Organic & Biomolecular Chemistry

An international journal of synthetic, physical and biomolecular organic chemistry

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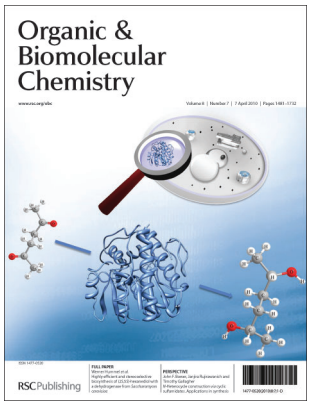
ISSN 1477-0520 CODEN OBCRAK 8(7) 1481–1732 (2010)



Cover

See Werner Hummel *et al.*, pp. 1540–1550.
Discovery of the bakers' yeast reductase responsible for the reduction of 2,5-hexanedione into enantiopure (2*S*,5*S*)-hexanediol. This diol serves as a building block for the production of various fine chemicals and pharmaceuticals.

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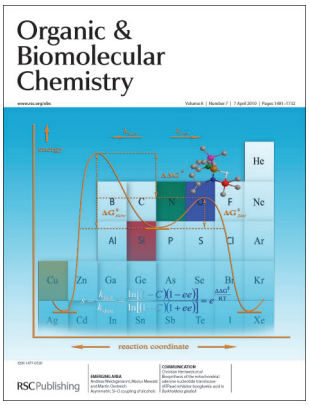

Inside cover

See Martin Oestreich *et al.*, pp. 1497–1504.
Stereoselective protection of alcohols is achieved through asymmetric Si–O coupling of silicon reagents and either chiral racemic alcohols (kinetic resolution) or prochiral alcohols (desymmetrisation).

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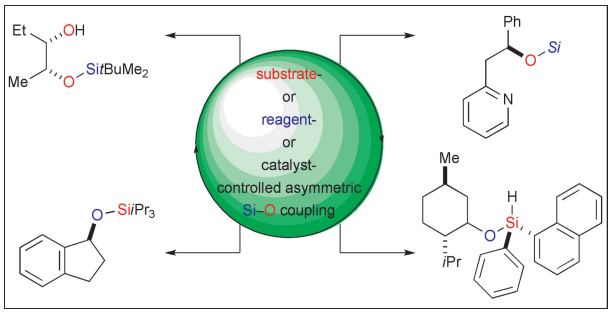
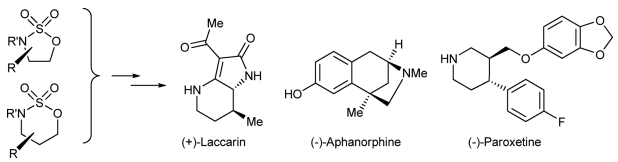
EMERGING AREA



PERSPECTIVE



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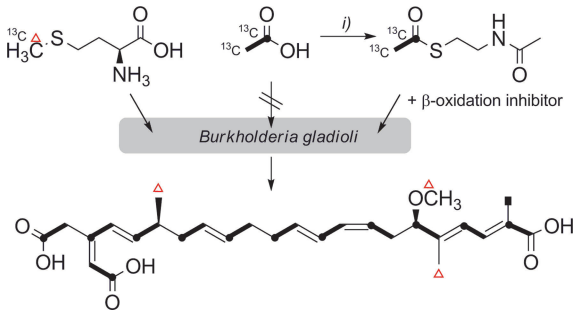
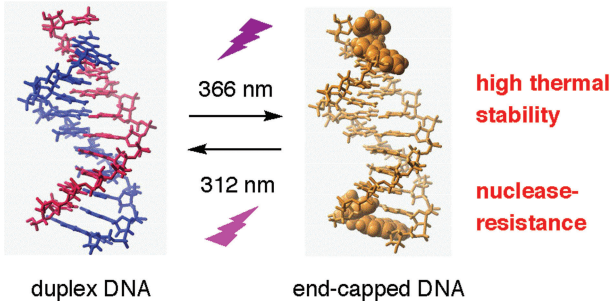
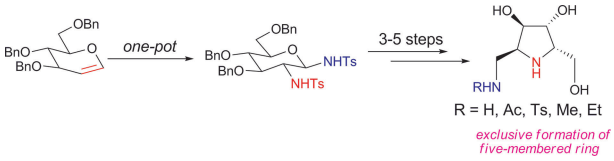
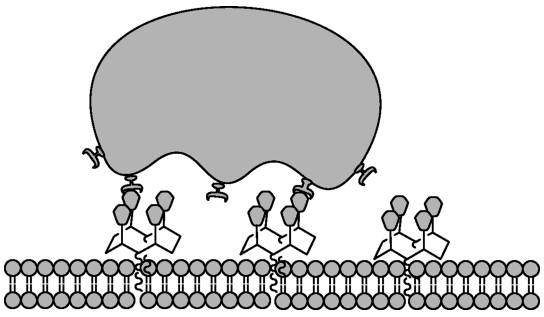








