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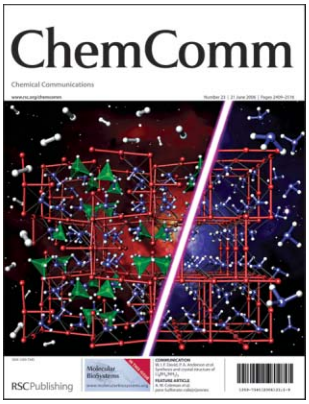

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See William I. F. David, Paul A. Anderson *et al.*, page 2439.
Synthesis and structure of the new complex hydride $Li_4BH_4(NH_2)_3$ solved from synchrotron X-ray and neutron powder diffraction data.
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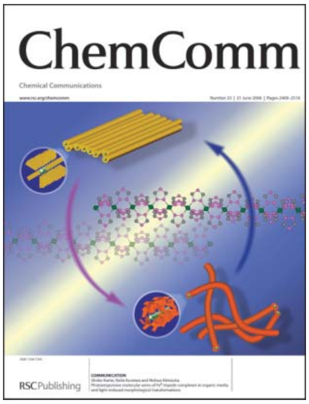

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Photoresponsive molecular wires of lipophilic Fe(II) 1,2,4-triazole complexes in organic media and their controlled self-assembly.
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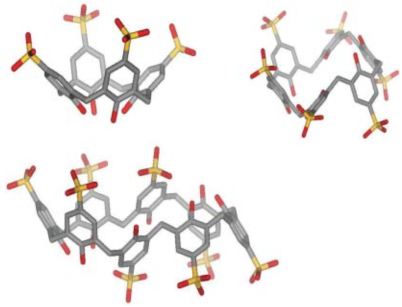
CHEMICAL SCIENCE

FEATURE ARTICLE



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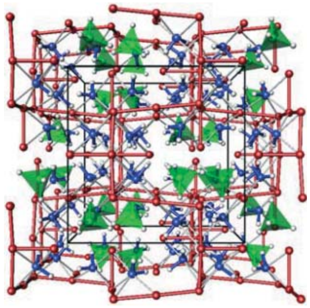
2439

Synthesis and crystal structure of $Li_4BH_4(NH_2)_3$

Philip A. Chater, William I. F. David,* Simon R. Johnson, Peter P. Edwards and Paul A. Anderson*

The structure of the new complex hydride $Li_4BH_4(NH_2)_3$ formed by the reaction of $LiBH_4$ with $LiNH_2$ solved by computational methods from synchrotron X-ray and neutron powder diffraction data.



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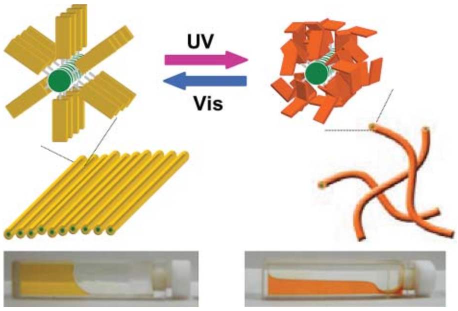
Photoresponsive molecular wires of Fe^{II} triazole complexes in organic media and light-induced morphological transformations

Shoko Kume, Keita Kuroiwa and Nobuo Kimizuka*

Photomanipulation of lipophilic 1D metal complexes leads to reversible control over morphology, assembly and the gel-to-sol transition in organic media.



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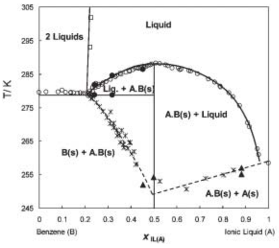
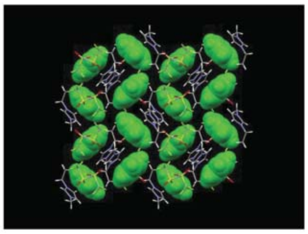
Condensed phase behaviour of ionic liquid–benzene mixtures: congruent melting of a $[emim][NTf_2]\cdot C_6H_6$ inclusion crystal

Joanna Òachwa, Isabel Bento, M. Teresa Duarte, José N. Canongia Lopes and Luís P. N. Rebelo*

The solid–liquid phase diagram of the ionic liquid $[emim][NTf_2]$ + benzene reveals an equimolar inclusion compound with congruent melting temperature and its X-ray structure shows the formation of tube-like structures of benzene around the ionic liquid ions.





