Dalton Transactions

An international journal of inorganic chemistry incorporating Acta Chemica Scandinavica

www.rsc.org/dalton

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

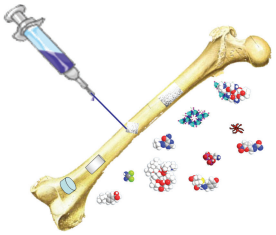
ISSN 1477-9226 CODEN DTARAF (44) 5201–5316 (2006)

Cover

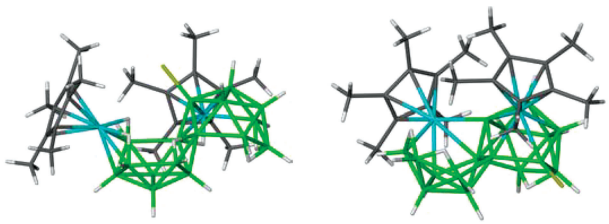
See: Shuang Liu, Jiasheng Zhang, Xin Wang and Gou-Xin Jin, pp. 5225–5230.
The background is a nocturne of some traditional architecture in Shanghai. The main body includes some selected crystal structures and a dimer of $\{Cp^*Ir[S_2C_2(B_{10}H_{10})]\}_2(\mu\text{-bpo})$ which forms a butterfly-shaped figure.

Image reproduced by permission of Guo-Xin Jin from *Dalton Trans.*, 2006, 5225–5230.

PERSPECTIVE



COMMUNICATION



Dalton Transactions (print: ISSN 1477-9226; electronic: ISSN 1477-9234) 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: £2154; US$3942. 2006 Annual (electronic) subscription price: £1939; US$3548. 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 Dalton Transactions, c/o Mercury Airfreight International Ltd., 365 Blair Road, Avenel, NJ 07001. All despatches outside the UK by Consolidated Airfreight.

PRINTED IN THE UK.

Dalton Transactions

An international journal of inorganic chemistry incorporating Acta Chemica Scandinavica

www.rsc.org/dalton

Dalton Transactions contains articles on all aspects of the chemistry of inorganic and organometallic compounds, including biological and solid-state inorganic chemistry; the application of physicochemical techniques to the study of their structures, properties and reactions, including kinetics and mechanisms; new or improved experimental techniques and syntheses.

INFORMATION FOR AUTHORS

Full details of how to submit material for publication in Dalton Transactions are given in the Instructions for Authors (available from http://www.rsc.org/authors). Submissions should be sent *via* ReSourCe: http://www.rsc.org/resource

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.

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.

PAPERS

PAPERS

AUTHOR INDEX

FREE E-MAIL ALERTS AND RSS FEEDS

Contents lists in advance of publication are available on the web *via* www.rsc.org/dalton – 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.

RSS 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

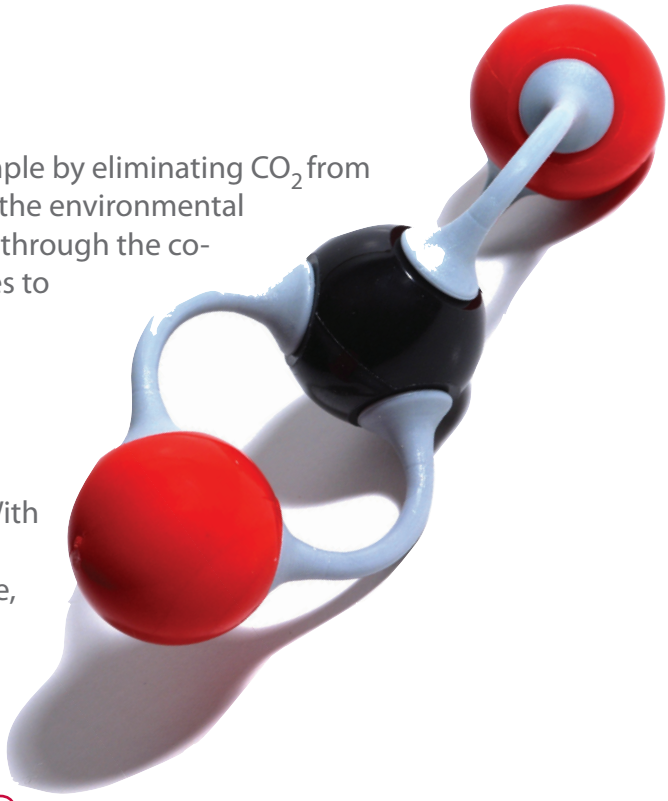
Free site-wide access to Advance Articles and the electronic form of this journal is provided with a full-rate institutional subscription. See www.rsc.org/ejs for more information.

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

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

***Dalton Transactions* web theme issue:**

CO_2 at metal centres



Methods for decreasing excess atmospheric CO_2, for example by eliminating CO_2 from gas-streams during air purification processes, are high on the environmental agenda. The chemistry of carbon dioxide at metal centres through the co-ordination of CO_2 or by reacting CO_2 with metal complexes to prepare carbon containing derivatives may hold some of the answers.

This timely web theme issue, guest edited by Dr. Roger Guilard, Professor of Chemistry at the University of Bourgogne in Dijon, France addresses exactly this topic. With contributed articles printed in regular issues of *Dalton Transactions* and collected online on a dedicated webpage, this first web theme issue from a series to appear in *Dalton Transactions* hails a new age in dynamic and flexible special issue publishing.

Topics covered in CO_2 at metal centres include:

- Study of CO_2 sequestration by various materials
- Catalytic synthesis using CO_2 as a building block
- CO_2 as a building block for supramolecular assemblies
- Chemistry of CO_2 inspired by nature
- Activation of CO_2 *via* formation of metal–CO_2 complexes or insertion into metal–heteroatom bonds
- Metal assisted catalytic reactions in compressed CO_2

Visit the website to **read** the latest articles or to **contribute** your article to this issue

Registered Charity Number: 207890

RSC Publishing

www.rsc.org/dalton/CO2

RSC online shop now open

And to celebrate we're having a sale…

The RSC online shop gives you continuous access to class leading products and services, expertly tailored to cater for your training and educational needs.

Browse: visit our shop to browse over 400 book titles, subscribe or purchase an individual article in one of our journals, register to attend a conference or one of our training events.

Gift Ideas: if you're looking for gift ideas, look no further. In our online shop you'll find everything from popular science books like *The Age of the Molecule* and the inspirational *Elegant Solutions* from award winning writer, Philip Ball, to our stunning Visual Elements wall chart and brain-teasing *Chemistry Su Doku* and *Crosswords* puzzle series.

Sale Now On: shop online during November and December and get a huge **25% discount*** on all books, puzzles/games, videos or wall charts purchased.

* Discount applied to your purchases when you check out.
Offer ends December 31st, 2006

04100607

RSC is a not for profit organisation. Revenue generated from collecting membership subscriptions, conference registration fees or through sales of our products is invested to support chemical science initiatives across the world.

Registered Charity Number: 207890

RSC | Advancing the Chemical Sciences

www.rsc.org/shop