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Cover

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C73

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EDITORIAL

1363

Thematic issue on trends in supramolecular chemistry

This publication is based (partly) on the presentations made at the ESF Research Conference on Supramolecular Chemistry-Molecular Architectures and Systems (Obernai, France, 14–19 October 2005) organised by the European Science Foundation. This information is the sole responsibility of the author(s) and does not reflect the ESF's opinion. The ESF is not responsible for any use that might be made of data appearing in this publication.



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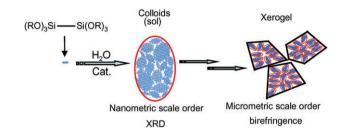
PERSPECTIVES

1364

Supramolecular self-organization in non-crystalline hybrid organic-inorganic nanomaterials induced by van der Waals interactions

Frédéric Lerouge, Geneviève Cerveau and Robert J. P. Corriu*

This paper describes a new type of organization of hybrid materials that occurs under kinetic control, and presents characteristics that are different depending on the scale: nano, micro and even milli.

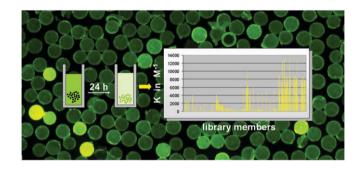


1377

Combinatorial receptor finding—large and random vs. small and focused libraries

Carsten Schmuck* and Peter Wich

The use of small but focused libraries in combinatorial chemistry is nowadays becoming increasingly into focus, *e.g.* in supramolecular chemistry to identify artificial receptors for peptide binding.



LETTER

1386

Copper(1)-induced threading of two bis-macrocycles on two rods: a cyclic [4]rotaxane

Jean-Paul Collin, Julien Frey, Valérie Heitz, Efstathia Sakellariou, Jean-Pierre Sauvage* and Christian Tock

A cyclic rotaxane tetramer has been synthesised by threading two two-coordination site rods through two bis-macrocycles in the presence of copper(1) as a template.



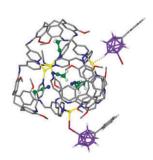
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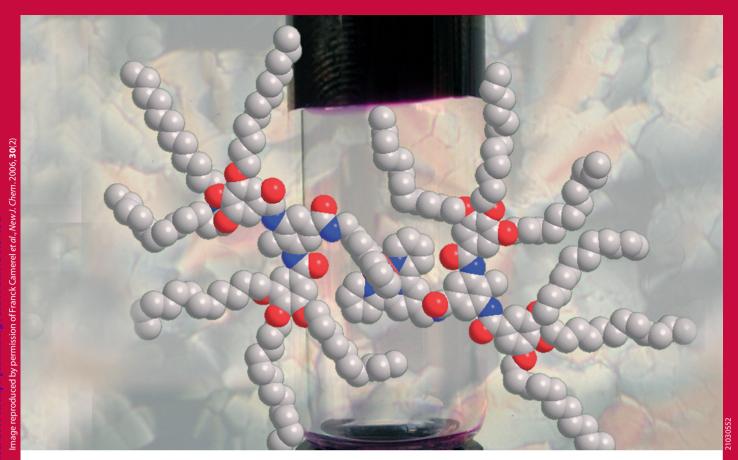


Crystal-packing motifs of $[Ag_4L_4]^{4+}$ star-burst tetrahedra

Christopher J. Sumby, Michael J. Carr, Andreas Franken, John D. Kennedy, Colin A. Kilner and Michaele J. Hardie*

A metallo-supramolecular tetrahedron [Ag₄L₄(CH₃CN)₂ (PhCB₉H₈I)₂]²⁺ with the novel [1-Ph-closo-CB₉H₈-6-I]⁻ anion has a star-burst structure similar to other reported [Ag₄L₄]⁴⁺ tetrahedra, though shows different overall crystal packing.