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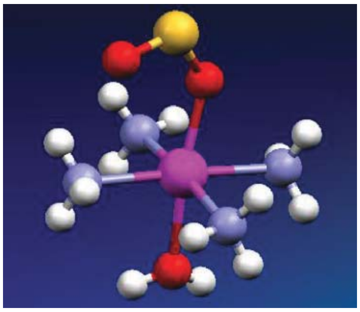
Photocrystallographic structure determination of a new geometric isomer of $[Ru(NH_3)_4(H_2O)(\eta^1\text{-OSO})][MeC_6H_4SO_3]_2$

Katharine F. Bowes, Jacqueline M. Cole,* Shamus L. G. Husheer, Paul R. Raithby,* Teresa L. Savarese, Hazel A. Sparkes, Simon J. Teat and John E. Warren

Photocrystallographic techniques have been used to determine the crystal structure of the metastable η^1-OSO linkage isomer of the $[Ru(NH_3)_4(H_2O)(SO_2)]^{2+}$ cation.



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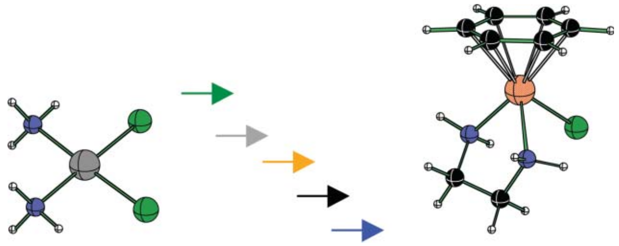

In silico evolution of substrate selectivity: comparison of organometallic ruthenium complexes with the anticancer drug cisplatin

Dirk V. Deubel* and Justin Kai-Chi Lau

A comparative quantum chemical approach helps to clarify how the selectivity of anticancer metallopharmaceuticals towards potential biological targets can be controlled by metal and ligands.

2454

Reaction of arynes, *N*-heteroaromatics and nitriles

Masilamani Jeganmohan and Chien-Hong Cheng*

Various *N*-heteroaromatic compounds, including pyridines, quinolines and isoquinoline, react with arynes and nitrile-containing solvents to give *N*-arylated 1,2-dihydro-2-pyridinyl, -2-quinolinyl and -1-isoquinolinyl nitriles in excellent yields.

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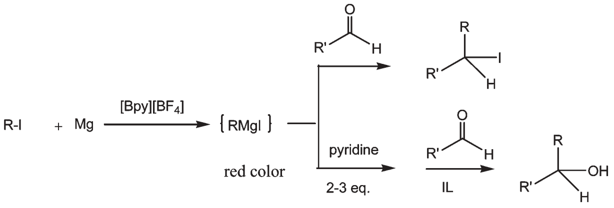

Grignard reagents in ionic liquids

Man Chun Law, Kwok-Yin Wong and Tak Hang Chan*

Grignard reagents were generated for the first time from magnesium and organic iodides in the ionic liquid *n*-butylpyridinium tetrafluoroborate, [bpy][BF_4], and they showed different reactivity from classical Grignard reagents in organic solvents.

