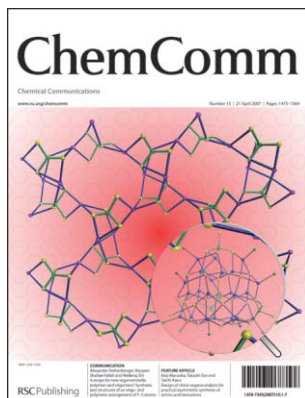


IN THIS ISSUE

ISSN 1359-7345 CODEN CHCOFS (15) 1473–1564 (2007)



Cover

See Alexander Rothenberger *et al.*, page 1499. Coordination chemistry with novel anions that are generated *in situ*. Similar to an example of a randomly-generated tiling, the coinage metal cluster and the alkali metal-containing coordination polymer represent two of many new oligomeric and polymeric arrangements of group 15/16 anions. Image reproduced by permission of Alexander Rothenberger, Maryam Shafaei-Fallah and Weifeng Shi, from *Chem. Commun.*, 2007, 1499.

CHEMICAL SCIENCE

C25

Drawing together the research highlights and news from all RSC publications, *Chemical Science* provides a 'snapshot' of the latest developments across the chemical sciences showcasing newsworthy articles, as well as the most significant scientific advances.

Chemical Science

April 2007/Volume 4/Issue 4

www.rsc.org/chemicalscience

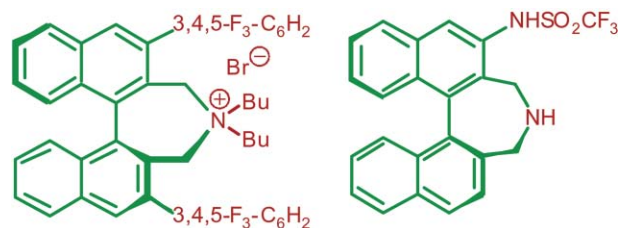
FEATURE ARTICLE

1487

Design of chiral organocatalysts for practical asymmetric synthesis of amino acid derivatives

Keiji Maruoka,* Takashi Ooi and Taichi Kano

A series of new C_2 -symmetric chiral phase-transfer catalysts and chiral bifunctional amino-catalysts derived from commercially available (*R*)- or (*S*)-binaphthol have been designed and successfully applied to the highly practical asymmetric synthesis of various amino acid derivatives.



EDITORIAL STAFF

Editor

Sarah Thomas

Deputy editor

Kathryn Sear

Assistant editors

James Mitchell Crow, Nicola Nugent, Alison Stoddart, Katherine Vickers, Jenna Wilson

Publishing assistants

Jackie Cockrill, Jayne Gough, Rachel Hegarty

Team leader, serials production

Helen Saxton

Technical editors

Sue Askey, Celia Clarke, Nicola Convine, Alan Holder, Laura Howes, Sandra Jones, David Parker, Ken Wilkinson, Roger Young

Administration coordinator

Sonya Spring

Editorial secretaries

Donna Fordham, Jill Segev, Julie Thompson

Publisher

Emma Wilson

Chemical Communications (print: ISSN 1359-7345; electronic: ISSN 1364-548X) is published 48 times a year by the Royal Society of Chemistry, Thomas Graham House, Science Park, Milton Road, Cambridge, UK CB4 0WF. All orders, with cheques made payable to the Royal Society of Chemistry, should be sent to RSC Distribution Services, c/o Portland Customer Services, Commerce Way, Colchester, Essex, UK CO2 8HP. Tel +44 (0)1206 226050; E-mail sales@rscdistribution.org

2007 Annual (print + electronic) subscription price: £1832; US\$3462. 2007 Annual (electronic) subscription price: £1649; US\$3116. Customers in Canada will be subject to a surcharge to cover GST. Customers in the EU subscribing to the electronic version only will be charged VAT. If you take an institutional subscription to any RSC journal you are entitled to free, site-wide web access to that journal. You can arrange access via Internet Protocol (IP) address at www.rsc.org/ip. Customers should make payments by cheque in sterling payable on a UK clearing bank or in US dollars payable on a US clearing bank. Periodicals postage paid at Rahway, NJ, USA and at additional mailing offices. Airfreight and mailing in the USA by Mercury Airfreight International Ltd, 365 Blair Road, Avenel, NJ 07001, USA. US Postmaster: send address changes to Chemical Communications, c/o Mercury Airfreight International Ltd, 365 Blair Road, Avenel, NJ 07001. All despatches outside the UK by Consolidated Airfreight. PRINTED IN THE UK

© The Royal Society of Chemistry, 2007. Apart from fair dealing for the purposes of research or private study for non-commercial purposes, or criticism or review, as permitted under the Copyright, Designs and Patents Act 1988 and the Copyright and Related Rights Regulations 2003, this publication may only be reproduced, stored or transmitted, in any form or by any means, with the prior permission in writing of the Publisher or in the case of reprographic reproduction in accordance with the terms of licences issued by the Copyright Licensing Agency in the UK. US copyright law is applicable to users in the USA. The Royal Society of Chemistry takes reasonable care in the preparation of this publication but does not accept liability for the consequences of any errors or omissions. Inclusion of an item in this publication does not imply endorsement by The Royal Society of Chemistry of the content of the original documents to which that item refers.

