

This article was downloaded by:

On: 29 January 2011

Access details: *Access Details: Free Access*

Publisher *Taylor & Francis*

Informa Ltd Registered in England and Wales Registered Number: 1072954 Registered office: Mortimer House, 37-41 Mortimer Street, London W1T 3JH, UK



## Supramolecular Chemistry

Publication details, including instructions for authors and subscription information:

<http://www.informaworld.com/smpp/title~content=t713649759>

## Index Abstracts

To cite this Article (1995) 'Index Abstracts', *Supramolecular Chemistry*, 6: 1, 1 – 9

To link to this Article: DOI: 10.1080/10610279508032515

URL: <http://dx.doi.org/10.1080/10610279508032515>

PLEASE SCROLL DOWN FOR ARTICLE

Full terms and conditions of use: <http://www.informaworld.com/terms-and-conditions-of-access.pdf>

This article may be used for research, teaching and private study purposes. Any substantial or systematic reproduction, re-distribution, re-selling, loan or sub-licensing, systematic supply or distribution in any form to anyone is expressly forbidden.

The publisher does not give any warranty express or implied or make any representation that the contents will be complete or accurate or up to date. The accuracy of any instructions, formulae and drug doses should be independently verified with primary sources. The publisher shall not be liable for any loss, actions, claims, proceedings, demand or costs or damages whatsoever or howsoever caused arising directly or indirectly in connection with or arising out of the use of this material.

## Index Abstracts

The efficiency of the self-assembly of a range of interlocked molecular compounds has been studied as a function of the recognition sites present in the molecule that make up the molecular assemblies. While constitutional changes have opened up avenues to polycatenanes, steric and electronic changes associated with the recognition sites have provided an opportunity to investigate and control translational isomerism.



[2]Catenane



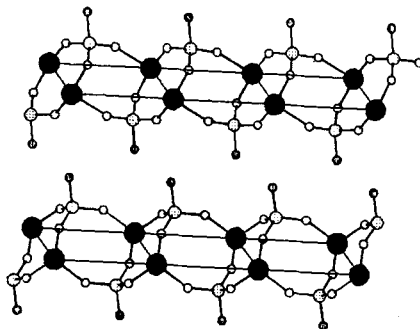
[2]Rotaxane

Steven J. Langford, Lluïsa Pérez García and J. Fraser Stoddart

Self-assembly in chemical synthesis

11-27

After a brief account on previous results obtained in this Laboratory in the field of layered and pillared  $\alpha$  and  $\gamma$  zirconium phosphonates, the perspectives for a development of a "molecular recognition" in porous and in layered solids are examined.

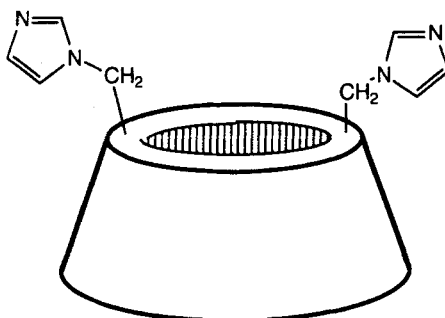


G. Alberti, U. Costantino, C. Dionigi, S. Murcia-Mascarós and R. Vivani

Layered and pillared zirconium phosphate-phosphonates and their inclusion chemistry

29-40

In the final structure of an enzyme-substrate complex, or of a related molecular complex, the two components may fit together in a lock and key relationship, but flexibility is often needed in the binding process.

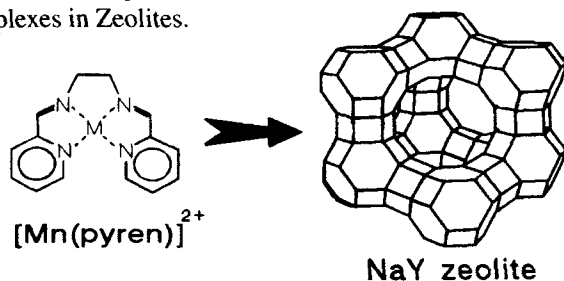


Ronald Breslow

Binding and catalysis with flexible locks and flexible keys

41-47

Catalytic and Physico-chemical Properties of New Schiff base Complexes in Zeolites.