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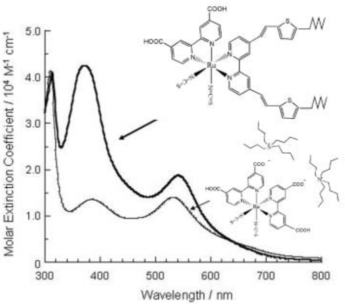

A novel ruthenium sensitizer with a hydrophobic 2-thiophen-2-yl-vinyl-conjugated bipyridyl ligand for effective dye sensitized TiO_2 solar cells

Ke-Jian Jiang, Naruhiko Masaki, Jiang-bin Xia, Shuji Noda and Shozo Yanagida*

The novel 2-thiophen-2-yl-vinyl conjugated ruthenium sensitizer (HRS-1) shows respectable light harvesting performance in the visible-light region, giving a higher solar light-to-electricity conversion efficiency compared to the N719 sensitizer under comparable conditions.

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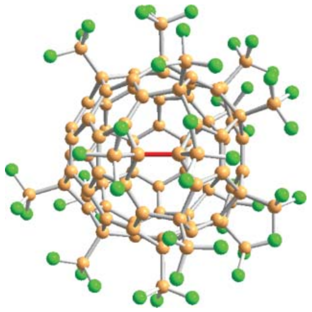
Preparation, crystallographic characterization and theoretical study of $C_{70}(CF_3)_{16}$ and $C_{70}(CF_3)_{18}$

Stanislav M. Avdoshenko, Alexey A. Goryunkov, Ilya N. Ioffe, Daria V. Ignat'eva, Lev N. Sidorov, Philip Pattison, Erhard Kemnitz and Sergey I. Troyanov*

$C_{70}(CF_3)_{16}$ and $C_{70}(CF_3)_{18}$ are the first CF_3 fullerene derivatives to comprise a pair of adjacent CF_3 groups. They have been isolated from a mixture obtained *via* reaction of C_{70} with CF_3I, characterized in a single crystal XRD study and theoretically investigated at the DFT level of theory.



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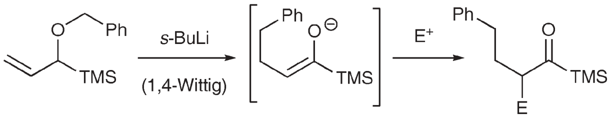
α-Substituted acylsilanes *via* a highly selective [1,4]-Wittig rearrangement of α-benzyloxyallylsilane

Edith N. Onyeozili and Robert E. Maleczka Jr.*

After deprotonation with *s*-BuLi at cold temperatures, α-benzyloxyallylsilane undergoes [1,4]-Wittig rearrangement with unprecedented selectivity to give an enolate that can be used to generate a variety of acylsilanes.



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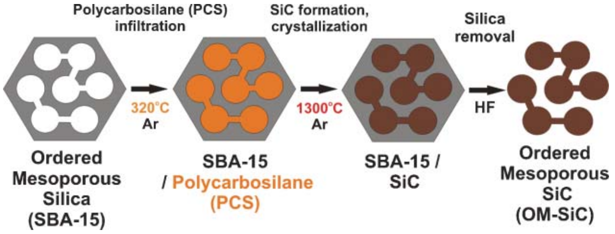
Ordered mesoporous silicon carbide (OM-SiC) *via* polymer precursor nanocasting

Piotr Krawiec, Dorin Geiger and Stefan Kaskel*

Ordered mesoporous SiC with high specific surface area (650–800 m^2 g^{-1}) and well ordered pore structure was obtained *via* nanocasting of polycarbosilanes into ordered mesoporous silica SBA-15 and subsequent conversion of the polymer at 1300 °C.



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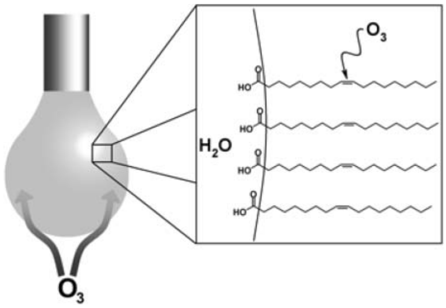
Real-time monitoring of the ozonolysis of unsaturated organic monolayers

Erick González-Labrada, Rolf Schmidt and Christine E. DeWolf*

The reaction of ozone with unsaturated organic molecules at the air–water interface of a pendant drop was followed by axisymmetric drop shape analysis (ADSA).



