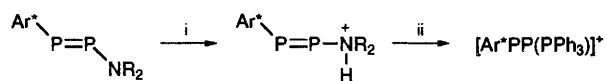
Shū Kobayashi, Haruro Ishitani

- 1381 Intermolecular Cycloaddition Reaction of Unactivated Alkenes and *o*-Quinone Methides generated by Electrochemical Oxidation: a Proposed Biomimetic Approach to the Euglobal Skeletons



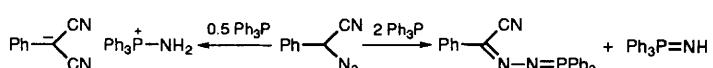
Kazuhiro Chiba, Junko Sonoyama, Masahiro Tada

- 1383 Synthesis and Structural Characterization of the First Donor-stabilized Phosphanetriylphosphonium Cation:  $[Ar^*PP(PPh_3)]^+$  ( $Ar^* = 2,4,6\text{-Bu}^t_3C_6H_2$ )



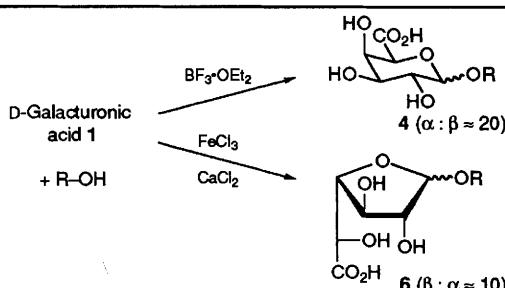
$Ar^* = 2,4,6\text{-Bu}^t_3C_6H_2$   
Reagents and conditions : i,  $CF_3SO_3H$ ,  $-50^\circ C$ ,  $CH_2Cl_2$ ; ii,  $Ph_3P$ ,  $-78^\circ C$ ,  $CH_2Cl_2$

- 1387 Unexpected Staudinger Reaction of  $\alpha$ -Azidophenylacetonitrile and Triphenylphosphine: Synthesis and Crystal Structure of Aminotriphenylphosphonium Salt of Phenylmalononitrile



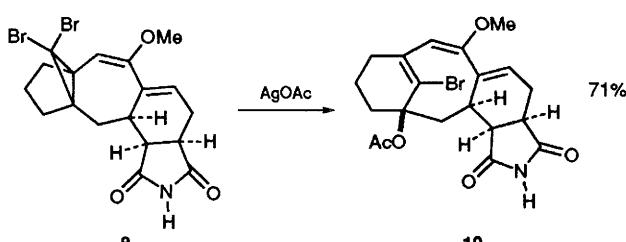
Pedro Molina, Carmen López-Leonardo, Javier Llamas-Botía, Concepción Foces-Foces, Cristina Fernández-Castaño

- 1391 A New Synthesis of D-Glycosiduronates from Unprotected D-Uronic Acids



Jean-Noël Bertho, Vincent Ferrières, Daniel Plusquellec

- 1395 Cyclohexannulated [5.3.1]Propellanes as Precursors to the ABC Ring System of Paclitaxel (Taxol™)



