**Cover (far left)**

The formation of the *ansa*-zirconocene(butadiene)/ $B(C_6F_5)_3$ addition product, featuring a C–F coordination to the zirconium cation inside the zwitterionic framework, which is an active single component olefin polymerisation catalyst (pp. 1469–1476).

Inside cover (left)

Porous gold microspheres prepared from a 4-dimethylaminopyridine stabilized gold sol, with enlargements of their porous surface and inner porous structure (pp. 1478–1479).

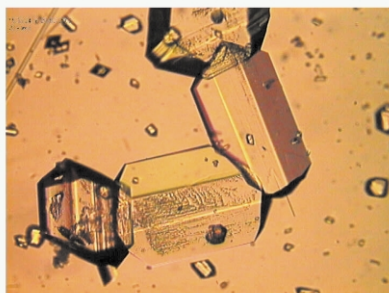
contents

FOCUS ARTICLE

1463

Pizzas, polymorphs and pills

R. J. Davey



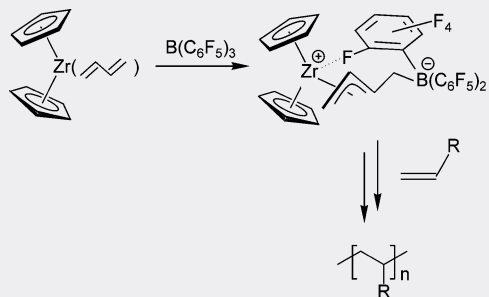
Molecular, crystalline materials form the basis of many of the products which have transformed our lives over the last century, from paints (pigments) through chocolate (triglycerides) to pharmaceuticals. Industrial and academic interest in the formation of these solids through crystallisation has never been greater. This focus article looks at the reasons for this and discusses the prospects for significant future advances.

FEATURE ARTICLE

1469

The (butadiene)metal complex/ $B(C_6F_5)_3$ pathway to homogeneous single component Ziegler–Natta catalyst systems

Gerhard Erker



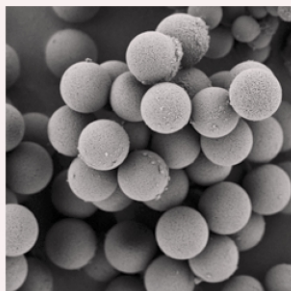
(Butadiene)zirconocene and related compounds add $B(C_6F_5)_3$ to yield zwitterionic metal complexes that are active catalysts for alkene polymerization. Such betaine systems have been useful for elucidating mechanistic features of carbon–carbon bond formation in homogeneous Ziegler–Natta catalysis.

COMMUNICATIONS

1478

Template synthesis of porous gold microspheres

Dmitry G. Shchukin and Rachel A. Caruso*



Porous polymer bead templates have been soaked in a gold sol before careful heating to remove the template and produce monodisperse macroporous gold spheres.

Chemical Communications
<http://www.rsc.org/chemcomm>

EDITORIAL STAFF

Managing editor

Sarah Thomas

Deputy editor

Louise Gill

Assistant editors

Sula Armstrong Nick Holmes

Caroline Evans

Publishing assistants

Jayne Drake Lois Kershaw

Jayne Gough Frances Thomson

Crystallographic data editor

Kirsty Anderson

Team Leader, Serials Production

Helen Saxton

Production editorial staff

Michelle Canning Carole Nerney

Sandra Jones Michael Smith

Hamish Kidd Ziva Whitelock

Kathryn Lees Ken Wilkinson

Lee Martin

Graphics

Scott Ollington

Editorial secretary (production)

Sarah James

Publisher, Journals and Reviews

Adrian Kybett

Chemical Communications (print: ISSN 1359-7345; electronic: ISSN 1364-548X) is published 24 times a year by the Royal Society of Chemistry, Thomas Graham House, Science Park, Milton Road, Cambridge, UK CB4 0WF. All orders accompanied by payment should be sent directly to Turpin Distribution Services Ltd, Blackhorse Road, Letchworth, Herts, UK SG6 1HN. 2003 Annual (print + electronic) subscription price: £878; US\$1450. 2003 Annual (electronic) subscription price: £790; US\$1305. 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.

Advertisement sales: Tel +44 (0)1223 432243; Fax +44 (0)1223 426017; E-mail advertising@rsc.org

© The Royal Society of Chemistry, 2003. Apart from fair dealing for the purposes of research or private study, or criticism or review, as permitted under the Copyright, Designs and Patents Act 1988, 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 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.

© 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.

EDITORIAL BOARD

Chairman

Andrew B. Holmes, Cambridge, UK
E-mail: abh1@cam.ac.uk

Frank Allen, CCDC, Cambridge, UK
E-mail: allen@ccdc.cam.ac.uk

Jerry L. Atwood, Columbia, MO, USA

E-mail: rsc.chemcomm@missouri.edu

Shankar Balasubramanian, Cambridge, UK
E-mail: sb10031@cam.ac.uk

Makoto Fujita, Tokyo, Japan

E-mail: mfujita@appchem.t.u-tokyo.ac.jp

Alois Fürstner, Mülheim, Germany

E-mail: fuerstner@mpi-muelheim.mpg.de

Donald Hilvert, Zurich, Switzerland

E-mail: hilvert@org.chem.ethz.ch

Wolfgang Hölderich, Aachen, Germany

E-mail: Hoelderich@rwth-aachen.de

Mir Wais Hosseini, Strasbourg, France

E-mail: hosseini@chimie.u-strasbg.fr

Barbara Imperiali, Cambridge, MA, USA

E-mail: chemcomm@mit.edu

Roeland J. M. Nolte, Nijmegen, The Netherlands

E-mail: nolte@sci.kun.nl

Dermot O'Hare, Oxford, UK

E-mail: chemcomm@chem.ox.ac.uk

Colin Raston, Perth, Australia

E-mail: clraston@chem.uwa.edu.au

David Rice, Reading, UK

E-mail: c.foote@reading.ac.uk

Ian Rothwell, West Lafayette, IN, USA

E-mail: chemcomm@purdue.edu

Clément Sanchez, Paris, France

E-mail: clem@ccr.jussieu.fr

James D. White, Corvallis, OR, USA

E-mail: james.white@orst.edu

SCIENTIFIC EDITORS

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

Professor Dermot O'Hare

Inorganic Chemistry Laboratory

University of Oxford

Oxford, UK

E-mail: chemcomm@chem.ox.ac.uk

Professor Donald Hilvert

Laboratory of Organic Chemistry

ETH Zentrum, Zurich, Switzerland

E-mail: hilvert@org.chem.ethz.ch

Professor Mir Wais Hosseini

Lab de Chimie de Coordination Organique

Université Louis Pasteur, Strasbourg, France

E-mail: hosseini@chimie.u-strasbg.fr

Professor Alois Fürstner

Max-Planck-Institut für Kohlenforschung

Müllheim/Ruhr, Germany

E-mail: fuerstner@mpi-muelheim.mpg.de

ASSOCIATE EDITORS

Manuscripts from the Americas should be submitted to the appropriate Associate Editor. Manuscripts from other regions should be submitted to the Cambridge Editorial Office. For information on how to submit your manuscript see <http://www.rsc.org/chemcomm>

Manuscripts from the Americas

SUPRAMOLECULAR

Professor Jerry L. Atwood

123 Chemistry Building

University of Missouri

Columbia, MO, USA

E-mail: rsc.chemcomm@missouri.edu

INORGANIC, ORGANOMETALLIC AND MATERIALS

Professor Ian Rothwell

Department of Chemistry

Purdue University,

West Lafayette, IN, USA

E-mail: chemcomm@purdue.edu

ORGANIC

Professor James D. White

Department of Chemistry

Oregon State University

Corvallis, OR, USA

E-mail: james.white@orst.edu

Manuscripts from all other regions

Dr Sarah Thomas

Chemical Communications

Royal Society of Chemistry

Thomas Graham House

Science Park, Milton Road

Cambridge, UK. CB4 0WF

Tel (+44) (0) 1223 420066

Fax (+44) (0) 1223 420247

E-mail: chemcomm@rsc.org

EDITORIAL ADVISORY BOARD

Takuzo Aida, Tokyo, Japan

Dario Braga, Bologna, Italy

Duncan W. Bruce, Exeter, UK

Jillian M. Buriak, West Lafayette, IN, USA

David H. G. Crout, Warwick, UK

Marcetta Darensbourg, College Station, TX, USA

Gautam R. Desiraju, Hyderabad, India

Pierre H. Dixneuf, Rennes, France

Gregory C. Fu, Cambridge, MA, USA

Tohru Fukuyama, Tokyo, Japan

Lutz Gade, Strasbourg, France

George W. Gokel, St Louis, MO, USA

Karl J. Hale, London, UK

Amir Hoveyda, Boston, MA, USA

Kazuyuki Kuroda, Tokyo, Japan

Jérôme Lacour, Geneva, Switzerland

E. W. 'Bert' Meijer, Eindhoven, The Netherlands

Albert I. Meyers, Fort Collins, CO, USA

Jason Micklefield, Manchester, UK

Achim Müller, Bielefeld, Germany

Maurizio Prato, Trieste, Italy

Richard J. Puddephatt, London, ON, Canada

Christopher A. Reed, Riverside, CA, USA

Jonathan Sessler, Austin, TX, USA

David C. Sherrington, Glasgow, UK

Jonathan W. Steed, London, UK

Herbert Waldmann, Dortmund, Germany

Henry N. C. Wong, Hong Kong, PR China

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 The Royal Society of Chemistry.