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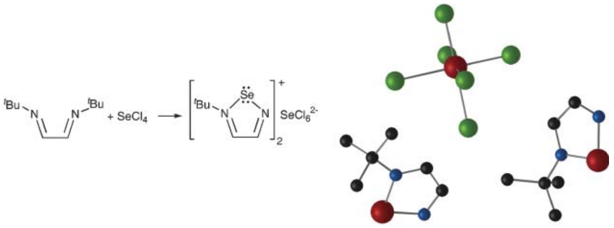
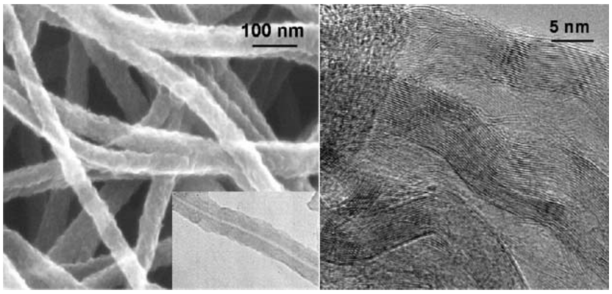


The direct reaction of the ^{t}Bu-DAB ligand with $SeCl_4$: a redox route to selenium–nitrogen heterocycles

Jason L. Dutton, Jocelyn J. Tindale, Michael C. Jennings and Paul J. Ragogna*

The reaction of $SeCl_4$ with the ubiquitous *tert*-butyl-substituted diazabutadiene ligand results in the isolation of a rare example of a 1,2,5-selenadiazolium cation, representing a novel route to Se–N ring formation. These heterocycles can be derivatised at selenium, which has led to the identification of a short Se···N secondary bonding interaction.

2477



Microwave synthesis of nanocarbons from conducting polymers

Xinyu Zhang and Sanjeev K. Manohar*

Bulk quantities of nanocarbons having pre-selected morphology can be synthesized, rapidly, and in one step, by heating doped conducting polymer precursors having similar morphology in a microwave oven, where the precursors' bulk morphology is retained upon microwave heating (spheres, fibers, tubes).

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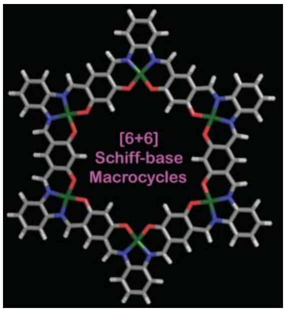
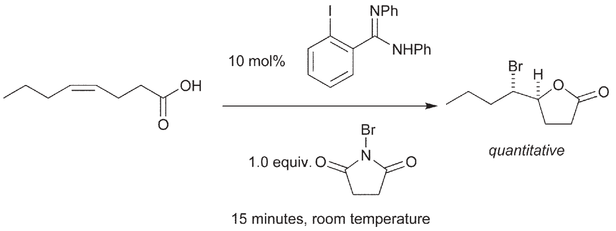


[6 + 6] Schiff-base macrocycles with 12 imines: giant analogues of cyclohexane

Joseph K.-H. Hui and Mark J. MacLachlan*

The Schiff-base condensation reaction of 12 components in solution has yielded large hexagon-shaped conjugated macrocycles with 6 N_2O_2 coordination sites.

2483



Ortho-substituted iodobenzenes as novel organocatalysts for bromination of alkenes

D. Christopher Braddock,* Gemma Cansell and Stephen A. Hermitage

Suitably *ortho*-substituted iodobenzenes act as catalysts for the transfer of electrophilic bromine from *N*-bromosuccinimide to alkenes as exemplified by the bromolactonisation of unsaturated aliphatic carboxylic acids.

