JOURNAL OF THE CHEMICAL SOCIETY

Chemical Communications

Number 6 1988

CONTENTS

- 405 Chiral Discrimination towards Racemic Alcohols through Host/Guest Clathrate Inclusion with Axially Chiral 1,1'-Binaphthyl-2,2'-dicarboxylic Acid Shigeyoshi Kanoh, Yukihiko Hongoh, Shingo Katoh, Masatoshi Motoi, Hiroshi Suda
- 407 Design, Synthesis, and Comparison of Crystal, Solution, and Calculated Structures within a New Family of Cavitands Donald J. Cram, Jean Weiss, Roger C. Helgeson, Carolyn B. Knobler, Andrea E. Dorigo, K. N. Houk
- 410 Benzene-Naphthalene Copolymer as a Processible Conductive Polymer Dinesh Chandra Trivedi, Shankaran Srinivasan
- 410 Diastereo- and Enantio-selective Synthesis of Dihydro-and Tetrahydro-pyrimidines. A New Strategy for the Asymmetric Synthesis of β-Amino Ketones and γ-Amino Alcohols Josè Barluenga, Bernardo Olano, Santos Fustero, Ma de la Concepción Foces-Foces, Fèlix Hernàndez Cano
- 413 EV-22, a Novel Antifungal Triacetylenic Dioxolone J. J. Wright, Mohindar S. Puar, B. Pramanik, A. Fishman
- 414 Facile Removal of a Peptide Chain from a Solid Phase Resin Support by Hydrolysis Using Tetrabutylammonium Fluoride Trihydrate in N,N-Dimethylformamide Masaaki Ueki, Kazufumi Kai, Masahide Amemiya, Haruhiko Horino, Hidekazu Oyamada
- 415 Sulphur-Oxygen Cleavage in the Reaction of Four- and Five-membered Sultones with Hydroxide: Evidence for a Stereoelectronic Effect in Sulphonyl Reactions James F. King, Kishan C. Khemani, Stanisław Skonieczny, Nicholas C. Payne
- 417 Molecular Recognition in a Monolayer Matrix on Silica Gel Yu-Tai Tao, Yeung-Haw Ho
- 419 Racemization-free and Efficient Peptide Synthesis by the Carbodiimide Method using 1-Hydroxybenzotriazole and Copper(II) Chloride simultaneously as Additives Toshifumi Miyazawa, Toshihiko Otomatsu, Yoshimasa Fukui, Takashi Yamada, Shigeru Kuwata
- 420 A New Strategy for the Synthesis of Pentacyclic Strychnos Alkaloids: Synthesis of (±)-Tubifolidine Mercedes Amat, Ana Linares, M.-Luisa Salas, Mercedes Alvarez, Joan Bosch
- 422 Mechanism of the myo-Inositol Phosphatase Reaction Janis K. Shute, Raymond Baker, David C. Billington, David Gani
- 423 The First Difluoro-bridged Copper Chain, an Alternating Zig-zag, Stabilized by a Unique Intrachain Hydrogen Bond System. Crystal and Molecular Structure of *Catena*-poly[di-u-fluoro-bis(3-methyl-4-ethyl-5-phenylpyrazole)copper(II)] Fennegien S. Keij, Rudolf A. G. de Graaff, Jaap G. Haasnoot, Ad J. Oosterling, Erik Pedersen, Jan Reedijk
- 425 An Asymmetric Intramolecular Alkylation to form a Bicyclo[3.1.0]hexanone Derivative David P. G. Hamon, Neil J. Shirley
- 426 Novel Tetranuclear Mixed-metal Complexes Containing the Heteronuclear Ions [MII{(OH)₂CrA₄}₃]⁵⁺ and [MII-{(OH)₂CoA₄}₃]⁵⁺ (A = Amine Ligand) **Derek J. Hodgson, Kirsten Michelsen, Erik Pedersen, Debra K. Towle**
- 430 Synthesis of Chiral 5-Substituted Cyclohex-2-enones from 5-Trimethylsilylcyclohex-2-enone Morio Asaoka, Kunihisa Shima, Hisashi Takei
- 431 A [Mn^{III}₂O(MeCO₂)₂(H₂O)₂(bipy)₂]²⁺ (bipy = 2,2'-bipyridine) Unit with Accessible Co-ordination Sites. Contribution to the Modelling of the Photosynthetic Oxygen Evolving Centre