ChemComm

Chemical Communications

www.rsc.org/chemcomm

EDITORIAL BOARD

Chairman

Roeland J. M. Nolte, Nijmegen, The Netherlands
nolte@sci.kun.nl

Associate Editors

P. Andrew Evans, Liverpool, UK
andrew.evans@liverpool.ac.uk
Jonathan L. Sessler, Austin, USA
chemcommun@cm.utexas.edu
T. Don Tilley, Berkeley, USA
chemcomm@berkeley.edu

Scientific Editors

Alois Fürstner, Mülheim, Germany
fuerstner@mpi-muelheim.mpg.de
Mir Wais Hosseini, Strasbourg, France
hosseini@chimie.u-strasbg.fr

Members

Shankar Balasubramanian, Cambridge, UK
sb10031@cam.ac.uk
Penny Brothers, Auckland, New Zealand
p.brothers@auckland.ac.nz

Jillian M. Buriak, Edmonton, Canada
jburiak@ualberta.ca

Ben L. Feringa, Groningen, The Netherlands
feringa@chem.rug.nl

David Haddleton, Warwick, UK
D.M.Haddleton@warwick.ac.uk
Peter Kündig, Geneva, Switzerland
Peter.Kundig@chiorg.unige.ch

Nazario Martín, Madrid, Spain
nazmar@quim.ucm.es

Keiji Maruoka, Kyoto, Japan
maruoka@kuchem.kyoto-u.ac.jp
Ryong Ryoo, Taejeon, Korea
rryoo@kaist.ac.kr

Ferdi Schüth, Mülheim, Germany
schueth@mpi-muelheim.mpg.de

Nicholas J. Turner, Manchester, UK
nicholas.turner@manchester.ac.uk

EDITORIAL ADVISORY BOARD

Varinder Aggarwal, Bristol, UK
Frank Allen, CCDC, Cambridge, UK
Jerry L. Atwood, Columbia, USA
Amit Basak, Kharagpur, India
Dario Braga, Bologna, Italy
Xiao-Ming Chen, Guangzhou, China
Derrick Clive, Alberta, Canada
Marcetta Darensbourg, College Station, USA
Scott E. Denmark, Urbana, USA
Shaojun Dong, Changchun, China
Chris Easton, Canberra, Australia
Gregory C. Fu, Cambridge, USA
Tohru Fukuyama, Tokyo, Japan
Lutz Gade, Heidelberg, Germany
Philip Gale, Southampton, UK
George W. Gokel, St Louis, USA
Trevor Hambley, Sydney, Australia
Craig Hawker, Santa Barbara, USA
Andrew B. Holmes, Melbourne, Australia
Amir Hoveyda, Boston, USA
Steven M. Howdle, Nottingham, UK
Taeghwan Hyeon, Seoul, Korea
Biao Jiang, Shanghai, China
Karl Anker Jørgensen, Aarhus, Denmark
Kimoan Kim, Pohang, Korea

Susumu Kitagawa, Kyoto, Japan
Shu Kobayashi, Tokyo, Japan
Jérôme Lacour, Geneva, Switzerland
Teck-Peng Loh, Singapore
Tien-Yau Luh, Taipei, Taiwan
Doug MacFarlane, Monash, Australia
David MacMillan, Princeton, USA
Seth Marder, Atlanta, USA
Ilan Marek, Haifa, Israel
E. W. 'Bert' Meijer, Eindhoven, The Netherlands
Achim Müller, Bielefeld, Germany
Catherine Murphy, South Carolina, USA
Atsuhiko Osuka, Kyoto, Japan
Ian Paterson, Cambridge, UK
Maurizio Prato, Trieste, Italy
C. N. R. Rao, Bangalore, India
Christopher A. Reed, Riverside, USA
Robin Rogers, Alabama, USA
Michael Sailor, San Diego, USA
Jonathan W. Steed, Durham, UK
Zhong-Qun Tian, Xiamen, China
Carsten Tschierske, Halle, Germany
Herbert Waldmann, Dortmund, Germany
Henry N. C. Wong, Hong Kong, China
Eiji Yashima, Nagoya, Japan

Advertisement sales: Tel +44 (0) 1223 432246; Fax +44 (0) 1223 426017; E-mail advertising@rsc.org

© The paper used in this publication meets the requirements of ANSI/NISO Z39.48-1992 (Permanence of Paper).

Royal Society of Chemistry: Registered Charity No. 207890.

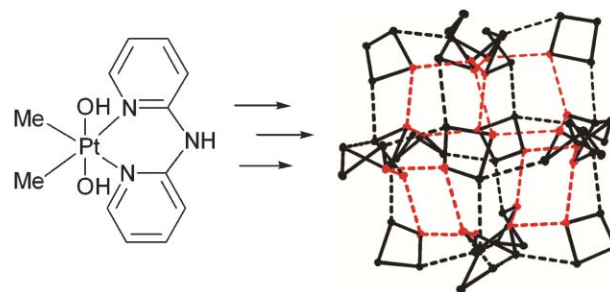
Authors may reproduce/republish portions of their published contribution without seeking permission from the RSC, provided that any such republication is accompanied by an acknowledgement in the form: (Original Citation)–Reproduced by permission of The Royal Society of Chemistry.

