

Ultrasmall-Scale Analysis

H. H. Gorris and D. R. Walt

Hybrid Catalysts

H. Sugiyama and S. Park

Bioinorganic Chemistry

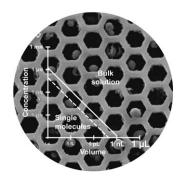
T. Ueno

Cover Picture

Sascha Tiede, Anke Berger, David Schlesiger, Daniel Rost, Anja Lühl, and Siegfried Blechert*

One handed is very efficient not only for fiddler crabs, but also for chiral ruthenium metathesis (pre)catalysts that contain a monosubstituted carbon center in the N-heterocyclic ligand. In their Communication on page 3972 ff. S. Blechert and coworkers show that through the combination of ligands a highly stable catalyst is formed that rapidly initiates the asymmetric ring-opening cross-metathesis and delivers high *E*-isomer selectivity and high enantioselectivity. (Photo: Thorsten Stegmann.)



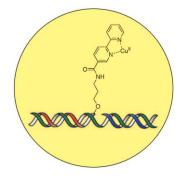


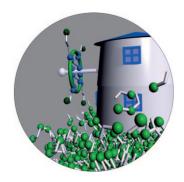
Ultrasmall-Scale Analytical Chemistry

The application of femtoliter containers and arrays offers tremendous perspectives for chemical and biochemical analysis as well as new scientific methods and insights. A status report on research in this area is given by H. H. Gorris and D. R. Walt in their Review on p. 3880 ff.

Asymmetric Catalysis

In their Minireview on page 3870 ff., S. Park and H. Sugiyama describe the use of hybrid catalysts self-assembled from DNA and metal-ligand complexes in highly enantioselective Lewis acid catalyzed reactions in aqueous media.





Molecular Devices

In their Communication on page 3896 ff., D. A. Leigh, W. J. Buma, and co-workers describe how hydrogen bonds holding the thread of a rotaxane can be freed by stepwise microsolvation. The process resembles disengaging a windmill blocked by its four vanes.