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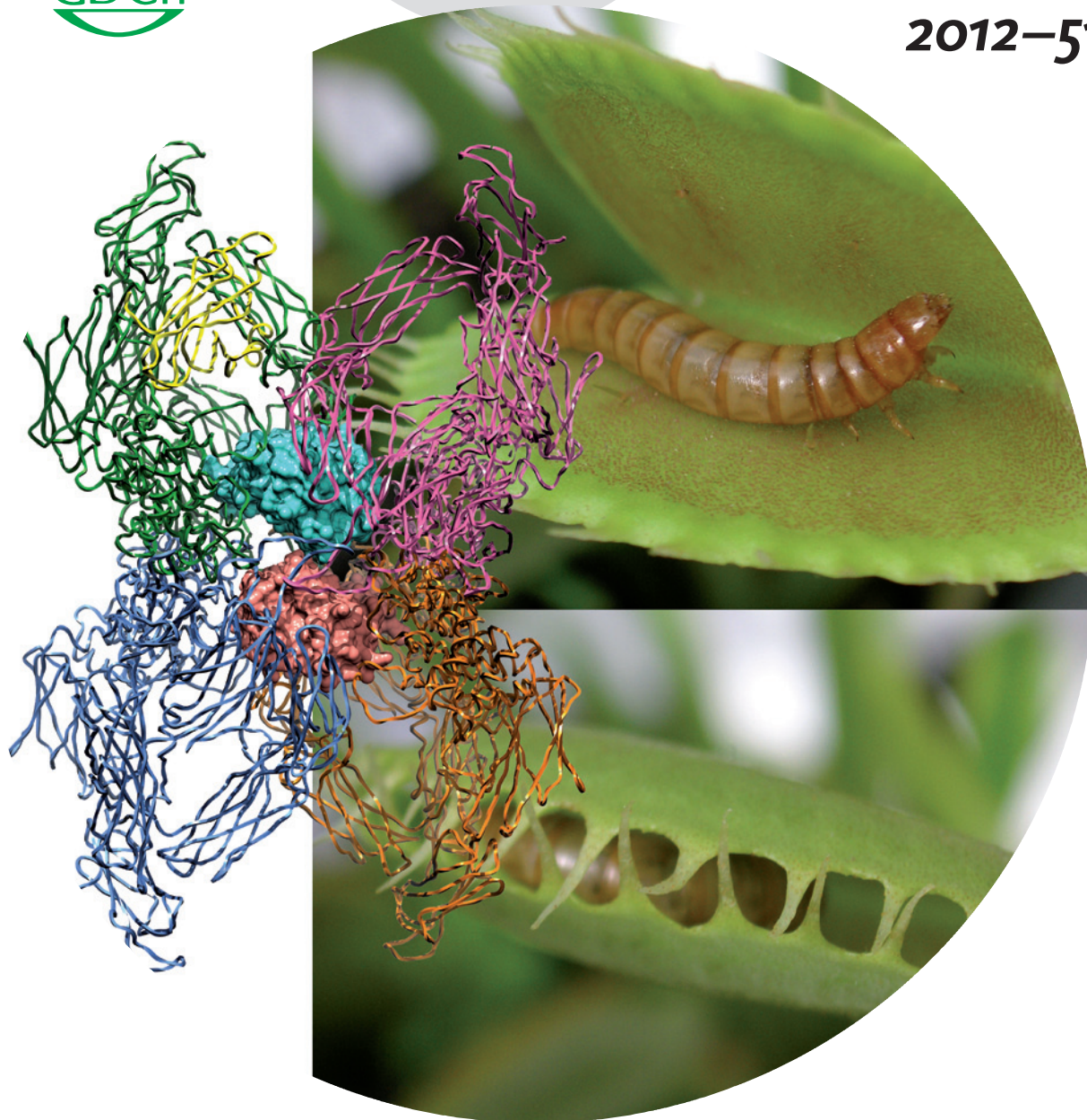
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Chemistry in Spain

Editorial by N. Martín

Pd–NHC Complexes for Cross-Coupling Reactions

Review by M. G. Organ et al.

Highlights: Hydrogenases • Dimetallic Nanoparticles

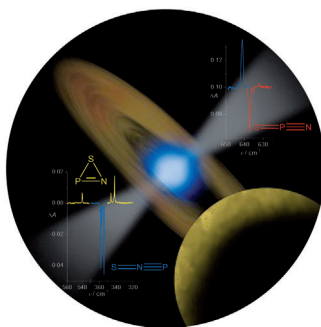
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Cover Picture

Aniebrys Marrero, Stephane Duquerroy, Stefano Trapani, Theodoros Goulas, Tibusay Guevara, Gregers R. Andersen, Jorge Navaza, Lars Sottrup-Jensen, and F. Xavier Gomis-Rüth*

The large central cavity of the human methylamine-induced form of α_2 -macroglobulin (α_2 M) can accommodate two medium-sized proteinases, as shown by its crystal structure. In their Communication on page 3340 ff., F. X. Gomis-Rüth et al. show how the 720-KDa α_2 M traps prey proteinases by a major conformational rearrangement from an open to a closed form, a process reminiscent of the action of a Venus flytrap. Photos of a meal worm in a Venus flytrap courtesy of Beatrice Murch (www.beatricemurchphotography.com).

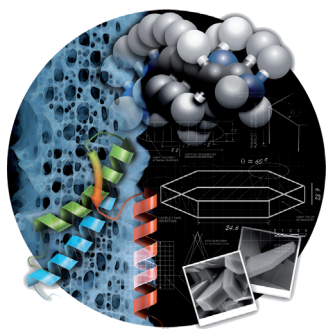
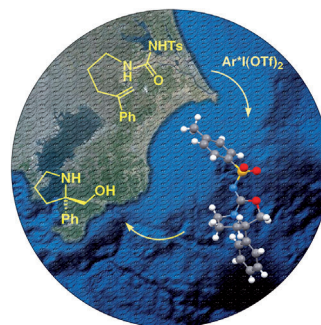


Small-Ring Compounds

The production of thiazylidynephosphane (SNP) from $\text{SP}(\text{N}_3)_3$ is described by J. S. Francisco et al. on page 3334 ff. The photointerconversion of SNP gives cyclic thiazaphosphirine, the first experimentally observed 16-electron cyclic triatomic molecule.

Stereoselective Synthesis

The use of enantiomerically pure hypervalent iodine compounds enables metal-free highly stereoselective oxyaminations of alkenes and leads to a facile synthesis of 2-arylprolinols, as shown by T. Wirth and U. Farid in their Communication on page 3462 ff.



Zeolite Crystallization

Bio-inspired crystal engineering of nanoporous zeolites is described by A. I. Lupulescu and J. D. Rimer in their Communication on page 3345 ff. Molecular analogues of silica proteins in unicellular organisms are effective growth modifiers.