

JOURNAL OF THE CHEMICAL SOCIETY

Chemical Communications

Number 17
1993

CONTENTS

- Jyoji Kurita, Makoto Ishii, Shuji Yasuike, Takashi Tsuchiya 1309 A Versatile Synthetic Route to 1-Benzometalloles involving the First Examples of Several C-Unsubstituted Benzometalloles
- Leonid M. Goldenberg, Geoffrey Williams, Martin R. Bryce, Andrew P. Monkman, Michael C. Petty, Andreas Hirsch, Antonio Soi 1310 Electrochemical Studies on Langmuir–Blodgett Films of 1-*tert*-Butyl-1,9-dihydrofullerene-60
- Adrian L. Schwan, Mark F. Pippert, Hung H. Pham, Michael R. Roche 1312 The Selective Generation of *trans*-Substituted Lithium and Sodium Ethenesulfonate Anions
- Dennis P. Curran, Nicholas C. DeMello 1314 Origins of Regioselectivity in Radical Reactions of Axially Twisted Anilides
- Bertus A. Markies, Kai A. N. Verkerk, Marco H. P. Rietveld, Jaap Boersma, Huub Kooijman, Anthony L. Spek, Gerard van Koten 1317 Anion-controlled Oligomerization of Carbon Monoxide and Norbornene on a Palladium(II) Centre
- Ryo Takeuchi, Nao Tanouchi 1319 Complete Reversal of Stereoselectivity in Rhodium Complex-catalysed Hydrosilylation of Alk-1-yne
- Jean-Luc Fillaut, Didier Astruc 1320 Tentacled Aromatics: from Central-ring to Outer-ring Iron Sandwich Complexes
- J. Kevin Judice, Steven J. Keipert, Donald J. Cram 1323 A Strongly Binding, Helically Chiral Ligand System
- J. Kevin Judice, Steven J. Keipert, Carolyn B. Knobler, Donald J. Cram 1325 Synthesis and Binding Properties of a Family of Potentially Chiral Spherands
- Glen B. Deacon, Tiecheng Feng, Siegbert Nickel, Brian W. Skelton, Allan H. White 1328 A Simple Synthesis of Tetrahydrofuran Complexes of Lanthanoid Trichlorides: Convenient Substitutes for Anhydrous Lanthanoid Chlorides
- Brigitte Jedlicka, Christoph Kratky, Walter Weissensteiner, Michael Widhalm 1329 Palladium-catalysed Enantioselective Grignard Cross Coupling with Use of a New Ferrocenylaminophosphine Ligand
- Helena Grennberg, Jan-E. Bäckvall 1331 Aerobic Palladium-catalysed 1,4-*cis*-Diacetoxylation and 1,4-*cis*-Chloroacetoxylation of Cyclohexa-1,3-diene using a Tetrakis-(methoxyhydroquinone)porphyrin
- Jack E. Baldwin, Robert M. Adlington, Mark B. Mitchell 1332 Stereocontrolled Enantiospecific Synthesis of Anticapsin: Revision of the Configuration
- Hitomi Suzuki, Tadashi Mori, Koichi Maeda 1335 Reversal of the *ortho*–*para*-Isomer Ratios by altering the Initial Concentration of Substrate in the Ozone-mediated Nitration of Chloro- and Bromo-benzenes
- Omer Casher, David O'Hagan, Christian A. Rosenkranz, Henry S. Rzepa, Naveed A. Zaidi 1337 Electronic Effects in π -Facially Stereoselective Epoxidation of Phenyltrifluoromethylpropenol
- Ronald Grigg, Maria Hadjisoteriou, Peter Kennewell, Jasothara Markandu, Mark Thornton-Pett 1340 Halogen-induced Formation of Nitrones from Oximes and Alkenes
- Mohamed F. Meidine, Rolf Roers, G. John Langley, Anthony G. Avent, Adam D. Darwish, Steven Firth, Harold W. Kroto, Roger Taylor, David R. M. Walton 1342 Formation and Stabilisation of the Hexa-cyclopentadiene Adduct of C₆₀
- Brian F. G. Johnson, Anke Sieker, Alexander J. Blake, Richard E. P. Winpenny 1345 The Preparation and Characterization of the Mixed Valence Complex Dianion [Mn₃(CO)₆(μ_2 -NO₂)₄(μ_2 -ONO)₂]²⁻
- Douglas B. McIlwaine, Craig A. Townsend 1346 Evidence for Distinct Mechanisms of Monocyclic β -Lactam Biosynthesis
- John E. Mangette, Douglas R. Powell, Robert West 1348 The Reaction of Tetramesityldisilene with Cyclohexene Oxide and Cyclohexene Sulfide
- Michael A. Paver, Christopher A. Russell, Dietmar Stalke, Dominic S. Wright 1349 A Model Intermediate for the Nucleophilic Substitution of (Cp)₂Sn; Synthesis and Structure of (Cp)(Me₃Si)₂NSn(μ -Cp)Li-pmdeta [Cp = C₅H₅, pmdeta = (Me₂NCH₂CH₂)₂NMe]
- Jonathan L. Bookham, William McFarlane 1352 Chiral Ligands: Unambiguous Assignment of Absolute Configuration by NMR Spectroscopy