1480

First supramolecular poly(taco complex)

Feihe Huang, Frank R. Fronczek and Harry W. Gibson*

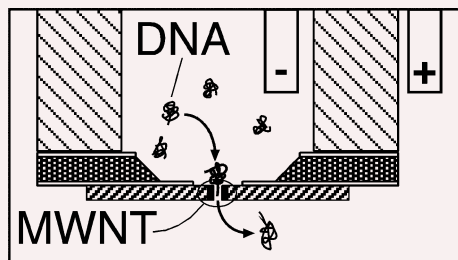


The first supramolecular poly(taco complex) was prepared from bis(*m*-phenylene)-32-crown-10 (**4**) and *N,N'*-bis[β -(phenyliminocarbonyloxy)ethyl]-4,4'-bipyridinium bis(hexafluorophosphate) (**3**) as shown by its crystal structure. Counterion (PF_6^-) hydrogen bonding with the NHs of the urethane moieties of **3** are key forces in the supramolecular structure.

1482

Observation of DNA transport through a single carbon nanotube channel using fluorescence microscopy

Takashi Ito, Li Sun and Richard M. Crooks*

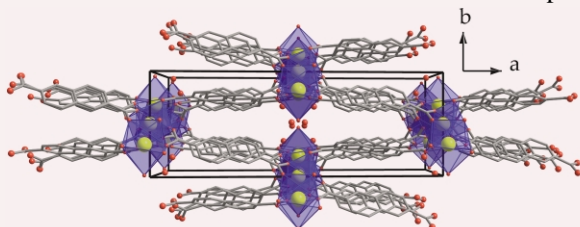


DNA transport through a single multiwall carbon nanotube (MWNT) channel was directly observed *via* fluorescence microscopy.

1484

Hydrothermal synthesis of a novel thermally stable three-dimensional ytterbium–organic framework

Filipe A. Almeida Paz and Jacek Klinowski*

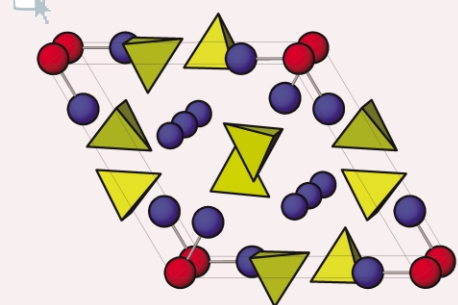


We describe the hydrothermal synthesis and structural characterization of a novel three-dimensional ytterbium–organic framework, thermally stable up to 550 °C.

1486

An apatite for fast oxide ion conduction

M. Saiful Islam,* Julian R. Tolchard and Peter R. Slater

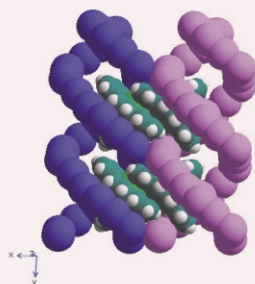


Apatite-type oxides form part of a new family of fast oxygen ion conductors with potential applications in solid oxide fuel cells. Atomistic simulations have allowed us to gain fresh insight into the mechanisms of oxygen ion transport within these complex structures.

1488

Construction of the first cross-linked double helical polyiodide

Caitlin J. Horn, Alexander J. Blake, Neil R. Champness, Vito Lippolis and Martin Schröder*

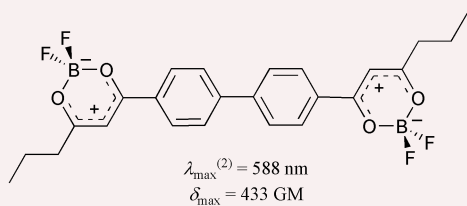


A homobimetallic supramolecular helicate has been used to template the formation of a polyiodide network, which adopts an infinite cross-linked double helical structure, topologically analogous to DNA.

1490

Bis(dioxaborine) compounds with large two-photon cross sections, and their use in the photodeposition of silver

Marcus Halik, Wim Wenseleers, Cara Grasso, Francesco Stellacci, Egbert Zojer, Stephen Barlow, Jean-Luc Brédas, Joseph W. Perry* and Seth R. Marder*

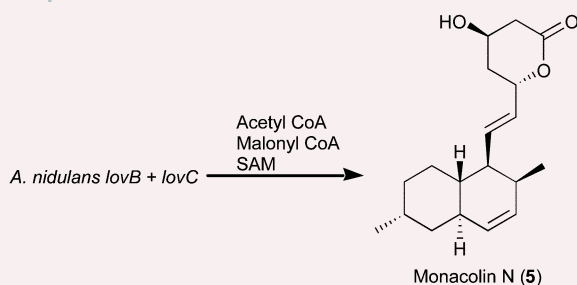


Compounds in which two dioxaborines are linked by a conjugated bridge exhibit high two-photon cross sections and can be used as sensitizers for the photodeposition of metallic silver lines.

1492

Monacolin N, a compound resulting from derailment of type I iterative polyketide synthase function *en route* to lovastatin

John L. Sorensen and John C. Vederas*

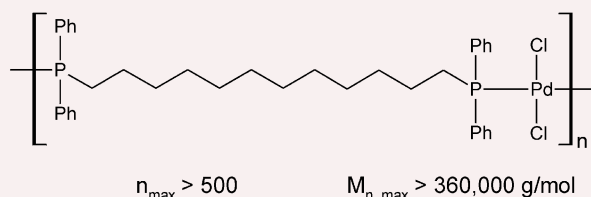


A novel compound, monacolin N, has been isolated from fermentation cultures of *Aspergillus nidulans* in which the lovastatin polyketide synthase genes *lovB* and *lovC* are heterologously expressed.

1494

A high molecular weight reversible coordination polymer of PdCl₂ and 1,12-bis(diphenylphosphino)dodecane

Jos M. J. Paulusse and Rint P. Sijbesma*

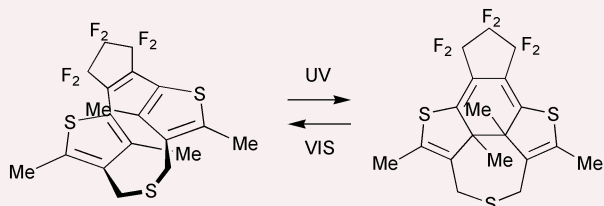


In the reversible system $[\text{PdCl}_2\{\text{Ph}_2\text{P}(\text{CH}_2)_{12}\text{PPh}_2\}]$, linear supramolecular polymers are shown to be in equilibrium with cyclic structures and high molecular weight material was obtained by melt polymerisation.

1496

A photochromic thiophenophan-1-ene

Michinori Takeshita,* Miki Nagai and Takehiko Yamato

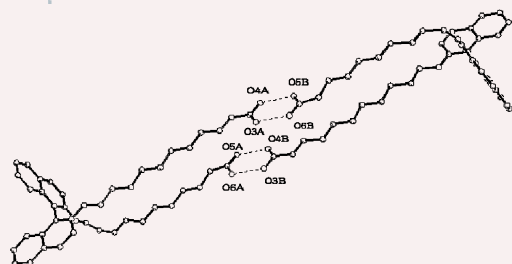


A thiophenophan-1-ene, of which two thiophene rings are bridged at 2- and 4-positions, was synthesized and its quantum yield for the photocyclization reaction was increased due to fixation to the photoactive *anti*-conformation.

1498

Synthesis of a novel axially chiral amphiphile and study on its assembly behavior in two and three dimensions

Jun Lu, Shi-Zhao Kang, Sai-Long Xu, Qing-Dao Zeng,* Chen Wang,* Li-Jun Wan and Chun-Li Bai*

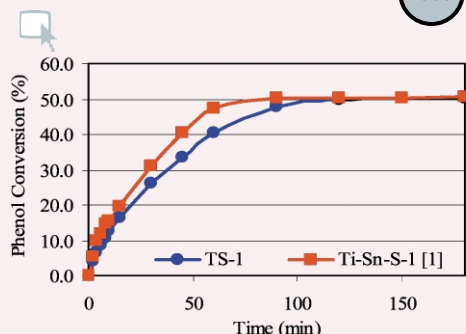


An axially chiral amphiphile was synthesized and the single crystal of its racemate was characterized by X-ray crystallography. Its three and two dimensional assembly behaviors were investigated by using X-ray crystallography and surface-area (π -A) isomers, respectively.