Fifth International Symposium on Macrocyclic and Supramolecular Chemistry

ISMSC 2010

June 6 - 10, 2010, Nara (Japan)

Plenary Speakers

Craig Hawker (UC Santa-Babara, US)
David Leigh (Edinburgh, UK)
Stefan Matile (Geneva, Switzerland)
Alan Rowan (Nijmegen, Netherlands)
Mitsuhiko Shionoya (Tokyo, Japan)

Invited Speakers

Takuzo Aida / Cornelia Bohne / David Dearden / Harry Anderson / Lee Cronin / Philip Gale / Shinji Inagaki / Kimoon Kim / Nobuo Kimizuka / Hiroshi Kitagawa / Jeffery Moore / Achim Müller / Colin Nuckolls / Hiroyuki Noji / V. Ramamurthy / Julius Rebek, Jr. / Jean-Pierre Sauvage / Jonathan Sessler / George Shimizu / Fraser Stoddart / James Tucker / Thomas R. Ward / Omar Yaghi / Kimihisa Yamamoto / Vivian Yam / Nobuhiko Yui

In 2006, the International Symposium on Macrocyclic Chemistry (established in 1977) and the International Symposium on Supramolecular Chemistry (established in1980) were merged in a constructive way to establish ISMSC. Since then, ISMSC has been the largest symposium in the fields of macrocyclic chemistry and supramolecular chemistry.

Important Deadlines

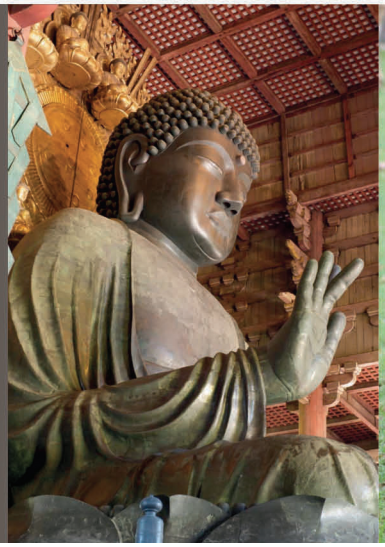
Early Registration: April, 15th
Regular Registration: May, 15th
Abstract submission: May, 15th

NARA ISMSC 2010

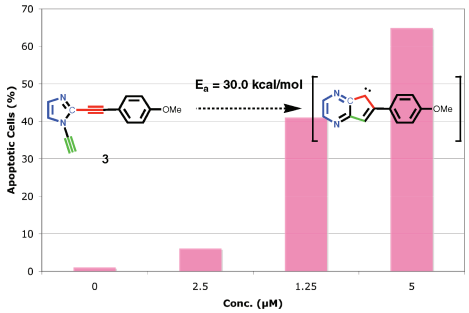
For registration, abstract submission visit: http://ismsc2010.org/

Nara is the ancient capital of Japan. The year 2010 is the 1300th anniversary of Nara Capital. So, various events will be held in Nara to commemorate the 1300th anniversary.

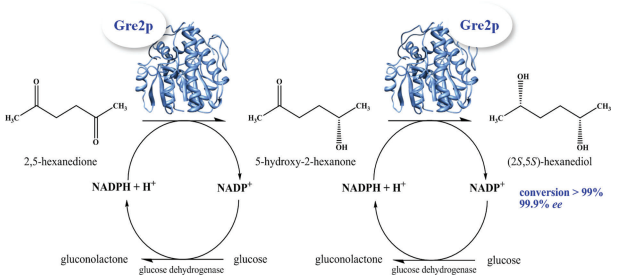
Honorary Chair: Seiji Shinkai
Chair: Makoto Fujita
Co-Chair: Yoshihisa Inoue

