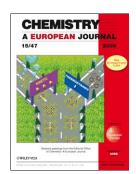
# Spotlights ...



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.



### **Chiral Phospholanes**

B. Gschwend, B. Pugin,\* A. Bertogg, A. Pfaltz\*

P-Chiral Ferrocenephospholanes: Synthesis, Reactivity, Metal Complex Chemistry and Application in the Asymmetric Hydrogenation of Olefins

**Asymmetric phosphanes**: P-chiral ferrocenephospholanes were prepared by an *ortho*-lithiation strategy followed by a stereoconvergent hydrophosphination. The reactivity of the corresponding rhodium and iridium complexes, including a chiral version of the Crabtree catalyst, was investigated and first results in the asymmetric hydrogenation of olefins were obtained.



Chem. Eur. J.

DOI: 10.1002/chem.200902418

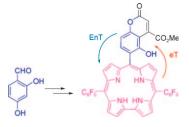


### **Corroles**

M. Tasior, D. T. Gryko,\* D. J. Pielacińska, A. Zanelli, L. Flamigni\*

 $\textit{Trans}-A_2B$ -corroles Bearing a Coumarin Moiety - From Synthesis to Photophysics

**Showdown at the ET corrole!** Several dyads comprised of corrole and coumarin units are synthesized, mainly through a one-pot condensation of coumarincarboxaldehydes with 5-(pentafluorophenyl)-dipyrromethane. An efficient energy transfer from the coumarin moiety to corrole takes place in the dyads investigated.



Chem. Asian J.

DOI: 10.1002/asia.200900345



## Cage Compounds

A. Deiters\*

Principles and Applications of the Photochemical Control of Cellular Processes

In the cage: Photochemical control over biological processes is commonly achieved with caged molecules. While the first reported examples of caged compounds were small molecules, recent advances in caging technologies have enabled the photochemical regulation of oligonucleotide and protein function. This article discusses different approaches to the caging of small molecules, DNA, and proteins, and the requirements for efficient light regulation of cellular processes by using caged molecules.



ChemBioChem

DOI: 10.1002/cbic.200900529

## ... on our Sister Journals







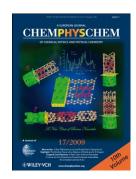
ChemPhysChem
DOI: 10.1002/cphc.200900601

## Soft Matter

L. Limozin,\* K. Sengupta

Quantitative Reflection Interference Contrast Microscopy (RICM) in Soft Matter and Cell Adhesion

On RICM: This review provides a guide to setting up a reflection interference contrast microscopy (RICM) system and interpreting the images. Examples of dynamical adhesion processes in colloid and membrane physics and cell biology are given. The picture (left) shows a giant phospholipid vesicle partially adhered to a substrate (arrows: adhesion domains) and (right) a spreading monocyte (arrow: large lamellipodium).



ChemMedChem
DOI: 10.1002/cmdc.200900356

## Molecular Modeling

P. Reszka, R. Schulz, K. Methling, M. Lalk, P. J. Bednarski\*

Synthesis, Enzymatic Evaluation, and Docking Studies of Fluorogenic Caspase 8 Tetrapeptide Substrates

**Automated docking** of various tetrapeptide substrates to human caspases provides insight into the features of enzyme recognition. Calculated binding energies are consistent with the experimentally determined  $K_{\rm M}$  values for a series of new fluorogenic IETD substrates toward human caspases 3 and 8.





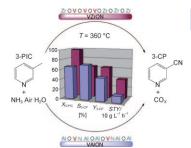
ChemSusChem
DOI: 10.1002/cssc.200900107

## Biofuels

S. Lestari, P. Mäki-Arvela, J. Beltramini, G. Q. M. Lu, D. Yu. Murzin\* Transforming Triglycerides and Fatty Acids into Biofuels

Fuels derived from biobased materials are attracting much attention. In this Minireview, we evaluate the transforming of biobased sources, particularly fatty acids and triglycerides, into fuels. Current technology such as transesterification, micro-emulsion, and cracking, known as the first generation, is covered. Recent novel technology based on deoxygenation reactions producing non-oxygenated biofuels is also discussed.





ChemCatChem

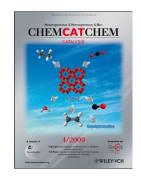
DOI: 10.1002/cctc.200900180

## Ammoxidation

C. Janke, J. Radnik, U. Bentrup, A. Martin, A. Brückner\*

Vanadium-Containing Oxynitrides: Effective Catalysts for the Ammoxidation of 3-Picoline

**Through space and time:** Vanadium-containing oxynitride (VMON; M = Al, Zr) catalysts give the highest space–time yields (STY) yet detected for 3-picoline (3-PIC) ammoxidation, due to a high V site dispersion, a mean surface V valence state close to +4, the formation of V—N—M moieties, the reversible incorporation of N in the catalyst surface, and a negligible surface acidity.





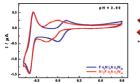


## Fe-Ni Sandwich-Type POMS

I. M. Mbomekalle,\* P. Mialane, A. Dolbecq, J. Marrot, F. Sécheresse, P. Berthet, B. Keita, L. Nadjo

Rational Synthesis, Structure, Magnetism and Electrochemistry of Mixed Iron–Nickel-Containing Wells–Dawson-Fragment-Based Sandwich-Type Polyoxometalates

We report on some novel nickel- and/or iron-containing Wells—Dawson sandwich-type polyoxoanions that were synthesized for the first time. These species are stable in solution, and their magnetic and redox behaviours were studied. The six complexes presented in this study are effective in the electrocatalytic reduction of nitrite, dioxygen and hydrogen peroxide.





Eur. J. Inorg. Chem.

DOI: 10.1002/ejic.200900625

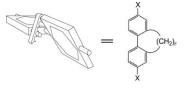


## **Molecular Electronics**

D. Vonlanthen, J. Rotzler, M. Neuburger, M. Mayor\*

Synthesis of Rotationally Restricted and Modular Biphenyl Building Blocks

The synthesis of a series of modular biphenyl building blocks with restricted torsion angles is described. Short alkyl bridges dictate the conformation and provide rigid rod-type structures with well-defined backbone conjugation.



Eur. J. Org. Chem.

DOI: 10.1002/ejoc.200900805

