ChemComm

Chemical Communications

www.rsc.org/chemcomm

RSC Publishing is a not-for-profit publisher and a division of the Royal Society of Chemistry. Any surplus made is used to support charitable activities aimed at advancing the chemical sciences. Full details are available from www.rsc.org

IN THIS ISSUE

ISSN 1359-7345 CODEN CHCOFS (5) 469-568 (2006)

Cover



See Carmen M. Atienza, Gustavo Fernández, Luis Sánchez, Nazario Martín, Inês Sá Dantas, Martijn M. Wienk, René A. J. Janssen, G. M. Aminur Rahman and Dirk M. Guldi, page 514. This light absorbing π -conjugated oligomer-tetrafullerene nanoarray undergoes an intramolecular energy transfer and has been used to fabricate a photovoltaic device with poly(3-hexylthiophene). Image reproduced by permission of Nazario Martín et al. from Chem. Commun., 2006, 514.



Inside cover

See Yoh Sonoda, Fumitoshi Hirayama, Hidetoshi Arima, Yoshihiro Yamaguchi, Wolfram Saenger and Kaneto Uekama, page 517. A novel approach for the isolation of Ostwald's intermediate metastable polymorphs by utilizing the inclusion complexation with 2,6-di-O-methyl-β-cyclodextrin is presented. Image reproduced by permission of Kaneto Uekama *et al.* from *Chem. Commun.*, 2006, 517.

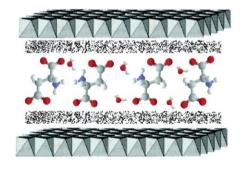
FEATURE ARTICLE

485

Preparation of layered double hydroxides and their applications as additives in polymers, as precursors to magnetic materials and in biology and medicine

David G. Evans and Xue Duan*

Methods of preparing layered double hydroxides with tailored properties are described and some practical applications of the resulting materials are illustrated.



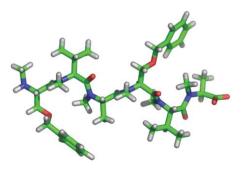
COMMUNICATIONS

497

Poly-N-methylated α -peptides: synthesis and X-ray structure determination of β -strand forming foldamers

Suode Zhang, Samran Prabpai, Palangpon Kongsaeree and Per I. Arvidsson*

The first high resolution structure determination of poly-*N*-methylated α -peptides – a class of compounds widely used in medicinal chemistry – shows that these molecules adopt a β -strand conformation in the solid state.



EDITORIAL STAFF

Editor Sarah Thomas

Deputy editor Kathryn Sear

Assistant editors Sarah Dixon, Nicola Nugent, Alison Stoddart, Katherine Vickers, Jenna Wilson

Publishing assistants Jackie Cockrill, Jayne Drake, Jayne Gough, Rachel Hegarty

Team leader, serials production Helen Saxton

Technical editors Celia Clarke, Laura Howes, Sandra Jones, Caroline Moore, David Parker, Michael Smith, Ken Wilkinson

Administration coordinator Sonya Spring

Editorial secretaries Lynne Braybrook, Jill Segev, Julie Thompson

Publisher Adrian Kybett

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

2006 Annual (print + electronic) subscription price: £1745; US\$3193.2006 Annual (electronic) subscription price: £1570; US\$2874. 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, 2006. 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
- Shankar Balasubramanian, Cambridge, UK sb10031@cam.ac.uk
- Hans-Ulrich Blaser, Solvias AG, Switzerland hans-ulrich.blaser@SOLVIAS.com
- P. Andrew Evans, Bloomington, USA chemcomm@indiana.edu Alois Fürstner, Mülheim, Germany fuerstner@mpi-muelheim.mpg.de David Haddleton, Warwick, UK
- D.M.Haddleton@warwick.ac.uk
- Donald Hilvert, Zürich, Switzerland
- hilvert@org.chem.ethz.ch
- Mir Wais Hosseini, Strasbourg, France hosseini@chimie.u-strasbg.fr

ASSOCIATE EDITORS

All submissions should be sent *via* ReSourCe: http://www.rsc.org/resource Manuscripts from North America should be submitted to the appropriate Associate Editor:

Supramolecular

Jonathan L. Sessler

Organic P. Andrew Evans

SCIENTIFIC EDITORS

The Scientific Editors welcome enquiries from potential authors regarding the submission and scientific content of papers. For more information please see http://www.rsc.org/authors