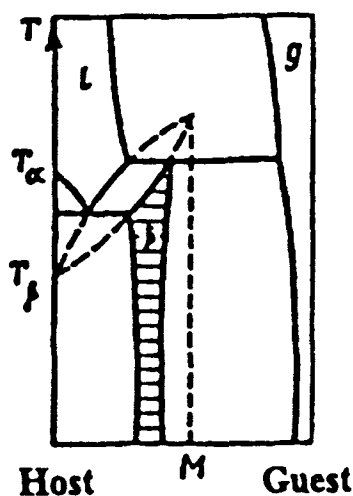


D. E. De Vos, P. P. Knops-Gerrits, D. L. Vanoppen, and P. A. Jacobs

Catalytic and physico-chemical properties of new schiff base complexes in zeolites

49-57

Different stoichiometric interrelations from solid solutions on the basis of the stable host modification to constant composition clathrates via classic clathrates of variable compositions are illustrated in the guest-host systems and summarized picture of this phenomenon is discussed.

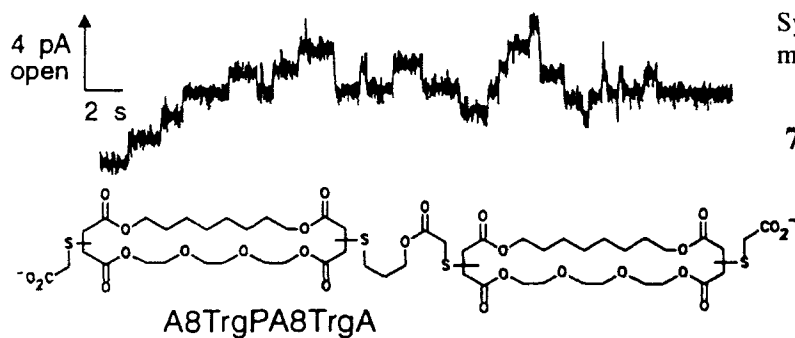


Yuri A. Dyadin

On the stoichiometry of clathrates

59-70

Simple linear pore-formers give controlled ion-selective channels, while more complex structures give irregular bursts of activity.

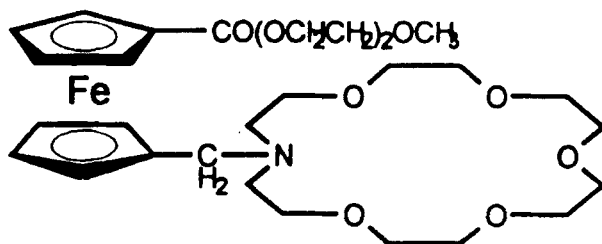


Thomas M. Fyles, Daniela Heberle, Wilma F. Van Straaten-Nijenhuis and Xin Zhou

Synthetic ion transporters in bilayer membranes

71-77

Ferrocenyl lariat ether complexing agents have been prepared.

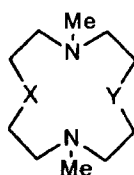


Chensheng Li, Mara Tsesarskaja, and George W. Gokel

Ferrocene as a molecular building block in lariat ethers and other complexing agents

79-85

Two general methods of the synthesis of diazacoronands.

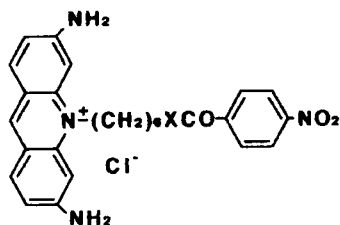


J. Jurczak, P. Lipkowski, T. Stankiewicz and Z. Urbańczyk-Lipkowska

Diazacoronands - synthesis, structure and inclusion properties

87-94

DNA binding and DNA cleavage specificities of two novel classes of synthetic DNA breakage agents.