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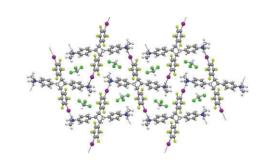
PAPERS

1397

Solid state synthesis under supramolecular control of a 2D heterotetratopic self-complementary tecton tailored to halogen bonding

Giovanni Marras, Pierangelo Metrangolo,* Franck Meyer, Tullio Pilati, Giuseppe Resnati* and Ashwani Vij

A solid state photoreaction under supramolecular control has been applied to the molecular synthesis by design of a heterotetratopic tecton tailored to XB-based crystal engineering.

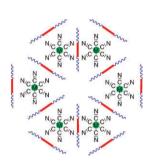


1403

Molecular tectonics: control of packing of hybrid 1-D and 2-D H-bonded molecular networks formed between bisamidinium dication and cyanometallate anions

Pierre Dechambenoit, Sylvie Ferlay,* Mir Wais Hosseini,* Jean-Marc Planeix and Nathalie Kyritsakas

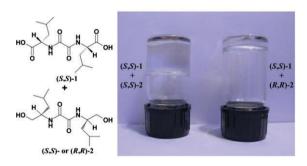
Upon combining the dicationic bis-amidinium tecton 2 bearing four propyl chains with cyanometallate anions neutral 1- and 2-D hybrid networks based on charge assisted H-bonds are generated and their packing controlled in the crystalline phase.



1411

Synergic effect in gelation by two-component mixture of chiral gelators

Zoran Džolić, Kristina Wolsperger and Mladen Žinić* The homochiral combination of the constitutionally different gelators (S,S)-1 + (S,S)-2 is able to harden up to 5 times the volume of certain solvents than the heterochiral (S,S)-1 + (R,R)-2 combination and up to 7 times the volume than an equal mass of each of the single components.

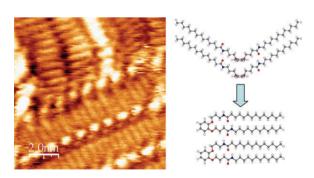


1420

Scanning tunnelling microscopy of a foldamer prototype at the liquid/solid interface: water/Au(111) versus 1-octanol/ graphite

Andrey S. Klymchenko, Norbert Schuurmans, Mark van der Auweraer, Ben L. Feringa, Jan van Esch* and Steven De Feyter*

We report the design and synthesis of a catechol based foldamer containing amide functionalized alkyl chains, and its folding at the liquid/solid interface.



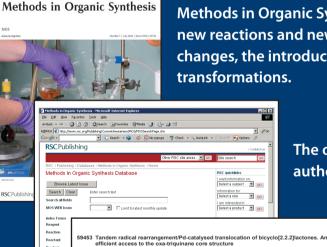
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Org. Biomol. Chem., 2006, 4(8), 1464-1467

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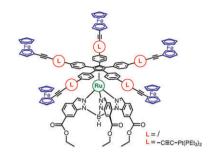
PAPERS



Synthesis of triester-functionalized molecular motors incorporating bis-acetylide *trans*-platinum insulating fragments

Guillaume Vives, Alexandre Carella, Stéphanie Sistach, Jean-Pierre Launay and Gwénaël Rapenne*

Two prototypes of electron-fuelled molecular motors bearing ester anchoring groups are synthesized. The insulating role of *trans*-platinum spacers separating the core and the electroactive groups is also discussed.

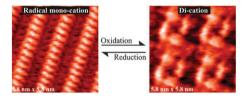


1439

Surface redox chemistry of adsorbed viologens on Cu(100)

Duc-Thanh Pham, Knud Gentz, Caroline Zörlein, Nguyen T. M. Hai, Sung-Lin Tsay, Barbara Kirchner,* Simone Kossmann, Klaus Wandelt and Peter Broekmann*

2D phases of redox-active dibenzyl-viologens immobilized on an anion modified Cu(100) electrode surface undergo quasi-reversible structural transitions driven by electron transfer reactions.

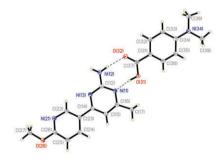


1452

Balancing intermolecular hydrogen-bond interactions for the directed assembly of binary 1:1 co-crystals

Christer B. Aakeröy,* Nate Schultheiss, John Desper and Curtis Moore

A systematic structural study of nine molecular co-crystals demonstrate that 2-aminopyrimidine is a very effective binding site for carboxylic acids even in the presence of a potentially disruptive hydrogen-bonding donor/acceptor moiety such as pyridine.