1496

Organometallic molecular materials: self-assembly through hydrogen bonding of an organoplatinum network structure with zeolite-like topology

Fenbao Zhang, Michael C. Jennings and Richard J. Puddephatt*

The complex $[\text{Pt}(\text{OH})_2\text{Me}_2(\text{dpa})]$, dpa = di-2-pyridylamine, undergoes a remarkable form of self-assembly through $\text{NH}\cdots\text{O}$ and $\text{OH}\cdots\text{O}$ hydrogen bonding to give an organometallic network with a zeolitic topology.

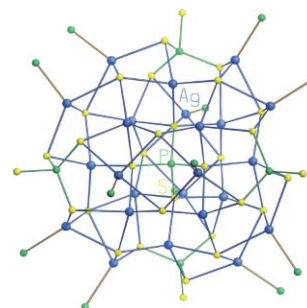


1499

A recipe for new organometallic polymers and oligomers? Synthesis and structure of an oligo- and a polymeric arrangement of P–S anions

Alexander Rothenberger,* Maryam Shafaei-Fallah and Weifeng Shi

The potential of neutral molecules to undergo fragmentation and subsequent organisation into clusters or polymers is demonstrated. The results feature new P/S anions and the first example of a $[\text{P}(\mu_3\text{-S})_4]^{3-}$ ion embedded in a cluster cation.

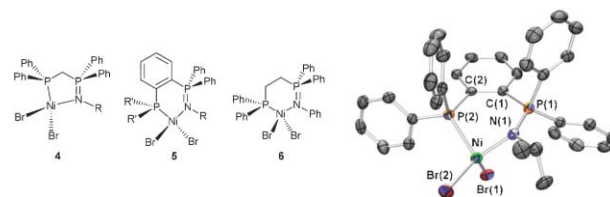


1502

Highly efficient P–N nickel(II) complexes for the dimerisation of ethylene

Antoine Buchard, Audrey Auffrant, Christian Klemp, Laurence Vu-Do, Leïla Boubekeur, Xavier F. Le Goff and Pascal Le Floch*

New P–N ligands featuring a phosphino group and an iminophosphorane moiety were successfully employed in the nickel-catalysed dimerisation of ethylene.

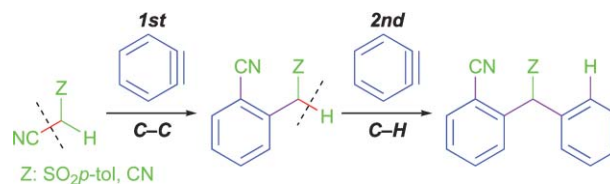


1505

Straightforward construction of diarylmethane skeletons via aryne insertion into carbon–carbon σ -bonds

Hiroto Yoshida,* Masahiko Watanabe, Takami Morishita, Joji Ohshita and Atsutaka Kunai*

Two mol equiv. of arynes are found to couple with nitriles at the C–C and C–H σ -bonds, assembling diverse diarylmethane skeletons in a straightforward manner. Overall, the transformation enables three C–C and one C–H bond forming processes to take place all in one pot.



Highlighting Heme

Natural Product Reports has gathered together a series of forward-looking articles from leading international experts in the heme enzyme area. Co-edited by Emma Raven and Paul Ortiz, it is essential reading for anyone working on heme enzymes. It will also be of wider interest to those requiring an overview of the current understanding of the bioinorganic chemistry of heme iron.

The Janus Nature of Heme

Thomas L. Poulos

Spectroscopic characterization of heme iron-nitrosyl species and their role in NO reductase mechanisms in diiron proteins

Pierre Moëgne-Loccoz

Heme and Virulence: How bacterial pathogens regulate, transport and utilize heme

Angela Wilks and Kimberly A. Burkhard

Structure and Catalytic Mechanism of Heme Oxygenase

Masaki Unno, Toshitaka Matsui and Masao Ikeda-Saito

Heme to protein linkages in mammalian peroxidases: Impact on spectroscopic, redox and catalytic properties.

M. Zederbauer, P. G. Furtmüller, S. Brogioni, C. Jakopitsch, G. Smulevich and C. Obinger

Properties of an Unusual Heme Cofactor in PLP-dependent Cystathionine b-Synthase

Sangita Singh, Peter Madzelan and Ruma Banerjee

Structural Modelling of Metal Ion Binding to Human Hæmopexin

Marcia R. Mauk, Federico I. Rosell and A. Grant Mauk

Diversity and Conservation of Interactions for Binding Heme in b-type Heme Proteins

Sabine Schneider, Jon Marles-Wright, Katherine H. Sharp and Max Paoli

Reactivity patterns of cytochrome P450 enzymes: Multifunctionality of the active species and the two states – two oxidants conundrum

