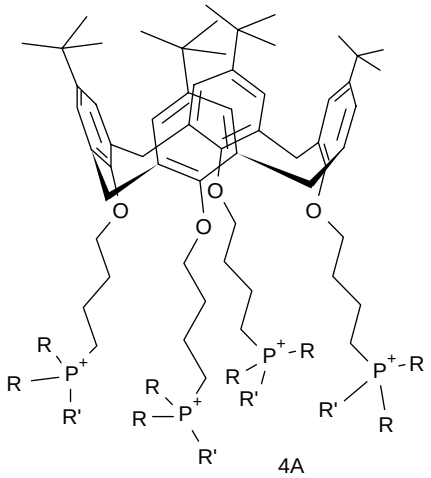
Supramolecular Chemistry
Publication details, including instructions for authors and subscription information:
http://www.informaworld.com/smpp/title~content=t713649759

Index Abstracts

Online publication date: 19 April 2010

To cite this Article (2010) 'Index Abstracts', Supramolecular Chemistry, 22: 5, iii — v
To link to this Article: DOI: 10.1080/10610278.2010.483784
URL: http://dx.doi.org/10.1080/10610278.2010.483784

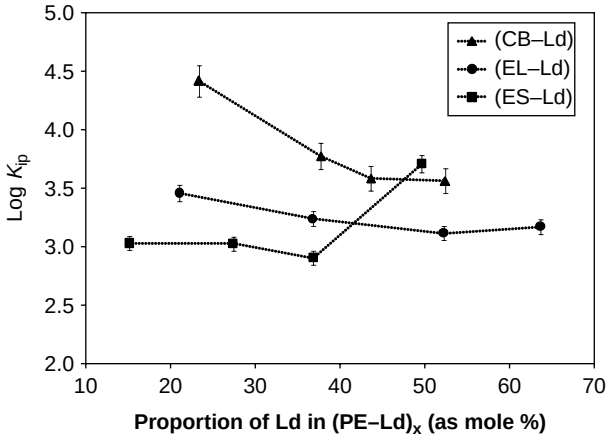
Index Abstracts



Radoslaw Pomecko, Zouhair Asfari, Véronique Hubscher-Bruder, Maria Bochenska and Françoise Arnaud-Neu

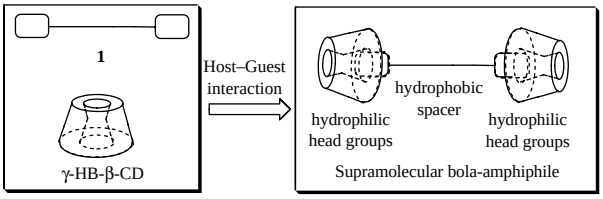
Anion recognition by phosphonium calix[4]arenes: synthesis and physico-chemical studies

The properties as drug carriers of PE drug dispersions (PE–D) arise from the ionic (PE–D) condensation affinity K_{ip} that are reported as a function of D loading and PE structure.



M.S. Ardusso, R.H. Manzo and A.F. Jimenez-Kairuz

Comparative study of three structurally related acid polyelectrolytes as carriers of basic drugs: Carbomer, Eudragit L-100 and S-100



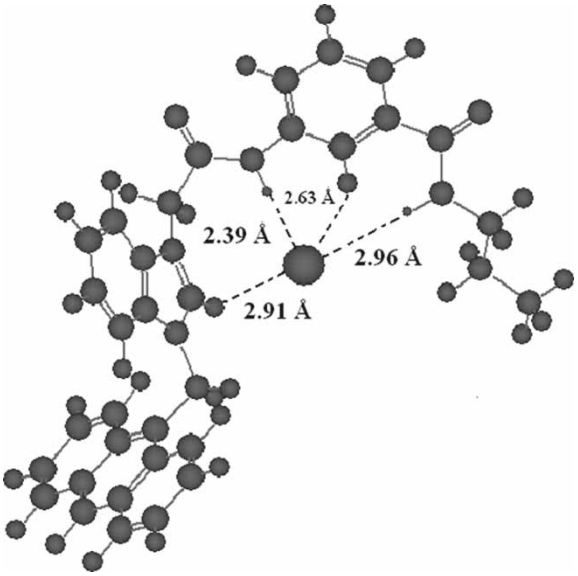
Multi-responsive cyclodextrin vesicles (CDVs) self-assembled by 'supramolecular bola-amphiphiles', consisting of the guest (*N*,*N*′-bis(ferrocenylmethylene)-diaminohexane, **1**) and the host (γ-hydroxybutyric-β-cyclodextrin, γ-HB-β-CD), were prepared and investigated here. The morphologies and sizes of these novel vesicles in water were observed by transmission electron microscopy (TEM) and confirmed by scanning electron microscopy (SEM) and dynamic light scattering (DLS). The effects of the host–guest ratio, the concentration and the solvent composition are also discussed. The host–guest interactions, complex stoichiometry and structures of **1**·γ-HB-β-CD in water were investigated by cyclic voltammetry, UV, ^{1}H NMR and 2D ROESY NMR spectroscopy. According to the complex stoichiometry, TEM observations and Chem3D estimation, the 'supramolecular bola-amphiphiles' made from **1**·γ-HB-β-CD formed the membranes of the CDVs. The CDVs system was responsive to an oxidising agent, which is the first report on redox-responsive systems in this field. They were also stable in methanol–water mixtures and the effect of added methanol solvent is described in detail. The CDVs were responsive to pH and the presence of metal ions, such that they disassemble upon addition of acetic acid or Cu^{2+} ions, providing possible routes to drug delivery systems. This kind of vesicle system could pave the way to combine supramolecular host–guest chemistry and membrane chemistry for potentially functional applications.

Huacheng Zhang, Jian Shen, Zhaona Liu, Aiyou Hao, Yan Bai and Wei An

Multi-responsive cyclodextrin vesicles assembled by 'supramolecular bola-amphiphiles'

297–310

A new anthracene-appended benzimidazolium-based receptor **1** has been designed and synthesised. The receptor shows selective recognition of iodide in the excited state by exhibiting quenching of emission of anthracene. The interaction properties of the new receptor were evaluated by ^{1}H NMR, UV–vis and fluorescence spectroscopic methods.



Kumaresh Ghosh and Indrajit Saha

A new benzimidazolium receptor for fluorescence sensing of iodide

311–317

Three anion complexes with a doubly protonated flexible bis(pyridylcarbamate) receptor have been synthesised which feature novel anion-binding modes, such as the hydrogen-bonded 1D channels constructed by ligand L^2 with perchlorate or chloride anion.