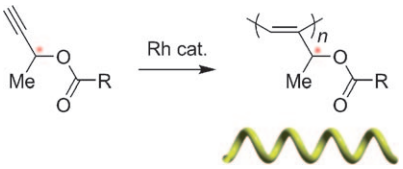
Helical Polymers

Y. Suzuki, M. Shiotsuki, F. Sanda,*
T. Masuda*

Synthesis and Helical Structure of Poly(1-methylpropargyl ester)s with Various Side Chains

Chem. Asian J.
DOI: **10.1002/asia.200800131**



Something's screwy: Optically active poly(1-methylpropargyl ester)s with various substituents can be obtained by polymerization with a rhodium catalyst. The polymers have a *cis*-stereoregular main chain and form a predominantly one-handed helical structure. As a result, they exhibit high rigidity and chiral amplification.

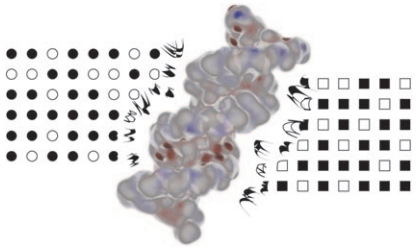
DNA Structures

B. D. Heuberger, C. Switzer*

An Alternative Nucleobase Code: Characterization of Purine–Purine DNA Double Helices Bearing Guanine–Isoguanine and Diaminopurine 7-Deaza-Xanthine Base Pairs

ChemBioChem
DOI: **10.1002/cbic.200800450**

DNA's alter ego: Synthetic purine–purine DNA double helices are shown to have stability comparable to canonical DNA.

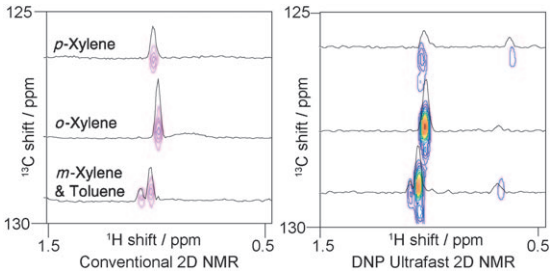


NMR Spectroscopy

M. Mishkovsky, L. Frydman*

Progress in Hyperpolarized Ultrafast 2D NMR Spectroscopy

ChemPhysChem
DOI: **10.1002/cphc.200800461**



Sensitive multidimensional NMR: The combination of ex situ dynamic nuclear polarization (DNP) and single-scan 2D NMR methodologies opens new vistas in the collection of multidimensional data with high sensitivity. Experimental results show the benefits expected for optimized spectroscopic acquisitions implemented on small- and medium-sized organic molecules (see figure).

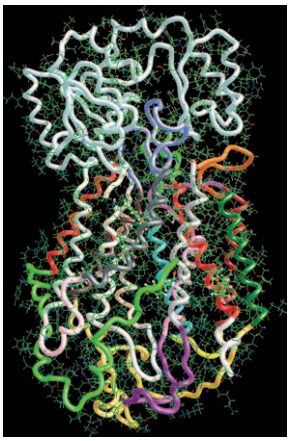
Pharmacophore Mapping

A. Pedretti, L. De Luca, C. Marconi, G. Negrisoli, G. Aldini, G. Vistoli*

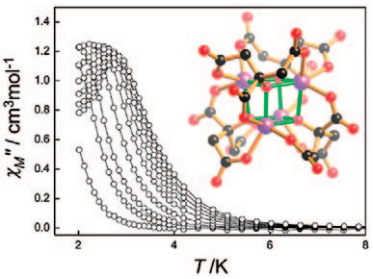
Modeling of the Intestinal Peptide Transporter hPepT1 and Analysis of Its Transport Capacities by Docking and Pharmacophore Mapping

ChemMedChem
DOI: **10.1002/cmdc.200800184**

The intestinal hPepT1 transporter is involved in the active absorption of dietary peptides and peptidomimetic drugs. The aim of this study was to generate a model for hPepT1 by fragments. The model was validated by docking analyses and pharmacophore mapping using a set of 50 known ligands. The results suggest that the model can be used to predict the transport of peptide-like molecules.