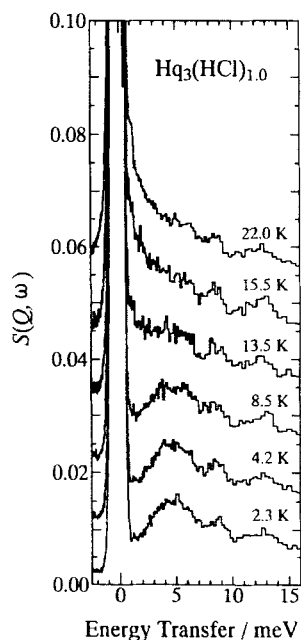
Reiko Kuroda, H. Tanaka, H. Satoh, M. Shinomiya, T. Amagai and M. Furubayashi

Intelligent compounds which read DNA base sequences

95-102

1a X = O  
1b X = NH

Low temperature properties of clathrate compounds of hydroquinone and thiourea and of clathrate hydrates are discussed using experimental results from calorimetry, neutron scattering and nuclear resonance experiments.

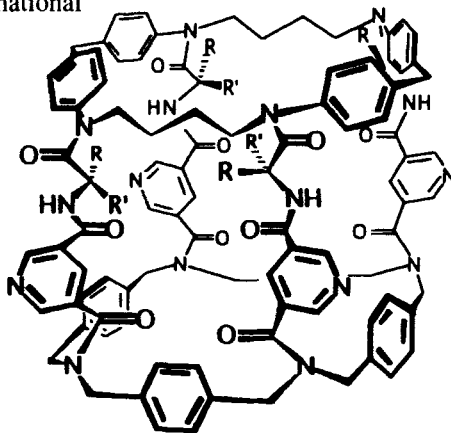


Takasuke Matsuo and Osamu Yamamuro

Phase transitions in some clathrate compounds

**103-108**

Novel cage-type cyclophanes, which are constructed with two macrocyclic skeletons and four chiral bridging components, have been synthesized. The present cage-type hosts performed size- and shape-sensitive molecular discrimination toward nonionic fluorescent guests of various bulkiness due to their rigid conformational framework.



Osamu Hayashida, Kazuya Ono, and Yukito Murakami

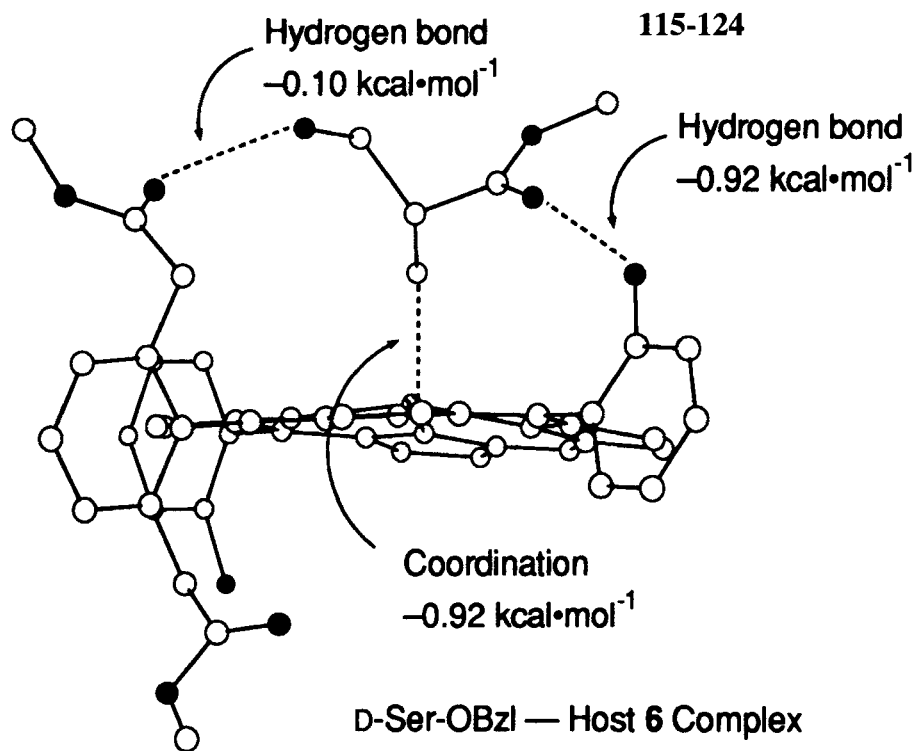
Size- and shape-sensitive molecular discrimination by cage-type cyclophanes in aqueous media

