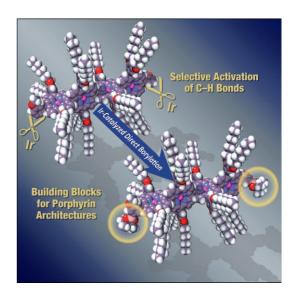
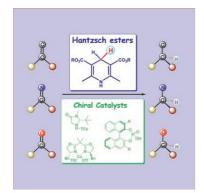
Multiporphyrin arrays...

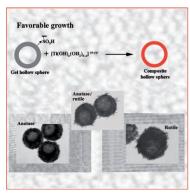
... have attracted much attention because of their potential in a wide range of applications. However, current methods of porphyrin synthesis involve acidic and oxidative conditions that restrict the functional groups that can be introduced. On the other hand, porphyrins can be selectively borylated through C—H activation under Ir catalysis. The chemo- and regioselective borylation can even be applied to monomeric and oligomeric porphyrins, thus offering a route to elaborate porphyrin architectures. H. Shinokubo, A. Osuka, and co-workers explain how it is done in their Full Paper on page 849 ff.





Organocatalysis

Hantzsch esters have been extensively used as the hydrogen source to reduce many unsaturated functionalities. Recently, their application in asymmetric transfer hydrogenation of C=C, C=N, and C=O was explored in the presence of an organocatalyst or a metal-ligand complex, thus affording versatile chiral building blocks with excellent enantioselectivities under mild conditions. In his Focus Review on page 820 ff., S.-L. You summarizes recent findings that employed Hantzsch esters as a biomimetic reductant in catalytic asymmetric reactions.



Hollow Spheres

Inorganic coated-polymer core—shell composites and the corresponding hollow spheres have attracted growing interest due to their many potential applications. The conventional method of producing these spheres usually involves uncontrollable fast hydrolysis and condensation, which results in the formation of amorphous inorganic oxides. Crystalline inorganic-oxide composite and hollow spheres can, however, be prepared under mild conditions, which is not only easier but also guarantees intact shells. For more information, see the Full Paper by Z. Yang et al. on page 828 ff.