- Gilles Alcaraz, Robert Reed, Antoine Baceiredo, Guy Bertrand 1354 Synthesis and Evolution of Phosphanlycarbene-Borane Adducts
- Ian Cragg-Hine, Matthew G. Davidson, Oldrich Kocian, Thomas Kottke, Francis S. Mair, Ronald Snaith, J. Fraser Stoddart 1355 Monometallation of a Di(aminoaryl) Ether induces a Smiles Rearrangement leading to a Sodium Aryloxide Complex: the Synthesis and Crystal Structure of $[(\text{MeOCH}_2\text{CH}_2)(\text{C}_6\text{H}_4\text{NHCH}_2\text{CH}_2\text{OMe})\text{NC}_6\text{H}_4\text{O}\cdot\text{Na}]_2$
- Joseph S. Warmus, Mikhail A. Rodkin, Robert Barkley, A. I. Meyers 1357 Kinetic Isotope Effects in the Deprotonation of Chiral Formamides
- Cuiwei Lai, Thomas E. Mallouk 1359 A New Approach to the Photochemical Trifluoromethylation of Aromatic Compounds
- Harry R. Rose, Ian G. Dance, Keith J. Fisher, Derek R. Smith, Gary D. Willett, Micheal A. Wilson 1361 Endohedral Barium and Strontium Fullerenes
- Matthew G. Davidson, Malcolm Gerloch, S. Clare Llewellyn, Paul R. Raithby, Ronald Snaith 1363 An Unusual Co_2 -containing Anion: Synthesis and Structure of $[(\text{OxS})\text{Ca}\cdot 4\text{HMPA}]^+\cdot[(\text{OxS})\text{Co}\cdot\mu\text{-(OxS)}_3\cdot\text{CoCl}]^-\text{[OxS}^- = \text{C}_6\text{H}_4\text{O}\cdot(\text{C}=\text{S})\cdot\text{N}^-]; \text{HMPA} = \text{O}=\text{P}(\text{NMe}_2)_3$
- Kazuhiko Nakatani, Tomoko Izawa, Yoshihiko Odagaki, Sachihiko Isoe 1365 Novel Stereocontrolled Syntheses of Exocyclic γ -Oxovinyltrimethylsilanes. A Potential Route for Stereodefined Exocyclic Tetrasubstituted Alkenes
- Toshiro Harada, Tetsuya Yoshida, Yasuhiro Kagamihara, Akira Oku 1367 Resolution and Asymmetric Synthesis of 3-Hydroxycarboxylic Acids by using (-)-Menthone as a Chiral Template
- Yoshikazu Hiraga, Weixing Shi, Diana I. Ito, Shinji Ohta, Takayuki Suga 1370 Biosynthesis Generation of the Species-specific Chirality of Limonene in *Mentha spicata* and *Citrus unshiu*

