

GDCh 2008-47/31 Guperhydrophobic CHEMSUSCHEM

Regenerative Medicine

K. Sakurada, F. M. McDonald and F. Shimada

Optical Rotation of Achiral Compounds W. Kaminsky, B. Kahr et al.

Highlights: Dual Catalysis · Antibiotics



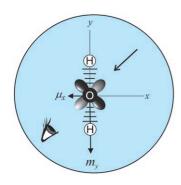
Out now

Cover Picture

Sampath Srinivasan, Vakayil K. Praveen, Robert Philip, and Ayyappanpillai Ajayaghosh*

Superhydrophobic and self-cleaning coatings are created from the physical interaction between carbon nanotubes and oligo(*p*-phenylenevinylene)s. In their communication on page 5750 ff. A. Ajayaghosh et al. show that the nanocomposite with micrometer-sized hills and valleys as well as a nanoscale paraffin coating of hydrocarbon chains gives high contact angles and a very small slide angle, thus allowing water droplets to roll along the surface, generating the ability to self-clean, akin to a lotus leaf.



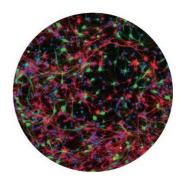


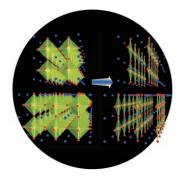
Optical Activity

Some achiral compounds can rotate the plane of polarized light. B. Kahr, W. Kaminsky et al. describe in their Minireview on page 5706 ff. the conditions that must be fullfilled to achieve this phenomenon.

Regenerative Medicine

Stem cell technologies could be the key to the treatment of acute and chronic degenerative diseases. K. Sakurada, F. McDonald, and F. Shimada give an overview of the current status of regenerative medicine and stem cell based drug discovery in their Review on page 5718 ff.





Planar Coordinated Iron

H. Kageyama et al. describe in their Communication on page 5740 ff. the topochemical reaction of $Sr_3Fe_2O_7$ to ladder compound $Sr_3Fe_2O_5$, which opens up new possibilities for the chemistry of square planar iron oxides and the physics of *n*-legged ladder systems.