 Stéphane Ménage, Jean-Jacques Girerd, Alain Gleizes
- 433 Silver(1) Solvation in Some N-Donor Solvents from Ag K-edge EXAFS Toshio Yamaguchi, Hisanobu Wakita, Masaharu Nomura
- 434 Direct Evidence to support the Proposal that ZSM-23 is a Recurrently Twinned Variant of Zeolite Theta-1 John M. Thomas, G. Robert Millward, Donald White, Subramanian Ramdas
- 437 Bimetallic Polymeric Macrocyclic Chain Structures Formed by Lanthanide(III) Nitrates and Hg(C₄H₆NO)₂; the Crystal Structures of [Hg₂Eu(C₄H₆NO)₄(NO₃)₃]_n and [Hg₃Tb₂(C₄H₆NO)₆(NO₃)₆]_n **David M. L. Goodgame, David J. Williams, Richard E. P. Winpenny**

- 439 Synthesis of Naucléfine, Angustidine, Angustine, and (±)-13b,14-Dihydroangustine

 D. Clark, David B. MacLean

 David B. Repke, Jahangir, Robin
- 440 Regio- and Face-Selective 1,3-Dipolar Cycloadditions to Levoglucosenone Alexander J. Blake, Angus C. Forsyth, R. Michael Paton
- 442 A Synthesis of the (+)-Prelog-Djerassi Lactone Anthony J. Pearson, Yen-Shi Lai
- 443 Synthesis of a New Liquid Crystal with a 4,4'-Biphenanthryl Core Kazuo Yamamura, Yukihiro Okada, Satoru Ono, Masakazu Watanabe, The late Iwao Tabushi
- 445 Modification of Neutral (Isoelectric) Liposomes to Anionic Liposomes by Phospholipase A₂: The Use of Macrocyclic 1,2-Dotriacontanedioyl-sn-glycero-3-phosphocholine **Kiyoshi Yamauchi, Ikuo Yamamoto, Masayoshi Kinoshita**
- 446 The Direct Electrochemical Synthesis of Metal-Diphenylphosphido Complexes, and the Crystal Structure of Cu₄(μ-PPh₂)₄(Ph₂PCH₂PPh₂)₂ Theodore A. Annan, Rajesh Kumar, Dennis G. Tuck

Corrigendum

448 Synthesis and Crystal Structure of a Complex of a Tetranucleating Macrocylic Ligand which binds Four Ni^{II} Ions in a Square Arrangement with a μ₄-Hydroxo Group at the Centre Malcolm Bell, Alison J. Edwards, Bernard F. Hoskins, Edward H. Kachab, Richard Robson

AUTHOR INDEX

Alvarez, Mercedes, 420 Amat, Mercedes, 420 Amemiya, Masahide, 414 Annan, Theodore A., 446 Asaoka, Morio, 430 Baker, Raymond, 422 Barluenga, Josè, 410 Bell, Malcolm, 448 Billington, David C., 422 Blake, Alexander J., 440 Bosch, Joan, 420 Cano, Fèlix Hernandez, 410 Clark, Robin D., 439 Cram, Donald J., 407 de Graaff, Rudolf A. G., 423 Dorigo, Andrea E., 407 Edwards, Alison J., 448 Fishman, A., 413 Foces-Foces, Ma de la Concepción, 410 Forsyth, Angus C., 440 Fukui, Yoshimasa, 419 Fukuoka, Atsushi, 428 Fustero, Santos, 410 Gani, David, 422 Girerd, Jean-Jacques, 431

Gleizes, Alain, 431 Goodgame, David M. L., 437 Haasnoot, Jaap G., 423 Hamon, David P. G., 425 Helgeson, Roger C., 407 Ho, Yeung-Haw, 417 Hodgson, Derek J., 426 Hongoh, Yukihiko, 405 Horino, Haruhiko, 414 Hoskins, Bernard F., 448 Houk, K. N., 407 Ichikawa, Masaru, 428, 439 Jahangir, 439 Kachab, Edward H., 448 Kai, Kazufumi, 414 Kanoh, Shigeyoshi, 405 Katoh, Shingo, 405 Keij, Fennegien S., 423 Khemani, Kishan C., 415 Kimura, Takuma, 428 King, James F., 415 Kinoshita, Masayoshi, 445 Knobler, Carolyn B., 407 Kumar, Rajesh, 446 Kuwata, Shigeru, 419 Lai, Yen-Shi, 442