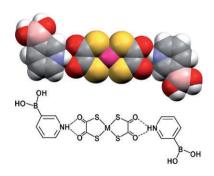


1461

Pyridinium boronic acid salts in crystal synthesis

Hulya Kara, Christopher J. Adams, A. Guy Orpen* and Thomas J. Podesta

Use of the 3- and 4-pyridinium boronic acid tectons in salts with $[M(dto)_2]^{2-}$ (M = Ni, Pd, Pt and Cu) and $[Pt(ox)_2]^{2-}$ leads to two series of crystalline isomorphous salts in which NH–O and $B(OH)_2\cdots$ carboxylate bonds are formed.



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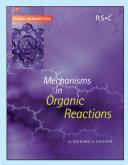
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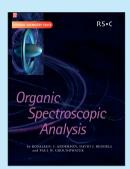
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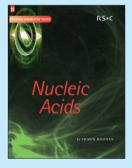
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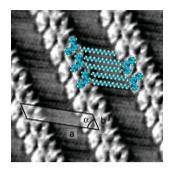
PAPERS



An evaluation of the relationship between two- and three-dimensional packing in self-organised monolayers and bulk crystals of amphiphilic 2,2':6',2"-terpyridines

Edwin C. Constable,* H.-J. Güntherodt, Catherine E. Housecroft, Leo Merz, Markus Neuburger, Silvia Schaffner and Yaqiu Tao

Direct visualisation of chirality in chiral domains in monolayers of prochiral compounds.



1480

CMP(O) tripodands: synthesis, potentiometric studies and extractions

M. M. Reinoso-García, D. Jańczewski, D. N. Reinhoudt, W. Verboom,* E. Malinowska, M. Pietrzak, C. Hill, J. Báča, B. Grüner, P. Selucky and C. Grüttner

CMPO tripodands show interesting extraction properties, especially in the presence of bromo-Cosan as a synergistic agent and coated on the surface of dendrimer-covered magnetic particles.

R = Ph, OEt

1493

Determination of the activity of heterofunctionalized catalysts from mixtures

Giovanni Zaupa, Marco Martin, Leonard J. Prins* and Paolo Scrimin*

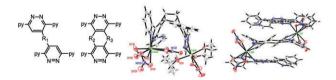
A new approach is presented for the determination of the activity of mixtures of heterofunctionalized catalysts *via* the deconvolution of small libraries without the separation of the components.

1498

Synthesis of pyridazinyl ligands for multimetallic complexes

Frédéric Thébault, Alexander J. Blake, Claire Wilson, Neil R. Champness* and Martin Schröder*

New polypyridazinyl ligands and multimetal complexes of $\text{Cu}(\Pi)$ and $\text{Cd}(\Pi)$ have been prepared and characterised.



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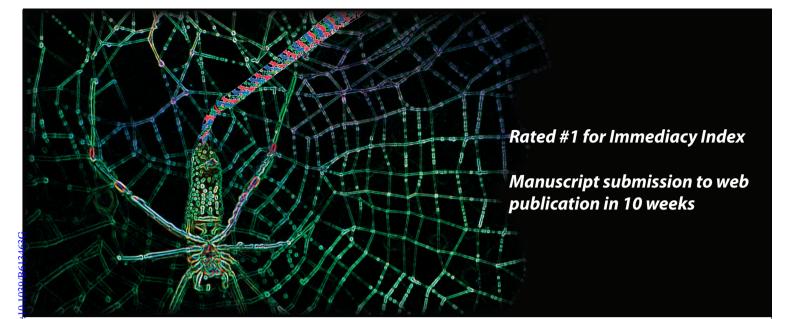
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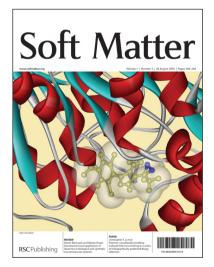
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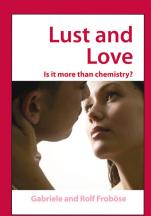
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