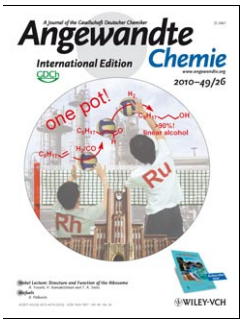
On these pages, we feature a selection of the excellent work that has recently been published in our sister journals. If you are reading these pages on a computer, click on any of the items to read the full article. Otherwise please see the DOIs for easy online access through Wiley InterScience.

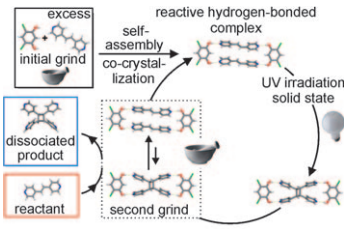



## *Supramolecular Catalysis*

A. N. Sokolov, D.-K. Bučar, J. Baltrusaitis, S. X. Gu, L. R. MacGillivray*

**Supramolecular Catalysis in the Organic Solid State through Dry Grinding**

**Chemical mechanics**: Hydrogen-bond-driven self-assembly and mechanochemistry are used to facilitate supramolecular catalysis in the solid state. Mortar-and-pestle grinding proves to be an efficient means to achieve co-crystal formation and turnover using a physical mixture composed of an olefin and catalytic amounts of a ditopic template (see scheme).



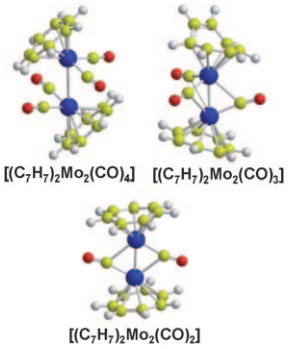

*Angew. Chem. Int. Ed.*
DOI: **10.1002/anie.201000874**


## *Organometallics*

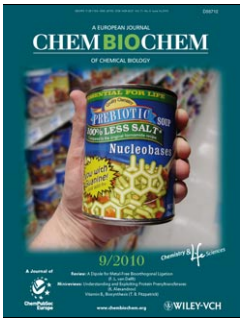
X. Feng,* C. Xie, Y. Xie, R. B. King,* H. F. Schaefer, III

**Heptahapticity in Binuclear (Cycloheptatrienyl)molybdenum Carbonyl Derivatives: The Interplay between Ring Hapticity/Planarity and Metal–Metal Multiple Bonding**

**A worthy competitor**: Theoretical studies on $[(C_7H_7)_2Mo_2(CO)_n]$ (see figure) indicate structures with fully bonded heptahapto $C_7H_7$ rings and four or fewer carbonyl groups to be energetically competitive, contrary to their chromium analogues. The lowest-energy structures for the carbonyl-richer systems ($n=6$, 5) contain one trihapto and one pentahapto $C_7H_7$ ring.




*Chem. Asian J.*
DOI: **10.1002/asia.200900363**

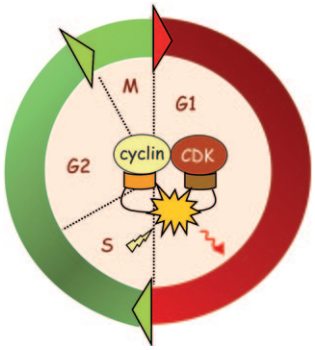



## *Biosensors*

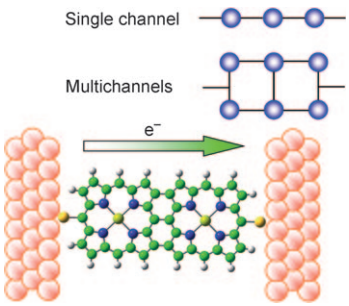
L. Kurzawa, M. C. Morris*

**Cell-Cycle Markers and Biosensors**

**Seeing signals**: Characterisation of the cell-cycle status in eukaryotic cells is essential to determine the impact of physiological and pathological signals. This review describes classical approaches that rely on cell fixation, and more recent approaches based on fluorescent markers and biosensors to probe cell-cycle regulators in living cells.




*ChemBioChem*
DOI: **10.1002/cbic.200900729**



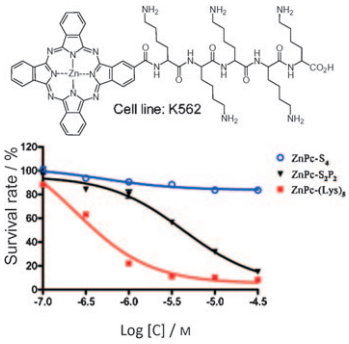

*ChemPhysChem*
DOI: **10.1002/cphc.201000092**

***Molecular Junctions***

H. Liu, C. Yu, N. Gao, J. Zhao*

**The Diversity of Electron-Transport Behaviors of Molecular Junctions: Correlation with the Electron-Transport Pathway**

**The length–conductivity relations** of conjugated molecules are diverse—and they are dominated by the electron-transport pathway (see picture). In the case of a single channel, the conductance decays rapidly with the length and follows an exponential law. However, when the molecular wires have multichannels, the decay of conductance does not follow the exponential relation.