EDITORIAL ADVISORY BOARD

Varinder Aggarwal, Bristol, UK Takuzo Aida, Tokyo, Japan Frank Allen, CCDC, Cambridge, UK Jerry L. Atwood, Columbia, USA Dario Braga, Bologna, Italy Jillian M. Buriak, Alberta, Canada Derrick Clive, Alberta, Canada Marcetta Darensbourg, College Station, USA Gregory C. Fu, Cambridge, USA Tohru Fukuyama, Tokyo, Japan Lutz Gade, Heidelberg, Germany Philip Gale, Southampton, UK George W. Gokel, St Louis, USA Craig Hawker, Santa Barbara, USA Andrew B. Holmes, Melbourne, Australia Amir Hoveyda, Boston, USA Kazuyuki Kuroda, Tokyo, Japan

chemcomm@chem.ox.ac.uk Ryong Ryoo, Taejon, Korea rryoo@kaist.ac.kr Ferdi Schüth, Mülheim, Germany schueth@mpi-muelheim.mpg.de Jonathan L. Sessler, Austin, USA chemcommun@cm.utexas.edu T. Don Tilley, Berkeley, USA chemcomm@berkeley.edu

Barbara Imperiali, Cambridge, USA

chemcomm@mit edu

Nazario Martín, Madrid, Spain

nazmar@guim.ucm.es

Dermot O'Hare, Oxford, UK

Chemical biology Barbara Imperiali

Inorganic, Organometallic and Materials

T. Don Tilley

Submissions from all other regions should be submitted to the Editor *via* ReSourCe at http://www. rsc.org/resource. For further information see http:// www.rsc.org/authors

Dermot O'Hare Donald Hilvert Mir Wais Hosseini Alois Fürstner

Jérôme Lacour, Geneva, Switzerland David MacMillan, Pasadena, USA E. W. 'Bert' Meijer, Eindhoven, The Netherlands Jason Micklefield, Manchester, UK Achim Müller, Bielefeld, Germany Catherine Murphy, South Carolina, USA Atsuhiro Osuka, Kyoto, Japan Ian Paterson, Cambridge, UK Maurizio Prato, Trieste, Italy Christopher A. Reed, Riverside, USA Robin Rogers, Alabama, USA Michael Sailor, San Diego, USA Jonathan W. Steed, Durham, UK Carsten Tschierske, Halle, Germany Herbert Waldmann, Dortmund, Germany Henry N. C. Wong, Hong Kong, PR China

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.

500



Formation of highly ordered porphyrin adlayers induced by electrochemical potential modulation

Soichiro Yoshimoto,* Nozomi Yokoo, Takamitsu Fukuda, Nagao Kobayashi* and Kingo Itaya*

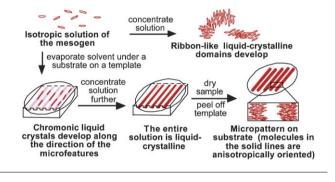
Molecular self–assembly of porphyrin derivatives formed with intermolecular hydrogen bonding on the surface of Au(111) electrode in acidic solution can be controlled by varying the number of peripheral carboxy groups and the applied electrochemical potential.

503

Template-guided organization of chromonic liquid crystals into micropatterned anisotropic organic solids

Suk-Wah Tam-Chang,* Jennifer Helbley, Travis D. Carson, Wonewoo Seo and Isaac K. Iverson

An approach has been developed to generate micropatterns of anisotropic organic materials by exploiting the selforganization of an ionic perylenebis(dicarboximide) in aqueous solutions.



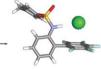
506

Anion– π interaction augments halide binding in solution

Orion B. Berryman, Fraser Hof, Michael J. Hynes and Darren W. Johnson*

¹H NMR spectroscopic data and complementary theoretical predictions suggest that a designed receptor exhibits the anion– π interaction in solution.





