

2009-48/36 Hydrogen Storage F. Schüth et al.

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Wilhelm Ostwald: Nobel Laureate 1909
G. Ertl

Highlights: Transmembrane Structure of Integrin α IIb β 3 ·

Graphene Nanoribbons · Organometallic Compounds of Ca and Cs

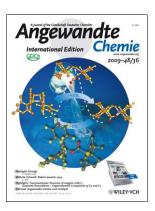
Editorial: Angewandte Chemie and Catalysis



Cover Picture

Cornelia M. Mömming, Edwin Otten, Gerald Kehr, Roland Fröhlich, Stefan Grimme,* Douglas W. Stephan,* and Gerhard Erker*

Reversible binding of CO₂ can be realized with borane–phosphane frustrated Lewis pairs (FLPs). In their Communication on page 6643 ff., G. Erker et al. describe how the greenhouse gas CO_2 is captured to form both cyclic and acyclic adducts through P–C and O–B bond formation. The reaction is reversed and CO_2 released when the temperature of the solution is raised. Theoretical analysis describes CO_2 binding by FLPs as a synchronous concerted reaction.





Wilhelm Ostwald

December 2009 is the 100th anniversary of the awarding of the Nobel Prize to Wilhelm Ostwald. In the Essay on page 6600 ff., G. Ertl, who is himself a Nobel laureate, takes this opportunity to look back on the life and work of Ostwald.

Hydrogen Storage

Hydrogen is a promising energy carrier, but storing it efficiently presents difficulties. In their Review on page 6608 ff., F. Schüth et al. discuss the advantages and disadvantages of various hydrogen storage systems.





Conjugated Macrocycles

A new family of giant cyclic oligothiophenes containing up to 35 thiophene units is reported by P. Bäuerle et al. in their Communication on page 6632 ff. The optoelectronic and supramolecular properties of the compounds are also presented.