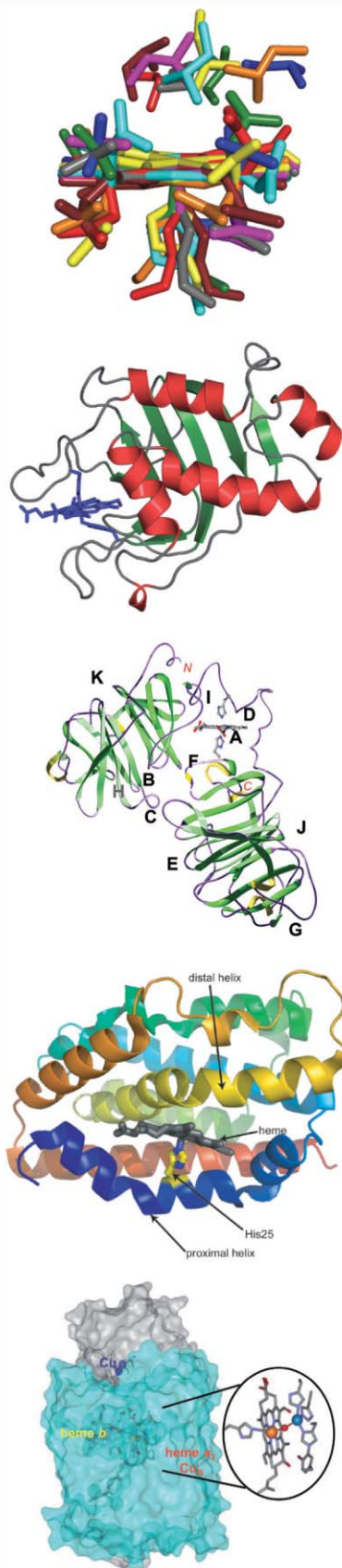
Sason Shaik, Hajime Hirao, and Devesh Kumar

Variations on a (T)Heme – Novel Mechanisms, Redox Partners and Catalytic Functions in the Cytochrome P450 Superfamily

Andrew W. Munro, Hazel M. Girvan and Kirsty J. McLean

To read more, visit

14030746

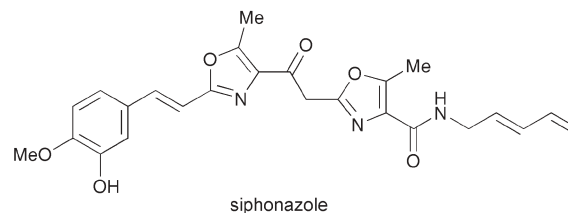


1508

The total synthesis of siphonazole, a structurally unusual bis-oxazole natural product

Jörg Linder and Christopher J. Moody*

The first synthesis of the unusual bis-oxazole natural product siphonazole is reported.

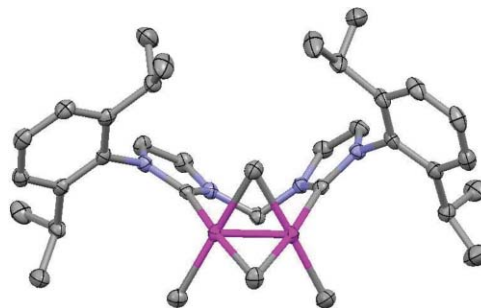


1510

A bimetallic N-heterocyclic carbene complex featuring a short Cr–Cr distance

Kevin A. Kreisel, Glenn P. A. Yap and Klaus H. Theopold*

The reaction of a chelating bis(carbene) complex of CrCl_2 with MeMgCl in THF yields an unusual bimetallic complex featuring a short Cr–Cr distance, novel ligand coordination, and CH_3 ligand exchange.

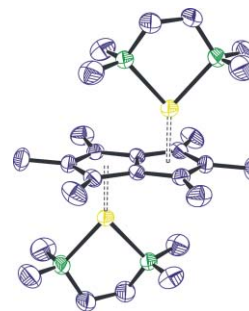


1512

The hexamethylpentalene dianion and other reagents for organometallic pentalene chemistry

Andrew E. Ashley, Andrew R. Cowley and Dermot O'Hare*

A novel trialkylborohydride-mediated conjugate reduction of an isomer of hexamethylpentalene permits the isolation of the lithium salt of the hydropermethylpentalene anion. Subsequent metallation provides the hexamethylpentalene dianion, which has been structurally characterised. These represent new synthons for future progress in metal-pentalene chemistry.

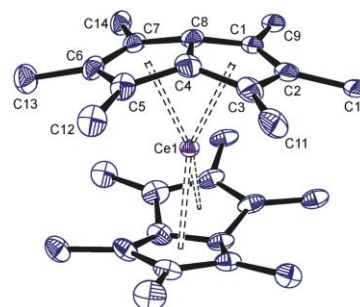


1515

Bis(permethylpentalene)cerium – another ambiguity in lanthanide oxidation state

Andrew Ashley, Gabor Balazs, Andrew Cowley, Jennifer Green, Corwin H. Booth and Dermot O'Hare*

$\text{Ce}(\eta^8\text{-C}_8\text{Me}_6)_2$ has been studied using a variety of techniques including XANES spectroscopy and DFT calculations; the former gives strong evidence for a formal valency close to Ce^{III} in this molecule and provides an example of the self-contained Kondo effect.



CALL FOR
EXHIBITORS

Tap into the best resources

ChemCareers 2007

THE CAREERS FAIR WITH A DIFFERENCE

**Exhibit at the UK's leading
recruitment exhibition for
the chemical sciences**

**Saturday 3 November 2007
NEC, Birmingham**

ChemCareers 2007, a national one-day event organised by the RSC, brings students, graduates, postdocs and professionals in the chemical sciences together under one roof.

Through presentations, workshops and an exhibition, the fair highlights the diversity of career opportunities available today to chemical scientists in all sectors. Where else could you find exclusive access to such a specialist group?

