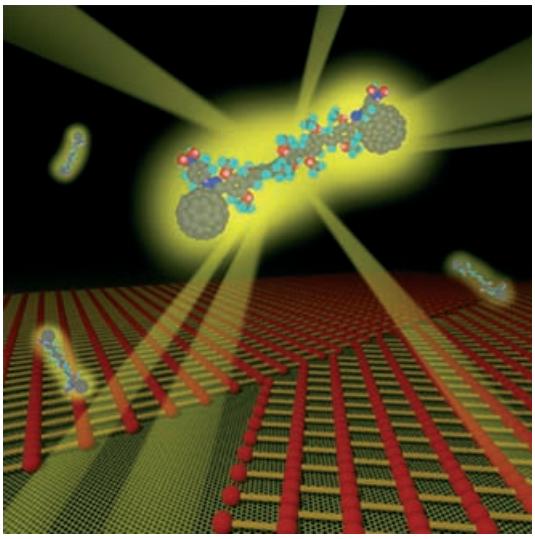
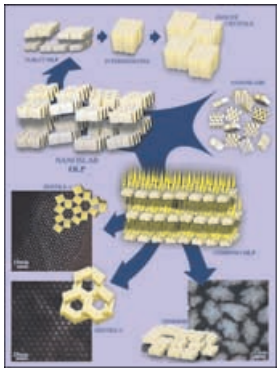
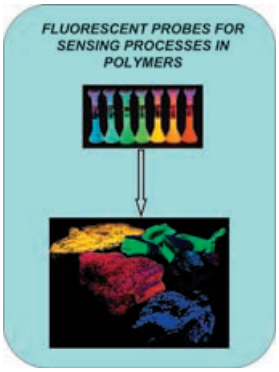
CHEMISTRY
A EUROPEAN JOURNAL

… of fullerenes can lead to the tuning of electron-acceptor properties of C_{60} derivatives. In the Full Paper by F. Langa, J.-F. Nierengarten, P. Samorì, N. Armaroli, et al. on page 4405 ff, the synthesis, electrochemistry, the photophysical properties and the self-assembly behavior in ultra-thin films of OPV–fulleropyrazoline compounds (shown on the cover) is described. Detailed SFM and STM studies on the largest system reveal the spontaneous formation from solution of ordered layer architectures on surfaces (illustrated schematically).

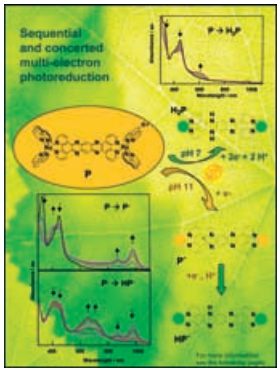




Zeogrids and Zeotiles
These are two new types of hierarchical materials that can be obtained by the addition of surfactants or polymers to zeolite building units. In the Concept article on page 4306 ff, J. A. Martens et al. explore how the knowledge of self-assembly processes during zeolite formation can be exploited for the development of new materials.



Fluorescent Sensors
Fluorescence spectroscopy is an important analytical technique that has been widely used in a variety of applications, such as biomedicine, biology, and science of materials. In their Concept article on page 4314 ff, P. Bosch et al. discuss the use of fluorescent probes for sensing processes in polymers.



Photochemistry
In their Full Paper on page 4327 ff, F. MacDonnell et al. describe their investigations on the use of pure water as the solvent for multi-electron photochemical processes and, by means of a combination of voltammetry and differential reflectance spectroelectrochemistry, they were able to probe the mechanism of reduction and protonation of the dinuclear ruthenium complex, $[(phen)_2Ru(tatpp)Ru(phen)_2]Cl_4$. Background photograph by Uschi Hering; Agency: Dreamstime.com.

