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.

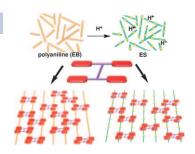


Supramolecular Chemistry

T. Kaseyama, S. Takebayashi, R. Wakabayashi, S. Shinkai,* K. Kaneko, M. Takeuchi*

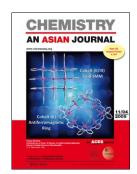
Supramolecular Assemblies of Polyaniline through Cooperative Bundling by a Palladium-Complex-Appended Synthetic Cross-Linker

Alignment of polyanilines: The ordered structures of polyanilines were efficiently formed through a supramolecular bundling approach (see scheme) by using an aligner molecule bearing two cofacial palladium centers, which elicits positive homotropic allosterism during the binding of polymers.



Chem. Eur. I.

DOI: 10.1002/chem.200902305

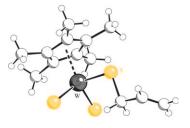


Tungsten Complexes

F. Eweiner, S. Senda, K. Bergander, C. Mück-Lichtenfeld, S. Grimme, R. Fröhlich, M. Aoyama, H. Kawaguchi, Y. Ohki, T. Matsumoto, G. Kehr, K. Tatsumi,* G. Erker*

Evidence for a Rapid Degenerate Hetero-Cope-Type Rearrangement in $[Cp*W(S)_2S-CH_2-CH=CH_2]$

Allyl automerization: The title complex undergoes rapid allyl automerization, proceeding via a six-membered transition state, as identified by DFT calculations. A detailed temperature-dependent NMR study provides a Gibbs activation energy of about 14 kcal mol⁻¹.



Chem. Asian J.

DOI: 10.1002/asia.200900360

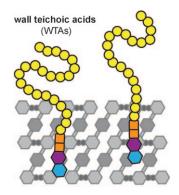


Wall Teichoic Acids

J. G. Swoboda, J. Campbell, T. C. Meredith, S. Walker*

Wall Teichoic Acid Function, Biosynthesis, and Inhibition

Off the wall: Wall teichoic acids (WTAs) are negatively charged glycopolymers found in dense arrays on the surface of Gram-positive bacteria. WTAs have profound effects on the physiology of Gram-positive organisms, and impact everything from cation homeostasis to antibiotic susceptibility to survival in a host. This review summarizes recent advances made toward understanding WTA function, biosynthesis and inhibition.



ChemBioChem

DOI: 10.1002/cbic.200900557

... on our Sister Journals

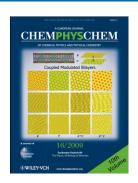
Chem Phys Chem DOI: 10.1002/cphc.200900574

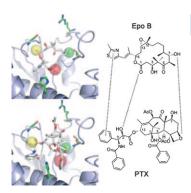
Atomic Force Microscopy

T. Pirzer, T. Hugel*

Adsorption Mechanism of Polypeptides and Their Location at Hydrophobic Interfaces

A single-molecule method based on atomic force microscopy is applied to determine the adhesion strength and location of polypeptides at interfaces (see figure). The experiments show that the adsorbed polypeptide spans over both the depletion layer and the hydrophobic hydration layer to facilitate a compensation mechanism between dispersive and hydration forces.





ChemMedChem DOI: 10.1002/cmdc.200900303

Antitumor Agents

Fuel Cells

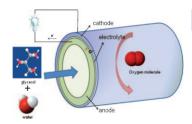
S. Forli, F. Manetti, K.-H. Altmann,* M. Botta*

J. Y. Won, H. J. Sohn, R. H. Song, S. I. Woo*

Evaluation of Novel Epothilone Analogues by means of a Common Pharmacophore and a QSAR Pseudoreceptor Model for Taxanes and **Epothilones**

Taxanes and epothilones: New insights into the binding mode of epothilone B with tubulin support a previous hypothesis based on a pseudoreceptor model, in which taxanes and epothilones binding in the βtubulin binding pocket share several pharmacophoric elements.





ChemSusChem DOI: 10.1002/cssc.200900170

Glycerol as a Bioderived Sustainable Fuel for Solid-Oxide Fuel Cells with Internal Reforming

Fuel for thought: Glycerol, obtained as a byproduct during the production of biodiesel is an environmentally sustainable fuel. Here it is used as fuel for solid oxide fuel cells. The maximum power density is comparable to that of solid oxide fuel cells that use hydrogen.



 $C_2H_{4(g)} + CO_{(g)} + H_2O_{(g)}$



Heteregeneous Catalysis

L. Jin, J. Reutenauer, N. Opembe, M. Lai, D. J. Martenak, S. Han, S. L. Suib*

Studies on Dehydrogenation of Ethane in the Presence of CO2 over Octahedral Molecular Sieve (OMS-2) Catalysts

A breath of fresh air: The octahedral molecular sieve (OMS-2) catalyst shows outstanding catalytic activity, selectivity, and stability in the dehydrogenation of ethane into ethylene in the presence of CO₂. This process can be extended for other alkanes, giving an ideal feedstock for any process involving alkene carbonylation, as a greenhouse gas, CO₂, can be recycled.



ChemCatChem

DOI: 10.1002/cctc.200900149

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Spotlights ...



Dual-Modality Imaging

J. P. Holland, * V. Fisher, J. A. Hickin, J. M. Peach *

Pyrene-Functionalised Copper Complexes as Potential Dual-Modality Imaging Agents

Pyrene-functionalised copper and zinc complexes of bis (thiosemicar-bazonato) ligands have been characterised as potential dual-modality imaging agents for in vitro fluorescence microscopy and in vivo positron emission tomography.



Eur. J. Inorg. Chem.

DOI: 10.1002/ejic.200900823

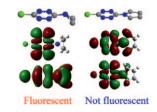


Fluorescent s-Tetrazines

Y.-H. Gong, F. Miomandre, R. Méallet-Renault, S. Badré, L. Galmiche, J. Tang, P. Audebert,* G. Clavier*

Synthesis and Physical Chemistry of s-Tetrazines: Which Ones are Fluorescent and Why?

New s-tetrazines have been synthesized and their electrochemical and photophysical properties investigated. Their electronic properties were rationalized by DFT calculations affording a predictive tool for the occurrence or not of fluorescence in this class of compounds.



Eur. J. Org. Chem.

DOI: 10.1002/ejoc.200900964