AUTHOR INDEX

- Adlington, Robert M., 1332
Alcaraz, Gilles, 1354
Astruc, Didier, 1320
Avent, Anthony G., 1342
Baceiredo, Antoine, 1354
Bäckvall, Jan-E., 1331
Baldwin, Jack E., 1332
Barkley, Robert, 1357
Bertrand, Guy, 1354
Blake, Alexander J., 1345
Boersma, Jaap, 1317
Bookham, Jonathan L., 1352
Bryce, Martin R., 1310
Casher, Omer, 1337
Cragg-Hine, Ian, 1355
Cram, Donald J., 1323, 1325
Curran, Dennis P., 1314
Dance, Ian G., 1361
Darwish, Adam D., 1342
Davidson, Matthew G., 1355, 1363
Deacon, Glen B., 1328
DeMello, Nicholas C., 1314
Feng, Tiecheng, 1328
Fillaut, Jean-Luc, 1320
Firth, Steven, 1342
Fisher, Keith J., 1361
Gerloch, Malcolm, 1363
Goldenberg, Leonid M., 1310
Grennberg, Helena, 1331
Grigg, Ronald, 1340
Hadjisoteriou, Maria, 1340
Harada, Toshiro, 1367
Hiraga, Yoshikazu, 1370
Hirsch, Andreas, 1310
Ishii, Makoto, 1309
Isoe, Sachihiko, 1365
Ito, Diana I., 1370
Izawa, Tomoko, 1365
Jedlicka, Brigitte, 1329
Johnson, Brian F. G., 1345
Judice, J. Kevin, 1323, 1325
Kagamiyara, Yasuhiro, 1367
Keipert, Steven J., 1323, 1325
Kennewell, Peter, 1340
Knobler, Carolyn B., 1325
Kocian, Oldrich, 1355
Kooijman, Huub, 1317
Kottke, Thomas, 1355
Kratky, Christoph, 1329
Kroto, Harold W., 1342
Kurita, Jyoji, 1309
Lai, Cuiwei, 1359
Langley, G. John, 1342
Llewellyn, S. Clare, 1363
McFarlane, William, 1352
McIlwaine, Douglas B., 1346
Maeda, Koichi, 1335
Mair, Francis S., 1355
Mallouk, Thomas E., 1359
Mangette, John E., 1348
Markandu, Jasothara, 1340
Markies, Bertus A., 1317
Meidine, Mohamed F., 1342
Meyers, A. I., 1357
Mitchell, Mark B., 1332
Monkman, Andrew P., 1310
Mori, Tadashi, 1335
Nakatani, Kazuhiko, 1365
Nickel, Siegbert, 1328
Odagaki, Yoshihiko, 1365
O'Hagan, David, 1337
Ohta, Shinji, 1370
Oku, Akira, 1367
Paver, Michael A., 1349
Petty, Michael C., 1310
Pham, Hung H., 1312
Pippert, Mark F., 1312
Powell, Douglas R., 1348
Raithby, Paul R., 1363
Reed, Robert, 1354
Rietveld, Marco H. P., 1317
Roche, Michael R., 1312
Rodkin, Mikhail A., 1357
Roers, Rolf, 1342
Rose, Harry R., 1361
Rosenkranz, Christian A., 1337
Russell, Christopher A., 1349
Rzepa, Henry S., 1337
Schwan, Adrian L., 1312
Shi, Weixing, 1370
Sieker, Anke, 1345
Skelton, Brian W., 1328
Smith, Derek R., 1361
Snaith, Ronald, 1355, 1363
Soi, Antonio, 1310
Spek, Anthony L., 1317
Stalke, Dietmar, 1349
Stoddart, J. Fraser, 1355
Suga, Takayuki, 1370
Suzuki, Hitomi, 1335
Takeuchi, Ryo, 1319
Tanouchi, Nao, 1319
Taylor, Roger, 1342
Thornton-Pett, Mark, 1340
Townsend, Craig A., 1346
Tsuchiya, Takashi, 1309
van Koten, Gerard, 1317
Verkerk, Kai A. N., 1317
Walton, David R. M., 1342
Warmus, Joseph S., 1357
Weissensteiner, Walter, 1329
West, Robert, 1348
White, Allan H., 1328
Widhalm, Michael, 1329
Willett, Gary D., 1361
Williams, Geoffrey, 1310
Wilson, Micheal A., 1361
Winpenny, Richard E. P., 1345
Wright, Dominic S., 1349
Yasuike, Shuji, 1309
Yoshida, Tetsuya, 1367
Zaidi, Naveed A., 1337