**109-114**

Preparation and recognition ability of new chiral porphyrins with multi-point recognition groups are described. Thermodynamic analysis of multi-point recognition is summarized. Application of this approach to chiral recognition by porphyrin hosts is then reported.

Hisanobu Ogoshi, Tadashi Ema, Yusuke Kato, Tadashi Mizutani and Yasuhisa Kuroda

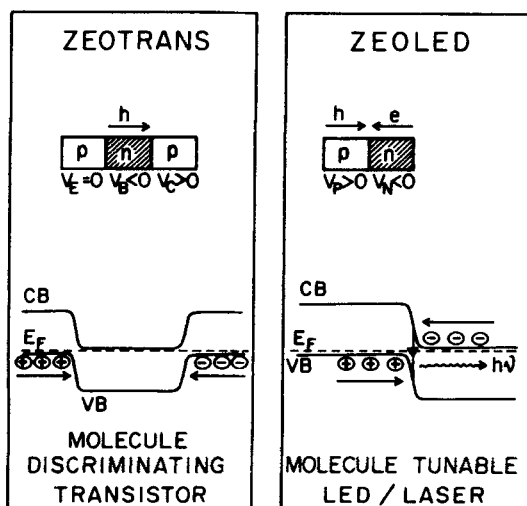
Molecular recognition: New chiral metalloporphyrins as receptor models



A novel class of flexible open frame-work nanoporous tin(IV) chalcogenide electronic materials is described.

Geoffrey Alan Ozin

Microporous and mesoporous electronic materials: flexible open-framework nanomaterials for molecular recognition, towards the electronic nose



125-134

Monte Carlo methods are effective in docking ligands, ranging in size from molecular fragments up to proteins, to protein targets of known 3D structure.

R. J. Read, T. N. Hart, M. D. Cummings and S. R. Ness

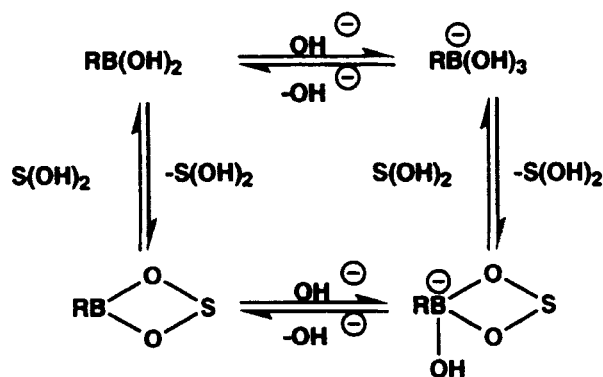
Monte Carlo algorithms for docking to proteins

**135-140**

A various kind of boronic-acid-appended sugar receptors were designed.

Tony D. James, K. R. A. Samankumara Sandanayake and Seiji Shinkai

Recognition of sugars and related compounds by "reading-out" -type interfaces

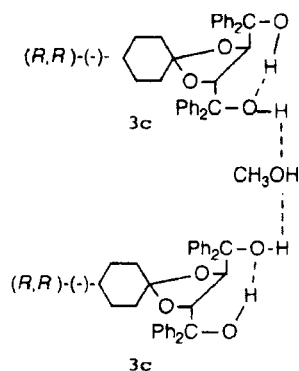


**141-157**

Host-guest solid state chemistry and distillation afford resolution.

