

JOURNAL OF THE CHEMICAL SOCIETY

Chemical Communications

Number 9
1988

CONTENTS

- 569 A Novel Stereocontrolled Preparation of Phospho Sugar Derivatives from Phospholenes **Mitsuji Yamashita, Miyuki Uchimura, Akihito Iida, Laszlo Parkanyi, Jon Clardy**
- 571 Rate-limiting NO⁺ Formation in Nitrosation Reactions in Acetonitrile **Michael J. Crookes, D. Lyn H. Williams**
- 572 A Novel Route to Indolines by Photochemical Desulphurization of Indoline-2-thiones **Takehiko Nishio, Norikazu Okuda, Choji Kashima, Yoshimori Omote**
- 574 Synthesis of the First Example of a 1,3,4,6-Tetraphospha-hexatriene Complex **Agustin Galindo del Pozo, Anne-Marie Caminade, Françoise Dahan, Jean-Pierre Majoral, René Mathieu**
- 575 Anomalous Hydrolysis Behaviour of [*n.n*] Paracyclophanediazonium Salts: a New Route to Bridged Benzobarrelenes **Nobuo Mori, Tetsuo Takemura, Kazuhiko Tsuchiya**
- 576 Residual Paramagnetism in Silver(III) Metalloporphyrin Complexes **Lionel R. Milgrom, Christopher C. Jones**
- 579 Synthesis and Structure of a Semi-rigid Dinucleating Macrocyclic containing the 2,6-Bis(thiomethyl)pyridine Unit and Reactions of its Copper(II) Complex **Carol A. Salata, Donna Van Engen, Cynthia J. Burrows**
- 581 Electrosynthesis of Highly Conducting Poly(3-methylthiophene) Thin Films **Jean Roncali, Abderrahim Yasser, Francis Garnier**
- 582 Two-step Synthesis of D₃ and C_{3h} Cryptophanes **Josette Canceill, André Collet**
- 584 The Characterisation of Anion-vacancy Ordering in the Oxide Ion Conductor (Bi₂O₃)_{1-x}(Y₂O₃)_x by ⁸⁹Y N.M.R. Spectroscopy **Peter D. Battle, Bernard Montez, Eric Oldfield**
- 586 Structural Change accompanying Electrochemical Oxidation of [(η⁵-C₅Me₅)₂Fe₂S₄] to [(η⁵-C₅Me₅)₂Fe₂S₄](PF₆)₂ **Hiroshi Ogino, Hiromi Tobita, Shinji Inomata, Mamoru Shimoi**
- 587 Photocyclisation of Haloacetyl Tryptophan Derivatives **Mark Mascal, Christopher J. Moody**
- 589 Synthesis of (–)-Indolactam V **Mark Mascal, Christopher J. Moody**
- 590 Coprinolone, an Oxygen-bridged Protoilludane from the Fungus *Coprinus psychromorbidus*: Structure Determination by Chemical and N.M.R. Studies aided by Biosynthetic Incorporation of [1,2-¹³C₂]Acetate **Alvin N. Starratt, J. B. Stothers, Edmund W. B. Ward**
- 591 Sodium Benzenetellurolate-catalysed Selective Reduction of Aromatic Nitro Compounds to Azoxy Compounds **Kouichi Ohe, Hidetaka Takahashi, Sakae Uemura, Nobuyuki Sugita**
- 592 Iron or Lanthanum Promoters on the Selectivity of Palladium Zeolites in Methanol Synthesis **B. M. Choudary, K. Lázár, K. Matusek, L. Guzzi**
- 594 A High Resolution Infrared Study of HY and HZSM-20 in the Hydroxy Stretching Region **John Dwyer, Khalid Karim, Waed Kayali, Dave Millward, Pádraig J. O'Malley**
- 596 Multiple Molecular Recognition and Catalysis. Nucleotide Binding and ATP Hydrolysis by a Receptor Molecule Bearing an Anion Binding Site, an Intercalator Group, and a Catalytic Site **Mir Wais Hosseini, A. John Blacker, Jean-Marie Lehn**
- 598 A Highly Selective Ester Hydrolase from *Pseudomonas Sp.* for the Enzymatic Preparation of Enantiomerically Pure Secondary Alcohols; Chiral Auxiliaries in Organic Synthesis **Kurt Laumen, Manfred P. Schneider**
- 600 Biosynthetic Study of Betaenone B: Origin of the Oxygen Atoms and Accumulation of a Deoxygenated Intermediate using P-450 Inhibitor **Hideaki Oikawa, Akitami Ichihara, Sadao Sakamura**
- 602 Reversible Homogeneous Catalysis of Carbon Dioxide Hydrogenation/Reduction at Room Temperature and Low Pressures **Serge Schreiner, James Y. Yu, Lauri Vaska**
- 603 Titanium Enolates from Epoxides and Bis(pentamethylcyclopentadienyl)dimethyltitanium(IV) **Charles P. Gibson, Gary Dabbagh, Steven H. Bertz**
- 605 Total Synthesis of Acarbose and Adiposin-2 **Seiichiro Ogawa, Yasushi Shibata**

