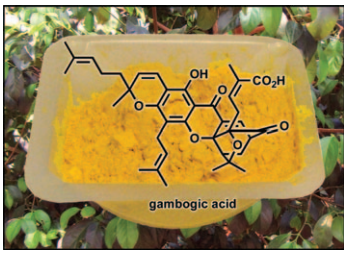
On these pages, we feature a selection of the excellent work that has recently been published in our sister journals. If you are reading these pages on a computer, click on any of the items to read the full article. Otherwise please see the DOIs for easy online access through Wiley Online Library.

Natural Products

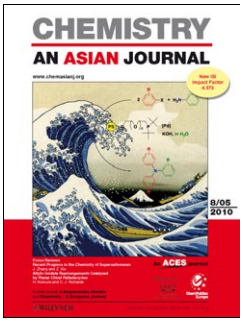
O. Chantarasriwong, A. Batova, W. Chavasiri, E. A. Theodorakis*

Chemistry and Biology of the Caged *Garcinia* Xanthones

Golden discovery: Gamboge, the golden resin of various *Garcinia* trees, has a spectacular history in traditional Asian medicine. Chemical analysis of gamboge led to the identification of a new family of bioactive metabolites collectively referred to as caged *Garcinia* xanthones. Represented by gambogic acid (see figure), this family is highlighted by a privileged chemical scaffold that holds remarkable potential in chemistry, biology, and medicine.



Chem. Eur. J.
DOI: **10.1002/chem.201000741**

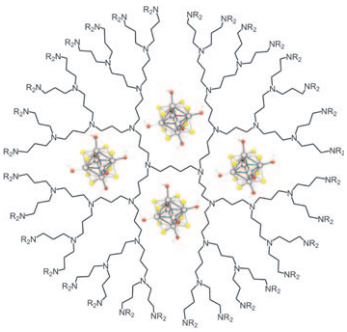


Dendrimers

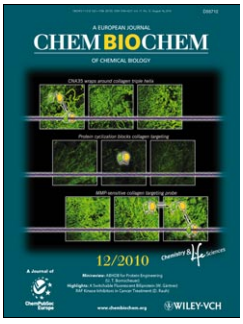
M. Kubeil, H. Stephan,* H.-J. Pietzsch, G. Geipel, D. Appelhans, B. Voit, J. Hoffmann, B. Brutschy, Y. V. Mironov, K. A. Brylev, V. E. Fedorov

Sugar-Decorated Dendritic Nanocarriers: Encapsulation and Release of the Octahedral Rhenium Cluster Complex $[Re_6S_8(OH)_6]^{4-}$

Catch and release! The encapsulation and release of nanometer-sized anionic rhenium cluster complexes in biocompatible maltose-decorated dendrimers have been studied in detail through the application of different physico-chemical methods. The determined properties suggest the possibility for the development of the next generation of dendritic nanocarriers with specific targeting of destined tissue for therapeutic treatments.



Chem. Asian J.
DOI: **10.1002/asia.201000284**

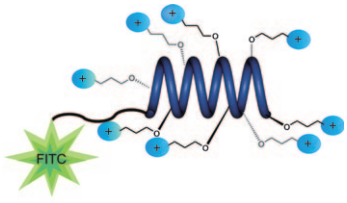


Drug Delivery

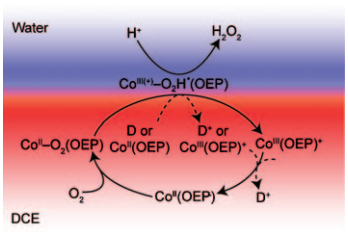
J. Iriondo-Alberdi, K. Laxmi-Reddy, B. Bouguerne, C. Staedel, I. Huc*

Cellular Internalization of Water-Soluble Helical Aromatic Amide Foldamers

Stay positive and it will happen! A series of water-soluble, aromatic, oligoamide foldamers have been prepared that are capable of efficiently crossing the plasma membrane in three different cell lines. These studies suggest that the length of the aromatic-oligoamide foldamers and greater number of positive charges aid in the translocation process, which presumably then follows an endocytic pathway.



ChemBioChem
DOI: **10.1002/cbic.201000256**



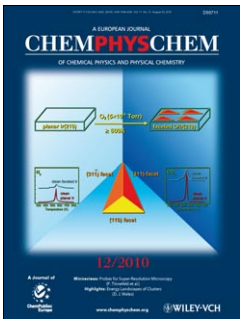
Electrocatalysis

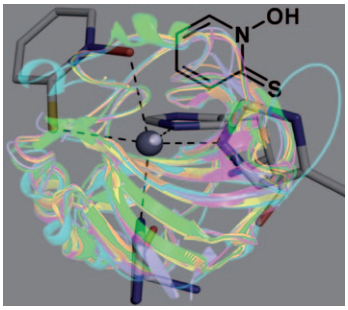
R. Partovi-Nia, B. Su, M. A. Méndez, B. Habermeyer, C. P. Gros, J.-M. Barbe, Z. Samec, H. H. Girault*

Dioxygen Reduction by Cobalt(II) Octaethylporphyrin at Liquid | Liquid Interfaces

Molecular electrocatalysis: The oxygen reduction reaction catalyzed by cobalt(II) (2,3,7,8,12,13,17,18-octaethylporphyrin) [Co(OEP)] can be driven at soft interfaces formed between water and 1,2-dichloroethane (DCE) (see picture). Thus, in the presence of Co(OEP) in DCE and an aqueous acidic solution, oxygen is reduced. This reduction reaction is facilitated when ferrocene is present in excess in the organic phase.