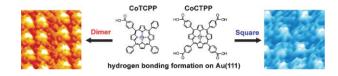
509

Normal hydrocarbons tumble rapidly in a deep, water-soluble cavitand

Richard J. Hooley, Shannon M. Biros and Julius Rebek, Jr.*

A deep, water-soluble cavitand extracts *n*-alkanes into its cavity *via* hydrophobic forces. The guests bind in a helical manner, and tumble rapidly on the NMR timescale inside the binding pocket.

fast tumbling on NMR time scale



511

517

Constructing 2D porous material based on the assembly of large organic ions: *p*-sulfonatocalix[8]arene and tetraphenylphosphonium ions Mohamed Makha,* Alexandre N. Sobolev and Colin L. Raston* In the presence of tetraphenylphosphonium and aquated ytterbium(III) ions conformationally flexible p-sulfonatocalix[8]arene forms an extended structure with two dimensional porosity. 514 Light harvesting tetrafullerene nanoarray for organic Q solar cells Carmen M. Atienza, Gustavo Fernández, Luis Sánchez, Nazario Martín,* Inês Sá Dantas, Martijn M. Wienk, l if René A. J. Janssen,* G. M. Aminur Rahman and 5 / P3H1 Dirk M. Guldi* PEDOT / PSS A new tetrafullerene nanoarray (5) has been synthesized and ITO the PV devices fabricated by blending 5 with P3HT show an external quantum efficiency of 15%.

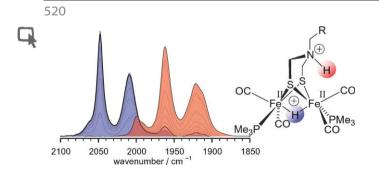
Stable Form I crystals without DM-β-CD Tolbutamide with DM-β-CD

Metastable Form IV crystals

Cyclodextrin-based isolation of Ostwald's metastable polymorphs occurring during crystallization Yoh Sonoda, Fumitoshi Hirayama, Hidetoshi Arima,

Yoh Sonoda, Fumitoshi Hirayama, Hidetoshi Arima, Yoshihiro Yamaguchi, Wolfram Saenger and Kaneto Uekama*

A novel approach for the selective isolation of Ostwald's intermediate metastable polymorphs occurring during an early stage of crystallization by utilizing the inclusion complex formed with 2,6-di-*O*-methyl-β-cyclodextrin is reported.



Iron hydrogenase active site mimic holding a proton and a hydride

Lennart Schwartz, Gerriet Eilers, Lars Eriksson, Adolf Gogoll, Reiner Lomoth* and Sascha Ott*

The first model of the iron hydrogenase active site which concomitantly carries a proton and a hydride has been prepared and was characterized by IR and NMR spectroscopy.

526

Unprecedented 1,4-stannatropy: effective generation of azomethine ylides as nitrile ylide equivalents from *N*-(stannylmethyl)thioamides

Mitsuo Komatsu,* Yukihiro Kasano, Jin-ichi Yonemori, Yoji Oderaotoshi and Satoshi Minakata

Generation and cycloaddition of less- or non-stabilized azomethine ylides, or nitrile ylide equivalents, *via* 1,4-stannatropy of *N*-(tributylstannylmethyl)thioamides were achieved. The reactions with dipolarophiles, such as electrondeficient alkenes and alkynes, afforded corresponding pyrrolidine and pyrrole derivatives effectively.



Probing the influence of *cis-trans* isomers on model lipid membrane fluidity using *cis*-parinaric acid and a stop-flow technique

Carla Ferreri,* Silvia Pierotti, Chryssostomos Chatgilialoglu, Andrea Barbieri* and Francesco Barigelletti

We describe the development of a stop-flow method using the environment-sensitive fluorescence probe *cis*-parinaric acid for examining the effect of *cis* : *trans* ratios on lipid membrane fluidity/diffusibility.

532

Misassigned C-H····Cu agostic interaction in a copper(II) ephedrine derivative is actually a weak, multicentred hydrogen bond

Tejender S. Thakur and Gautam R. Desiraju*

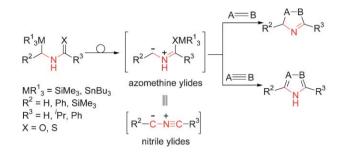
A recently reported 'agostic' interaction is more correctly described as a weak hydrogen bond.

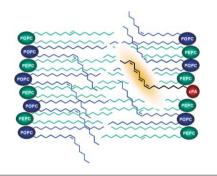
535

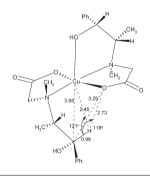
Interface engineering for solid-state dye-sensitised nanocrystalline solar cells: the use of an organic redox cascade

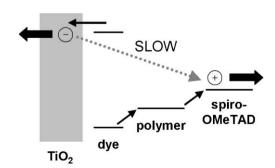
Narukuni Hirata, Jessica E. Kroeze, Taiho Park, David Jones, Saif A. Haque, Andrew B. Holmes* and James R. Durrant*

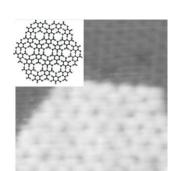
We demonstrate the formation of a charge transfer cascade at a nanostructured $TiO_2/dye/polymer/molecular$ hole transport multilayer interface. Charge recombination dynamics at this interface are shown to be retarded when the ionisation potential of the polymer layer exceeds that of the molecular hole transport layer.