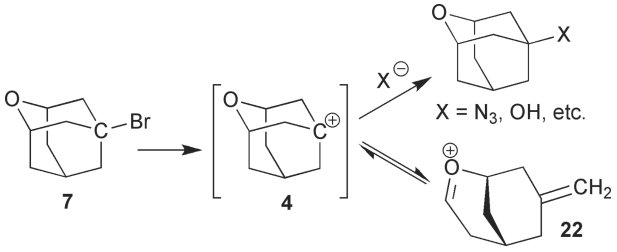


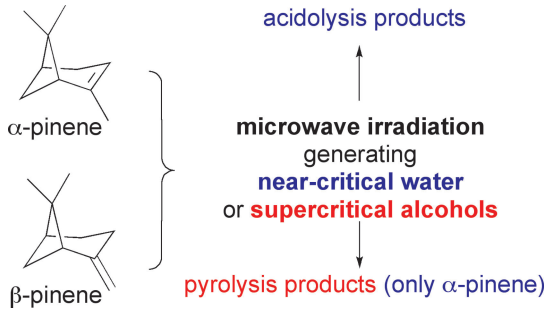
COMMUNICATIONS



PAPERS







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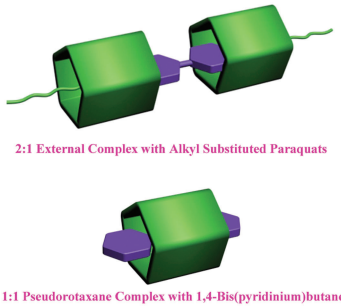
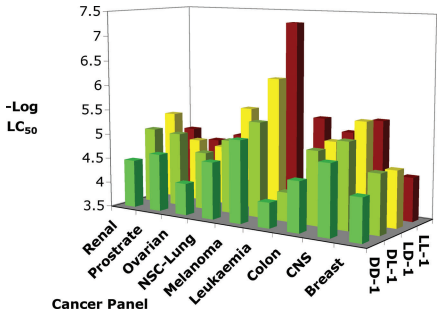


Complex interactions of pillar[5]arene with paraquats and bis(pyridinium) derivatives

Chunju Li,* Qianqian Xu, Jian Li, Feina Yao and Xueshun Jia*

The pillar[5]arene host forms 2 : 1 external complexes with alkyl-substituted paraquats, and it forms 1 : 1 pseudorotaxane-type inclusion complexes with methylene [–$(CH_2)_n$–] connected bis(pyridinium) derivatives.

1577

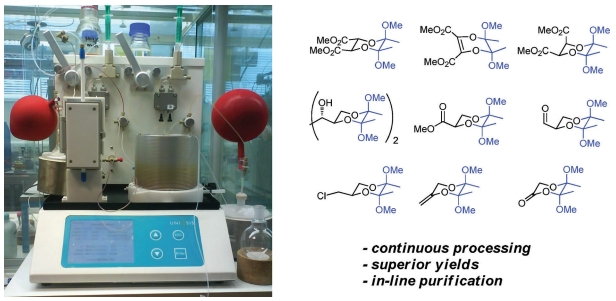


Triple molecular target approach to selective melanoma cytotoxicity

Edward B. Skibo,* Akmal Jamil, Brittany Austin, Douglas Hansen and Armand Ghodousi

Phenylalanine-linked pyrrolo[1,2-*a*]benzimidazole **LL1** was successfully designed to target melanoma cells *in vitro*; the design utilised three molecular targets: a phenylalanine pump, the reducing enzyme DT-diaphorase, and IMP dehydrogenase.

1588

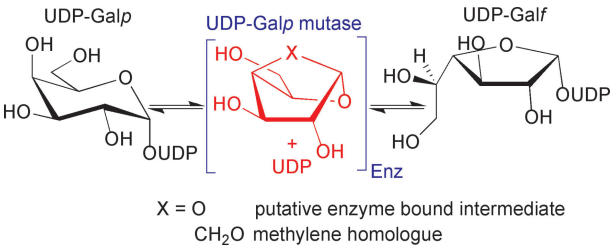


The continuous flow synthesis of butane-2,3-diacetal protected building blocks using microreactors

Catherine F. Carter, Ian R. Baxendale, John B. J. Pavey and Steven V. Ley*

The continuous flow syntheses of a family of butane-2,3-diacetal protected building blocks has been achieved using microreactors in concert with solid supported reagents and scavengers.