Fumio Toda

Chiral lock and chiral key in inclusion crystals



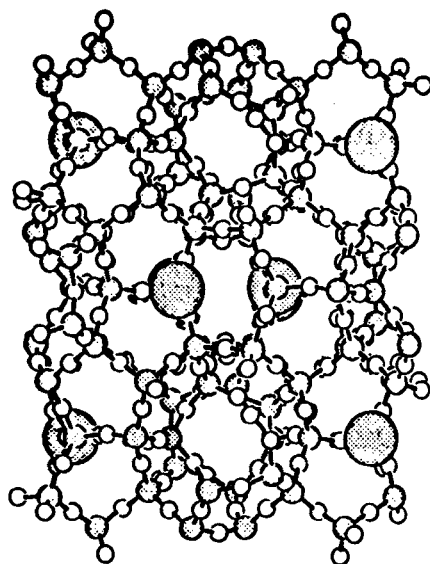
**159-163**

The mechanism for the novel structural memory effect is investigated using clathrasil dodecasil as a model system.

John S. Tse and Dennis D. Klug

Reversible amorphization and structural memory effect in clathrasil dodecasil-3c

165-170



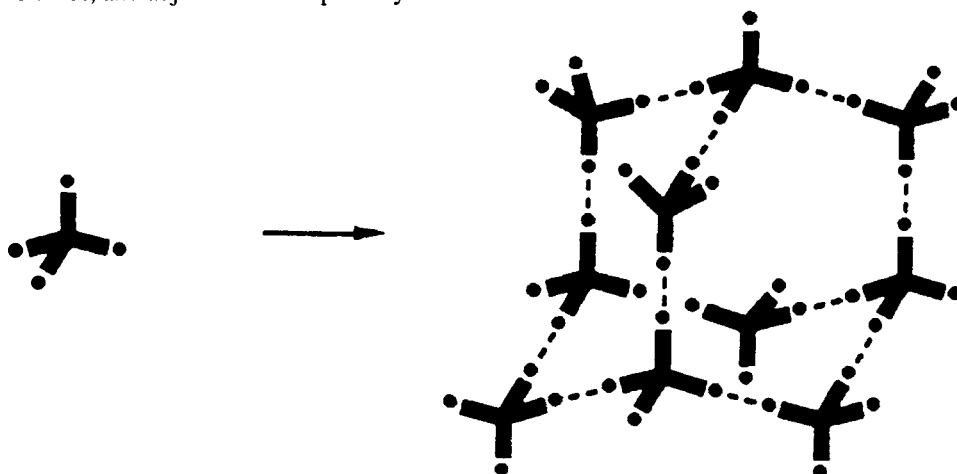
1 bar

The strategy of molecular tectonics can be used to build a wide variety of ordered three-dimensional organic networks with some of the desirable properties of zeolites and related inorganic materials, including high structural integrity, potentially large void volumes, and adjustable microporosity.