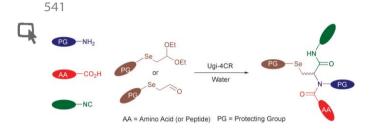












Surface self-assembly of the cyanuric acid-melamine hydrogen bonded network

Luís M. A. Perdigão, Neil R. Champness* and Peter H. Beton*

A hydrogen-bonded bimolecular network formed between cyanuric acid (CA) and melamine (M), $CA \cdot M$, has been prepared by a surface-based self-assembly process under ultrahigh vacuum conditions.

One pot synthesis of selenocysteine containing peptoid libraries by Ugi multicomponent reactions in water

Muhammad Abbas, John Bethke and Ludger A. Wessjohann*

Selenocysteine peptoids—model compounds for selenocysteine peptides and proteins—can be synthesized in one step by combinatorial Ugi multicomponent reactions using a selenoacetal in water or under microwave conditions.

544 Room Temperature Ionic Liquid (High-Safety) × Surface-Coated Cathode Materials

(High-Voltage Stability) Highly-Reversible, High-Safety Lithium Secondary Batteries!!

Highly reversible lithium metal secondary battery using a room temperature ionic liquid/lithium salt mixture and a surface-coated cathode active material

Shiro Seki,* Yo Kobayashi, Hajime Miyashiro, Yasutaka Ohno, Akira Usami, Yuichi Mita, Masayoshi Watanabe and Nobuyuki Terada

For realizing high-voltage, high-capacity, long-life and safe rechargeable batteries, a lithium secondary battery that uses high-voltage stable ZrO₂-coated LiCoO₂ cathode and a nonvolatile high-safety rt ionic liquid was fabricated.

Rapid formation of amides *via* carbonylative coupling reactions using a microfluidic device

Philip W. Miller, Nicholas J. Long, Andrew J. de Mello, Ramon Vilar, Jan Passchier and Antony Gee

For the first time a microstructured device has been used to perform a gas-liquid carbonylation reaction—featuring the Pd-catalysed cross-coupling reaction of arylhalides with benzylamine and CO to rapidly form a range of secondary amides.





COMMUNICATIONS

549

Mechanistic studies of an unusual epoxide-forming elimination of a β -hydroxyalkyl rhodium porphyrin

Yuan-Zhang Han, Melanie S. Sanford, Michael D. England and John T. Groves*

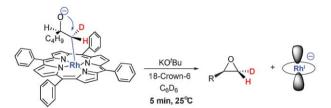
A new and remarkably facile sp^3 -C–O bond forming reaction of β -hydroxyalkyl Rh porphyrins to form epoxides has been discovered and its mechanism investigated.



⁶⁸Zn isotope exchange experiments reveal an unusual kinetic lability of the metal ions in the di-zinc form of IMP-1 metallo-β-lactamase

Stefan Siemann, Hamid R. Badiei, Vassili Karanassios, Thammaiah Viswanatha and Gary I. Dmitrienko*

Zinc ions in the β -lactamase IMP-1 resist removal by dialysis but exchange rapidly with exogenous ${}^{68}Zn^{2+}$ as detected by ICP MS-based tracer-to-tracee ratio analysis. Exogenous Cd²⁺ exchanges with only one metal ion.







Synthon evolution and unit cell evolution during crystallisation. A study of symmetry-independent molecules (Z' > 1) in crystals of some hydroxy compounds

Dinabandhu Das, Rahul Banerjee, Raju Mondal, Judith A. K. Howard, Roland Boese and Gautam R. Desiraju*

A kinetically favoured crystal, with many molecules in the asymmetric unit, may be a fossil relic of the crystal nucleus of a more stable polymorph.