Don't miss out! Register to exhibit now and become a part of ChemCareers 2007.

Contact:

Sarah Layzell, Sales Executive, The Royal Society of Chemistry
Tel: +44 (0)1223 432333 or e-mail: layzells@rsc.org

Ian Swain, Head of Advertising, The Royal Society of Chemistry
Tel: +44 (0)1223 432310 or e-mail: swaini@rsc.org



03030719

RSC | Advancing the
Chemical Sciences

www.rsc.org/chemcareers2007

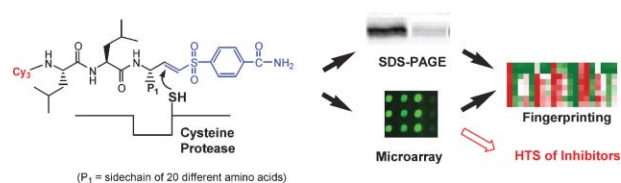
Registered Charity Number 207890

1518

Activity-based fingerprinting and inhibitor discovery of cysteine proteases in a microarray

Mahesh Uttamchandani, Kai Liu, Resmi C. Panicker and Shao Q. Yao*

A panel of 20 peptide vinyl sulfone probes has been synthesized and used to generate activity-based fingerprinting profiles of cysteine proteases in both gel- and microarray-based formats. The inhibitor fingerprints of representative small molecule inhibitors targeted against 4 cysteine proteases were also obtained, in high-throughput, using the same protein microarray platform.

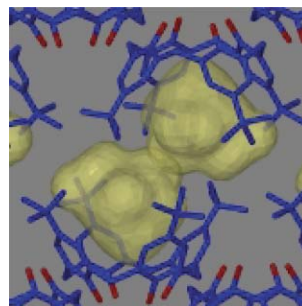


1521

Sorption of nitrogen oxides in a nonporous crystal

Praveen K. Thallapally,* B. Peter McGrail* and Jerry L. Atwood*

The uptake of various nitrogen oxides was studied with the well known nonporous *p*-*tert*-butylcalix[4]arene at 1 atm pressure and room temperature.

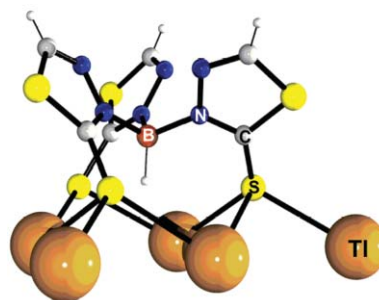


1524

A 'metallic tape' stabilized by an unprecedented (μ_5 - $\kappa^2, \kappa^2, \kappa^2, \kappa^1, \kappa^1$ -) scorpionate binding mode

James R. Gardinier,* Rosalice M. Silva, Chengeto Gwengo and Sergey V. Lindeman

A new coordination mode for a 'soft' scorpionate has been discovered that may portend the use of such ligands in materials chemistry.

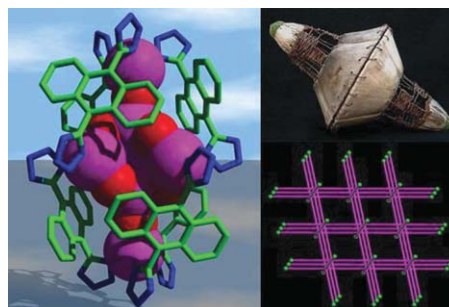


1527

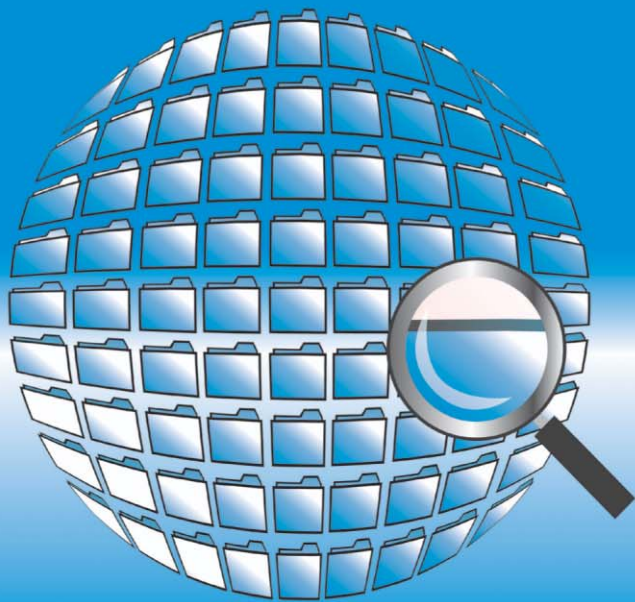
A *pcu*-type metal-organic framework with spindle $[\text{Zn}_7(\text{OH})_8]^{6+}$ cluster as secondary building units

Jian-Rong Li, Ying Tao, Qun Yu and Xian-He Bu*

A novel *pcu*-type metal-organic framework complex, $\{[\text{Zn}_7(\text{OH})_8(\text{DTA})_3] \cdot \text{H}_2\text{O}\}_n$ (DTA^{2-} = 9,10-ditetrazolateanthracene) was obtained by the *in situ* solvothermal reaction of 9,10-dicyanoanthracene and $\text{NaN}_3/\text{ZnCl}_2$, in which tetrazolate ligands DTA^{2-} as linkers bridge unprecedented heptanuclear spindle $[\text{Zn}_7(\text{OH})_8]^{6+}$ cluster SBUs as nodes. The optical and electric properties of this complex were also investigated.