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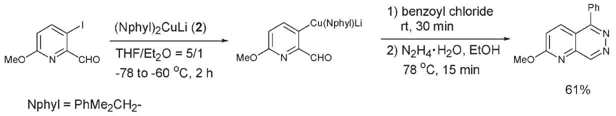
Direct preparation of copper organometallics bearing an aldehyde function *via* an iodine–copper exchange

Xiaoyin Yang and Paul Knochel*

The iodine–copper exchange reaction allows the direct preparation of various aryl, heteroaryl and alkenyl cuprates bearing a formyl group, thus allowing a direct synthesis of polyfunctional aldehydes without the need of protecting groups or an additional oxidation step.



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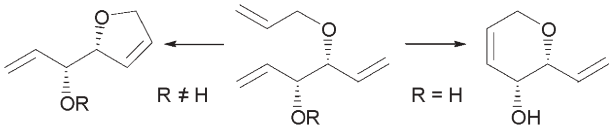
Control of ring size selectivity by substrate directable RCM

Bernd Schmidt* and Stefan Nave

The presence or absence of a hydroxy protecting group determines the ring size selectivity of an RCM reaction. This observation suggests that hydroxy groups may exert strong catalyst-directing effects in olefin metathesis reactions.



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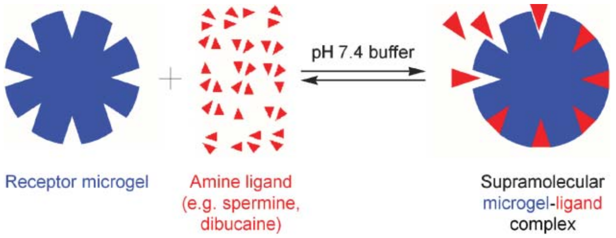
Supramolecular binding of protonated amines to a receptor microgel in aqueous medium

Alan Tominey, David Andrew, Lewis Oliphant, Georgina M. Rosair, Juliette Dupré and Arno Kraft*

Polyanionic microgels containing negatively charged tetrazole binding sites were synthesised and showed supramolecular binding of various protonated amines (*e.g.* dibucaine, propranolol, spermine) in a competitive aqueous medium at millimolar concentration.



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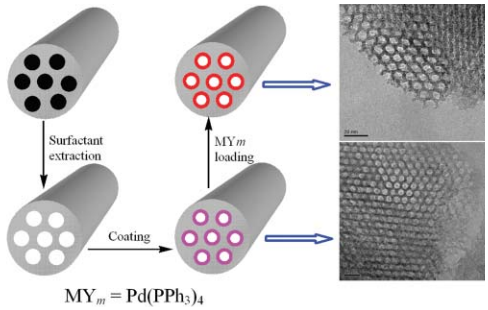
A water-compatible, highly active and reusable PEG-coated mesoporous silica-supported palladium complex and its application in Suzuki coupling reactions

Qing Yang, Shengming Ma,* Jixue Li, Fengshou Xiao* and Hai Xiong

An air stable heterogeneous palladium catalyst, prepared from a coated mesoporous material containing a layer of PEG, showed very high catalytic activity for aqueous Suzuki coupling reactions.



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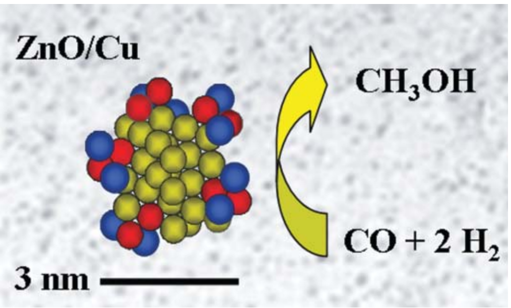
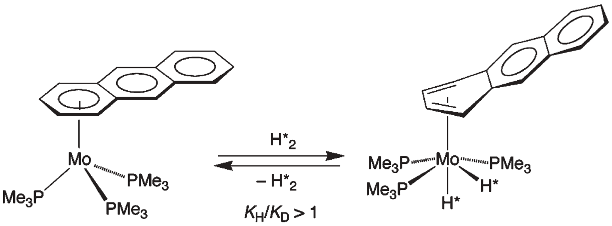


A colloidal ZnO/Cu nanocatalyst for methanol synthesis

Marie Katrin Schröter, Lamma Khodeir, Maurits W. E. van den Berg, Todor Hikov, Mirza Cokoja, Shaojun Miao, Wolfgang Grünert, Martin Muhler and Roland A. Fischer*

Free-standing, ZnO surface decorated Cu nanoparticles of 1–3 nm in size form stable colloids in squalane and proved to be highly active quasi homogeneous catalysts for methanol synthesis from CO and H_2.