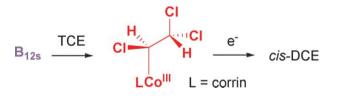
558

On the role of alkylcobalamins in the vitamin B_{12} -catalyzed reductive dehalogenation of perchloroethylene and trichloroethylene

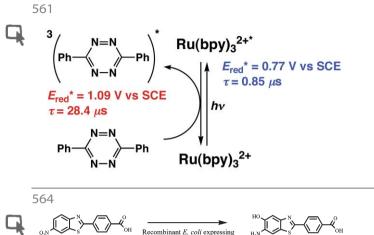
Derek A. Pratt* and Wilfred A. van der Donk*

An alternative mechanism for the vitamin B_{12} -catalyzed dechlorination of the priority pollutants perchloroethylene and trichloroethylene is proposed. This mechanism involves chlorinated ethylcobalamins as intermediates.





COMMUNICATIONS



nitroreductase and mutase enzym

Remarkable oxidizing ability of triplet excited states of tetrazines produced by photosensitization with Ru(bpy)₃²⁺

Junpei Yuasa and Shunichi Fukuzumi*

An efficient energy transfer from $Ru(bpy)_3^{2+*}$ (bpy = 2,2'-bipyridine, * denotes the excited state) to tetrazines occurs to yield the triplet excited states of tetrazines, which have much longer lifetimes and higher oxidizing ability as compared with those of $Ru(bpy)_3^{2+*}$.

Conversion of 2-(4-carboxyphenyl)-6-nitrobenzothiazole to 4-(6-amino-5-hydroxybenzothiazol-2-yl)benzoic acid by a recombinant *E. coli* strain

Lloyd J. Nadeau, Jim C. Spain,* Ramamurthi Kannan and Loon-Seng Tan

The biological conversion of a complex nitroaromatic compound to the corresponding *o*-aminophenol, a novel synthon of potential use for the production of thermally resistant polymers.

AUTHOR INDEX

Abbas, Muhammad, 541 Arima, Hidetoshi, 517 Arvidsson, Per I., 497 Atienza, Carmen M., 514 Badiei, Hamid R., 552 Baneriee, Rahul, 555 Barbieri, Andrea, 529 Barigelletti, Francesco, 529 Berryman, Orion B., 506 Bethke, John, 541 Beton, Peter H., 538 Biros, Shannon M., 509 Boese, Roland, 555 Carson, Travis D., 503 Champness, Neil R., 538 Chatgilialoglu, Chryssostomos, 529 Dantas, Inês Sá, 514 Das, Dinabandhu, 555 de Mello, Andrew J., 546 Desiraju, Gautam R., 532, 555 Dmitrienko, Gary I., 552 Duan, Xue, 485 Durrant, James R., 535 Eilers, Gerriet, 520 Elsegood, Mark R. J., 523 England, Michael D., 549 Eriksson, Lars, 520

Evans, David G., 485 Fernández, Gustavo, 514 Ferreri, Carla, 529 Fukuda, Takamitsu, 500 Fukuzumi, Shunichi, 561 Gee, Antony, 546 Gogoll, Adolf, 520 Groves, John T., 549 Guldi, Dirk M., 514 Han, Yuan-Zhang, 549 Haque, Saif A., 535 Helbley, Jennifer, 503 Hirata, Narukuni, 535 Hirayama, Fumitoshi, 517 Hof. Fraser, 506 Holmes, Andrew B., 535 Hooley, Richard J., 509 Howard, Judith A. K., 555 Hynes, Michael J., 506 Itaya, Kingo, 500 Iverson, Isaac K., 503 Janssen, René A. J., 514 Johnson, Darren W., 506 Jones, David, 535 Kannan, Ramamurthi, 564 Karanassios, Vassili, 552 Kasano, Yukihiro, 526 Kobayashi, Nagao, 500

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 RSS 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.

Kobayashi, Yo, 544 Komatsu, Mitsuo, 526 Kongsaeree, Palangpon, 497 Kroeze, Jessica E., 535 Lomoth, Reiner, 520 Long. Nicholas J., 546 Makha, Mohamed, 511 Martín, Nazario, 514 Miller, Philip W., 546 Minakata, Satoshi, 526 Mita, Yuichi, 544 Miyashiro, Hajime, 544 Mondal, Raju, 555 Nadeau, Lloyd J., 564 Oderaotoshi, Yoji, 526 Ohno, Yasutaka, 544 Ott, Sascha, 520 Park, Taiho, 535 Passchier, Jan, 546 Perdigão, Luís M. A., 538 Pierotti, Silvia, 529 Prabpai, Samran, 497 Pratt, Derek A., 558 Rahman, G. M. Aminur, 514 Raston, Colin L., 511 Rebek, Jr., Julius, 509 Redshaw, Carl, 523 Saenger, Wolfram, 517

