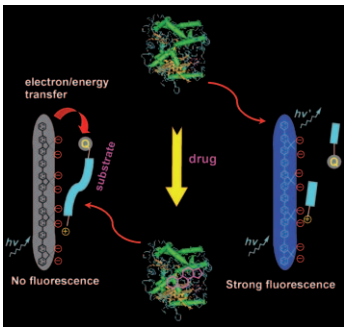
On these pages, we feature a selection of the excellent work that has recently been published in our sister journals. If you are reading these pages on a computer, click on any of the items to read the full article. Otherwise please see the DOIs for easy online access through Wiley InterScience.

Drug Screening

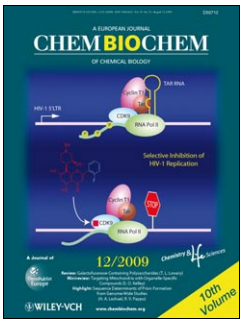
L. An, S. Wang*

Conjugated Polyelectrolytes as New Platforms for Drug Screening

Putting a charge into drug discovery: This Focus Review highlights recent research efforts in the development of water-soluble conjugated polyelectrolytes (CPEs) as a new class of optical platforms for the screening of potential drugs. Three types of biological targets for the search of small-molecule active drugs are described: nucleic acid, enzyme, and RNA-protein complex. Future research directions for drug screening based on CPEs are also presented.



Chem. Asian J.
DOI: **10.1002/asia.200900148**

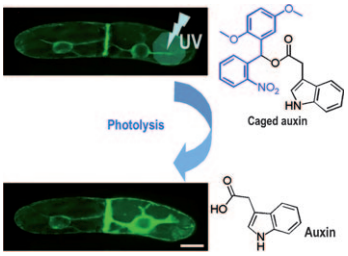


Caged Auxins

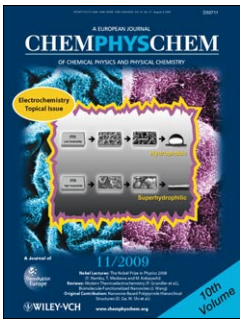
N. Kusaka, J. Maisch, P. Nick, K.-i. Hayashi,* H. Nozaki

Manipulation of Intracellular Auxin in a Single Cell by Light with Esterase-Resistant Caged Auxins

Artificial auxin gradient: An esterase-resistant caged auxin probe was designed for plant biology to control the intracellular auxin level with photoirradiation by using a caged auxin system. In this system, the spatial control of photolysis of a DMPNB-caged auxin can manipulate the intracellular auxin level within a single cell and trigger the auxin response of gene expression.



ChemBioChem
DOI: **10.1002/cbic.200900289**

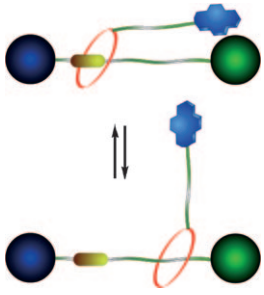


Molecular Shuttle

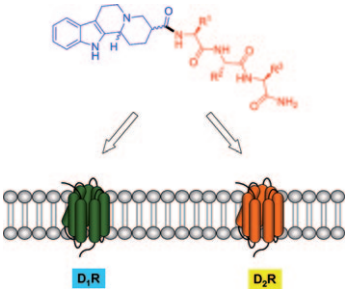
W. Zhou, S. Zhang, G. Li, Y. Zhao, Z. Shi, H. Liu, Y. Li*

Fluorescent Alteration on a Bistable Molecular Shuttle

Artificial motors: Solvent-driven molecular shuttles containing a pyrene-connected macrocycle and an intramolecular charge-transfer (ICT) chromophore stopper (TDPD) are constructed. The macrocycle is located close to or far from the chromophore in apolar and polar solvents, respectively, which alters the fluorescent emission of the pyrene probe in the macrocycle (see figure).



ChemPhysChem
DOI: **10.1002/cphc.200900228**



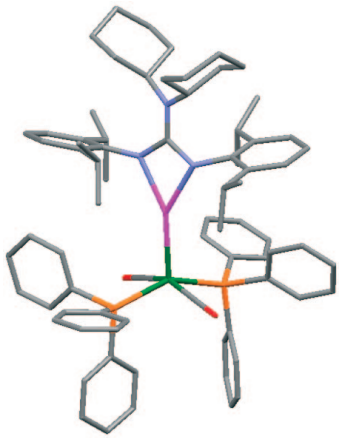
ChemMedChem
DOI: **10.1002/cmdc.200900149**

Combinatorial Chemistry

M. Vendrell, A. Soriano, V. Casadó, J. L. Díaz, R. Lavilla, E. I. Canela, C. Lluís, R. Franco, F. Albericio,* M. Royo*

Indoloquinolizidine–Peptide Hybrids as Multiple Agonists for D_1 and D_2 Dopamine Receptors

Dual agonists: Herein we summarize the synthesis and biological evaluation of the first indoloquinolizidine–peptide hybrids to be reported. Their capacity to activate both D_1 and D_2 dopamine receptors makes these compounds potentially useful molecules for testing the therapeutic potential of multivalent drugs on dopamine receptors.



