Angelvand Chemiker Angelvand Chemiker International Edition A Journal of the Gesellschaft Deutscher Chemiker Che

www.angewandte.org 2012-51/21 Solid-phase EMPNRYPGALLE Peptide Synthesis 5-oxaproline 5-oxaproline α -ketoacid **KAHA Ligation** with 5-Oxaproline Synthetic proteins

Palladium-Catalyzed Cross-Coupling

Review by V. Snieckus et al.

Ion-Pair Recognition

Minireview by P. D. Beer and A. J. McConnell

Highlights: Enantioselective Catalysis · Trifluoromethylation · Proteinase Inhibitors



Cover Picture

Vijaya R. Pattabiraman, Ayodele O. Ogunkoya, and Jeffrey W. Bode*

Chemoselective ligations of two unprotected protein segments that give a native amide bond are valued reactions for the synthesis of proteins. In their Communication on page 5114 ff., J. W. Bode et al. show that the α -ketoacid—hydroxylamine (KAHA) ligation with 5-oxaproline is an efficient reaction for the synthesis of proteins with unprotected protein segments in aqueous buffers. Prokaryotic ubiquitin-like protein and probable cold shock protein A have been synthesized.



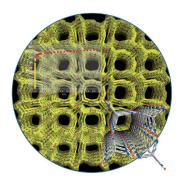


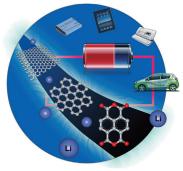
Supramolecular Chemistry

Gallium–zinc-seamed pyrogallol[4]arene nanoassemblies are reported by C. A. Deakyne, J. L. Atwood et al. in their Communication on page 5086 ff. The assemblies rearrange from spheres in the solid state to toroids in solution.

Porous Organic Crystals

M. Mastalerz and I. M. Oppel describe the self-assembly of an organic precursor by hydrogen bonding in their Communication on page 5252 ff. Enclosed solvent molecules were removed from the pores, leading to a permanently porous material.





Electrode Materials

In their Communication on page 5147 ff., T. Sun et al. show that each C_6 aromatic ring in carbon-based systems can accept up to six Li ions to create Li_6/C_6 additive complexes with insertion capacities of up to nearly 2000 mA h g⁻¹.