Sánchez, Luis, 514 Sanford, Melanie S., 549 Schwartz, Lennart, 520 Seki, Shiro, 544 Seo, Wonewoo, 503 Siemann, Stefan, 552 Sobolev, Alexandre N., 511 Sonoda, Yoh, 517 Spain, Jim C., 564 Tam-Chang, Suk-Wah, 503 Tan, Loon-Seng, 564 Terada, Nobuyuki, 544 Thakur, Tejender S., 532 Uekama, Kaneto, 517 Usami, Akira, 544 van der Donk, Wilfred A., 558 Vilar, Ramon, 546 Viswanatha, Thammaiah, 552 Watanabe, Masayoshi, 544 Wessjohann, Ludger A., 541 Wienk, Martijn M., 514 Yamaguchi, Yoshihiro, 517 Yokoo, Nozomi, 500 Yonemori, Jin-ichi, 526 Yoshimoto, Soichiro, 500 Yuasa, Junpei, 561 Zhang, Suode, 497

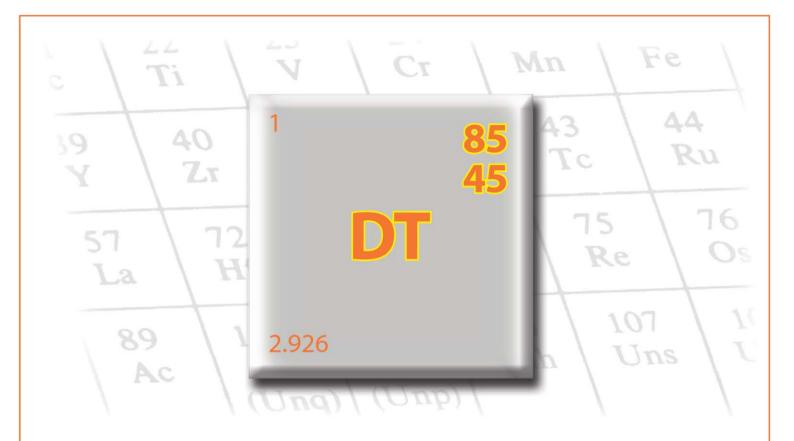
ADVANCE ARTICLES AND ELECTRONIC JOURNAL

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).



Dalton Transactions...



Dalton Transactions is the fastest journal in the field. Publication of full papers is rapid, with average times to publication (t_{pub}) of just 85 days from receipt of manuscript.



For preliminary results, published as Dalton Communications, time to publication is also fast with t_{pub} = 45 days. Coupled with new weekly instalments, *Dalton Transactions*, is the only place to read the latest in inorganic chemistry research.



Publication states include both printed and online versions, each with a new easy-to-read format. The improved legibility enables readers to browse the articles quickly and effortlessly.

... the essential element

RSCPublishing

www.rsc.org/dalton

Professor Barbara Imperiali, FRSC

US Associate Editor for Chemical Biology, ChemComm

ChemComm is the leading international journal for the publication of communications on important new developments in the chemical sciences.

Each one of ChemComm's US Associate Editors is happy to receive submissions from the Americas in their subject area.

Professor Imperiali is the Ellen Swallow Richards Professor of Chemistry and Professor of Biology at Massachusetts Institute of Technology (MIT). Her research interests are concerned with the diverse aspects of protein structure, function and design. A multidisciplinary approach involving synthesis, state-of-the-art spectroscopy, molecular modelling, enzymology and molecular biology is employed to address fundamental problems at the interface of chemistry and biology.

Call for papers!

Professor Imperiali is pleased to receive papers on important developments in chemical biology. Submit today at **www.rsc.org/resource**

For enquiries please contact: Professor Imperiali at chemcomm@mit.edu

Why publish in ChemComm:

- Impact factor: 3.997
- Rapid publication typically 60 days (from receipt to publication)
- Now: weekly publication
- 3 page communications providing authors with the flexibility to develop their results and discussion
- 40 years publishing excellent research
- High visibility indexed in MEDLINE
- 'Hot papers' are highlighted helping authors to promote their work
- FREE colour where scientifically necessary
- FREE inclusion in Chemical Biology Virtual Journal



ChemComm



Submit today!

RSCPublishing

www.rsc.org/chemcomm