Dan Su, Xin Wang, Michel Simard and James D. Wuest

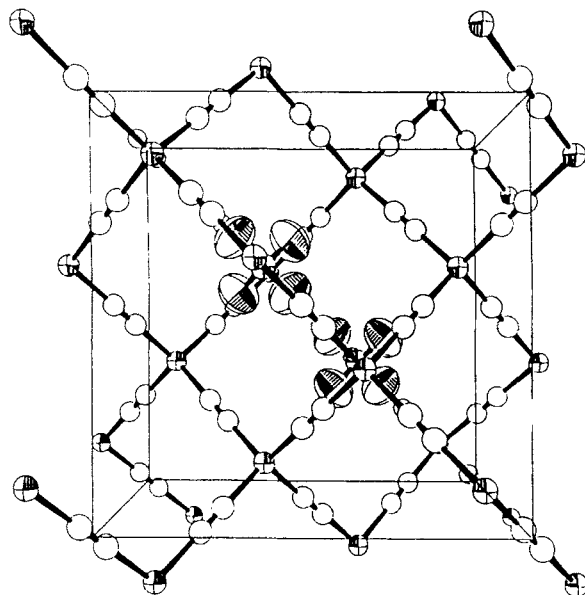
Molecular tectonics

171-178





The structural similarity between  $\text{Cd}_x(\text{CN})_y$  and  $\text{Si}_x\text{O}_y$  in the  $\text{A}_x\text{B}_y$  composition can be utilized in developing mineral-like supramolecular structures.

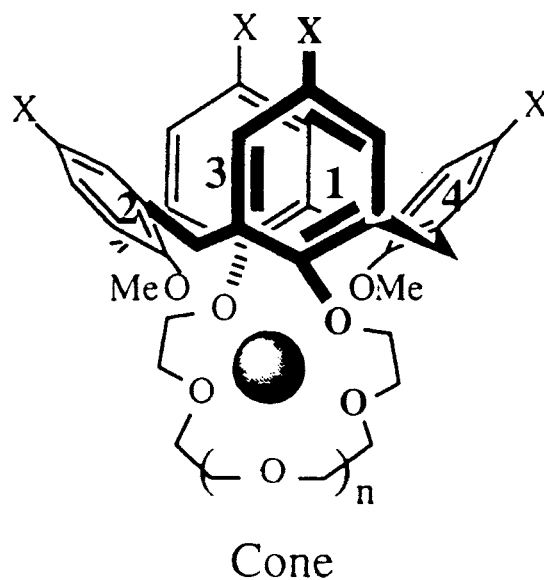


Toschitake Iwamoto, Shin-ichi Nishikiori and Takafumi Kitazawa

Mineralomimetic chemistry of cyanometallates

179-186

Molecular dynamics and free energy calculations are presented for calix[4] crown in water and the gas phase.



G. Wipff and M. Lauterbach

Complexation of alkali cations by calix[4] crown ionophores: conformation and solvent dependent  $\text{Na}^+/\text{Cs}^+$  binding selectivity and extraction: MD simulations in the gas phase, in water and at the chloroform-water interface

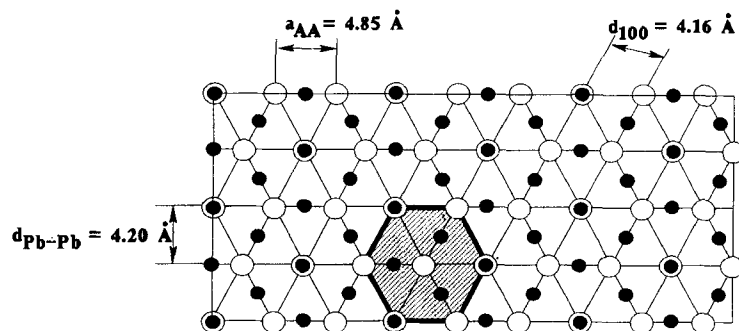
187-207

PbS has been epitaxially grown under arachidic acid (AA) monolayers due to the overlap between  $\text{Pb}^{2+}$  ions and AA headgroups; O = AA headgroup, • =  $\text{Pb}^{2+}$ , and  $\odot$  =  $\text{Pb}^{2+}$  and AA headgroups. A unit cell is highlighted by the dotted area which is enclosed by heavy lines.

Janos H. Fendler

Epitaxial growth of size-quantized semiconductor particles at monolayers

209-216



Generally we can not fit a "guest" to a cyclodextrin (CD), but we can select (or even synthesize by modifying the CD-structure) a better fitting -host- for a given guest.

J. Szejtli

Selectivity/structure correlation in cyclodextrin chemistry

217-223