- 607 Carbon–Carbon Triple Bond Cleavage at Room Temperature with Nonacarbonyl-iron: Synthesis of $[\text{Fe}_3(\text{CO})_9(\mu_3\text{-CMe})(\mu_3\text{-CNEt}_2)]$ **E. Cabrera, J. C. Daran, Yves Jeannin**
- 608 Thermally Induced Phase Transitions in the Clathrasil Dodecasil-3C (Zeolite ZSM-39) **J. A. Ripmeester, M. A. Desando, Y. P. Handa, J. S. Tse**
- 610 Remote Reformatsky Reaction: Reaction of β -, γ -, and δ -Zinc Esters with Aldehydes **Y. Tamaru, T. Nakamura, M. Sakaguchi, H. Ochiai, Z. Yoshida**
- 612 Synthetic Approach to Medium-sized Cycloalkanones. A One-pot Three-carbon Ring Expansion of Carbocyclic β -Keto Esters **Zhuo-Feng Xie, Hiroshi Suemune, Kiyoshi Sakai**
- 613 Anomalous Facile Carbon–Nitrogen Bond Cleavage in Novel Diastereoisomers of the Ethylenediaminetetra-3-propionatochromate(III) Ion **Sumio Kaizaki, Mariko Hayashi**
- 615 Unexpected Reaction between Benzaldehyde and 2,4,4,5,5-Pentamethyl-1,3,2-dioxaphospholane leading to a Phospha(v)-oxirane Dimer **M. T. Boisdon, J. Barrans**
- 617 Isolation of an Electronically Saturated Cluster of Platinum; Synthesis of $[\text{Pt}_4(\eta^5\text{-C}_5\text{Me}_5)_3(\mu_3\text{-CO})(\text{CO})_2]^+$ **Neil M. Boag**
- 619 The Biosynthesis of Mangostin: The Origin of the Xanthone Skeleton **Graham J. Bennett, Hiok-Huang Lee**
- 621 Do Nitromethane and Malononitrile form C–H · · · O Hydrogen Bonds? Implications for Molecular Recognition by Crown Ethers **Robert A. Kumpf, James R. Damewood, Jr.**
- 623 New Fused Heterocyclic Systems derived from Pyridine-2,3-dicarboximides **Gregory J. Hitchings, John M. Vernon**
- 624 Aziridination of Cyclohex-2-en-1-ol and Geraniol: Comparison with Epoxidation **Robert S. Atkinson, Brian J. Kelly**
- 625 Preparation of *trans*-3-(Hydroxymethyl)-2-vinyloxetane *via* Allyloxycarbanion-mediated Carbon–Carbon Bond Formation in Allyl Glycidyl Ether **Yuh-ichiro Ichikawa, Setsuko Niitsuma, Kuniki Kato, Tomohisa Takita**
- 626 Mechanism of the *myo*-Inositol Phosphatase Reaction **Janis K. Shute, Raymond Baker, David C. Billington, David Gani**

Corrigendum

- 628 Lanthanide Tetraphenylimidodiphosphinates: X-Ray Structure of an Ethyl Acetate Adduct and Use as N.M.R. Shift Reagents for Acids **I. Rodriguez, C. Alvarez, J. Gomez-Lara, R. A. Toscano, N. Platzer, C. Mulheim, H. Rudler**