RSC Database and Current Awareness Products



- Abstracted from high quality sources
- Easy to use search functions
- Clearly displayed results
- Spanning the chemical sciences

for quick and easy searching

Graphical Databases

present search results in both text and graphical form. Titles include *Catalysts & Catalysed Reactions*, *Methods in Organic Synthesis* and *Natural Product Updates*.

Specialist Databases

review both academic and industrial literature on a wide range of hard to reach and unique information. Titles include *Chemical Hazards in Industry* and *Laboratory Hazards Bulletin*.

Analytical Abstracts

is the first stop for analytical scientists. Offering coverage on all areas of analytical and bioanalytical science. With a fresh new look, including improved search and results features, *Analytical Abstracts* offers an excellent online service.

Find out more at

RSC Publishing

www.rsc.org/databases

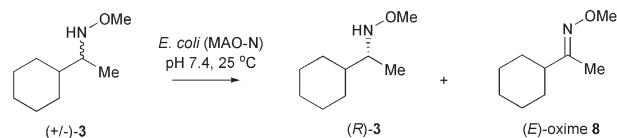
Registered Charity Number 207890

1530

Enantioselective oxidation of *O*-methyl-*N*-hydroxylamines using monoamine oxidase N as catalyst

Tom S. C. Eve, Andrew Wells and Nicholas J. Turner*

E. coli cells expressing a monoamine oxidase N (MAO-N) variant have been used for the efficient and highly stereoselective oxidation of (\pm)-**3** yielding (*R*)-**3** (e.e. = 99%) and (*E*)-**8**.

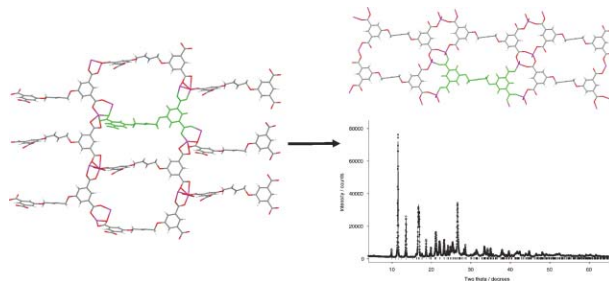


1532

Ligand flexibility and framework rearrangement in a new family of porous metal–organic frameworks

Samuel M. Hawxwell, Guillermo Mínguez Espallargas, Darren Bradshaw, Matthew J. Rosseinsky, Timothy J. Prior, Alastair J. Florence, Jacco van de Streek and Lee Brammer*

Ligand flexibility permits framework rearrangement upon evacuation and gas uptake in a new family of porous MOFs.

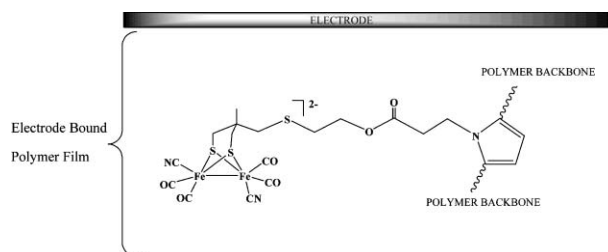


1535

Electropolymeric materials incorporating subsite structures related to iron-only hydrogenase: active ester functionalised poly(pyrroles) for covalent binding of {2Fe3S}-carbonyl/cyanide assemblies

Saad K. Ibrahim, Xiaoming Liu, Cédric Tard and Christopher J. Pickett*

The authors report the assembly of the first electropolymeric materials incorporating catalytic diiron subsites related to those of the iron-only hydrogenases.

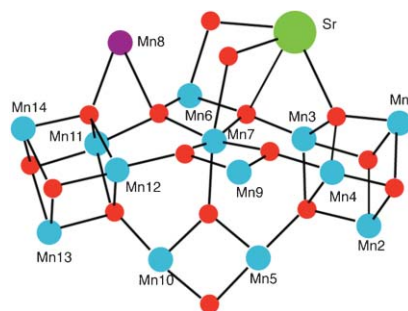


1538

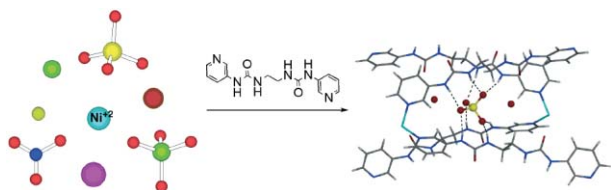
Heteronuclear Mn–Ca/Sr complexes, and Ca/Sr EXAFS spectral comparisons with the Oxygen-Evolving Complex of Photosystem II

Abhudaya Mishra, Junko Yano, Yulia Pushkar, Vittal K. Yachandra, Khalil A. Abboud and George Christou*

The first mixed-metal Mn–Sr complex has been prepared, and this and a previously reported Mn–Ca complex have allowed Sr and Ca EXAFS comparisons with the Oxygen-Evolving Complex (OEC) of Photosystem II.