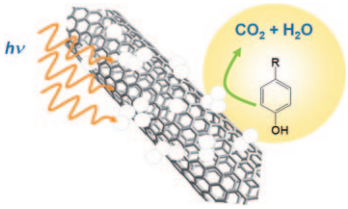

*ChemMedChem*
DOI: **10.1002/cmdc.201000042**

***Photodynamic Therapy***

Z. Chen, S. Zhou, J. Chen, Y. Deng, Z. Luo, H. Chen, M. R. Hamblin, M. Huang*

**Pentalysine β-Carbonylphthalocyanine Zinc: An Effective Tumor-Targeting Photosensitizer for Photodynamic Therapy**

**A new unsymmetrical** zinc phthalocyanine photosensitizer (pentalysine β-carbonylphthalocyanine zinc, ZnPc-$(Lys)_5$) was prepared in large quantity and high purity. This water-soluble cationic photosensitizer shows high tumor phototoxicity and significant inhibition of tumor growth.

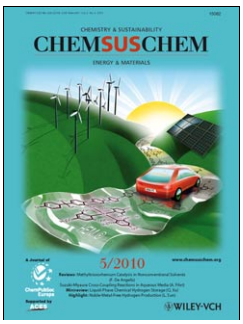

*ChemSusChem*
DOI: **10.1002/cssc.200900262**

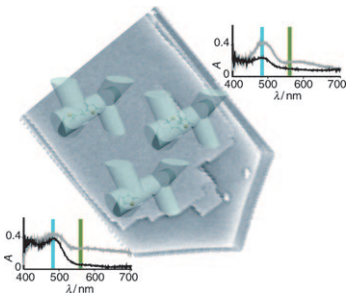
***Photocatalysis***

C. G. Silva, J. L. Faria*

**Photocatalytic Oxidation of Phenolic Compounds by Using a Carbon Nanotube-Titanium Dioxide Composite Catalyst**

**A multiwalled carbon nanotube-titanium dioxide catalyst** produced by a sol–gel method shows a high activity in the photocatalytic degradation of *para*-substituted phenols containing electron-donating groups. A synergetic effect is ascribed to the action of the carbon nanotubes as sensitizers, injecting electrons in the conduction band of the semiconductor, thereby increasing the efficiency of the photocatalytic process.



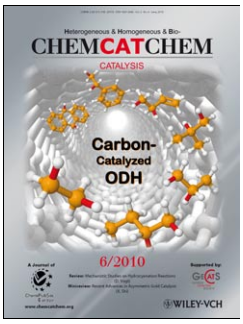

*ChemCatChem*
DOI: **10.1002/cctc.200900329**

***Spectroscopy***

M. H. F. Kox, A. Mijovilovich, J. J. H. B. Sättler, E. Stavitski, B. M. Weckhuysen*

**The Catalytic Conversion of Thiophenes over Large H-ZSM-5 Crystals: An X-Ray, UV/Vis, and Fluorescence Microspectroscopic Study**

**Inner visions**: Thiophene derivatives are chemically imaged during acid-catalyzed conversion within the micropores of individual coffin-shaped H-ZSM-5 zeolite crystals by X-ray absorption, UV/Vis, and confocal fluorescence microspectroscopy. A thiophene sulfur atom is found to be in a close proximity to two oxygen framework atoms and the reaction products are aligned within the straight pores of H-ZSM-5.



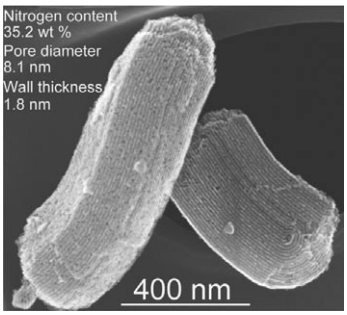

  

## *Mesoporous Silicon (Oxy)Nitride*

F. Hayashi, K.-i. Ishizu, M. Iwamoto*

**Effect of Pore Structure on the Nitridation of Mesoporous Silica with Ammonia**

Mesoporous silicon (oxy)nitrides with regular pore structures were prepared by nitridation of mesoporous silica MCM-41, SBA-15, and MCM-48 with ammonia. The nitrogen contents were 35–39 wt.-%. The reaction rates were dependent on the surface areas. Characterization revealed no collapse of the regular pore structure through the nitridation.



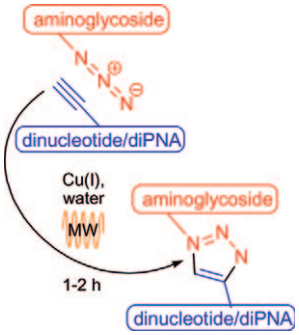

*Eur. J. Inorg. Chem.*
DOI: **10.1002/ejic.200901236**

## *Aminoglycoside Antibiotics*

J. Alguacil, S. Defaus, A. Claudio, A. Trapote, M. Masides, J. Robles*

**A Straightforward Preparation of Aminoglycoside–Dinucleotide and –diPNA Conjugates via Click Ligation Assisted by Microwaves**

Here, we report on an alternative procedure to prepare aminoglycoside–dinucleotide and –diPNA conjugates which combines copper-catalyzed Huisgen azide-alkyne cycloaddition with microwave irradiation (MW).




*Eur. J. Org. Chem.*
DOI: **10.1002/ejoc.201000182**