Variable-frequency ac-susceptibility studies on our recently reported cubane-containing clusters $[C(NH_2)_3]_8[Co_4(cit)_4]\cdot 8H_2O$, cit = citrate, and $[Co_8(C_4O_7)_4(H_2O)_{12}]\cdot 24H_2O$ reveal slow relaxation and single-molecule magnetic behaviour, with blocking temperatures of below 4 K.

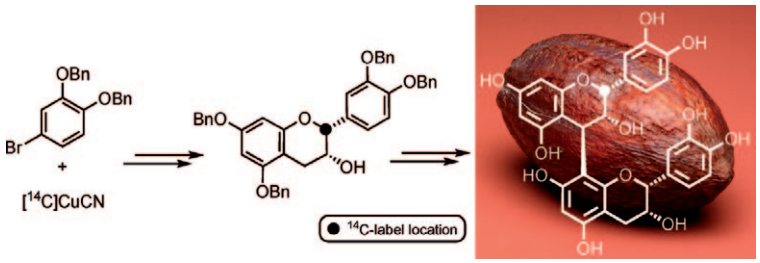


Magnetisation Reversal in Co Cluster

B. Moubaraki, K. S. Murray,*
T. A. Hudson, R. Robson

Tetranuclear and Octanuclear Cobalt(II) Citrate Cluster Single Molecule Magnets

Eur. J. Inorg. Chem.
DOI: **10.1002/ejic.200800611**



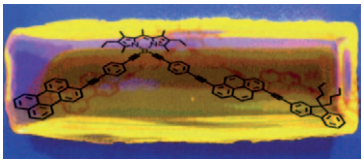
Health benefits of foods consumed for pure pleasure received much recognition in the recent years. Cocoa and dark chocolate are particularly rich in procyanidins. We developed the first asymmetric total synthesis of[jy[ntprocyanidin B2 and applied it to the preparation of a regioselectively radiolabeled ^{14}C-analogue, which will be used to strengthen our knowledge on the metabolism of procyanidins.

Radiolabeled Polyphenols

F. Viton, C. Landreau, D. Rustidge, F. Robert, G. Williamson, D. Barron*

First Total Synthesis of ^{14}C-Labeled Procyanidin B2 – A Milestone Toward Understanding Cocoa Polyphenol Metabolism

Eur. J. Org. Chem.
DOI: **10.1002/ejoc.200800886**



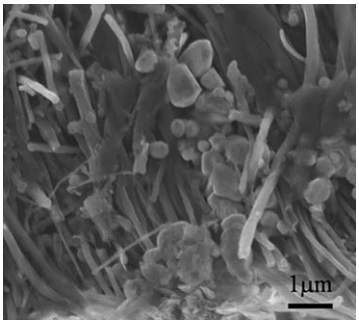
Piecing together a multicomponent molecular array (see graphic) that absorbs incident photons over a wide spectral range and concentrates the emission into a narrow band, thereby producing a highly efficacious solar concentrator.

Energy Transfer

A. Harriman,* L. Mallon, R. Ziessel*

Energy Flow in a Purpose-Built Cascade Molecule Bearing Three Distinct Chromophores Attached to the Terminal Acceptor

Chem. Eur. J.
DOI: **10.1002/chem.200801384**



Carbon—the new black: The advantages of using carbon nanotubes together with acetylene blacks as cathode fillers include not only enhancement of the electrical and the thermal properties of the electrode but also enhancement of the density of the electrode and a decrease in the electrolyte absorption time. The use of carbon nanotubes as multifunctional fillers in both cathode and anode materials for lithium-ion secondary batteries may increase.

Lithium-Ion Batteries

C. Sotowa, G. Origi, M. Takeuchi, Y. Nishimura, K. Takeuchi, I. Y. Jang, Y. J. Kim, T. Hayashi, Y. A. Kim,* M. Endo, M. S. Dresselhaus

The Reinforcing Effect of Combined Carbon Nanotubes and Acetylene Blacks on the Positive Electrode of Lithium-Ion Batteries

ChemSusChem
DOI: **10.1002/cssc.200800170**

Auf diesen beiden Seiten weisen wir auf wichtige aktuelle Beiträge in unseren Schwesterzeitschriften hin. Wenn Sie die Seiten online lesen, dann können Sie die Artikel mit einem Klick direkt aufrufen, ansonsten sind sie durch Eingabe der DOIs über Wiley InterScience leicht online zugänglich.