GDCh 2008-47/11 CHEM**SUS**CHEM

In Situ Functionalization of Polyolefins

T. J. Marks and S. B. Amin

Drinking Water Disinfection

C. A. Martínez-Huitle and E. Brillas

Porous Semiconductors from Chalcogenide Clusters

N. Hüsing

A Base-Stabilized B=B Bond

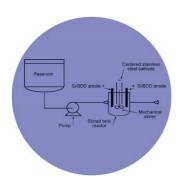
D. Scheschkewitz

Cover Picture

Md. Akhtarul Alam, Yeong-Sang Kim, Saho Ogawa, Akihiko Tsuda,* Noriyuki Ishii, and Takuzo Aida*

An inorganic/organic polypseudorotaxane is formed by the template-assisted cofacial assembly of a ring-shaped polyoxomolybdate cluster with a rigid-rod molecule having a high affinity toward the polyoxomolybdate surface, as described by A. Tsuda, T. Aida, and co-workers in their Communication on page 2070 ff. For the construction of this nanoobject, the polyoxomolybdate clusters are threaded along oligomeric *p*-phenylenebutadiynylene units and are "stitched" together, as shown in the cover picture, to form the 1D structure.



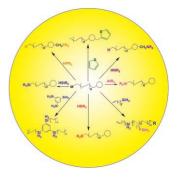


Water Purification

In their Minireview on page 1998 ff., C. A. Martińnez-Huitle and E. Brillas give an update on alternatives in drinking water purification and wastewater treatment. Electrochemical processes with diamond electrodes could soon replace the standard chlorination and electrochemical chlorination.

Catalytic Chain Transfer

In their Review on page 2006 ff., T. J. Marks and S. B. Amin show how electron-deficient and electron-rich chain-transfer agents allow selective functionalization and control of molecular weight and microstructure in single-site olefin polymerization reactions.





Conducting Nanomaterials

T. Torres et al. describe in their Communication on page 2026 ff. the self-organization of a covalently linked phthalocyanine– C_{60} fullerene conjugate on graphite and graphite-like surfaces to give supramolecular fibers and films.