

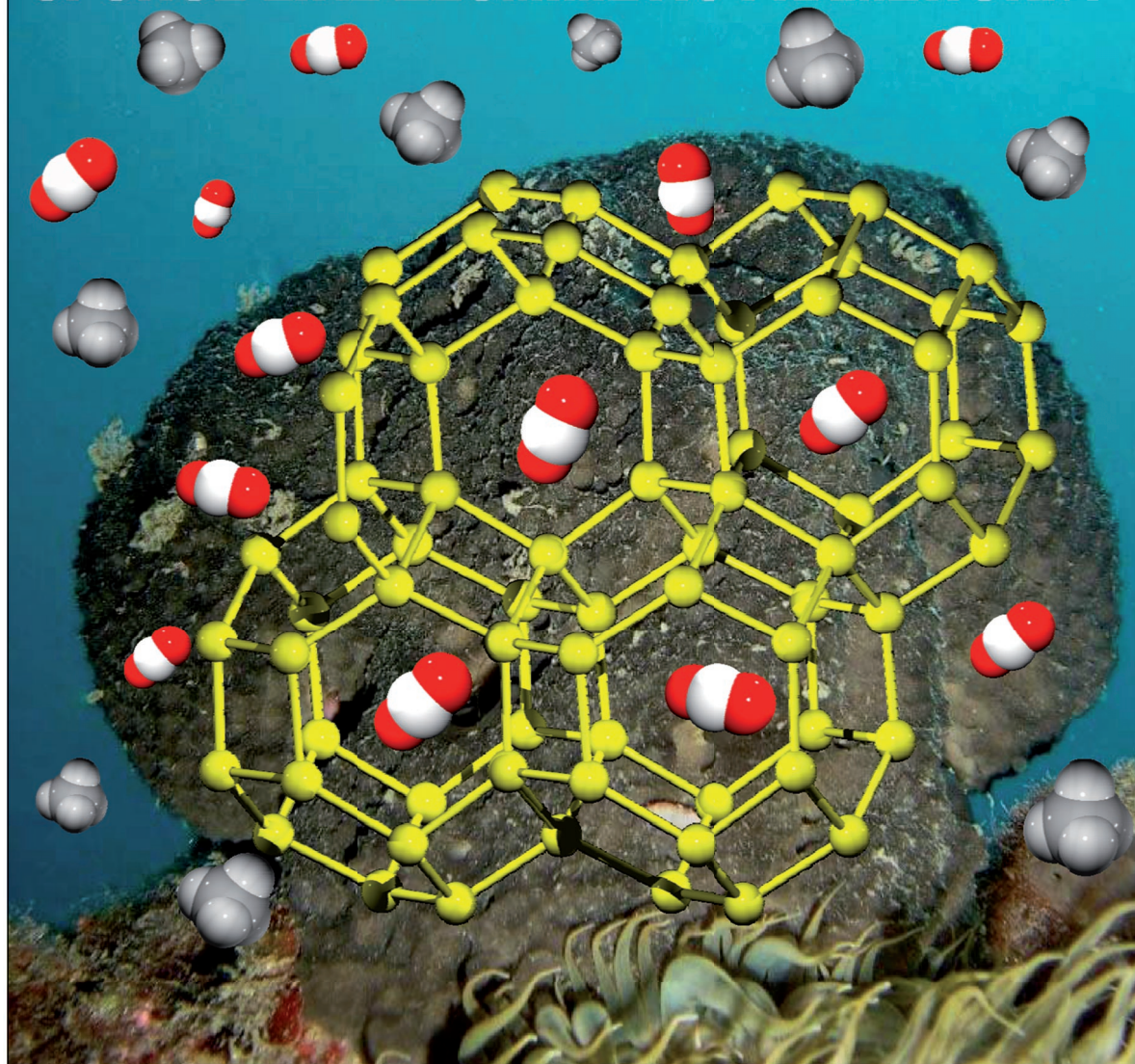
CHEMISTRY

A EUROPEAN JOURNAL

14/32

2008

SPONGE-LIKE ZEOMIMETIC FRAMEWORKS



New ISI
Impact Factor
5.330

ChemPubSoc
Europe

Concept

Chemistry in Confining Reaction Fields with Special Emphasis
on Nanoporous Materials S. Polarz and A. Kuschel