1541

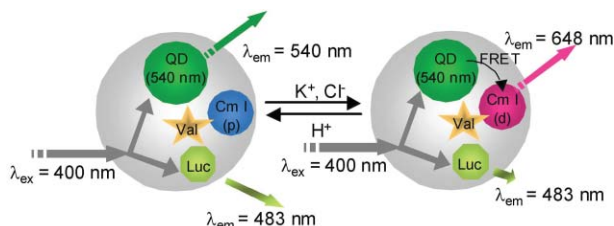


Sulfate separation by selective crystallization of a urea-functionalized metal–organic framework

Radu Custelcean,* Vincent Sellin and Bruce A. Moyer

Competitive crystallization of a Ni coordination framework functionalized with urea hydrogen-bonding groups results in exclusive separation of sulfate from aqueous anionic mixtures.

1544

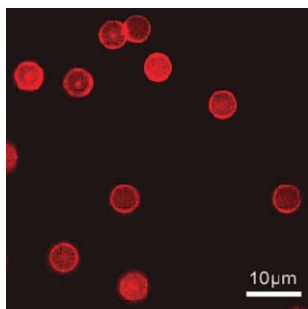


A multi-ion particle sensor

Maria Jose Ruedas-Rama, Xiaojuan Wang and Elizabeth A. H. Hall*

The first sub-micron polyacrylic sensor containing two independent ion-sensing systems is shown, that uses a single excitation wavelength and separates signals by using quantum dot donors to form FRET pairs with other fluorophores.

1547

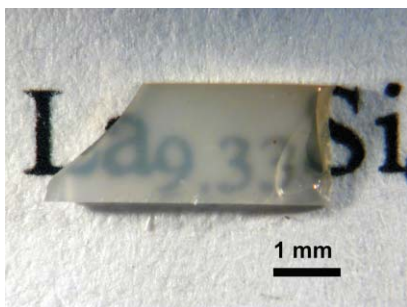


Study on high-efficiency fluorescent microcapsules doped with europium β-diketone complex by LbL self-assembly

Ren-Jie Zhang,* Ji-wei Cui, De-Ming Lu and Wan-Guo Hou

Microcapsules are fabricated by the layer-by-layer self-assembly of polyelectrolytes and a europium β-diketone complex emitting red fluorescence. Luminescence of the microcapsules with only one layer of europium complex can be observed by the naked eye.

1550



Preparation of transparent oxyapatite ceramics by combined use of freeze-drying and spark-plasma sintering

A. Chesnaud, C. Bogicevic, F. Karolak, C. Estournès and G. Dezanneau*

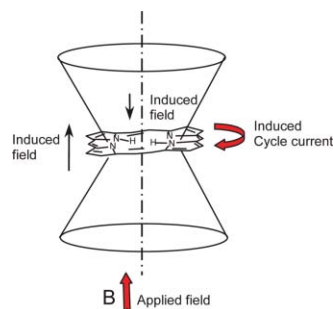
Lanthanum silicate oxyapatites with formula $\text{La}_{0.33}\text{Si}_6\text{O}_{26}$, an ion-conducting material for solid oxide fuel cell electrolytes, have been obtained in form of dense transparent ceramics, by combining freeze-drying and spark plasma sintering methods.

1553

Self-organization of porphyrin units induced by magnetic field during sol–gel polymerization

Frédéric Lerouge, Geneviève Cerveau, Robert J. P. Corriu,* Christine Stern and Roger Guillard*

The use of a magnetic field during the hydrolytic sol–gel polycondensation of porphyrins tetrasubstituted by Si(OR)₃ groups induces the stacking of the macrocycle units in the resulting hybrid materials.

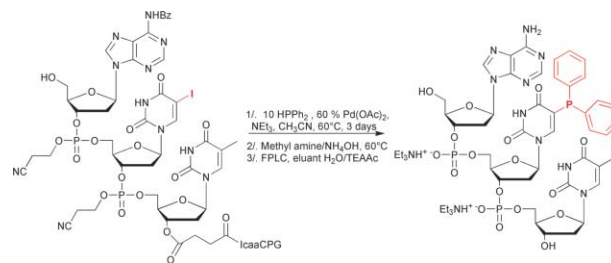


1556

Phosphine containing oligonucleotides for the development of metallodeoxyribozymes

Loïc Ropartz, Nico J. Meeuwenoord, Gijsbert A. van der Marel, Piet W. N. M. van Leeuwen, Alexandra M. Z. Slawin and Paul C. J. Kamer*

Novel transition metal catalysts based on oligonucleotides can be easily obtained by functionalization of 5-iodouridine with phosphine ligands, resulting in good asymmetric induction in palladium catalyzed allylic nucleophilic substitution.

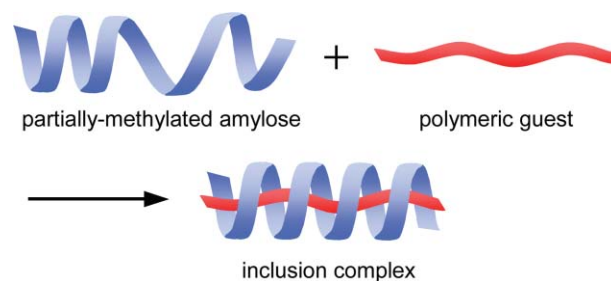


1559

Partially-methylated amyloses as effective hosts for inclusion complex formation with polymeric guests

Toshiyuki Kida, Takashi Minabe, Shogo Okabe and Mitsuru Akashi*

Partially-methylated amyloses efficiently form inclusion complexes with polytetrahydrofuran and poly(ϵ -caprolactone) by simply mixing them in DMSO–H₂O (1 : 9) solution.