1500

Phenol hydroxylation using Ti- and Sn-containing silicalites

Rawewan Klaewkla,* Santi Kulprathipanja, Pramoch Rangsunvigit, Thirasak Rirksomboon and Laszlo Nemeth

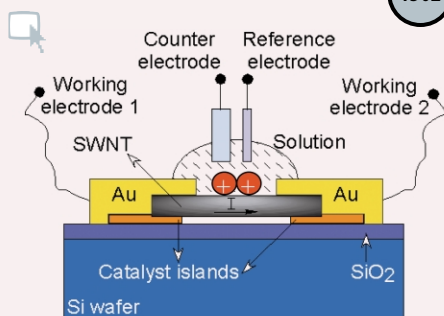


New bimetallic framework and non-framework titanium and tin silicalite have been investigated for phenol hydroxylation with H_2O_2 in different solvents, and the optimized catalyst composition showed 26% higher initial rate than reference TS-1.

1502

In situ detection of cytochrome c adsorption with single walled carbon nanotube device

S. Boussaad, N. J. Tao, R. Zhang, T. Hopson and L. A. Nagahara

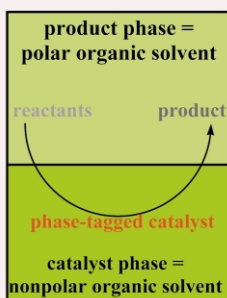


We report on the *in situ* detection of cytochrome c adsorption onto individual SWNT transistors *via* changes in the electron transport properties of the transistors.

1504

Nonpolar biphasic catalysis: Sonogashira and Suzuki coupling of aryl bromides and chlorides

Anupama Datta and Herbert Plenio*

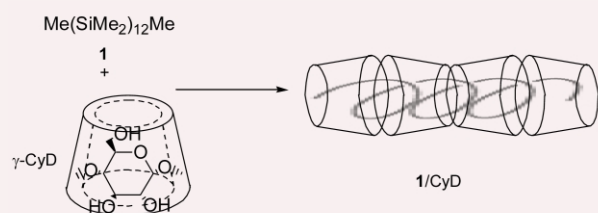


Palladium–phosphine catalysts which are phase-tagged with soluble poly(4-methylstyrene) can be used for efficient carbon–carbon coupling reactions by nonpolar biphasic catalysis with high recyclability.

1506

Induction of optical activity in oligosilanes within the internal cavity of cyclodextrins

Takanobu Sanji,* Akihiko Yoshiwara, Hideki Sakurai and Masato Tanaka*

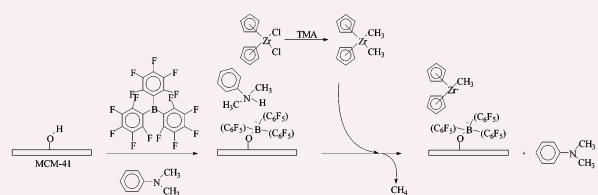


The first example of induced optical activity of oligosilanes within the internal cavity of γ -cyclodextrins is reported, leading to a preferential helical-sense induction of the oligosilane chain.

1508

MCM-41 immobilised borate co-catalyst for metallocene catalyzed propene oligomerisation

Marc Kwanten, Brenda A. M. Carrière, Piet J. Grobet and Pierre A. Jacobs*

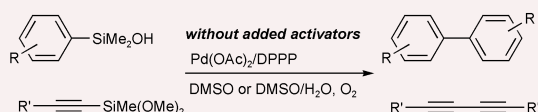


The immobilised weakly-coordinating heterogeneous tris(pentafluorophenyl)borate anion retains metallocenes, thus yielding a heterogeneous propene oligomerisation catalyst.

1510

Activator-free oxidative homocoupling of organosilanes catalysed by a palladium–DPPP complex

Hiroto Yoshida,* Yasuhito Yamaro, Joji Ohshita and Atsutaka Kunai*

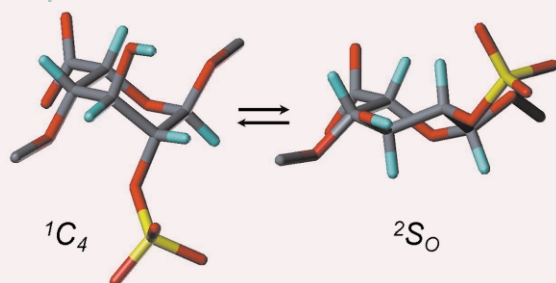


Aryl- and alkynylsilylans were found to undergo oxidative homocoupling reaction without any added activators in the presence of a palladium–1,3-bis(diphenylphosphino)propane complex, providing biaryl and 1,3-diynes, respectively.

1512

A molecular dynamics description of the conformational flexibility of the L-iduronate ring in glycosaminoglycans

Jesús Angulo, Pedro M. Nieto* and Manuel Martín-Lomas

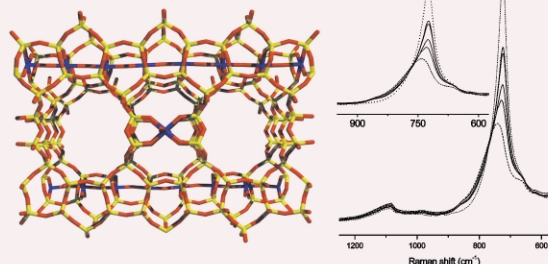


Molecular dynamics simulations in explicit solvent by using PME electrostatic treatment allow an adequate description of the L-iduronate conformational flexibility characteristic of heparin and heparan sulfate.

1514

Healing of defects in ETS-10 by selective UV irradiation: a Raman study

F. X. Llabrés i Xamena, A. Damin, S. Bordiga and A. Zecchina*

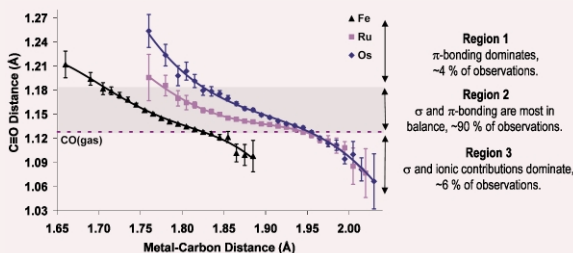


Healing of defects in a defective ETS-10 sample is observed upon irradiation with a laser line at 325 nm. Possible implications for the preparation of highly ordered materials are envisaged.

1516

Structural insights into transition-metal carbonyl bonding

Rosalie K. Hocking and Trevor W. Hambley*

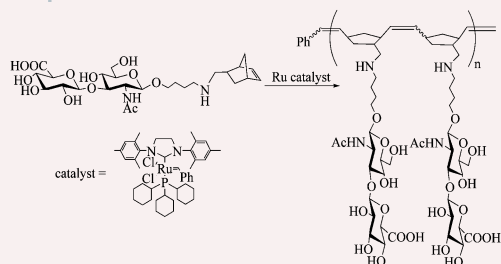


An examination of the relationship between TM–C and C≡O bond lengths using ~20,000 crystal structures has revealed three novel observations relating to TM–carbonyl interactions.

1518

Synthesis of a hyaluronan neoglycopolymer by ring-opening metathesis polymerization

Suri Iyer, Shyam Rele, Gabriela Grasa, Steven Nolan and Elliot L. Chaikof*

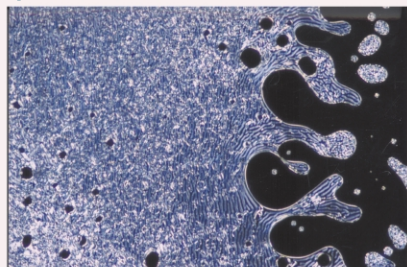


A hyaluronan (HA)-derived disaccharide was synthesized bearing an n-pentenyl spacer arm, which facilitated disaccharide derivatization with a norbornene template. Subsequent ring opening metathesis polymerization of the monomer produced an HA-mimetic neoglycopolymer of low polydispersity.

1520

Functional polyepdes—chiral nematic fullerenes

Stéphane Campidelli, Carine Eng, Isabel M. Saez, John W. Goodby* and Robert Deschenaux*

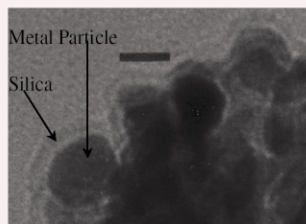


A chiral nematic tetrapedal liquid crystal which has been functionalised with buckminsterfullerene C_{60} was created by bottom-up synthesis, and its physical properties evaluated.

1522

Ultra-thin porous silica coated silver–platinum alloy nano-particle as a new catalyst precursor

Kai Man K. Yu, David Thompsett and Shik Chi Tsang*

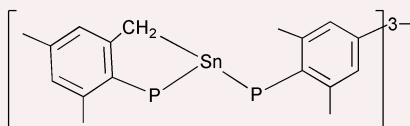


Encapsulation of surfactant-stabilised micelles containing metal precursor(s) with an ultra-thin porous silica coating allows extraction of organic stabiliser giving inorganic based nano-composites for synthesis of supported metal catalysts with defined size.