Linares, Ana, 420 MacLean, David B., 439 Ménage, Stéphane, 431 Michelsen, Kirsten, 426 Millward, G. Robert, 434 Miyazawa, Toshifumi, 419 Motoi, Masatoshi, 405 Nomura, Masaharu, 433 Okada, Yukihiro, 443 Olano, Bernardo, 410 Ono, Satoru, 443 Oosterling, Ad J., 423 Otomatsu, Toshihiko, 419 Oyamada, Hidekazu, 414 Paton, R. Michael, 440 Payne, Nicholas C., 415 Pearson, Anthony J., 442 Pedersen, Erik, 423, 426 Pramanik, B., 413 Puar, Mohindar S., 413 Ramdas, Subramanian, 434 Reedijk, Jan, 423 Repke, David B., 439 Robson, Richard, 448 Salas, M.-Luisa, 420 Shima, Kunihisa, 430

Shirley, Neil J., 425 Shute, Janis K., 422 Skonieczny, Stanisław, 415 Srinivasan, S., 410 Suda, Hiroshi, 405 Tabushi, The late Iwao, 443 Takei, Hisashi, 430 Tao, Yu-Tai, 417 Thomas, John M., 434 Towle, Debra K., 426 Trivedi, D. C., 410 Tuck, Dennis G., 446 Ueki, Masaaki, 414 Wakita, Hisanobu, 433 Watanabe, Masakazu, 443 Weiss, Jean, 407 White, Donald, 434 Williams, David J., 437 Winpenny, Richard E. P., 437 Wright, J. J., 413 Yamada, Takashi, 419 Yamaguchi, Toshio, 433 Yamamoto, Ikuo, 445 Yamamura, Kazuo, 443 Yamauchi, Kiyoshi, 445

FROM THE ROYAL SOCIETY OF CHEMISTRY Hardcover 500pp ISBN 0 85186 343 3

DIFFUSIVE SAMPLING

AN ALTERNATIVE APPROACH TO WORKPLACE AIR MONITORING

Edited by: A. Berlin, Health & Safety Directorate R.H. Brown, Occupational Medicine and Hygiene Laboratories K.J. Saunders, BP Research Centre.

Diffusive Sampling is based on a symposium held in Luxembourg in September 1986 and organised jointly by the Commission of the European Communities and the United Kingdom Health and Safety Executive in cooperation with the World Health Organization and the Royal Society of Chemistry. This book:

- Reviews the state of the art of diffusive sampler techniques
- Stimulates the exchange of technical information
- Assesses the suitability and range of applications for workplace
- Promotes the further development of this technique and its wider use.

Brief contents: Introduction, Current Field Application, Role of Diffusive Sampler in Workplace Air Monitoring, Current Trends in Development of Diffusive Systems, Acceptability of Monitoring Data Based on Diffusive Sampling, Conclusions and Recommendations.



Price £45.00 \$87.00 RSC Members Price £27.00

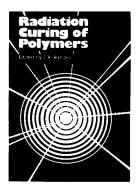
Radiation Curing of Polymers

EDITED BY D. R. RANDELL, CIBA-GEIGY INDUSTRIAL CHEMICALS

Throughout the 1970's and 1980's, there has been a growing interest in the use of radiation sources in the curing of polymers in surface coatings applications. This has arisen because the procedure presents a quick, clean and energy efficient means of achieving a hardened cross-linked polymer system. Initially ultraviolet was the sole radiation source used but more recently electron beam and laser energy sources have been introduced. Furthermore cationic as well as free radical initiators are now finding favour.

Industrial outlets now served by the technique include paper, metal, plastics and wood coatings, adhesives and printing. Consequently many workers in industry and academia are now involved in the varied aspects of developing new systems for the future.

This new book provides a timely review of progress in this rapidly developing and diverse subject area and offers useful and stimulating reading for practitioners of the radiation curing of polymers.



Softcover 216pp ISBN 0 85186 096 4

Price £32.50 (\$63.00) RSC Members Price £20.00

ORDERING:

RSC Members should be sent their orders to: The Royal Society of Chemistry, Membership Manager, 30 Russell Square, London WC1B 5DT, U.K. Non-RSC members should send their orders to: The Royal Society of Chemistry, Distribution Centre, Blackhorse Road, Letchworth, Herts SG6 1HN, U.K.