ChemPhysChem
DOI: **10.1002/cphc.201000200**





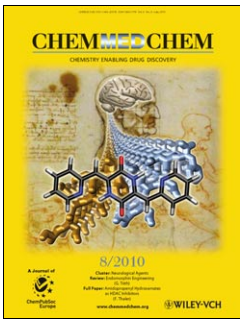
Drug Discovery

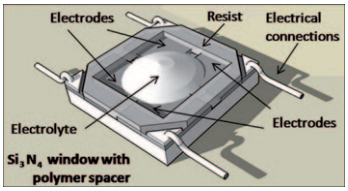
J. Schulze Wischeler, A. Innocenti, D. Vullo, A. Agrawal, S. M. Cohen, A. Heine, C. T. Supuran,* G. Klebe*

Bidentate Zinc Chelators for α-Carbonic Anhydrases that Produce a Trigonal Bipyramidal Coordination Geometry

New zinc binding groups were evaluated on carbonic anhydrase (CA) isoforms. They show IC_{50} values of 2.8 to 10.8 μM. The crystal structure of hCA II in complex with one of these fragments reveals a bidentate chelation of the Zn^{2+} center with trigonal-bipyramidal coordination geometry. It provides the starting point for the development of a new class of promising CA inhibitors.

ChemMedChem
DOI: **10.1002/cmdc.201000200**





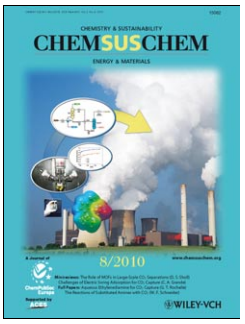
Fuel Cells

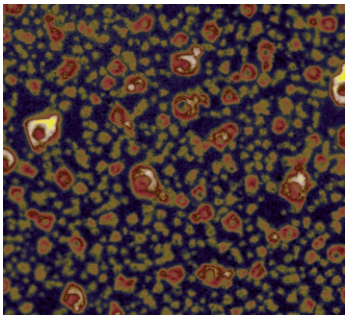
B. Bozzini,* A. Gianoncelli, B. Kaulich, M. Kiskinova, M. Prasciolu, I. Sgura

Metallic Plate Corrosion and Uptake of Corrosion Products by Nafion in Polymer Electrolyte Membrane Fuel Cells

Contamination of fuel-cell membranes with metal ions, resulting from the use of ferrous alloys, leads to corrosion and ultimately failure of the device. By using a combination of X-ray spectroscopy techniques, the corrosion processes of Ni and Fe electrodes in contact with a hydrated Nafion film are investigated. The results show diffusion of corrosion products within the film only in the case of the Fe electrodes, whereas Ni electrodes appear corrosion resistant.

ChemSusChem
DOI: **10.1002/cssc.201000048**





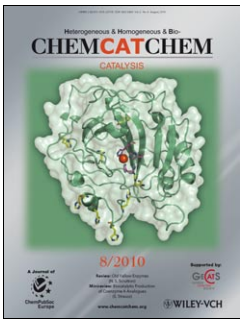
Carbon Nanotubes

R. Joshi, J. Engstler, L. Houben, M. Bar Sadan, A. Weidenkaff, P. Mandaliev, A. Issanin, J. J. Schneider*

Catalyst Composition, Morphology and Reaction Pathway in the Growth of "Super-Long" Carbon Nanotubes

What took so long? An ex situ investigation of an iron–aluminum nanocatalyst that is active in the water-assisted growth of "super-long" carbon nanotubes (CNTs) with different techniques (HRSTEM, EELS, XPS, GIXRD) reveals for the first time its bimetallic nature. Besides metallic aluminum and iron, mixed oxides, hydroxides, and aluminum oxycarbides play a role in the CNT growth process.

ChemCatChem
DOI: **10.1002/cctc.201000037**

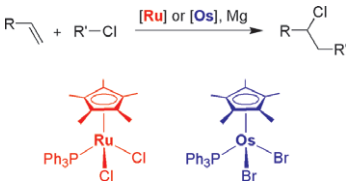


Radical Chemistry

M. A. Fernández-Zúmel, G. Kiefer, K. Thommes, R. Scopelliti, K. Severin*

Ruthenium vs. Osmium Complexes as Catalysts for Atom Transfer Radical Addition Reactions

The catalytic activity of the complexes $[Cp^*OsBr_2(PPh_3)]$ and $[Cp^*RuCl_2(PPh_3)]$ in conjunction with Mg has been evaluated for atom transfer radical addition (ATRA) reactions and for atom transfer radical cyclization (ATRC) reactions.



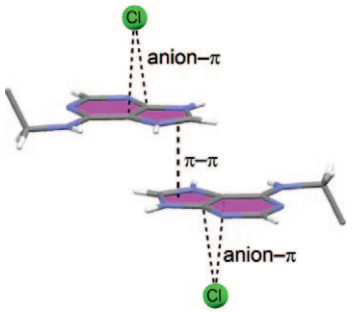
Eur. J. Inorg. Chem.
DOI: **10.1002/ejic.201000388**

Anion–π Interactions

A. Garcia-Raso, F. M. Albertí,* J. J. Fiol, Y. Lagos, M. Torres, E. Molins, I. Mata, C. Estarellas, A. Frontera,* D. Quiñonero, P. M. Deyà

A Combined Experimental and Theoretical Study of Anion–π Interactions in N^6- and N^9-Decyladenine Salts

The synthesis and X-ray characterization of N^9- and N^6-decyladenine hydrochloride salts is reported. The latter exhibits interesting anion–π interactions, which are responsible for crystal packing. The former does not present any anion–π interactions; instead, it is stabilized by hydrogen-bonding interactions. Both structures are compared and analyzed by theoretical calculations.



Eur. J. Org. Chem.
DOI: **10.1002/ejoc.201000436**