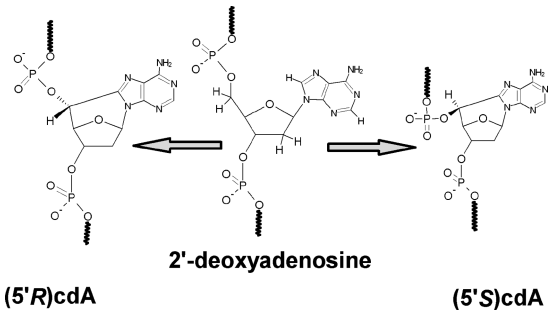
1596

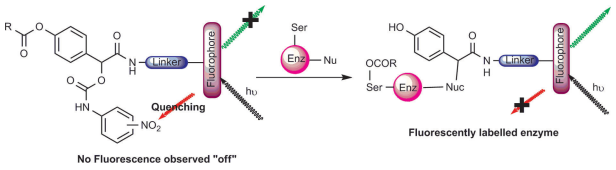


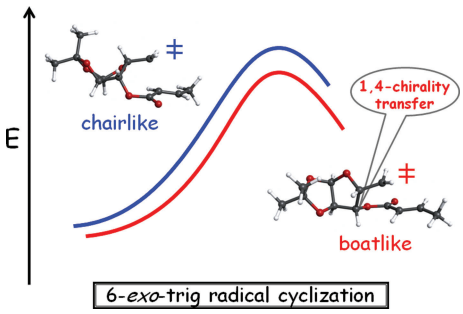
The UDP-Gal*p* mutase catalyzed isomerization: synthesis and evaluation of 1,4-anhydro-β-D-galactopyranose and its [2.2.2] methylene homologue

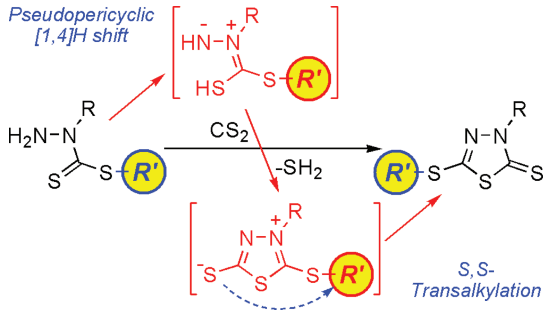
Ali Sadeghi-Khomami, Tatiana J. Forcada, Claire Wilson, David A. R. Sanders and Neil R. Thomas*

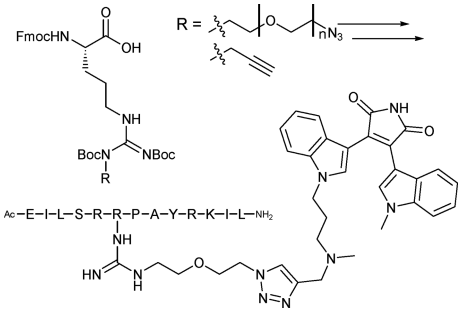
The synthesis of 1,4-anhydro-β-D-galactopyranose (1,5-anhydro-α-D-galactofuranose), a proposed intermediate in the ring contraction isomerisation catalyzed by UDP-galactopyranose mutase, together with its [2.2.2] bicyclic methylene homologue, synthesised as a possible competitive inhibitor or alternative substrate, are reported.

