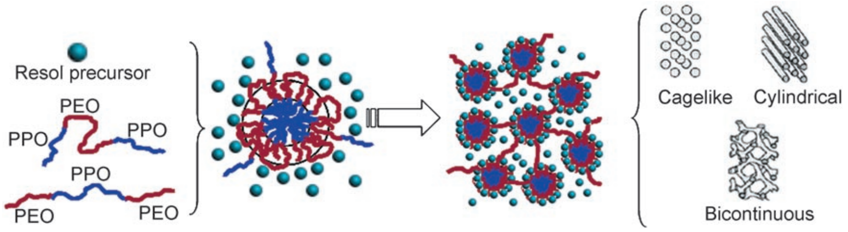
Mesoporous Materials

Y. Huang, H. Cai, T. Yu, X. Sun, B. Tu, D. Zhao*

Highly Ordered Mesoporous Carbonaceous Frameworks from a Template of a Mixed Amphiphilic Triblock-Copolymer System of PEO–PPO–PEO and Reverse PPO–PEO–PPO

Chem. Asian J.
DOI: **10.1002/asia.200700173**



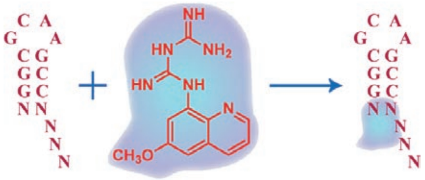
Order, order! A series of highly ordered mesoporous polymers with various structures can be formed by using phenolic resol as precursors and a mixed PEO/PPO amphiphilic surfactant system as a template. Rational control of the mesostructure in an amphiphilic system thus becomes possible. PEO = poly(ethylene oxide), PPO = poly(propylene oxide).

RNA Recognition

Z. Yan, S. Rao Ramisetty, P. H. Bolton,* A. M. Baranger*

Selective Recognition of RNA Helices Containing Dangling Ends by a Quinoline Derivative

ChemBioChem
DOI: **10.1002/cbic.200700261**



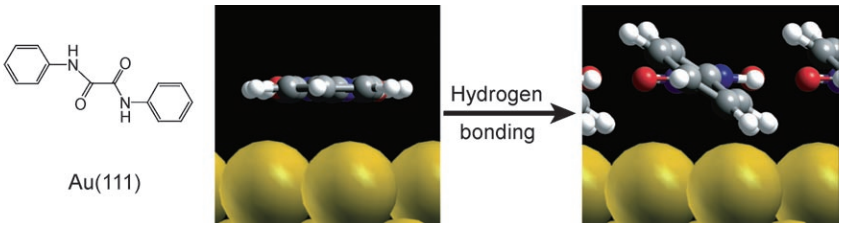
On the loose end. We report a quinoline derivative (QD1; highlighted in blue in the scheme) that is selective for RNA helices that contain 3′-dangling ends. The selectivity depends on the length and sequence of the dangling 3′ end and the terminal base pair of the helix. These results identify QD1 as a promising scaffold for designing structure specific RNA-binding ligands.

Surface Science

F. Klappenberger,* M. E. Cañas-Ventura, S. Clair, S. Pons, U. Schlickum, Z.-R. Qu, H. Brune, K. Kern, T. Strunskus, C. Wöll, A. Comisso, A. De Vita, M. Ruben,* J. V. Barth*

Conformational Adaptation in Supramolecular Assembly on Surfaces

ChemPhysChem
DOI: **10.1002/cphc.200700370**



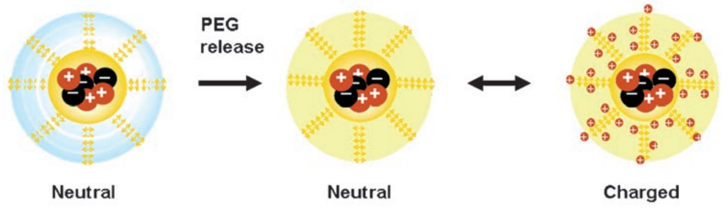
Intermolecular hydrogen bonding of *N*,*N*′-diphenyl oxalic amides deposited on Au(111) drives a rotation of the aromatic substituents (see picture). This low-dimensional supramolecular surface nanosystem, based on conformationally adaptive tectons, is identified by molecular-level scanning tunnelling imaging, X-ray absorption measurements and first-principles modeling.

