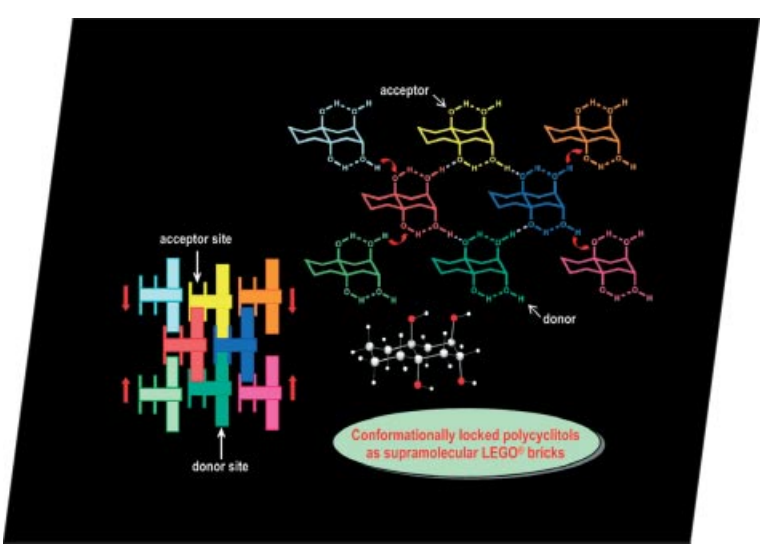
The EUChemSoc Societies have taken the significant step into the future by merging their traditional journals, to form two leading chemistry journals, the *European Journal of Inorganic Chemistry* and the *European Journal of Organic Chemistry.* Three further EUChemSoc Societies (Austria, Czech Republic and Sweden) are Associates of the two journals.

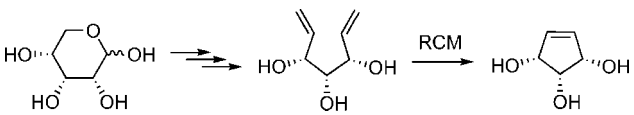
COVER PICTURE

The cover picture shows, schematically, the manner in which a conformationally locked polycyclitol can be thought of as a LEGO® brick in the supramolecular world. This analogy manifests during the self-assembling process by involvement of intermolecular H-bond donors and acceptors engendered in preordained positions through the rigid *trans*-decalin framework and intramolecular O−H···O hydrogen bonding between the 1,3-diaxial OH groups. Details are discussed in the article by G. Mehta et al. on p. 423 ff.



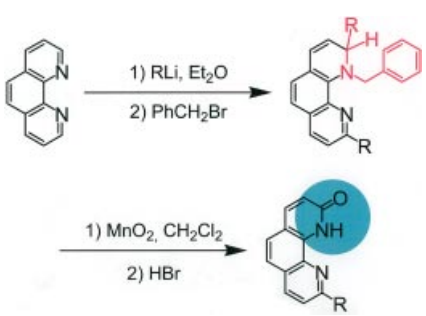
CONTENTS

MICROREVIEW

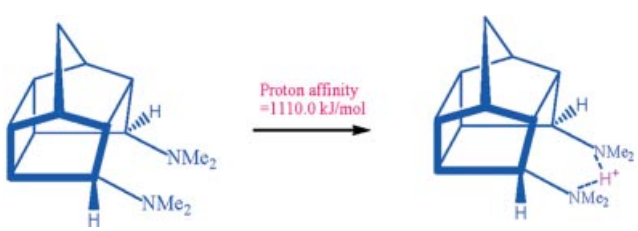


Recent advances in the use of RCM for converting carbohydrates into carbocycles are reviewed, including methods for the synthesis of dienes, RCM reactions and application to natural product synthesis.

SHORT COMMUNICATIONS



Benzylated dihydrophenanthroline derivatives have been prepared to modify the chemical reactivity of the phenanthroline backbone.

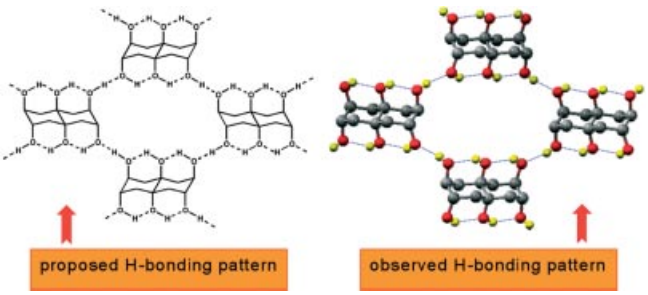


Superduper: According to DFT calculations, pentacyclo[5.4.0.0^{2,6}.0^{3,10}.0^{5,9}]-undecane (PCU) derivatives have been predicted as superorganic bases. The new molecular framework (PCU) is versatile in terms of anchoring different functional groups to achieve high basicities in both the gas and solvent phases.

FULL PAPERS

Crystal Engineering

Keywords: Crystal engineering / Conformational locking / Cyclitols / Fused-ring systems / Hydrogen bonds

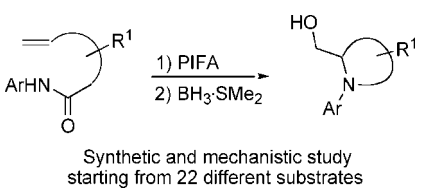


That conformational locking of hydroxyl groups in polyols lends enhanced predictability to the molecular packing of such molecules in the solid state has been revealed through a comparison between the qualitatively proposed models of supramolecular aggregation and experimentally observed crystal structures in three polycyclitols, which have been specially crafted on a rigid *trans*-decalin backbone.

