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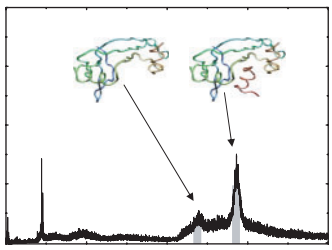
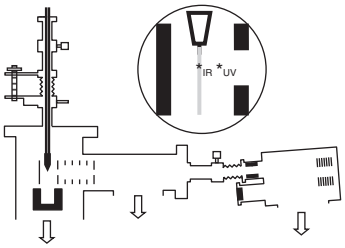
RESEARCH FRONT: Liquid Beam Mass Spectrometry

Essay

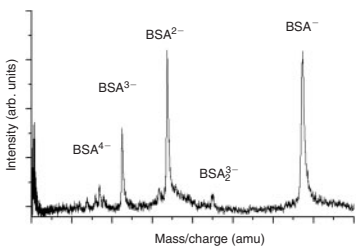
Review



Rapid Communication



Full Paper



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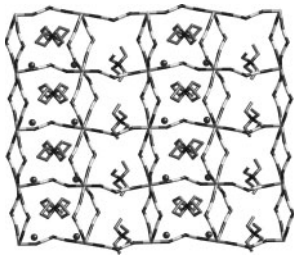
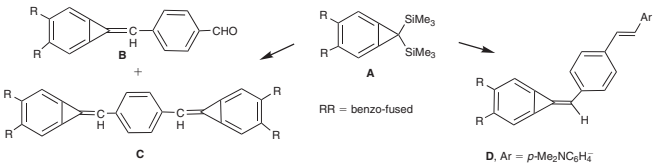
Rapid Communication

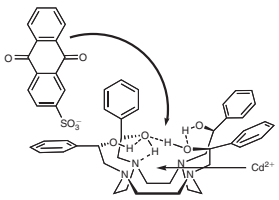


The first example of a metal tris-dicyanamide compound containing the tetraethylammonium cation shows formation of two-dimensional (4,4) connectivity in the absence of the usual supramolecular interactions.

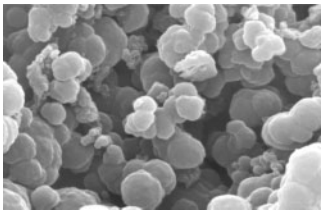
Full Papers

π-Extended cycloproparenes **B** and **C** result from **A**, benzene-1,4-dialdehyde and base; **B** is a minor product. Likewise prepared is stilbene-substituted **D**, highly fluorescent but insoluble.





The molecular receptor (*S*)-thpec12, shown, acts as a molecular receptor towards aromatic anions, such as anthraquinone-2-sulfonate, when activated with cadmium(II). The structure of the receptor is investigated using a combined XRD and ab initio study, which leads to a means of estimating the crystal packing energy.



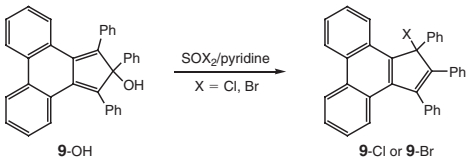
Possessing an extremely low flavour threshold, 2,4,6-trichloroanisole (TCA) is the primary agent of the 'mousy' aroma associated with cork taint in wine. Responsible for tainting about 10% of all corked wines, TCA represents a considerable inconvenience to the wine industry. We applied our molecular modelling–NMR titration approach to the generation of molecularly imprinted polymers and designed a MIP system selective to TCA.

Fused Supracyclopentadienyl Ligand Precursors. The Synthesis, Structure, and Some Reactions of 1,3-Diphenylcyclopenta[*l*]phenanthrene-2-one, 1,2,3-Triphenylcyclopenta[*l*]-phenanthrene-2-ol, 1-Chloro-1,2,3-triphenylcyclopenta[*l*]phenanthrene, 1-Bromo-1,2,3-triphenylcyclopenta[*l*]-phenanthrene, and 1,2,3-Triphenyl-1*H*-cyclopenta[*l*]phenanthrene

Glen D. Dennis, David Edwards-Davis, Leslie D. Field, Anthony F. Masters, Thomas Maschmeyer, Antony J. Ward, Irmi E. Buys, Peter Turner

Aust. J. Chem. **2006**, *59*, 135–146.

Derivatives of the title phenanthrene-2-one, including halo-analogues, have been prepared in good to high yields and characterized. Ambiguities in some earlier syntheses have been resolved.

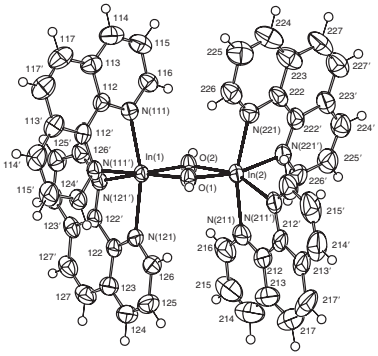


9-OH **9**-Cl or **9**-Br

Structural Characterization of Some Complexes of Group 13 Metal(III) Nitrates with *N*,*N*′-Bidentate Bases

Peter C. Junk, Brian W. Skelton, Allan H. White

Aust. J. Chem. **2006**, *59*, 147–154.



$In(NO_3)_3$:bpy (1:2), unexpectedly, takes the form $[(ONO_2)(O_2NO)In(bpy)_2]$ with crystallographic 2-symmetry. Attempts to obtain other $M(NO_3)_3$:L (1:2,3) adducts for gallium and indium with 2,2′-bipyridyl, 1,10-phenanthroline, and 1,2-diaminoethane have resulted in a diversity of hydroxy-bridged binuclear species.