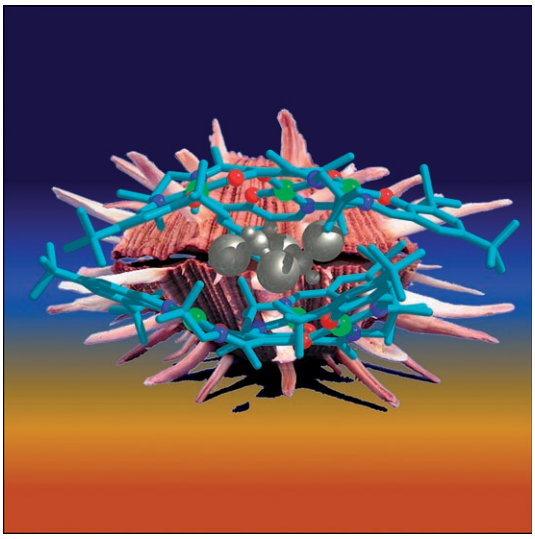
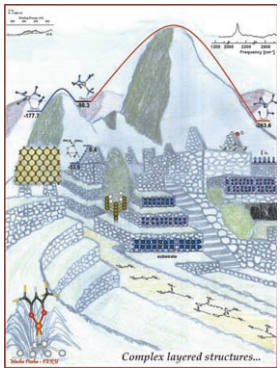
As two pearls in an oyster…

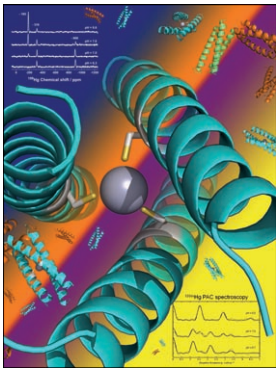
… are two CH_2Cl_2 molecules encapsulated by two trinuclear triplesalen complexes. In their Full Paper on page 9191 ff., T. Glaser et al. show that these supramolecular aggregates form without covalent bonds. The molecular bowls consist of ferromagnetically coupled complexes. The detailed analysis establishes that not only the spin-polarization, but also the spin-delocalization leads to the ferromagnetic coupling.

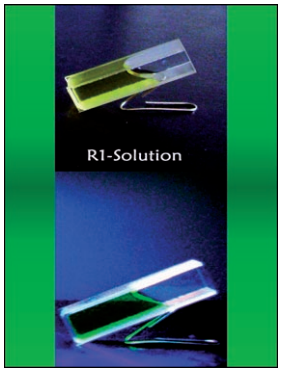




Organometallics on Silicon
In their Concept article on page 9164 ff., A. V. Teplyakov and J. C. F. Rodríguez-Reyes describe recent progress towards an understanding of the mechanisms of organometallic adsorption on silicon that can lead to the development of strategies for controlling the nature of the surface structures.

Metalloprotein Design
In their Full Paper on page 9178 ff., V. L. Pecoraro et al. show that the use of a combination of ^{199}Hg NMR and ^{199m}Hg PAC spectroscopy can be broadly used to distinguish not only static structures, but also between exchange processes on very different timescales. These studies represent their successful application in determining the structure of Hg^{II} bound to three- and two-stranded coiled coils.





Fluorescent Hydrosol–Gel Systems
In their Full Paper on page 9216 ff., H. Tian et al. describe the preparation of a rotaxane-doped reversible hydrosol–gel system with enhanced fluorescence signals. The reversibility of the system has two aspects. First, the transformation between hydrosol state and hydrogel state controlled by temperature is reversible. Second, the variations of optical signals induced by irradiation at different wavelengths in these hydrosol systems are reversible.