Intramolecular C–N Bond Formation

Keywords: Hypervalent iodine / Pyrrolidines / *N*-Acylnitrenium / PIFA / Cyclization

The intramolecular amidation reaction of a series of *N*-aryl-substituted unsaturated amides mediated by the hypervalent iodine reagent PIFA is studied. The cyclization process takes place with simultaneous generation of a hydroxy group at the terminal position of the original double bond.

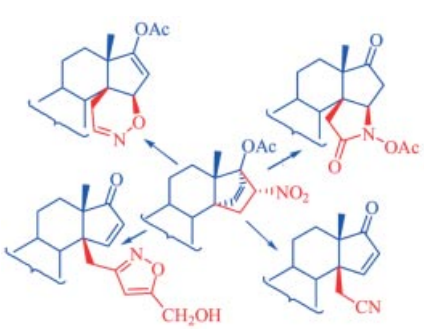


Synthetic and mechanistic study starting from 22 different substrates

Bridgehead Cleavage Reactions

Keywords: Steroids / Nitrogen heterocycles / Cycloaddition / Cleavage reactions / Sigmatropic rearrangement

The Diels–Alder adduct of a steroidal 14,16-diene and nitroethylene can be reduced with $TiCl_3$ to give an oxazine, whereas its treatment with Lewis acids leads to a derivative of the cyclic hydroximic acid. The 16α-nitro cycloadduct suffers a weak-base-induced cleavage of the C(16)–C(17) bond, releasing the nitrile oxide intermediate, which can be trapped by a dipolarophile or reduced with triphenylphosphane.

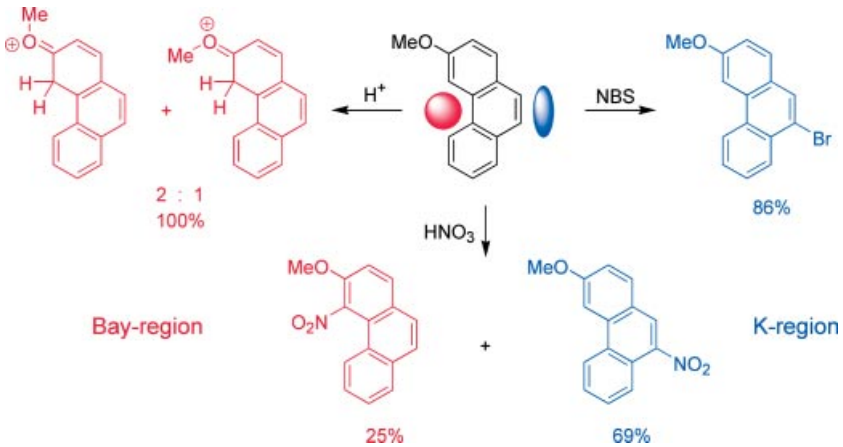


CONTENTS

A-Ring Substituted Phenanthrenium Ions

Stable Ion and Electrophilic Substitution (Nitration and Bromination) Study of A-Ring Substituted Phenanthrenes: Novel Carbocations and Substituted Derivatives; NMR, X-ray Analysis, and Comparative DNA Binding

Keywords: Persistent carbocations / NMR spectroscopy / Nitration and bromination / X-ray analysis / Comparative DNA binding study



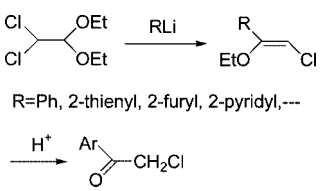
Novel carbocations were generated and substituted (nitrated and brominated) derivatives were synthesized from several A-ring substituted phenanthrenes. NMR, X-ray analysis and a comparative DNA binding study are reported.

Prodrug for Alzheimer's Disease

Novel Building Blocks: 1-Aryl-2-chloro-1-ethoxyethenes – Preparations and Transformations

Keywords: Thiophenes / Sulfur heterocycles / Alkenes / Aryllithiums / Alzheimer's disease

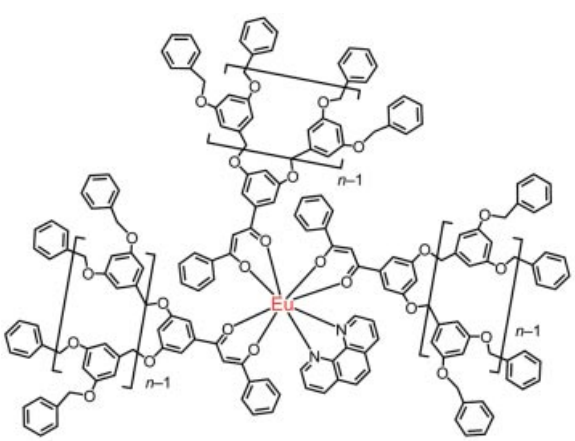
A simple and convenient preparative method for 1-aryl-2-chloro-1-ethoxyethenes is described.



Europium(III)-Core Dendrimers

The Synthesis of Dendritic β-Diketonato Ligands and Their Europium Complexes

Keywords: β-Diketonato ligands / Dendrimers / Europium / Luminescence



Eu(1-G$_n$dbm)$_3$(phen) (n = 1–3)

Two kinds of dendritic β-diketonato ligands which contain a dibenzoylmethane (dbm) core and poly(aryl ether) dendron, have been synthesized by a convergent strategy, and applied to the synthesis of dendritic europium(III)-core complexes.

CONTENTS

If not otherwise indicated in the article, papers in issue 2 were published online on December 18, 2006

