www.angewandte.org 2011-50/35 Angewandte Shuttle-Mediated Drug Delivery M. Teixidó, E. Giralt, and M. Malakoutikhah

Multifunctional Poly(ethylenglycol)

H. Frey et al.

Vanadium Nitrogenase

N. Lehnert and D. L. Gerlach

Asymmetric Organocatalysis

T. Rovis and D. A. DiRocco

Cover Picture

Jinlan Wang,* Liang Ma, Qinghong Yuan, Liyan Zhu, and Feng Ding*

Narrow, smooth-edged graphene nanoribbons are needed for graphene electronics to replace the current silicon technology. In their Communication on page 8041 ff., J. Wang, F. Ding, et al. report a smart strategy for cutting single-walled carbon nanotubes (gray) into narrow graphene nanoribbons in H_2 gas (green) with a single transition-metal atom (Cu, red) as the chemical scissors.



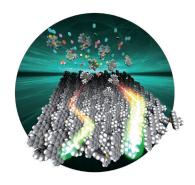


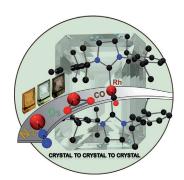
Shuttle-Mediated Delivery

The treatment of brain disorders is still a great challenge because of the blood-brain barrier (BBB). E. Giralt et al. show in their Review on page 7998 ff. how a vector-mediated approach, whereby the drug is coupled to a shuttle molecule that has the ability to cross the BBB, offers a potential solution.

Extended π Systems

Y. Matano et al. present in their Communication on page 8016 ff. the synthesis and characterization of a new class of arene-annulated phosphole– π systems, namely the diacenaphtho[1,2-b:1',2'-d]phospholes, often with a marked electron-transport capability.





Chemical Transformations

C. Crudden et al. describe a dinitrogen–rhodium complex with an N-heterocyclic carbene in their Communication on page 8100 ff. that undergoes two back-to-back single-crystal-to-single-crystal transformations to $\rm O_2$ and CO complexes.