ADDITION AND CORRECTION

1562

Preparation of transparent oxyapatite ceramics by combined use of freeze-drying and spark plasma sintering


A. Chesnaud, C. Bogicevic, F. Karolak, C. Estournès and G. Dezanneau

AUTHOR INDEX

- Abboud, Khalil A., 1538
Akashi, Mitsuru, 1559
Ashley, Andrew E., 1512, 1515
Atwood, Jerry L., 1521
Auffrant, Audrey, 1502
Balazs, Gabor, 1515
Bogicevic, C., 1550
Booth, Corwin H., 1515
Boubekur, Leïla, 1502
Bradshaw, Darren, 1532
Brammer, Lee, 1532
Bu, Xian-He, 1527
Buchard, Antoine, 1502
Cerveau, Geneviève, 1553
Chesnaud, A., 1550
Christou, George, 1538
Corriu, Robert J. P., 1553
Cowley, Andrew R., 1512, 1515
Cui, Ji-wei, 1547
Custelcean, Radu, 1541
Dezanneau, G., 1550
Estournès, C., 1550
Eve, Tom S. C., 1530
Florence, Alastair J., 1532
Gardinier, James R., 1524
Green, Jennifer, 1515
Guilard, Roger, 1553
Gwengo, Chengeto, 1524
Hall, Elizabeth A. H., 1544
Hawxwell, Samuel M., 1532
Hou, Wan-Guo, 1547
Ibrahim, Saad K., 1535
Jennings, Michael C., 1496
Kamer, Paul C. J., 1556
Kano, Taichi, 1487
Karolak, F., 1550
Kida, Toshiyuki, 1559
Klemps, Christian, 1502
Kreisel, Kevin A., 1510
Kunai, Atsutaka, 1505
Le Floch, Pascal, 1502
Le Goff, Xavier F., 1502
Lerouge, Frédéric, 1553
Li, Jian-Rong, 1527
Lindeman, Sergey V., 1524
Linder, Jörg, 1508
Liu, Kai, 1518
Liu, Xiaoming, 1535
Lu, De-Ming, 1547
Maruoka, Keiji, 1487
McGrail, B. Peter, 1521
Meeuwenoord, Nico J., 1556
Minabe, Takashi, 1559
Mínguez Espallargas, Guillermo, 1532
Mishra, Abhudaya, 1538
Moody, Christopher J., 1508
Morishita, Takami, 1505
Moyer, Bruce A., 1541
O'Hare, Dermot, 1512, 1515
Ohshita, Joji, 1505
Okabe, Shogo, 1559
Ooi, Takashi, 1487
Panicker, Resmi C., 1518
Pickett, Christopher J., 1535
Prior, Timothy J., 1532
Puddephatt, Richard J., 1496
Pushkar, Yulia, 1538
Ropartz, Loïc, 1556
Rosseinsky, Matthew J., 1532
Rothenberger, Alexander, 1499
Ruedas-Rama, Maria Jose, 1544
Sellin, Vincent, 1541
Shafaei-Fallah, Maryam, 1499
Shi, Weifeng, 1499
Silva, Rosalice M., 1524
Slawin, Alexandra M. Z., 1556
Stern, Christine, 1553
Tao, Ying, 1527
Tard, Cédric, 1535
Thallapally, Praveen K., 1521
Theopold, Klaus H., 1510
Turner, Nicholas J., 1530
Uttamchandani, Mahesh, 1518
van der Marel, Gijsbert A., 1556
van de Streek, Jacco, 1532
van Leeuwen, Piet W. N. M., 1556
Vu-Do, Laurence, 1502
Wang, Xiaojuan, 1544
Watanabe, Masahiko, 1505
Wells, Andrew, 1530
Yachandra, Vittal K., 1538
Yano, Junko, 1538
Yao, Shao Q., 1518
Yap, Glenn P. A., 1510
Yoshida, Hiroto, 1505
Yu, Qun, 1527
Zhang, Fenbao, 1496
Zhang, Ren-Jie, 1547

FREE E-MAIL ALERTS AND RSS FEEDS


Contents lists in advance of publication are available on the web *via* www.rsc.org/chemcomm – or take advantage of our free e-mail alerting service (www.rsc.org/ej_alert) to receive notification each time a new list becomes available.

 Try our RSS feeds for up-to-the-minute news of the latest research. By setting up RSS feeds, preferably using feed reader software, you can be alerted to the latest Advance Articles published on the RSC web site. Visit www.rsc.org/publishing/technology/rss.asp for details.

ADVANCE ARTICLES AND ELECTRONIC JOURNAL

Free site-wide access to Advance Articles and electronic form of this journal is provided with a full-rate institutional subscription. See www.rsc.org/ejs for more information.

* Indicates the author for correspondence: see article for details.

 Electronic supplementary information (ESI) is available *via* the online article (see <http://www.rsc.org/esi> for general information about ESI).