Martin G. Banwell, Robert W. Gable, Steven C. Peters, James R. Phyland

## AUTHOR INDEX

- Aboutayab, Karim, 1353  
 Akasaka, Takeshi, 1343  
 Aldridge, Simon, 1363  
 Ashamu, Gloria A., 1359  
 Assfeld, X., 1371  
 Baiker, A., 1377  
 Bakalbassis, Evangelos G., 1347  
 Banwell, Martin G., 1395  
 Barchi Jr., Joseph J., 1345  
 Bayless, W. R., 1311  
 Bertho, Jean-Noël, 1391  
 Bezuidenhoudt, Barend C. B., 1317  
 Blake, Alexander J., 1363  
 Bol, Johan E., 1365  
 Brönnimann, C., 1377  
 Bu, Xianhui, 1337  
 Cabrera, Armando, 1325  
 Caddick, Stephen, 1353  
 Calzaferri, Gion, 1313  
 Chan, H. S. O., 1327  
 Chang, Yu-Min, 1349  
 Chen, Feng Qi, 1335  
 Chen, Y. K., 1355  
 Chénédé, Alain, 1373  
 Chernega, Alexander N., 1383  
 Chiba, Kazuhiro, 1381  
 Collard, David M., 1357  
 Diamantopoulou, Eleanna, 1347  
 Downs, Anthony J., 1363  
 Driessens, Willem L., 1365  
 Duan, Niangao, 1367  
 Dudek, James D., 1311  
 Ezzitouni, Abdallah, 1345  
 Fairbanks, Antony J., 1373  
 Fendrich, John A., 1311  
 Feng, Pingyun, 1337  
 Fernández-Castaño, Cristina, 1387  
 Ferreira, Daneel, 1317  
 Ferrières, Vincent, 1391  
 Foces-Foces, Concepción, 1387  
 Friedrich, Dirk, 1351  
 Funasaka, Hideyuki, 1343  
 Furlong, D. Neil, 1329  
 Gable, Robert W., 1395  
 Galione, Antony, 1359  
 García, J. I., 1371  
 Geiser, Urs, 1311  
 Green, M. L. H., 1355  
 Gregar, Joseph S., 1311  
 Grieser, Franz, 1329  
 Gurjar, Mukund K., 1369  
 Hagen, Karl S., 1357  
 Hemscheidt, Thomas, 1361  
 Hernández, Simón, 1325  
 Hill, Robert E., 1339  
 Hirano, Takashi, 1335  
 Ho, P. K. H., 1327  
 Huang, H. H., 1327  
 Ichihara, Akitami, 1321  
 Ishitani, Haruro, 1379  
 Jackson, Andrew, 1319  
 Joseph, Reni, 1341  
 Katayama, Kinya, 1321  
 Kato, Tatsuhisa, 1343  
 Kelly, Margaret E., 1311  
 Kitamura, Tsugio, 1375  
 Kobayashi, Kaoru, 1343  
 Kobayashi, Shū, 1379  
 Kumar, Pradeep, 1315  
 Kumar, Rajiv, 1315, 1341  
 Kwok, Wai H., 1311  
 Lago, R. M., 1355  
 Lallemand, J. Y., 1333  
 Lanz, Martin, 1313  
 Leclaire, M., 1333  
 Li, Jian-wei, 1313  
 Llamas-Botía, Javier, 1387  
 López-Leonardo, Carmen, 1387  
 Lu, K. L., 1355  
 Mallat, T., 1377  
 Marquez, Victor E., 1345  
 Matsuura, Kazunori, 1329  
 Mayoral, J. A., 1371  
 Meth-Cohn, Otto, 1319  
 Miyaji, Masa-aki, 1375  
 Molina, Pedro, 1387  
 Nagase, Shigeru, 1343  
 Naumann, Dieter, 1311  
 Negishi, Ryo, 1335  
 Ng, S. C., 1327  
 Ohashi, Mamoru, 1335  
 Ohmiya, Yoshihiro, 1335  
 Oikawa, Hideaki, 1321  
 Okahata, Yoshio, 1329  
 O'Young, Chi-Lin, 1367  
 Pais, Godwin C. G., 1315  
 Pandey, Bipin, 1315  
 Paquette, Leo A., 1351  
 Parsons, Simon, 1363  
 Pericaud, F., 1333  
 Perlepes, Spyros P., 1347  
 Peters, Steven C., 1395  
 Pfister-Guillouzo, Genevieve, 1383  
 Phyland, James R., 1395  
 Plusquellec, Daniel, 1391  
 Pothier, Paul, 1373  
 Potter, Barry V. L., 1359  
 Rao, A. V. Rama, 1369  
 Rapala, Jarkko, 1361  
 Raptopoulou, Catherine P., 1347  
 Ravindranathan, T., 1341  
 Reedijk, Jan, 1365  
 Romanenko, Vadim D., 1383  
 Rosas, Noé, 1325  
 Roy, Thomas, 1311  
 Rudzevich, Valentin L., 1383  
 Ruiz-López, M. F., 1371  
 Rusanov, Eduard B., 1383  
 Sadri, Manijeh J., 1357  
 Salvatella, L., 1371  
 Sananes, M. T., 1323  
 Sanchez, Michel, 1383  
 Sasidharan, M., 1341  
 Sayer, Brian G., 1339  
 Schirber, J. E., 1311  
 Schlueter, John A., 1311  
 Senio, Anna, 1383  
 Sharma, Pankaj, 1325  
 Sinaÿ, Pierre, 1373  
 Sirchio, Scott A., 1311  
 Sivonen, Kaarina, 1361  
 Skulberg, Olav M., 1361  
 Soda, Shin-ichi, 1375  
 Sollogoub, Matthieu, 1373  
 Sonoyama, Junko, 1381  
 Sotiropoulos, Jean-Marc, 1383  
 Spenser, Ian D., 1339  
 Sciner, Thomas, 1331  
 Stucky, Galen D., 1337  
 Sudalai, A., 1341  
 Suib, Steven L., 1367  
 Suzuki, Toshiyasu, 1343  
 Suzuki, Yuichi, 1321  
 Swart, Kenneth J., 1317  
 Tada, Masahiro, 1381  
 Takahashi, Takeshi, 1343  
 Tangoulis, Vasilis, 1347  
 Taniguchi, Hiroshi, 1375  
 Terzis, Aris, 1347  
 Tsang, S. C., 1355  
 Tso, Hsi-Hwa, 1349  
 Tsuji, Frederick I., 1335  
 Tuel, A., 1323  
 Urquhart, Robert S., 1329  
 VanDerveer, Donald, 1357  
 Vasudevan, Jayasree, 1369  
 Versteeg, Marietjie, 1317  
 West, Robert I., 1353  
 Williams, Jack M., 1311  
 Wilson, Peter D., 1351  
 Wolf, Eckardt, 1339  
 Yamaguchi, Mihoko, 1335  
 Yamamoto, Kazunori, 1343  
 Yang, Nien-Chi, 1349  
 Zafiroopoulos, Theodoros F., 1347