1524

Stabilisation of an *ortho*-deprotonated mesityl group within the unusual $[\{2,4,6\text{-Me}_3\text{C}_6\text{H}_2\text{P}\}\{4,6\text{-Me}_2\text{C}_6\text{H}_2(2\text{-CH}_2\text{P})\text{Sn}\}]^{3-}$ stannate ion

Mary McPartlin, Anthony D. Woods,* Christopher M. Pask, Thomas Vogler and Dominic S. Wright*

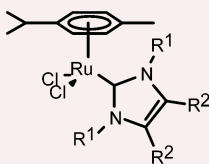


The reaction of $2,4,6\text{-Me}_3\text{C}_6\text{H}_2\text{PHNa}$ with $\text{Sn}(\text{NMe}_2)_3$ results in the formation of the unusual stannate ion $[\{2,4,6\text{-Me}_3\text{C}_6\text{H}_2\text{P}\}\{4,6\text{-Me}_2\text{C}_6\text{H}_2(2\text{-CH}_2\text{P})\text{Sn}\}]^{3-}$.

1526

Tuning of ruthenium *N*-heterocyclic carbene catalysts for ATRP

Lionel Delaude, Sébastien Delfosse, Aurore Richel, Albert Demonceau* and Alfred F. Noels

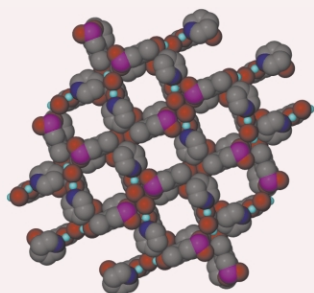


Depending on the substituents, R^1 and R^2 , ruthenium(II)-*p*-cymene complexes bearing *N*-heterocyclic carbene ligands are either efficient catalysts for the well-controlled atom transfer radical polymerisation of methyl methacrylate and styrene, or promote a redox-initiated free-radical process.

1528

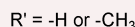
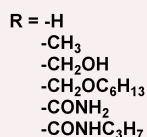
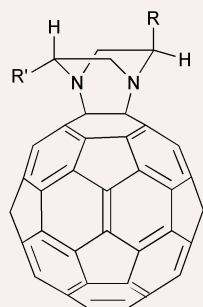
Syntheses and structures of two novel copper complexes constructed from unusual planar tetracopper(II) SBUs

Daofeng Sun, Rong Cao,* Yanqiong Sun, Wenhua Bi, Daqiang Yuan, Qian Shi and Xing Li



Two novel polymeric copper complexes constructed from unusual planar tetracopper(II) SBUs have been prepared and characterized.

1530

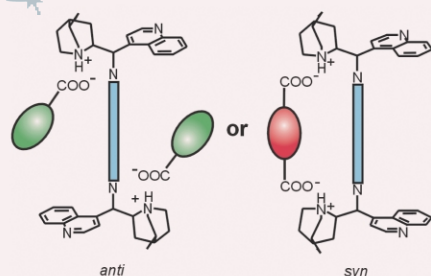


The preparation and structures of non-hydrocarbon functionalised fullerene–diamine adducts

Craig P. Butts* and Mikael Jazdyk

The first C₆₀–diamine monoadducts with non-hydrocarbon functionality can be prepared by the photochemical addition of addends based on C2-substituted piperazines.

1532

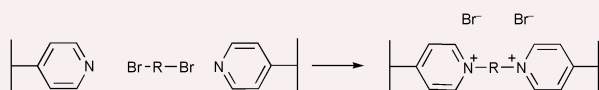


Bifunctional receptor triad for efficient recognition of mono- and dicarboxylic acids

Karol Kacprzak and Jacek Gawronski*

These *Cinchona* alkaloid–aromatic diimide atropisomeric triads switch their conformation to *anti* on binding monocarboxylic acids and to *syn* with dicarboxylic acid guests.

1534

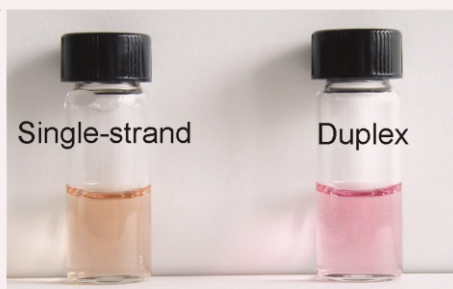


Quasi-solid dye sensitised solar cells filled with phase-separated chemically cross-linked ionic gels

Shinji Murai,* Satoshi Mikoshiba, Hiroyasu Sumino, Takashi Kato and Shuzi Hayase

Quasi-solid dye sensitised solar cells are prepared by gelling ionic liquid electrolytes with phase-separated chemically cross-linked gels which make it possible to solidify DSSC without losing the performance of the parent DSSC.

1536

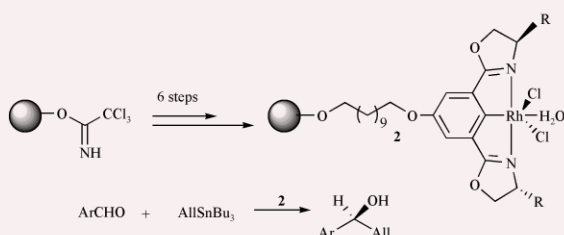


DNA–Naphthyl Red conjugate as a visualizing probe of DNA hybridization

Hiroyuki Asanuma,* Hiromu Kashida, Xingguo Liang and Makoto Komiyama*

The Naphthyl Red moiety, conjugated to DNA, shows distinct chromism by hybridization with its complementary DNA.

1538

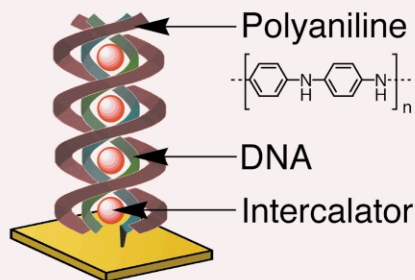


Unprecedented preparation of pincer bis(oxazolonyl)phenyl ligands on solid support and their use in the first heterogeneously-catalyzed enantioselective allylation of aldehydes

Avi Weissberg and Moshe Portnoy*

An efficient solid-phase synthesis of chiral Phebox ligands was developed. First heterogeneous catalysis of enantioselective allylation of aldehydes was demonstrated with the Rh complexes of the supported ligands.

1540

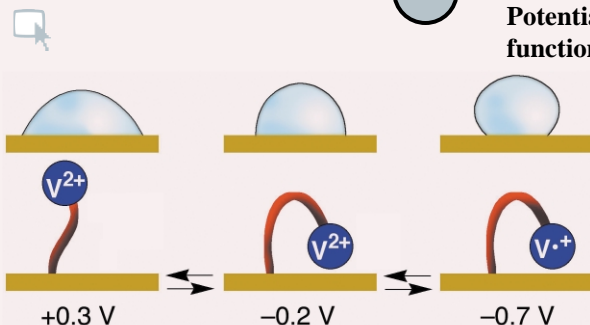


Electrocatalytic intercalator-induced winding of double-stranded DNA with polyaniline

Yi Xiao, Andrei B. Kharitonov, Fernando Patolsky, Yossi Weizmann and Itamar Willner*

Electrocatalytic winding of polyaniline on a double-stranded DNA template associated with electrodes is accomplished by the intercalator-mediated electrogeneration of H_2O_2 and the horseradish peroxidase (HRP)-mediated deposition of the polymer.

1542

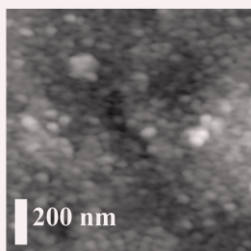


Potential-controlled molecular machinery of bipyridinium monolayer-functionalized surfaces: an electrochemical and contact angle analysis

Xuemei Wang, Andrei B. Kharitonov, Eugeni Katz and Itamar Willner*

The potential-induced bending and stretching of bipyridinium units tethered to an electrode control the hydrophobic/hydrophilic properties of the surface. The mechanical translocation of the molecular units and the resulting surface properties are probed by chronoamperometry and contact angle measurements.

1544

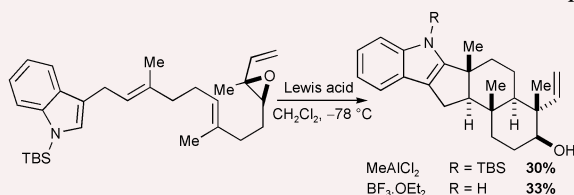


Self-assembling monolayer formation of glucose oxidase covalently attached on 11-aminoundecanethiol monolayers on gold

Koji Nakano,* Kenji Doi, Kousuke Tamura, Yosuke Katsumi and Masato Tazaki

Glucose oxidase has been attached covalently to 11-aminoundecanethiol/Au surfaces to form uniform, densely packed enzyme monolayers as confirmed by single molecular imaging with using AFM.

