On these pages, we feature a selection of the excellent work that has recently been published in our sister journals. If you are reading these pages on a computer, click on any of the items to read the full article. Otherwise please see the DOIs for easy online access through Wiley InterScience.

Drug delivery

B. W. Harper, A. M. Krause-Heuer, M. P. Grant, M. Manohar, K. B. Garbutcheon-Singh, J. R. Aldrich-Wright*

Advances in Platinum Chemotherapeutics

Evolution of platinum anticancer agents: Research into platinum-based anticancer compounds has led to the development of a myriad of drugs, with only a small handful gaining approval. This review highlights the current techniques for improving these approved drugs to retain or improve efficacy whilst reducing toxic side-effects. We focus on cancer-specific targeting, drug delivery and the prodrug approach.

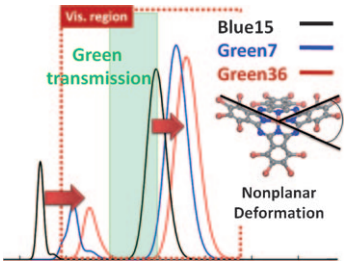
Chem. Eur. J.
DOI: **10.1002/chem.201000148**

Phthalocyanines

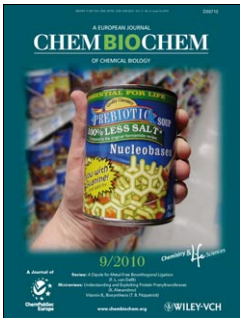
S. U. Lee,* J. C. Kim, H. Mizuseki, Y. Kawazoe

The Origin of the Halogen Effect on the Phthalocyanine Green Pigments

Going green! Nonplanar deformation of the tetraazatetrabenzoporphyrin chromophore of the halogenated copper-phthalocyanine ($n\alpha$,$m\beta$(Hal)-CuPc) molecule is the main role of halogenation in the manufacture of phthalocyanine green pigments. The present study may serve as an important reference point for designing novel halogen-free green pigments.



Chem. Asian J.
DOI: **10.1002/asia.200900601**

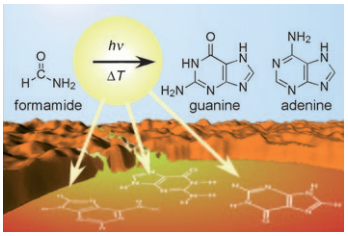


Prebiotic Syntheses

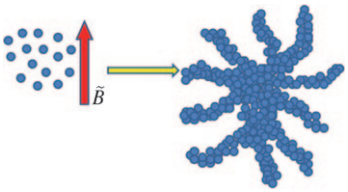
H. L. Barks, R. Buckley, G. A. Grieves, E. Di Mauro, N. V. Hud,* T. M. Orlando*

Guanine, Adenine, and Hypoxanthine Production in UV-Irradiated Formamide Solutions: Relaxation of the Requirements for Prebiotic Purine Nucleobase Formation

Relaxed requirements: We demonstrate the formation of adenine, hypoxanthine, and guanine from heated (130 °C), UV-irradiated formamide solutions in the absence of an inorganic catalyst. Evidence is also provided that "classical" HCN pathways for purine nucleobase production are also active in heated and UV-irradiated formamide reactions.



ChemBioChem
DOI: **10.1002/cbic.201000074**



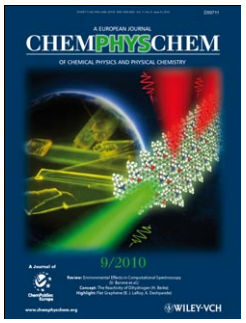
ChemPhysChem
DOI: **10.1002/cphc.201000056**

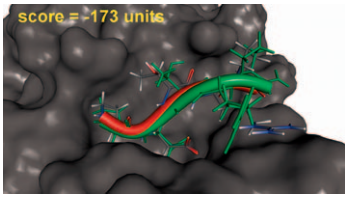
Magnetic Nanoparticles

W. Zhang, J. Sun, T. Bai, C. Wang, K. Zhuang, Y. Zhang, N. Gu*

Quasi-One-Dimensional Assembly of Magnetic Nanoparticles Induced by a 50 Hz Alternating Magnetic Field

We've got the power: Spoke-like assemblies of magnetic nanoparticles are fabricated by the exposure of a colloidal suspension to an alternating magnetic field of power frequency 50 Hz (see picture). In such a low-frequency alternating magnetic field, the assemblies retain superparamagnetism.





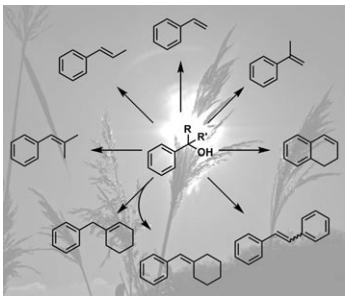
ChemMedChem
DOI: **10.1002/cmdc.201000090**

Drug Design

O. Korb, H. M. Möller, T. E. Exner*

NMR-Guided Molecular Docking of a Protein–Peptide Complex Based on Ant Colony Optimization

The combination of NMR experimental data and docking tools can greatly increase the reliability of predicted docking poses. For the complex of the antibody SM3 with its epitope, the PLANTS docking program and the ChemPLP scoring function complemented with intraligand trNOE and STD distance constraints are able to correctly predict the complex structure as the best-ranked docking pose.



