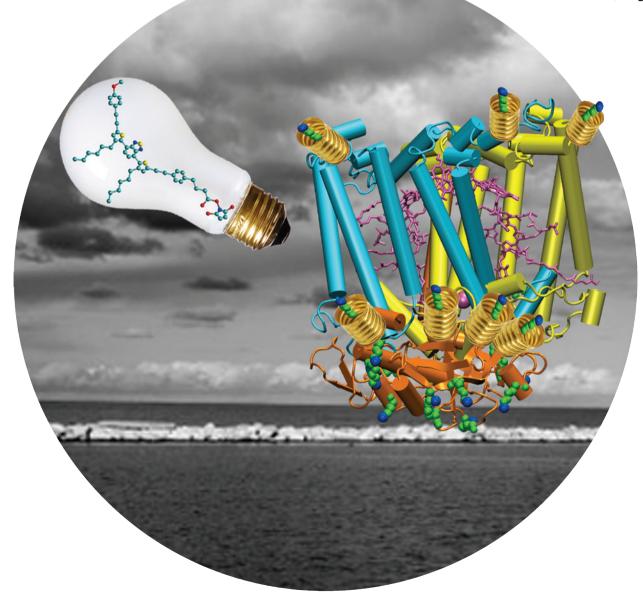


2012-51/44



Selective Catalysis

Review by J. W. Bode et al.

Asymmetric Halofunctionalization
Minireview by S. E. Denmark et al.

Highlights: Chiral Aryl Cation Equivalents · Graphene from Molecules

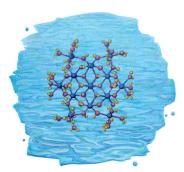
WILEY-VCH

Cover Picture

Francesco Milano, Rocco Roberto Tangorra, Omar Hassan Omar, Roberta Ragni, Alessandra Operamolla, Angela Agostiano, Gianluca M. Farinola,* and Massimo Trotta*

A hybrid photosynthetic machine capable of exploiting solar energy for photoconversion is described by G. M. Farinola, M. Trotta, and co-workers in their Communication on page 11019 ff. The simplest photosynthetic protein able to convert sunlight into other energy forms is covalently functionalized with a tailored organic dye to obtain a fully functional hybrid complex that outperforms the natural system in conversion and light-harvesting ability. Photograph by Francesca Suaria.





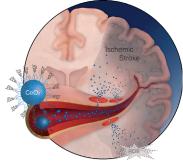
Cluster Compounds

In their Communication on page 11073 ff., J. E. Hutchison, D. W. Johnson, and coworkers show by NMR spectroscopy and small-angle X-ray scattering that a Ga_{13} cluster persists as a discrete nanoscale structure in an aqueous solvent.

Computational Chemistry

In their Communication on page 10997 ff., C. Rovira, G. J. Davies, and co-workers use QM/MM calculations to investigate the free-energy landscape of an isolated alpha-mannoside.





Therapeutic Nanoparticles

In their Communication on page 11039 ff., S.-H. Lee, T. Hyeon, and co-workers show that discrete, uniform 3 nm PEGylated ceria nanoparticles can protect against ischemic stroke by scavenging reactive oxygen species and reducing apoptosis.