1546

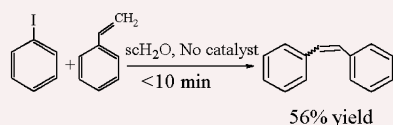


Exploration of the biomimetic synthesis of indole-diterpene mycotoxins: an unexpected cascade reaction during the attempted synthesis of emindole SB

J. Stephen Clark,* James Myatt, Claire Wilson, Lee Roberts and Nigel Walshe

Lewis acid mediated treatment of the vinylic epoxide results in complete cyclisation to give a pentacyclic compound that does not correspond to the ring system found in the alkaloid emindole SB.

1548



Noncatalytic Heck coupling reaction using supercritical water

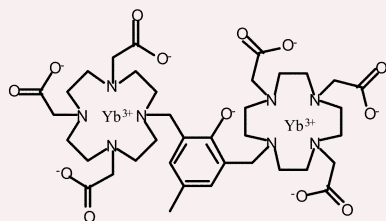
Rong Zhang, Fengyu Zhao, Masahiro Sato and Yutaka Ikushima*

Heck coupling reaction of iodobenzene and styrene proceeds rapidly and selectively in supercritical water even without any catalyst in the presence of a relatively weak base such as potassium acetate.

1550

**Synthesis and luminescence properties of a kinetically stable dinuclear ytterbium complex with differentiated binding sites**

Simon J. A. Pope, Alan M. Kenwright, Sarah L. Heath* and Stephen Faulkner*

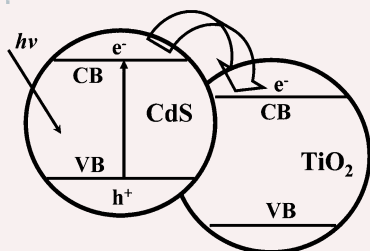


Yb₂L contains two DO3A units separated by a phenol bridging group. It is emissive in the near-IR and gives time-resolved luminescence spectra in solution consistent with the presence of two types of binding site.

1552

**Microemulsion-mediated solvothermal synthesis of nanosized CdS-sensitized TiO₂ crystalline photocatalyst**

Jimmy C. Yu,* Ling Wu, Jun Lin, Puishan Li and Quan Li

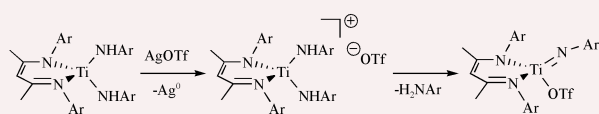


Nanosized CdS-sensitized TiO₂ nanocrystals were successfully prepared by a microemulsion-mediated solvothermal method. The new photocatalyst is highly effective in the visible-light range.

1554

**Snapshots of an oxidatively induced α -hydrogen abstraction reaction to prepare a terminal and four-coordinate titanium imide**

Falguni Basuli, Brad C. Bailey, John C. Huffman and Daniel J. Mindiola*

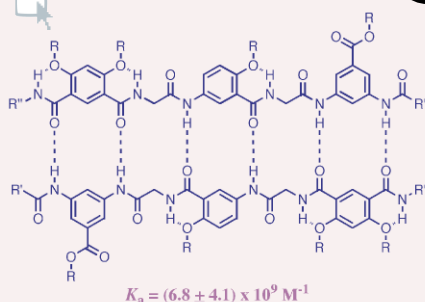


A titanium(III) bis-anilido complex supported by a β -diketiminato ligand can be oxidized by one electron to yield a four-coordinate titanium imide complex. Depending on the reaction conditions, the putative intermediate generated during the α -abstraction process can be isolated.

1556

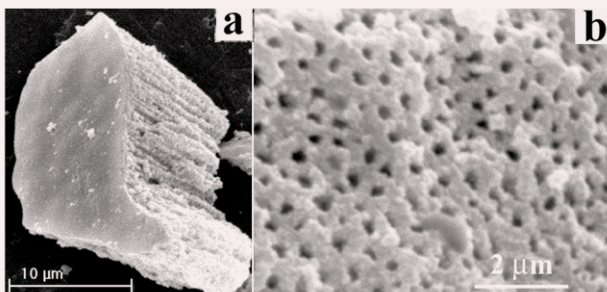
**An extremely stable, self-complementary hydrogen-bonded duplex**

Huaqiang Zeng, Xiaowu Yang, Amy L. Brown, Suzana Martinovic, Richard D. Smith and Bing Gong*

AADADD
DDADAA

Design, synthesis and characterization of a self-complementary six-H-bonded duplex with exceptional stability.

1558

**Surfactant-assisted synthesis of unprecedented hierarchical meso-macrostructured zirconia**

Zhong-Yong Yuan, Aurélien Vantomme, Alexandre Léonard and Bao-Lian Su*

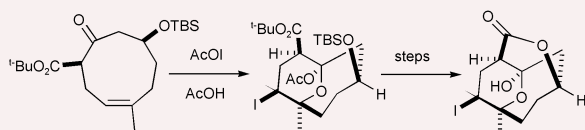
A surfactant-assisted one-step synthesis route was developed, leading to the formation of an unprecedented hierarchical meso-macroporous zirconia with wormhole-like mesoporous walls and a uniform assembly of macrochannels.

1560

Synthesis of a model DEF-ring core of hexacyclinic acid

Paul A. Clarke,* Matthew Grist, Mark Ebden and Claire Wilson

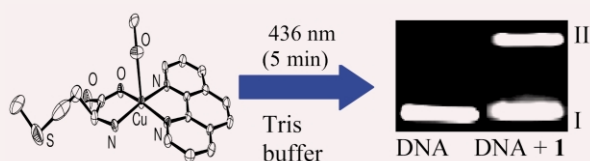
The first synthesis of a DEF-ring system of hexacyclinic acid is reported.



1562

Visible light-induced nuclease activity of a ternary mono-phenanthroline copper(II) complex containing L-methionine as a photosensitizer

Ashis K. Patra, Shanta Dhar, Munirathinam Nethaji and Akhil R. Chakravarty*

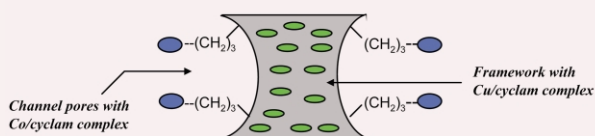


Ternary copper(II) complex $[\text{Cu}(\text{phen})(\text{met})(\text{MeOH})](\text{ClO}_4)$ containing L-methionine is prepared and structurally characterized. It binds ds-DNA in the minor groove and exhibits photocleavage activity under UV or visible light involving singlet oxygen.

1564

Mesoporous hybrid materials containing two transition metal ions, one in the framework, the other in the channel pores

Robert J. P. Corriu,* Ahmad Mehdi, Catherine Reyé and Chloé Thieuleux



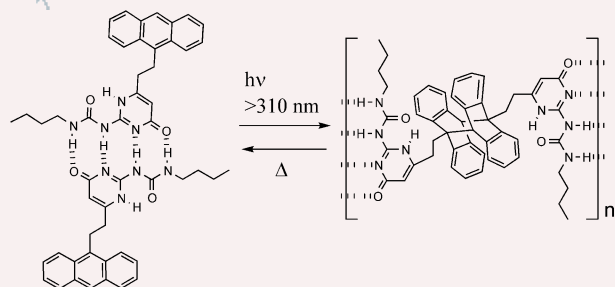
Mesoporous hybrid materials containing two strongly chelated transition metal ions, one in the framework, the other in the channel pores were prepared in two steps.

1566

Hydrogen bonded molecular assembly by reversible cyclization reaction of anthracene

Masashi Ikegami, Ikuma Ohshiro and Tatsuo Arai*

A hydrogen bonded molecular assembly of 2-ureido-4(1H)-pyrimidinone was constructed by utilizing an anthracene photodimerization reaction.

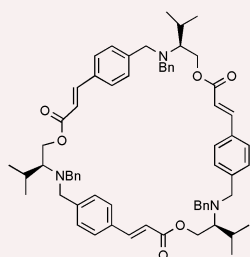


1568

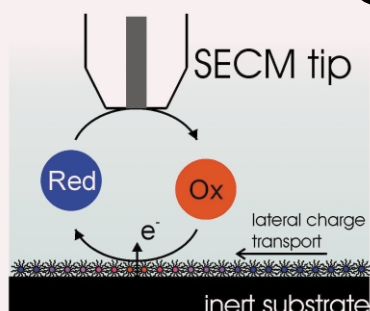
A versatile approach to chiral macrocycles

Susan E. Gibson,* Nello Mainolfi, S. Barret Kalindjian and Paul T. Wright

Head-to-tail Heck coupling of units derived from amino alcohols and iodoaryl aldehydes provides a short and versatile route to non-racemic chiral macrocycles.