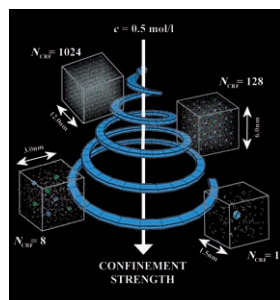
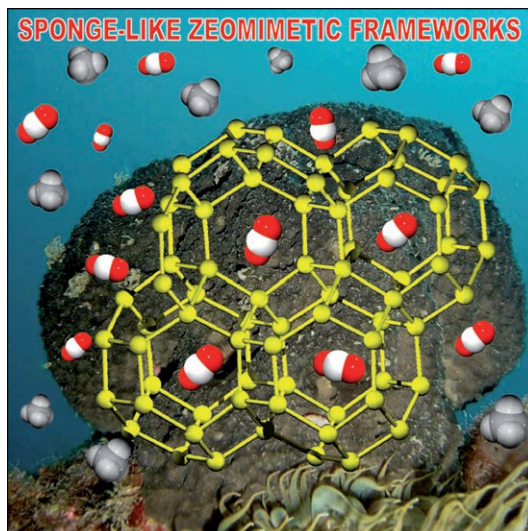
Minireview

Electrophilic Bromination of Alkenes: Environmental,
Health and Safety Aspects of New Alternative Methods
M. Eissen and D. Lenoir

 WILEY-VCH

Supported by
ACES

... have been synthesized by application of a gate pressure of CO₂ or exposure to moisture to a series of zeomimetic [M(5-fluoro-pyrimidin-2-olate)₂]_n·2.5nH₂O coordination networks (M = Co, Zn) to induce a reversible structural change from a non-porous phase to a porous one. An additional structural transformation into a dense layered phase is promoted by heating. In their Full Paper on page 9890 ff., S. Galli, E. Barea et al. show how X-ray powder thermodiffraction coupled to additional analytical methods can be used to address the observed phase transformations drawing a coherent picture of this complex soft material.

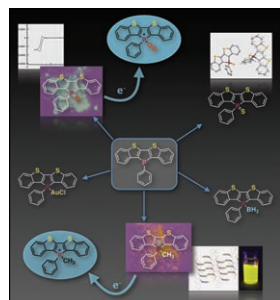


The Effects of Confinement

In their Concept article on page 9816 ff., S. Polarz and A. Kuschel explain that confining reaction fields of adjustable size can be used to create a small ensemble situation. The number of dissolved reactants per confinement becomes so small that at typical concentrations, unusual chemical behavior can be observed.

New Bromination Methods

In their Minireview on page 9830 ff., M. Eissen and D. Lenoir report on new advances in the electrophilic bromination of alkenes. A number of methods are evaluated, considering their resource demands and waste production, as well as environmental, health, and safety aspects.



Semiconductors

In their Full Paper on page 9878 ff., T. Baumgartner, L. Nyulászi et al. describe the synthesis of a series of phosphorus-based heteropentacenes by simple chemical modifications at the trivalent phosphorus center. Chemical modification of the central phosphorus atom provides materials with significantly altered properties, including organization in the solid state, photoluminescence, and redox behavior, all of which are of fundamental importance for organic semiconductors.

| | |
|--------------------|-----------------|
| GERMANY | NETHERLANDS |
| BELGIUM | ITALY |
| FRANCE | SPAIN |
| PORTUGAL | GREECE |
| CZECH REPUBLIC | POLAND |
| SWEDEN | HUNGARY |
| AUSTRIA | |

Supported by
ACES

Chemistry—A European Journal is jointly owned by the 14 Chemical Societies shown above and published by Wiley-VCH. This group of Societies has banded together as Chemistry Publishing Society (ChemPubSoc) Europe for its combined publishing activities. The journal is also supported by the Asian Chemical Editorial Society (ACES).