

### Preparation of assemblies

To a solution of resorcinarene **1b** (33 mg) and calixarene **2a** (variable amount) were dissolved in CDCl<sub>3</sub> (0.7 ml) one drop of water was added and solution was sonicated for 10s. The chloroform layer was carefully separated from water by a pipette and was placed into an NMR tube. Solid tetramethylammonium salt was added and the sample was sonicated for 8 hrs.

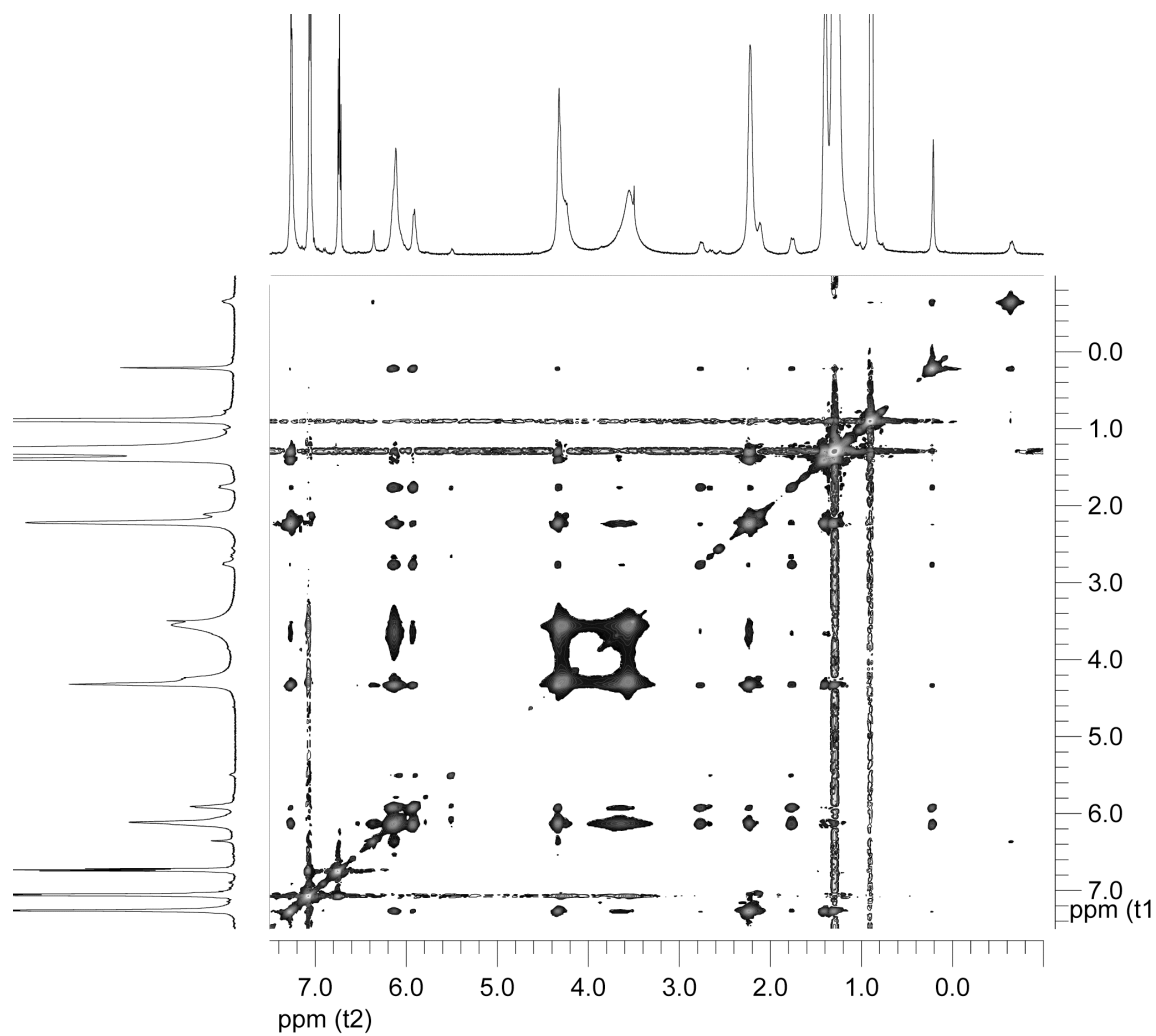


Figure S1. NOESY spectrum of 6 **1b** + 6 **2a** + Me<sub>4</sub>N<sup>+</sup>I<sup>-</sup> ([H<sub>2</sub>O]/[**1b**] = 2)