1570

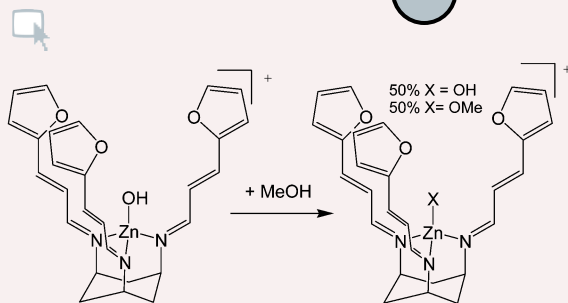


Charge injection and lateral conductivity in monolayers of metallic nanoparticles

Peter Liljeroth, Bernadette M. Quinn,* Virginia Ruiz and Kyösti Kontturi

Scanning electrochemical microscopy has been used to quantify charge injection and lateral charge transport in monolayers of metallic nanoparticles.

1572

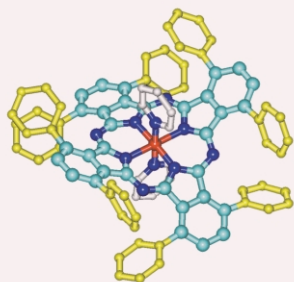


Synthesis and structure of $[\text{Zn}(\text{OMe})(\text{L})]\cdot[\text{Zn}(\text{OH})(\text{L})]\cdot 2(\text{BPh}_4)$, $\text{L} = \text{cis,cis-1,3,5-tris}[(E,E)\text{-3-(2-furyl)acrylideneamino}]\text{-cyclohexane}$: structural models of carbonic anhydrase and liver alcohol dehydrogenase

Leroy Cronin and Paul H. Walton*

A hydroxide ion–zinc complex is shown to react with methanol to give a mixture of complexes that are models of reactive intermediates in the catalytic cycles of the enzymes carbonic anhydrase and liver alcohol dehydrogenase.

1574

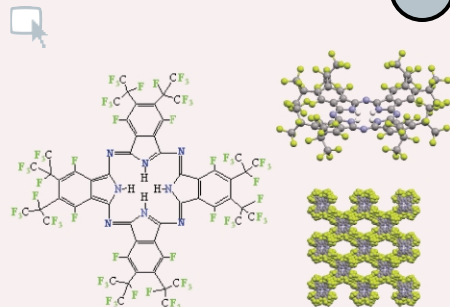


A highly deformed iron(II) low-spin phthalocyanine which shows two MLCT transitions beyond the Q-band

Takamitsu Fukuda, Shigetsugu Homma and Nagao Kobayashi*

A highly deformed iron(II) low-spin phthalocyanine has been synthesized, and found to show two MLCT transitions beyond the Q-band in pyridine due to lowering of molecular symmetry to D_{2d} .

1576

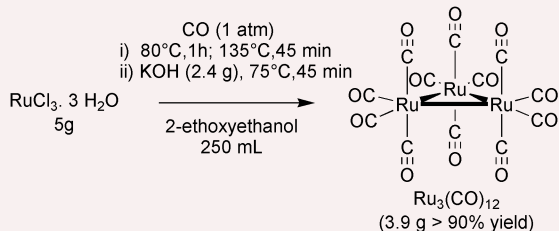


Dome-distortion and fluorine-lined channels: synthesis, and molecular and crystal structure of a metal- and C–H bonds-free fluorophthalocyanine

Hyun-Jin Lee, William W. Brennessel, Joshua A. Lessing, William W. Brucker, Victor G. Young, Jr. and Sergiu M. Gorun*

The first crystal structure of a free-base perhalogenated phthalocyanine reveals an unprecedented dome-like shape and fluorine-lined channels created by intermolecular interlocking peripheral iso-perfluoroalkyl groups.

1578



New insight into a convenient base-promoted synthesis of $\text{Ru}_3(\text{CO})_{12}$

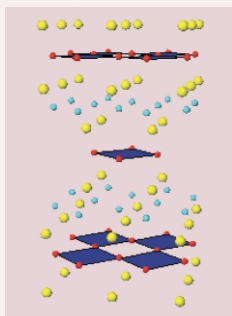
Matthieu Fauré, Catherine Saccavini and Guy Lavigne*

CO-induced disproportionation of a transient polymeric Ru(I) poly-anion generated *in situ*, constitutes the productive key step of the present iterative base promoted reduction of Ru(II) to Ru(0), leading to $\text{Ru}_3(\text{CO})_{12}$ at unprecedented mild conditions.

1580

Ba_{2-x}Sr_xPdO₂F₂ (0 ≤ x ≤ 1.5): The first palladium–oxide–fluorides

Thomas Baikie, Emma L. Dixon, John F. Rooms, Nigel A. Young and M. Grazia Francesconi*

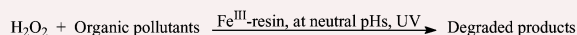


Here we describe the preparation and structural characterisation of the first family of ternary palladium oxide–fluorides, Ba_{2-x}Sr_xPdO₂F₂. Neither binary nor ternary oxide–fluorides of palladium have ever been reported.

1582

An efficient approach for the photodegradation of organic pollutants by immobilized iron ions at neutral pHs

Wanhong Ma, Yingping Huang, Jing Li, Mingming Cheng, Wenjing Song and Jincai Zhao*

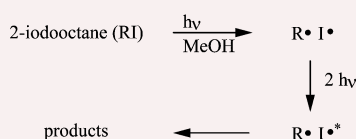


An immobilized iron catalyst (Fe^{III}-resin) can effectively catalyze the photodegradation of organic pollutants by H₂O₂ at neutral pHs. It can also significantly auto depress H₂O₂ side-reactions.

1584

The multiphoton photochemistry of 2-iodooctane in methanol

Fang Gao, Robert N. Compton and Richard M. Pagni*

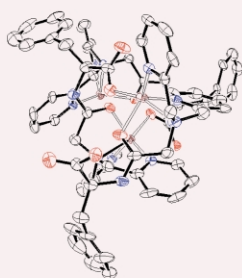


The photochemistry of 2-iodooctane in methanol, which is initiated with a Nd-YAG laser at 266 nm, is a three photon process proceeding through a radical pair excited state.

1586

Dipicolylglycyl-phenylalanine zinc(II): a metallopeptide with a built-in conformational switch and its homochiral helical coordination polymer

Nicole Niklas, Frank Hampel and Ralf Alsasser*

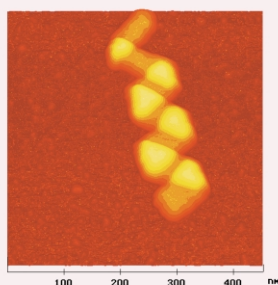


The metallo-dipeptide [(Dpg-L(S)-Phe)Zn]⁺ (Dpg = *N,N*-dipicolylglycine; Phe = phenylalanine) forms a homochiral, P-helical coordination polymer. A pH dependent amide switch triggers its formation and disassembly.

1588

Chiral shape and enantioselective growth of colloidal particles of self-assembled meso-tetra(phenyl and 4-sulfonatophenyl)porphyrins

Joaquim Crusats, Josep Claret, Ismael Díez-Pérez, Zoubir El-Hachemi, Héctor García-Ortega, Raimon Rubires, Francesc Sagués and Josep M. Ribó*

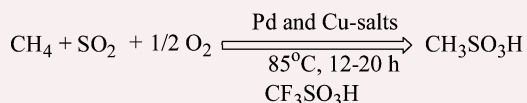


The polarization exerted by a stirring vortex selecting the chiral sign in the spontaneous symmetry breaking of H₂TPPS₃⁻ is related to the chiral shape of their mesophases (helices) and to their colloidal character.

1590

Direct catalytic sulfonation of methane with SO₂ to methanesulfonic acid (MSA) in the presence of molecular O₂

Sudip Mukhopadhyay and Alexis T. Bell*

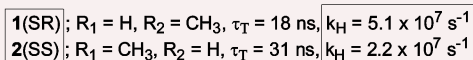
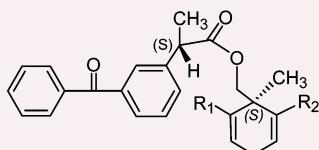


Methane is transformed selectively to methanesulfonic acid at low temperature by liquid-phase sulfonation of methane with SO₂ and O₂ in the presence of Pd- and Cu-salts as the catalysts.

1592

Chiral discrimination in the intramolecular abstraction of allylic hydrogens by benzophenone triplets

Francisco Boscá, Inmaculada Andreu, Isabel M. Morera, Abdelouahid Samadi and Miguel A. Miranda*

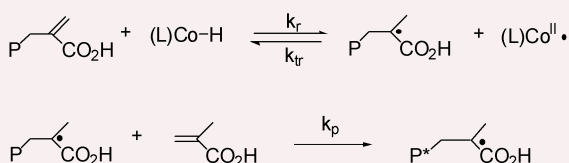


Chiral benzophenone derivatives tethered to enantiomerically pure 1,4-cyclohexadiene exhibit significant chiral discrimination not only in the intramolecular hydrogen abstraction process (k_H), but also in the π-quenching (k_π) and in the overall triplet quenching (k_{iq}). The lifetimes (τ_T) of **1** (SR) and **2** (SS), measured by laser flash photolysis, are 18 and 31 ns respectively.