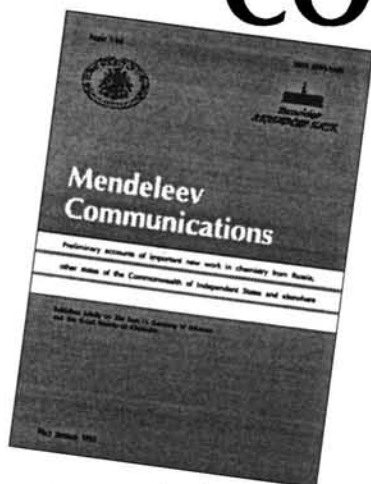
COPIES OF CITED ARTICLES

The Royal Society of Chemistry Library can usually supply copies of cited articles. For further details contact: The Library, Royal Society of Chemistry, Burlington House, Piccadilly, London W1V 0BN, UK Tel: +44 (0)71-437 8656 Fax: +44 (0)71-287 9798 Telecom Gold 84: BUR210 Electronic Mailbox (Internet) LIBRARY@RSC.ORG.

If the material is not available from the Society's Library, the staff will be pleased to advise on its availability from other sources. Please note that copies are not available from the RSC at Thomas Graham House, Cambridge.

NOW SIX
ISSUES PER YEAR

MENDELEEV COMMUNICATIONS



Mendeleev Communications is a unique publication providing rapid access to the extensive chemical research activities of an important and fascinating world region – the Commonwealth of Independent States. **It is not a translation journal; all material is published directly in English and is therefore as up-to-date as possible.**

Mendeleev Communications is a joint publishing venture between The Royal Society of Chemistry and The Russian Academy of Sciences. It contains preliminary accounts of novel and significant results of wide general appeal or exceptional specialist interest on any branch of chemistry. Most papers are submitted from the CIS but some come from other parts of the world. **Mendeleev Communications** acts as both a means and a stimulus for international dialogue.

Mendeleev Communications:

- ★ Has proved so successful that it is now published six times per annum
- ★ Is not a translation journal
- ★ Publishes rapidly – within 12 weeks of receipt of papers in the UK
- ★ Will accept high quality papers on all topics of chemistry
- ★ Offers a unique insight into the research activities of the CIS

Joint Editors-in-Chief:

H M Frey, University of Reading, UK
O M Nefedov, Vice-President of the Russian Academy of Sciences, Moscow, Russian Federation

UK Staff Editor: Andrew Wilkinson, Royal Society of Chemistry, Cambridge, UK

Moscow Staff Editor: Irina V Makhova, Russian Academy of Sciences, Moscow, Russian Federation

1993 Subscription Details

Published six times per annum plus annual author index

EC £140.00 USA \$280.00 Canada £147.00 (+ GST) Rest of World £140.00

ISSN 0959-9436 Back issues available on request.

Mendeleev Communications is essential reading for everyone who is interested in keeping up-to-date with the latest chemical research.

To order please contact:

Turpin Distribution Services Ltd, Blackhorse Road, Letchworth, Herts SG6 1HN, UK. Tel: +44 (0) 462 672555. Fax: +44 (0) 462 480947. Telex: 825372 TURPIN G.

For further information please contact:

Sales and Promotion Department, Royal Society of Chemistry, Thomas Graham House, Science Park, Milton Road, Cambridge CB4 4WF, UK. Tel: +44 (0) 223 420066. Fax: +44 (0) 223 423623. Telex: 818293 ROYAL.

ROYAL
SOCIETY OF
CHEMISTRY



Information
Services