Gene Delivery

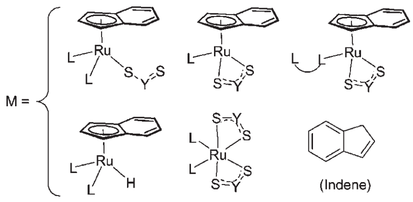
M. P. Xiong, Y. Bae, S. Fukushima, M. L. Forrest, N. Nishiyama, K. Kataoka,* G. S. Kwon*

pH-Responsive Multi-PEGylated Dual Cationic Nanoparticles Enable Charge Modulations for Safe Gene Delivery

ChemMedChem
DOI: **10.1002/cmdc.200700093**



Charged to deliver: The intelligent design and characterization of dynamic cationic nanoparticles formed from the self-association of a pH-responsive block copolymer is described. The platform allows pH-sensitive multilevel PEGylation and imparts nanoparticles with the ability to transition from neutral to charged at pH 5.



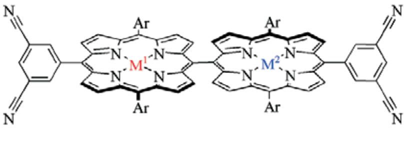
Halide substitution of the complexes $[(\mathrm{Ind})\mathrm{Ru}(\mathrm{L}_2)\mathrm{X}]$ [(L_2) = dppf, X = Cl; (L_2) = dppm, X = Cl; and (L_2) = $(\mathrm{CO})_2$, X = I] with the 1,1-dithiolates $^{-}\mathrm{S}_2\mathrm{Y}$ (Y = CNR_2, COR, PR_2) gives rise to a product mixture (M) dependent on the nature of L_2, $\mathrm{S}_2\mathrm{Y}$, and the solvent.

Ruthenium Complexes

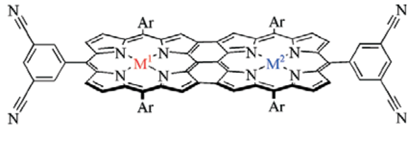
S. Y. Ng, J. Tan, W. Y. Fan, W. K. Leong, L. Y. Goh,* R. D. Webster

Synthetic, X-ray Diffraction, Electrochemical, and Density Functional Theoretical Studies of (Indenyl)ruthenium Complexes Containing Dithiolate Ligands

Eur. J. Inorg. Chem.
DOI: **10.1002/ejic.200700070**



meso,meso-linked biaryl type



meso,meso-β–β, β–β triply linked planar type

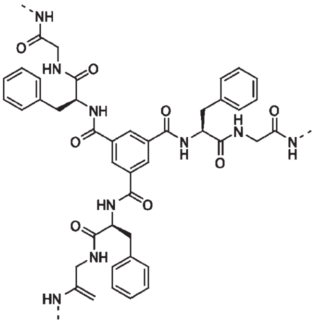
A change in the metal complexed in a porphyrin macrocycle had a profound influence on the optical and electrochemical properties of porphyrin monomers, biaryl-type *meso,meso*-linked diporphyrins, and planar triply fused diporphyrins. The insertion of mixed-metal ions provides a novel way to tune the electrochemical HOMO–LUMO gap of these systems.

Fused Diporphyrins

L.-A. Fendt, H. Fang, M. E. Plonska-Brzezinska, S. Zhang, F. Cheng, C. Braun, L. Echegoyen,* F. Diederich*

meso,meso-Linked and Triply Fused Diporphyrins with Mixed-Metal Ions: Synthesis and Electrochemical Investigations

Eur. J. Org. Chem.
DOI: **10.1002/ejoc.200700505**



A library of seven dipeptide discotics, such as depicted, has been synthesized and characterized in the neat state as well as in solution in order to determine the influence of small modifications in the dipeptide fragment on the stacking properties.

Self-Assembly

K. P. van den Hout, R. Martín-Rapún, J. A. J. M. Vekemans, E. W. Meijer*

Tuning the Stacking Properties of C_3-Symmetrical Molecules by Modifying a Dipeptide Motif

Chem. Eur. J.
DOI: **10.1002/chem.200700630**

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