2501

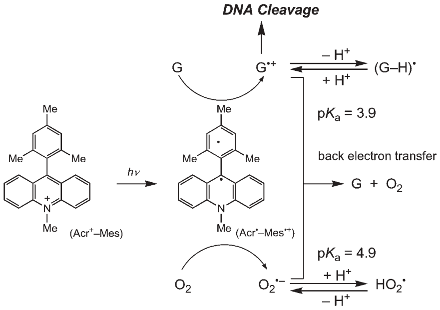


A normal equilibrium isotope effect for oxidative addition of H_2 to (η^6-anthracene)Mo(PMe_3)$_3$

Guang Zhu, Kevin E. Janak and Gerard Parkin*

Oxidative addition of H_2 and D_2 to the anthracene complex (η^6-AnH)Mo(PMe_3)$_3$ giving (η^4-AnH)Mo(PMe_3)$_3X_2$ (X = H, D) is characterized by a normal equilibrium isotope effect (K_H/K_D > 1) at temperatures close to ambient, in marked contrast to the inverse values that have been previously reported for other oxidative addition reactions.

2504

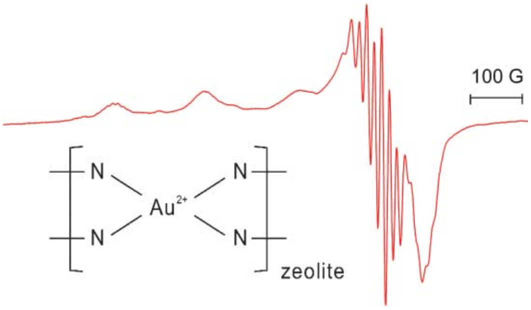


Direct detection of nucleotide radical cations produced by electron-transfer oxidation of DNA bases with electron-transfer state of 9-mesityl-10-methylacridinium ion and resulting efficient DNA cleavage without oxygen

Kei Ohkubo, Kazusa Yukimoto and Shunichi Fukuzumi*

Photoinduced electron transfer of DNA as well as DNA bases with 9-mesityl-10-methylacridinium ion results in formation of all types of DNA base radical cations, which have been detected as the transient absorption spectra in the laser flash photolysis measurements, leading to efficient DNA cleavage in the absence of O_2.

2507



ESR observation of the formation of an Au(II) complex in zeolite Y

Zhenping Qu, Liviu Giurgiu and Emil Roduner*

First time observation of an Au(II) complex stabilized in a zeolite Y supercage, as evidenced by electron spin resonance (ESR). Confinement in the zeolite pores obviously prevents this unusual oxidation state from undergoing disproportionation.

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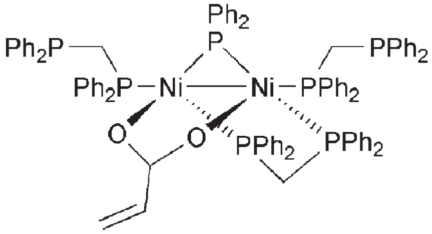