1594

Macromonomer living character in the cobalt(II) porphyrin chain transfer catalysis for radical polymerization of methacrylic acid in water

Yunying Li and Bradford B. Wayland*

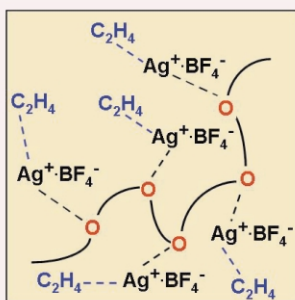


Macromonomers formed by cobalt(II) porphyrin catalyzed chain transfer in the aqueous radical polymerization of methacrylic acid acquire living character by continual reinitiation through reaction with an intermediate cobalt hydride.

1596

Olefin/paraffin solubility in a solid polymer electrolyte membrane

T. C. Merkel,* Z. He, A. Morisato and I. Pinnau

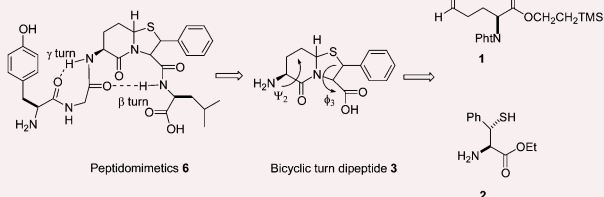


Detailed measurement of ethylene and ethane solubility in a polyether-based solid polymer electrolyte containing silver tetrafluoroborate yields insight into the mechanism of facilitated olefin transport through membranes of such materials.

1598

Stereoselective synthesis of individual isomers of Leu-enkephalin analogues containing substituted β-turn bicyclic dipeptide mimetics

Chiye Xiong, Junyi Zhang, Peg Davis, Wei Wang, Jinfa Ying, Frank Porreca and Victor J. Hruby*

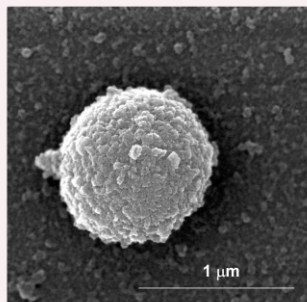


Individual isomers of Leu-enkephalin mimetics, which differ in their stereochemistry, have been synthesized by a convergent strategy involving novel substituted bicyclic β-turn dipeptide **3** and amino acids **1** and **2**.

1600

Supported ATRP and giant polymers

Peter von Natzmer, Debora Bontempo and Nicola Tirelli*

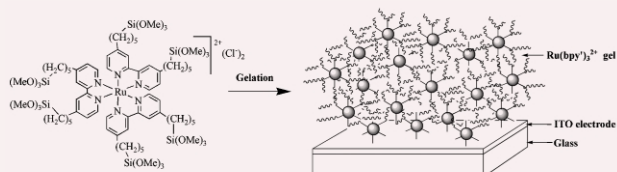


Micron-sized isolated macromolecules can be produced using a surface-initiated 'living' polymerization mechanism, the Atom Transfer Radical Polymerization (ATRP).

1602

Organosilicate thin film containing Ru(bpy)₃²⁺ for an electrogenerated chemiluminescence (ECL) sensor

Jin-Kyu Lee,* Seung-Hee Lee, Myungsun Kim, Hasuck Kim, Dong-Hyun Kim and Won-Yong Lee*

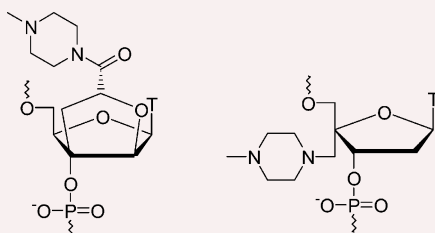


An insoluble organosilicate gel containing a Ru(bpy)₃²⁺ complex was formed on an ITO electrode surface and its ECL responses toward several analytes were investigated for the sensitive ECL sensor application having long-term stability.

1604

N-Methylpiperazinocarbonyl-2',3'-BcNA and 4'-C-(N-methylpiperazino)methyl-DNA: introduction of basic functionalities facing the major groove and the minor groove of a DNA:DNA duplex

Michael Raunkjær, Torsten Bryld and Jesper Wengel*

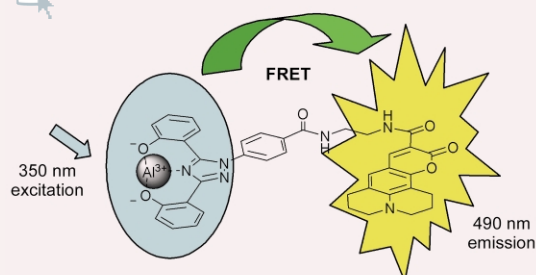


Piperazino-functionalized 2',3'-BcNA and 4'-C-hydroxymethyl-DNA are appropriate molecular architectures for the introduction of basic functionalities facing the major groove and the minor groove of nucleic acid duplexes, respectively.

1606

Aluminium fluorescence detection with a FRET amplified chemosensor

Maria Arduini, Fulvia Felluga, Fabrizio Mancin, Paola Rossi, Paolo Tecilla,* Umberto Tonellato* and Nicola Valentinuzzi



A selective Al³⁺ fluorescence chemosensor able to detect concentrations of metal ion in the nanomolar range has been realized. The remarkable sensitivity is the result of the FRET amplification of the fluorescence emission of the ligand subunit.

1608

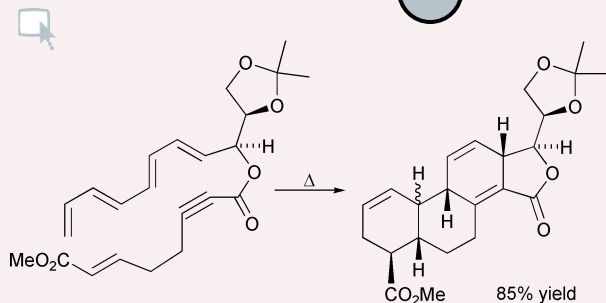
Synergy between Mo/SiO₂ and Co/SiO₂ beds in HDS: a remote control effect?

J. Ojeda, N. Escalona, P. Baeza, M. Escudey and F. J. Gil-Llambías*



Synergy between beds of Mo/SiO₂ and Co/SiO₂ separated by 5 mm of SiO₂ in the hydrodesulfurization (HDS) of gas oil, carried out in a high-pressure continuous-flow micro-reactor, was demonstrated.

1610



The domino intramolecular Diels–Alder approach to 16-oxasteroids

Craig I. Turner, Rachel M. Williamson, Peter Turner and Michael S. Sherburn*

The zipper mode double Diels–Alder reaction allows the one step synthesis of enantiomerically pure 16-oxasteroids. This heat-promoted transformation generates a fused tetracyclic framework bearing five new stereocentres.

CONFERENCE DIARY

XX

Dates, venues and contact details of forthcoming events.

COPIES OF CITED ARTICLES

The Library and Information Centre (LIC) of the RSC offers a first class Document Delivery Service for items in Chemistry and related subjects. Contact the LIC, The Royal Society of Chemistry, Burlington House, Piccadilly, London W1V 0BN, UK.

This service is only available from the LIC in London and not the RSC in Cambridge.

ADVANCE CONTENTS LISTS

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.

ADVANCE ARTICLES AND ELECTRONIC JOURNAL

Free site-wide access to Advance Articles and the 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 contact details.



Electronic supplementary information is available on <http://www.rsc.org/esi>: see article for further information.