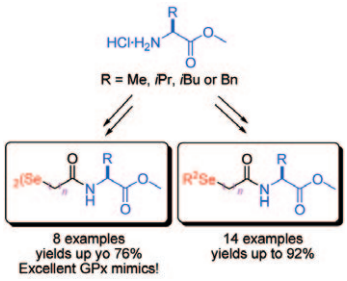
Eur. J. Inorg. Chem.
DOI: **10.1002/ejic.200900407**

Metal–Metal Bonds

C. Jones,* A. Stasch, G. J. Moxey, P. C. Junk, G. B. Deacon

Complexes of Four-Membered Group 13 Metal(I) N-Heterocyclic Carbene Analogues with Metal Carbonyl Fragments

The reactions of gallium(I) and indium(I) heterocycles with transition metal carbonyl compounds have afforded a series of complexes in which the heterocycles act as σ-donors and display negligible π-accepting capabilities. Color code: purple = In, green = Ru, orange = P, red = O, light blue = N.



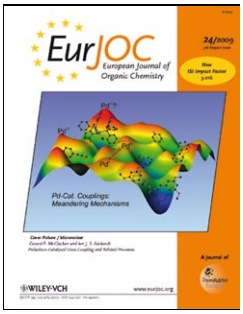
Eur. J. Org. Chem.
DOI: **10.1002/ejoc.200900485**

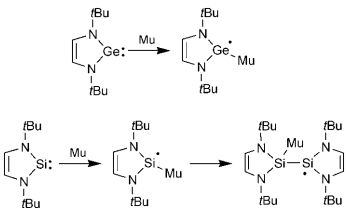
Selenium Amino Acids

E. E. Alberto, L. C. Soares, J. H. Sudati, A. C. A. Borges, J. B. T. Rocha,* A. L. Braga*

Efficient Synthesis of Modular Amino Acid Derivatives Containing Selenium with Pronounced GPx-Like Activity

In a concise and flexible synthetic route, a series of new amino acid derivatives containing selenium was prepared. These compounds showed high efficiency as GPx mimics, destroying H_2O_2 at the expense of PhSH.





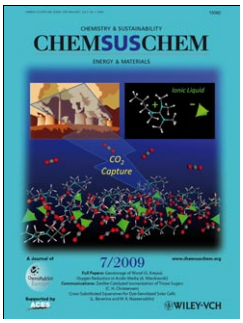
Chem. Eur. J.
DOI: **10.1002/chem.200901281**

Muoniated Radicals

B. M. McCollum, J.-C. Brodovitch, J. A. C. Clyburne, A. Mitra, P. W. Percival,* A. Tomasik, R. West

Reaction of Stable N-Heterocyclic Silylenes and Germylenes with Muonium

Very a-Mu-sing! Reaction of a germylene with muonium (Mu) yields a germyl radical, in direct analogy to Mu attack at the ylideneic center of the corresponding N-heterocyclic carbene. In contrast, the analogous silylene initially yields the expected silyl radical, but this radical rapidly attacks another silylene molecule to generate a muoniated disilanyl radical.



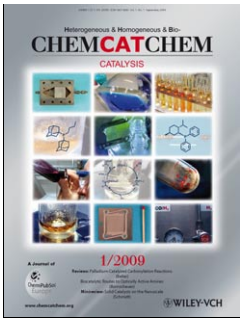
Renewable Resources

M. Van der Steen, C. V. Stevens*

Undecylenic Acid: A Valuable and Physiologically Active Renewable Building Block from Castor Oil

Undecylenic acid is a terminally unsaturated fatty acid that is obtained from *Ricinus communis (Euphorbiaceae)* after extraction of the seeds and pyrolysis of the castor oil extract (which contains mainly ricinolein). Undecylenic acid is applied in various fields, for example in antimicrobial agents, organic synthesis, polymer production, and analytical chemistry. The literature concerning undecylenic acid, or 10-undecenoic acid, is reviewed.

ChemSusChem
DOI: **10.1002/cssc.200900075**

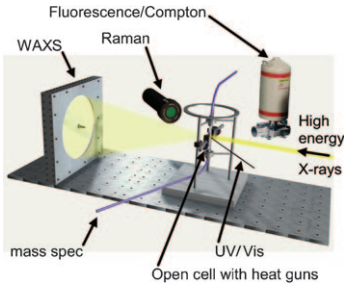


Operando Techniques

M. G. O'Brien, A. M. Beale, S. D. M. Jacques, M. Di Michiel, B. M. Weckhuysen*

Spatiotemporal Multitechnique Imaging of a Catalytic Solid in Action: Phase Variation and Volatilization During Molybdenum Oxide Reduction

Caught in the act: A novel combined experimental setup is demonstrated, which uses very high energy/flux synchrotron X-rays and allows the measurement of spatiotemporal data on larger reactors and the use of techniques such as fluorescence spectroscopy and Compton scattering. Wide-angle X-ray and Compton scattering reveal information on the causes of molybdenum volatilization in partial oxidation catalysts.



ChemCatChem
DOI: **10.1002/cctc.200900042**

