

CHEMISTRY

A EUROPEAN JOURNAL

16/42

2010



A Journal of



ChemPubSoc
Europe

Minireview

Antibacterials from the Sea
W. Fenical and C. C. Hughes

Supported by
ACES

 WILEY-VCH

... based upon aqueous suspensions of triangular silver nanoparticles with relatively sharp corners is reported in the Communication by Y. Xia and co-workers on page 12559 ff. When the nanoparticles are subjected to aging in air at various temperatures or under different degrees of acceleration, the sharp corners will be gradually rounded, resulting in a progressive blueshift of the surface plasmon resonance peak accompanied by a series of distinctive colors.



Natural Products

In the Minireview on page 12512 ff., W. Fenical and C. C. Hughes describe representatives from each of five classes of natural products (ribosomal and non-ribosomal peptides, polyketides, alkaloids, and terpenes) isolated as new antibacterial metabolites from marine organisms. The study of these metabolites is consistent with the pressing need to develop new antibacterials for clinical use.

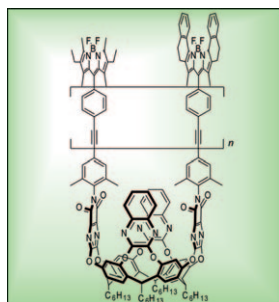
Dynamic Covalent Chemistry

In their Full paper on page 12570 ff., J. F. Stoddart et al. describe the dynamic chemistry of molecular Borromean rings and Solomon knots as influenced by the choice of solvent, metal-ion template, and crystallization conditions. These factors have significant implications for the amplification of one topological entity over the other—either species can be selected for during initial synthesis or by recrystallization, depending on the judicious choice of templating metal cations and crystallization solvents.



Cavitands

In their Full Paper on page 12590 ff., F. Diederich et al. describe the synthesis of a series of BODIPY-dye-labeled resorcin[4]arene cavitands with different lengths of oligo-(phenylene–ethynylene) spacers. In addition to full characterization of the new cavitands (including UV/Vis and fluorescence spectroscopic characterization), X-ray crystal structures of important synthetic intermediates were obtained. These data provided essential molecular distance parameters that were later used to deduce quantitative information about the vase conformation of the cavitands in bulk solution.



 GERMANY	 NETHERLANDS
 BELGIUM	 ITALY
 FRANCE	 SPAIN
 PORTUGAL	 GREECE
 CZECH REPUBLIC	 POLAND
 SWEDEN	 HUNGARY
 AUSTRIA	 ChemPubSoc Europe

Supported by
ACES

Chemistry—A European Journal is jointly owned by the 14 Chemical Societies shown above and published by Wiley-VCH. This group of Societies has banded together as Chemistry Publishing Society (ChemPubSoc) Europe for its combined publishing activities. The journal is also supported by the Asian Chemical Editorial Society (ACES).