AUTHOR INDEX

- Alsasser, Ralf, 1586
 Andreu, Inmaculada, 1592
 Angulo, Jesús, 1512
 Arai, Tatsuo, 1566
 Arduini, Maria, 1606
 Asanuma, Hiroyuki, 1536
 Baeza, P., 1608
 Bai, Chun-Li, 1498
 Baikie, Thomas, 1580
 Bailey, Brad C., 1554
 Barlow, Stephen, 1490
 Basuli, Falguni, 1554
 Bell, Alexis T., 1590
 Bi, Wenhua, 1528
 Blake, Alexander J., 1488
 Bontempo, Debora, 1600
 Bordiga, S., 1514
 Bosca, Francisco, 1592
 Boussaad, S., 1502
 Brédas, Jean-Luc, 1490
 Brennessel, William W., 1576
 Brown, Amy L., 1556
 Brucker, William W., 1576
 Bryld, Torsten, 1604
 Butts, Craig P., 1530
 Campidelli, Stéphane, 1520
 Cao, Rong, 1528
 Carrière, Brenda A. M., 1508
 Caruso, Rachel A., 1478
 Chaikof, Elliot L., 1518
 Chakravarty, Akhil R., 1562
 Champness, Neil R., 1488
 Cheng, Mingming, 1582
 Claret, Josep, 1588
 Clark, J. Stephen, 1546
 Clarke, Paul A., 1560
 Compton, Robert N., 1584
 Corriu, Robert J. P., 1564
 Cronin, Leroy, 1572
 Crooks, Richard M., 1482
 Crusats, Joaquim, 1588
 Damin, A., 1514
 Datta, Anupama, 1504
 Davey, R. J., 1463
 Davis, Peg, 1598
 Delaude, Lionel, 1526
 Delfosse, Sébastien, 1526
 Demonceau, Albert, 1526
 Deschenaux, Robert, 1520
 Dhar, Shanta, 1562
 Díez-Pérez, Ismael, 1588
 Dixon, Emma L., 1580
 Doi, Kenji, 1544
 Ebdén, Mark, 1560
 El-Hachemi, Zoubir, 1588
 Eng, Carine, 1520
 Erker, Gerhard, 1469
 Escalona, N., 1608
 Escudey, M., 1608
 Faulkner, Stephen, 1550
 Fauré, Matthieu, 1578
 Felluga, Fulvia, 1606
 Francesconi, M. Grazia, 1580
 Fronczek, Frank R., 1480
 Fukuda, Takamitsu, 1574
 Gao, Fang, 1584
 García-Ortega, Héctor, 1588
 Gawronski, Jacek, 1532
 Gibson, Harry W., 1480
 Gibson, Susan E., 1568
 Gil-Llambías, F. J., 1608
 Gong, Bing, 1556
 Goodby, John W., 1520
 Gorun, Sergiu M., 1576
 Grasa, Gabriela, 1518
 Grasso, Cara, 1490
 Grist, Matthew, 1560
 Grobet, Piet J., 1508
 Halik, Marcus, 1490
 Hambley, Trevor W., 1516
 Hampel, Frank, 1586
 Hayase, Shuzi, 1534
 He, Z., 1596
 Heath, Sarah L., 1550
 Hocking, Rosalie K., 1516
 Homma, Shigetsugu, 1574
 Hopson, T., 1502
 Horn, Caitlin J., 1488
 Hruby, Victor J., 1598
 Huang, Feihe, 1480
 Huang, Yingping, 1582
 Huffman, John C., 1554
 Ikegami, Masashi, 1566
 Ikushima, Yutaka, 1548
 Islam, M. Saiful, 1486
 Ito, Takashi, 1482
 Iyer, Suri, 1518
 Jacobs, Pierre A., 1508
 Jazdzzyk, Mikael, 1530
 Kacprzak, Karol, 1532
 Kalindjian, S. Barret, 1568
 Kang, Shi-Zhao, 1498
 Kashida, Hiromu, 1536
 Kato, Takashi, 1534
 Katsumi, Yosuke, 1544
 Katz, Eugenii, 1542
 Kenwright, Alan M., 1550
 Kharitonov, Andrei B., 1540, 1542
 Kim, Dong-Hyun, 1602
 Kim, Hasuck, 1602
 Kim, Myungsun, 1602
 Klawekla, Raweewan, 1500
 Klinowski, Jacek, 1484
 Kobayashi, Nagao, 1574
 Komiyama, Makoto, 1536
 Kontturi, Kyösti, 1570
 Kulprathipanja, Santi, 1500
 Kunai, Atsutaka, 1510
 Kwanten, Marc, 1508
 Lavigne, Guy, 1578
 Lee, Hyun-Jin, 1576
 Lee, Jin-Kyu, 1602
 Lee, Seung-Hee, 1602
 Lee, Won-Yong, 1602
 Léonard, Alexandre, 1558
 Lessing, Joshua A., 1576
 Li, Jing, 1582
 Li, Puishan, 1552
 Li, Quan, 1552
 Li, Xing, 1528
 Li, Yunying, 1594
 Liang, Xingguo, 1536
 Liljeroth, Peter, 1570
 Lin, Jun, 1552
 Lippolis, Vito, 1488
 Lu, Jun, 1498
 Ma, Wanhong, 1582
 McPartlin, Mary, 1524
 Mainolfi, Nello, 1568
 Mancin, Fabrizio, 1606
 Marder, Seth R., 1490
 Martín-Lomas, Manuel, 1512
 Martinovic, Suzana, 1556
 Mehdi, Ahmad, 1564
 Merkel, T. C., 1596
 Mikoshiba, Satoshi, 1534
 Mindiola, Daniel J., 1554
 Miranda, Miguel A., 1592
 Morera, Isabel M., 1592
 Morisato, A., 1596
 Mukhopadhyay, Sudip, 1590
 Murai, Shinji, 1534
 Myatt, James, 1546
 Nagahara, L. A., 1502
 Nagai, Miki, 1496
 Nakano, Koji, 1544
 Nemeth, Laszlo, 1500
 Nethaji, Munirathinam, 1562
 Nieto, Pedro M., 1512
 Niklas, Nicole, 1586
 Noels, Alfred F., 1526
 Nolan, Steven, 1518
 Ohshiro, Ikuma, 1566
 Ohshita, Joji, 1510
 Ojeda, J., 1608
 Pagni, Richard M., 1584
 Pask, Christopher M., 1524
 Patolsky, Fernando, 1540
 Patra, Ashis K., 1562
 Paulusse, Jos M. J., 1494
 Paz, Filipe A. Almeida, 1484
 Perry, Joseph W., 1490
 Pinnau, I., 1596
 Plenio, Herbert, 1504
 Pope, Simon J. A., 1550
 Porreca, Frank, 1598
 Portnoy, Moshe, 1538
 Quinn, Bernadette M., 1570
 Rangsunvigit, Pramoch, 1500
 Raunkjær, Michael, 1604
 Rele, Shyam, 1518
 Reyé, Catherine, 1564
 Ribó, Josep M., 1588
 Richel, Aurore, 1526
 Rirksomboon, Thirasak, 1500
 Roberts, Lee, 1546
 Rooms, John F., 1580
 Rossi, Paola, 1606
 Rubires, Raimon, 1588
 Ruiz, Virginia, 1570
 Saccavini, Catherine, 1578
 Saez, Isabel M., 1520
 Sagués, Francesc, 1588
 Sakurai, Hideki, 1506
 Samadi, Abdelouahid, 1592
 Sanji, Takanobu, 1506
 Sato, Masahiro, 1548
 Schröder, Martin, 1488
 Shchukin, Dmitry G., 1478
 Sherburn, Michael S., 1610
 Shi, Qian, 1528
 Sijbesma, Rint P., 1494
 Slater, Peter R., 1486
 Smith, Richard D., 1556
 Song, Wenjing, 1582
 Sorensen, John L., 1492
 Stellacci, Francesco, 1490
 Su, Bao-Lian, 1558
 Sumino, Hiroyasu, 1534
 Sun, Daofeng, 1528
 Sun, Li, 1482
 Sun, Yanqiong, 1528
 Takeshita, Michinori, 1496
 Tamura, Kousuke, 1544
 Tanaka, Masato, 1506
 Tao, N. J., 1502
 Tazaki, Masato, 1544
 Tecilla, Paolo, 1606
 Thieuleux, Chloé, 1564
 Thompsett, David, 1522
 Tirelli, Nicola, 1600
 Tolchard, Julian R., 1486
 Tonellato, Umberto, 1606
 Tsang, Shik Chi, 1522
 Turner, Craig I., 1610
 Turner, Peter, 1610
 Valentinuzzi, Nicola, 1606
 Vantomme, Aurélien, 1558
 Vederas, John C., 1492
 Vogler, Thomas, 1524
 von Natzmer, Peter, 1600
 Walshe, Nigel, 1546
 Walton, Paul H., 1572
 Wan, Li-Jun, 1498
 Wang, Chen, 1498
 Wang, Wei, 1598
 Wang, Xuemei, 1542
 Wayland, Bradford B., 1594
 Weissberg, Avi, 1538
 Weizmann, Yossi, 1540
 Wengel, Jesper, 1604
 Wenseleers, Wim, 1490
 Williamson, Rachel M., 1610
 Willner, Itamar, 1540, 1542
 Wilson, Claire, 1546, 1560
 Woods, Anthony D., 1524
 Wright, Dominic S., 1524
 Wright, Paul T., 1568
 Wu, Ling, 1552
 Xamena, F. X. Llabrés i, 1514
 Xiao, Yi, 1540
 Xiong, Chiyi, 1598
 Xu, Sai-Long, 1498
 Yamaryo, Yasuhito, 1510
 Yamamoto, Takehiko, 1496
 Yang, Xiaowu, 1556
 Ying, Jinfa, 1598
 Yoshida, Hiroto, 1510
 Yoshiwara, Akihiko, 1506
 Young, Jr., Victor G., 1576
 Young, Nigel A., 1580
 Yu, Jimmy C., 1552
 Yu, Kai Man K., 1522
 Yuan, Daqiang, 1528
 Yuan, Zhong-Yong, 1558
 Zecchina, A., 1514
 Zeng, Huaqiang, 1556
 Zeng, Qing-Dao, 1498
 Zhang, Junyi, 1598
 Zhang, R., 1502
 Zhang, Rong, 1548
 Zhao, Fengyu, 1548
 Zhao, Jincui, 1582
 Zojer, Egbert, 1490

NOTE: An asterisk in the heading of each paper indicates the author who is to receive any correspondence.