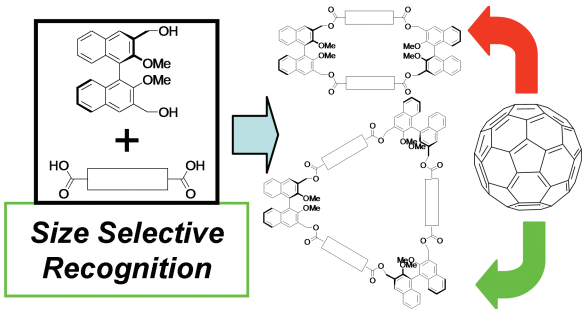


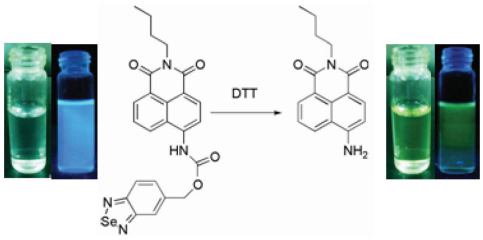


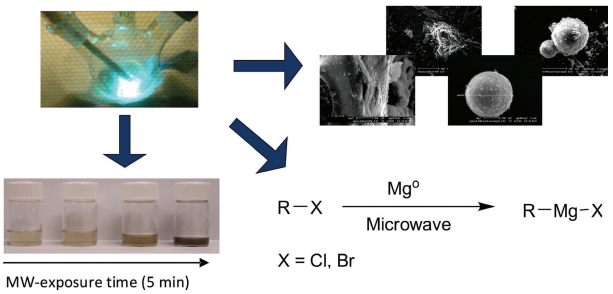


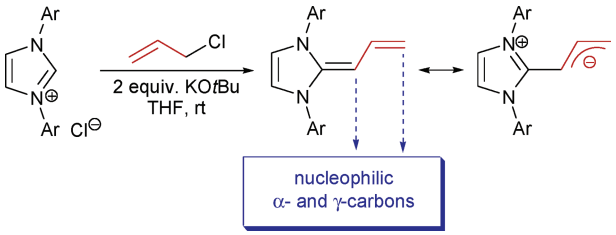


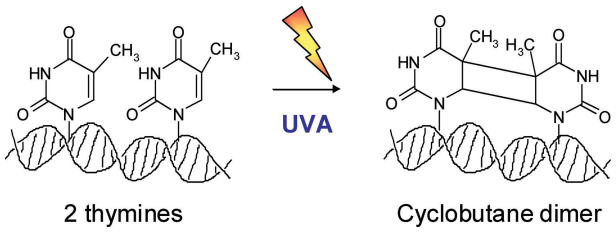


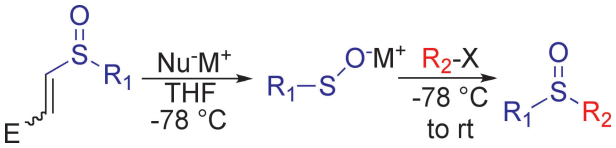












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Dalton Discussion 12:
Catalytic C-H and C-X Bond Activation

13 - 15 September 2010
Durham University, UK
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The meeting will highlight the importance of catalytic bond activation in cross-coupling chemistry. The latest research will be presented and discussed.

Topics

- Synthetic chemistry (including applications)
- Inorganic and organometallic chemistry
- Reaction mechanism (physical organic and organometallic chemistry)
- Transition metal catalysis
- Applications of C-H and C-X bond activation in organic synthesis

Keynote speakers

Jennifer Love
The University of British Columbia, Canada

William D. Jones
University of Rochester, USA

Aiwen Lei
Wuhan University, China

Zhang-jie Shi
Peking University, China

Invited speakers

Robin Bedford
University of Bristol, UK

John M. Brown
University of Oxford, UK

Stuart Macgregor
Heriot-Watt University, Edinburgh, UK

Hans de Vries
DSM Pharmaceutical Products, The Netherlands

Offers of contributed papers related to the listed themes for poster presentation are invited by 16 July 2010.
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Registration will open in spring 2010.

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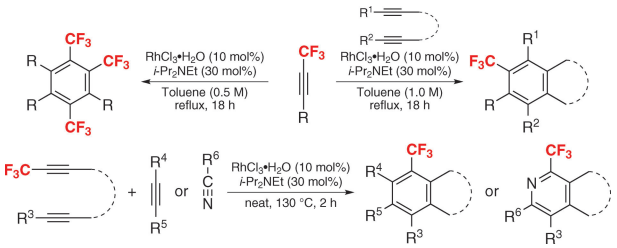

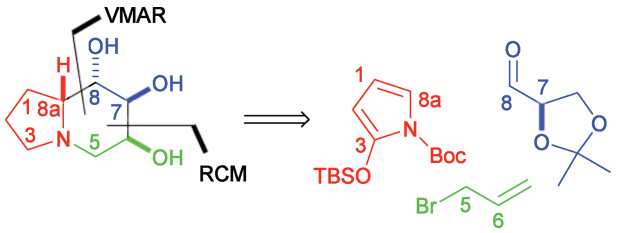

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