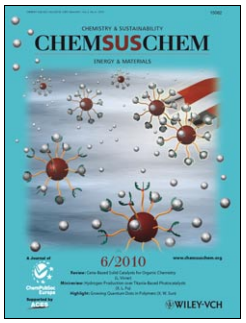
ChemSusChem
DOI: **10.1002/cssc.201000055**

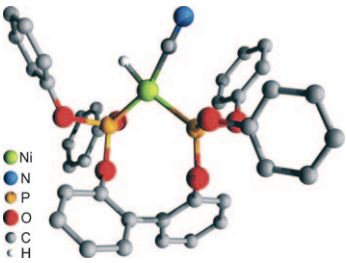
Biorenewables

T. J. Korstanje, J. T. B. H. Jastrzebski, R. J. M. Klein Gebbink*

Catalytic Dehydration of Benzylic Alcohols to Styrenes by Rhenium Complexes

The oxygen content of biomass-based materials can be reduced by selective dehydration of hydroxyl groups. As a first step towards biomass-based chemicals, rhenium-based catalysts are shown to be active in the dehydration of various benzylic alcohols to styrene moieties. The turnover frequencies are superior to the benchmark catalyst sulfuric acid, without sacrificing any selectivity.





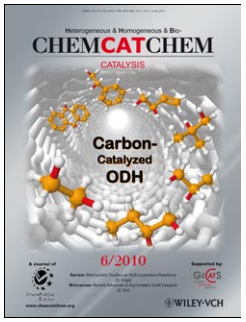
ChemCatChem
DOI: **10.1002/cctc.201000034**

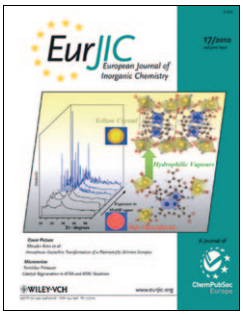
Homogeneous Catalysis

L. Bini, C. Müller, D. Vogt*

Mechanistic Studies on Hydrocyanation Reactions

Cyano' the times: This Review summarizes the state of the art in transition metal-catalyzed alkene hydrocyanation to form nitriles, with special emphasis on mechanistic studies. Ligand electronic and steric effects play a dominant role in determining the catalyst performance. Although the majority of the existing techniques concern nickel-catalyzed hydrocyanation, catalysis with complexes of other metals, such as cobalt and copper, is also discussed.



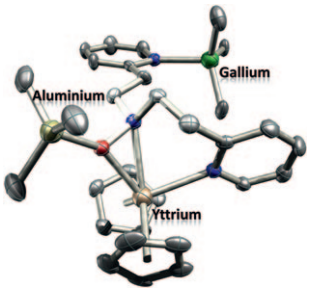


RE Metal Complex Adducts

B. J. Hellmann, A. Mix, B. Neumann, H.-G. Stammler, N. W. Mitzel*

$AlMe_3$, $GaMe_3$ and $InMe_3$ Adducts of *N*,*N*-Bis(2-{pyrid-2-yl}ethyl)hydroxylaminato Rare-Earth Metal Complexes and Their Molecular Dynamics

Three in one: The *N*,*N*-bis(2-{pyrid-2-yl}ethyl)hydroxylaminato ligand allows generating heterobi- and -trimetallic complexes by adduct formation of $[Cp_2Ln\{\eta^2\text{-}ON(C_2H_4\text{-}o\text{-}Py)_2\}]$ with $AlMe_3$, $GaMe_3$ and $InMe_3$. All complexes exhibit a highly dynamic behaviour in solution.



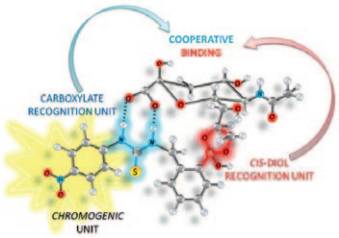
Eur. J. Inorg. Chem.
DOI: **10.1002/ejic.201000121**

Sialic Acid Recognition

M. Regueiro-Figueroa, K. Djanashvili, D. Esteban-Gómez, A. de Blas, C. Platas-Iglesias,* T. Rodríguez-Blas*

Towards Selective Recognition of Sialic Acid Through Simultaneous Binding to Its *cis*-Diol and Carboxylate Functions

Receptors containing phenylboronic acid and urea or thiourea units recognize sialic acids through a cooperative two-site binding mode based on 1) ester formation through interaction at the phenylboronic acid function of the receptor and 2) hydrogen-bond interaction between the thiourea moiety and the carboxylate group of the saccharide.



Eur. J. Org. Chem.
DOI: **10.1002/ejoc.201000186**