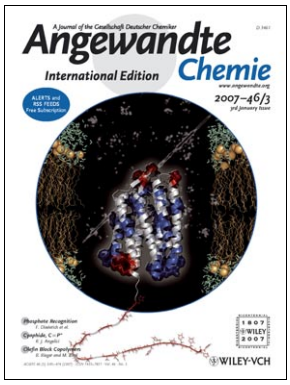
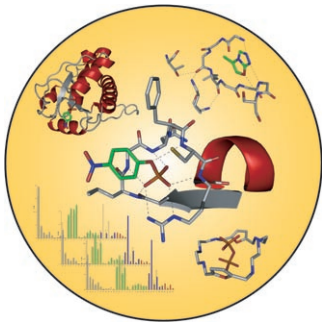
Cover Picture

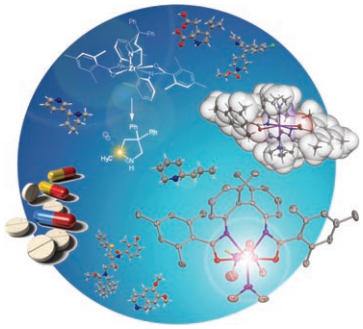


Manuel Etzkorn, Swetlana Martell, Ovidiu C. Andronesi, Karsten Seidel, Martin Engelhard,* and Marc Baldus*

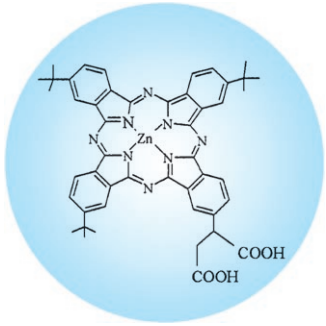
Membrane proteins can now be studied in their native environments by using high-resolution solid-state NMR spectroscopy. Techniques that probe rigid, mobile, and water-exposed protein segments provide insight into the membrane-embedded structure of sensory rhodopsin II from *Natronomonas pharaonis*. The secondary structure, dynamics, and membrane topology of this seven-helix receptor are discussed by M. Engelhard, M. Baldus, and co-workers in their Communication on page 459 ff.



Phosphate Recognition
In their Review on page 338 ff., F. Diederich and co-workers give an overview of proteins that feature a phosphate-binding site. This overview based on data-bank mining makes the search for new effective phosphate analogues easier.



Asymmetric Catalysis
A modular, neutral zirconium precatalyst that gives excellent enantioselectivities in the intramolecular hydroamination of alkenes to pyrrolidines is described by L. L. Schafer and co-workers in their Communication on page 354 ff. Trends in reactivity and enantioselectivity are explained on the basis of structural studies.



Solar Cells
A novel zinc phthalocyanine is a highly efficient sensitizer for dye-sensitized solar cells, as M. K. Nazeeruddin and co-workers describe in their Communication on page 373 ff. The asymmetry of the molecule, which creates directionality in the excited state of the sensitizer, is the key to this efficiency.