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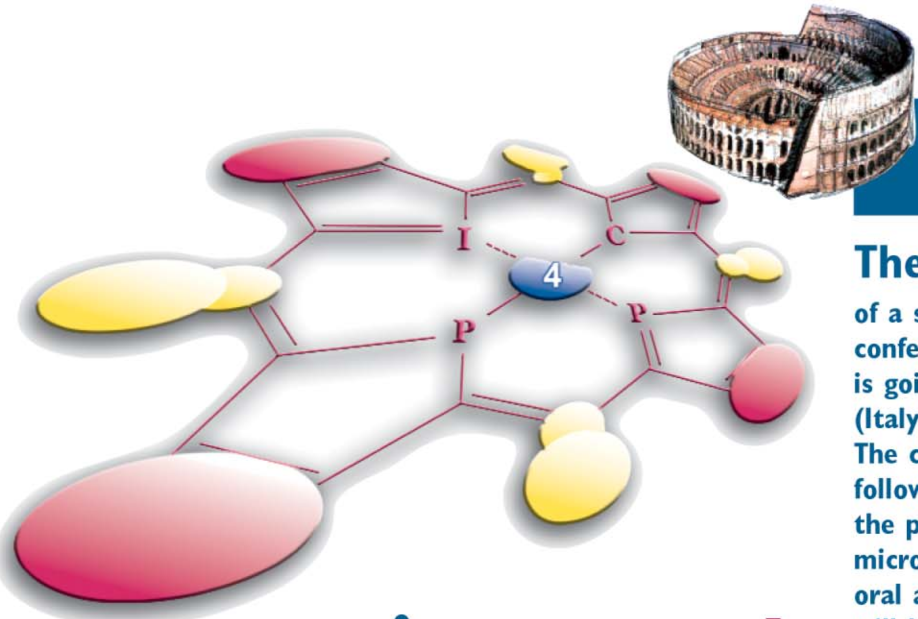

The 4th edition

**of a series of successful conferences that began in Dijon is going to take place in Rome (Italy), July 2-7, 2006.
The conference framework will follow the successful format of the previous ICPPs, and a series of microsymposia, plenary lectures, oral and poster presentations, will be included in the conference program, giving the opportunity to all the attendees to present their researches in the field.**

Rome, July 2-7, 2006

icpp—4

International Conference on Porphyrins and Phthalocyanines

Organizing Institutions

University of Rome "Tor Vergata"
Society of Porphyrins and Phthalocyanines

ICPP-4 Plenary Speakers

Takuzo Aida
University of Tokyo, Tokyo, Japan

Claudio Ercolani
University of Rome "La Sapienza", Rome, Italy

Karl M. Kadish
University of Houston, Houston, USA

Nagao Kobayashi
Tohoku University, Sendai, Japan

Gerd N. La Mar
University of California, Davis, USA

Bernard Meunier
CNRS, Toulouse, France

Jonathan L. Sessler
University of Texas, Austin, USA

Lifetime Achievement Award winners

Robert Burns Woodward Career Award in Porphyrin Chemistry
Kevin M. Smith
Louisiana State University, USA

Hans Fischer Career Award in Porphyrin Chemistry
Fred Anson
California Institute of Technology, USA

Eraldo Antonini Award in Hemoprotein Science
Ivano Bertini
University of Florence, Italy

Linstead Career Award in Phthalocyanine Chemistry
Clifford Leznoff
York University, Canada

Young Investigator Awards for 2006

David Goldberg
Johns Hopkins University, USA

Steven J. Langford
Monash University, Australia

Masayuki Takeuchi
Kyushu University, Japan

ICPP represents a unique occasion where the world's best scientists in the area of porphyrins and related macrocycles will present contributions describing their latest results.
The conference will highlight innovative ideas and latest developments encompassing all areas of tetrapyrrole chemistry, physics, biology and medicine, with a special attention devoted to new developments and emerging technologies.
The conference web page http://icpp.uniroma2.it, will provide the most current information about the meeting and venue.
Selected venue, the Angelicum Pontifical University of St. Thomas, Rome, is hosted in a Dominican monastery built in the XVI century on the Quirinale hill. It is at few hundred meters from Piazza Venezia adjacent to the Foro Romano: the largest archaeological area in the world.

Roberto Paolesse and Pietro Tagliatesta
Co-Chairpersons