AUTHOR INDEX

- Alvarez, C., 628
 Atkinson, Robert S., 624
 Baker, Raymond, 626
 Barrans, J., 615
 Battle, Peter D., 584
 Bennett, Graham J., 619
 Bertz, Steven H., 603
 Billington, David C., 626
 Blacker, A. John, 596
 Boag, Neil M., 617
 Boisdon, M. T., 615
 Burrows, Cynthia J., 579
 Cabrera, E., 607
 Caminade, Anne-Marie, 574
 Canceill, Josette, 582
 Cea-Olivares, R., 628
 Choudary, B. M., 592
 Clardy, Jon, 569
 Collet, André, 582
 Crookes, Michael J., 571
 Dabbagh, Gary, 603
 Dahan, Françoise, 574
 Damewood, Jr., James R., 621
 Daran, J. C., 607
 Desando, M. A., 608
 Dwyer, John, 594
 Galindo del Pozo, Agustin, 574
 Gani, David, 626
 Garnier, Francis, 581
 Gibson, Charles P., 603
 Gomez-Lara, J., 628
 Guzzi, L., 592
 Handa, Y. P., 608
 Hayashi, Mariko, 613
 Hitchings, Gregory J., 623
 Hosseini, Mir Wais, 596
 Ichihara, Akitami, 600
 Ichikawa, Yuh-ichiro, 625
 Iida, Akihito, 569
 Inomata, Shinji, 586
 Jeannin, Yves, 607
 Jones, Christopher C., 576
 Kaizaki, Sumio, 613
 Karim, Khalid, 594
 Kashima, Choji, 572
 Kato, Kuniki, 625
 Kayali, Waed, 594
 Kelly, Brian J., 624
 Kumpf, Robert A., 621
 Laumen, Kurt, 598
 Lázár, K., 592
 Lee, Hiok-Huang, 619
 Lehn, Jean-Marie, 596
 Majoral, Jean-Pierre, 574
 Mascal, Mark, 587, 589
 Mathieu, René, 574
 Matusek, K., 592
 Milgrom, Lionel R., 576
 Millward, Dave, 594
 Montez, Bernard, 584
 Moody, Christopher J., 587, 589
 Mori, Nobuo, 575
 Mulheim, C., 628
 Nakamura, T., 610
 Niitsuma, Setsuko, 625
 Nishio, Takehiko, 572
 Ochiai, H., 610
 Ogawa, Seiichiro, 605
 Ogino, Hiroshi, 586
 Ohe, Kouichi, 591
 Oikawa, Hideaki, 600
 Okuda, Norikazu, 572
 Oldfield, Eric, 584
 O'Malley, Pádraig J., 594
 Omote, Yoshimori, 572
 Parkanayi, Laszlo, 569
 Platzer, N., 628
 Ripmeester, J. A., 608
 Rodriguez, I., 628
 Roncali, Jean, 581
 Rudler, H., 628
 Sakaguchi, M., 610
 Sakai, Kiyoshi, 612
 Sakamura, Sadao, 600
 Salata, Carol A., 579
 Schneider, Manfred P., 598
 Schreiner, Serge, 602
 Shibata, Yasushi, 605
 Shimoi, Mamoru, 586
 Shute, Janis K., 626
 Starratt, Alvin N., 590
 Stothers, J. B., 590
 Suemune, Hiroshi, 612
 Sugita, Nobuyuki, 591
 Takahashi, Hidetaka, 591
 Takemura, Tetsuo, 575
 Takita, Tomohisa, 625
 Tamaru, Y., 610
 Tobita, Hiromi, 586
 Toscano, R. A., 628
 Tse, J. S., 608
 Tsuchiya, Kazuhiko, 575
 Uchimura, Miyuki, 569
 Uemura, Sakae, 591
 Van Engen, Donna, 579
 Vaska, Lauri, 602
 Vernon, John M., 623
 Ward, Edmund W. B., 590
 Williams, D. Lyn H., 571
 Xie, Zhuo-Feng, 612
 Yamashita, Mitsuji, 569
 Yasser, Abderrahim, 581
 Yoshida, Z., 610
 Yu, James Y., 602

Chemistry International

The News Magazine of the International Union of Pure and Applied Chemistry (IUPAC)

IUPAC Secretariat: *Bank Court Chambers, 2-3 Pound Way, Cowley Centre, Oxford OX4 3YF, England*

IUPAC is the international organization dedicated to establishing and maintaining standards in pure and applied chemistry and promoting international cooperation among chemists. *Chemistry International* will keep you up to date with regular progress reports on all IUPAC's activities, including those of its policy committees, and tell you how you may comment on tentative recommendations on nomenclature and symbols at the stages where opinions are being sought by Commission experts. *Chemistry International* will show you how you may have some influence in the way the world's chemists communicate with each other and with scientists in other disciplines. An extensive conference calendar indicates IUPAC-sponsored conferences in all areas of chemistry, while *CI* also keeps the scientist up to date about technical reports published by IUPAC and includes frequent subject indexes to reports.

IUPAC represents chemistry internationally and thus *Chemistry International* is the magazine for all seriously concerned chemists worldwide.

Subscription Information

Chemistry International is published bi-monthly. Subscription rates for 1988 are for institutions £31.50 (UK), \$47.00 (USA & Canada), £38.00 (elsewhere), and for individuals \$25.00 (USA & Canada), £17.50 (elsewhere) post free.

Order Form

Please tick the appropriate box and return to **Blackwell Scientific Publications Ltd, P.O. Box 88, Oxford, England.**

- I would like to subscribe to *Chemistry International*
 I wish to pay by cheque/money order (*delete as necessary*) and enclose the sum of
 I wish to pay by Access/Barclaycard/VISA/Mastercard (*delete as necessary*)

Please debit my credit card no.

--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Expiry date..... with the sum of

Signature..... Date

- Please send me a specimen copy of *Chemistry International*

Name.....

Address.....

Blackwell Scientific Publications
P.O. Box 88, Oxford, England