S3

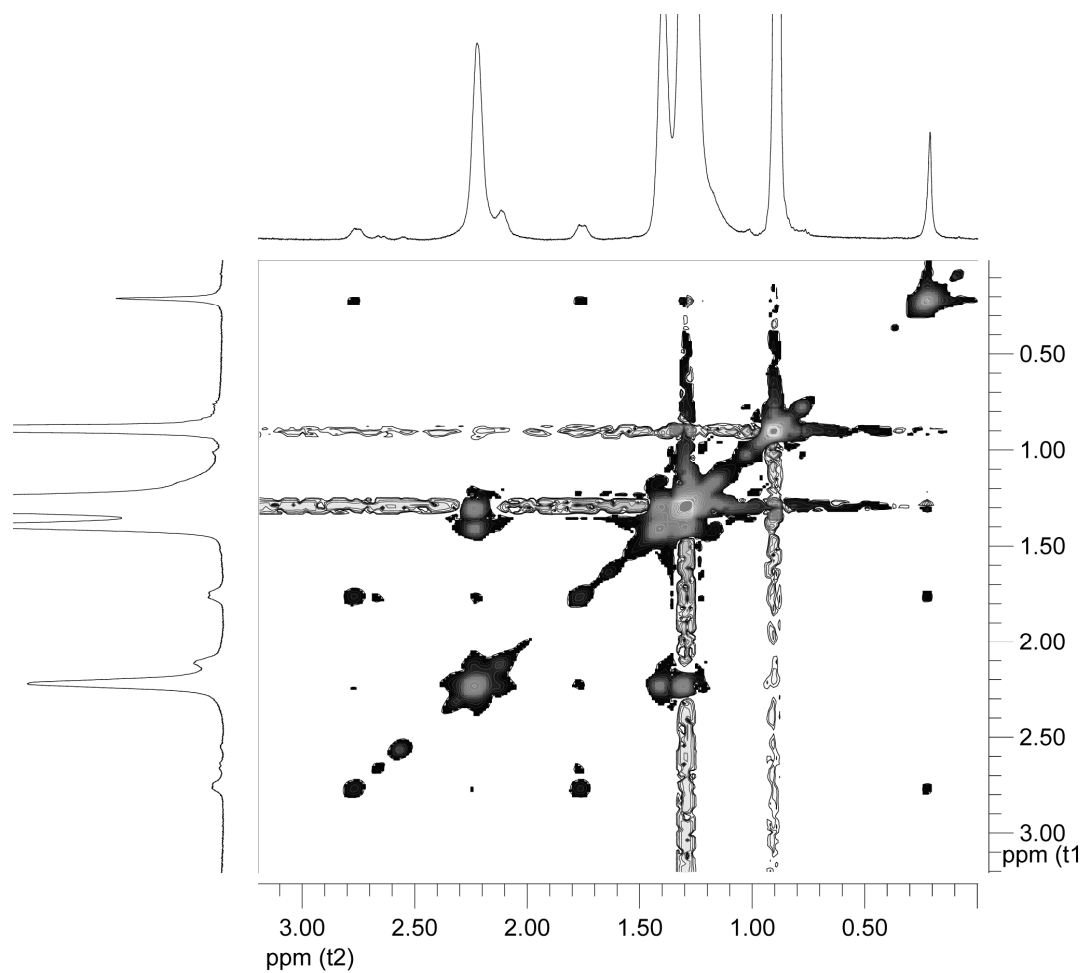


Figure S1. Up field part of NOESY spectrum of 6 **1b** + 6 **2a** + Me<sub>4</sub>N<sup>+</sup>I<sup>-</sup> ([H<sub>2</sub>O]/[**1b**] = 2)

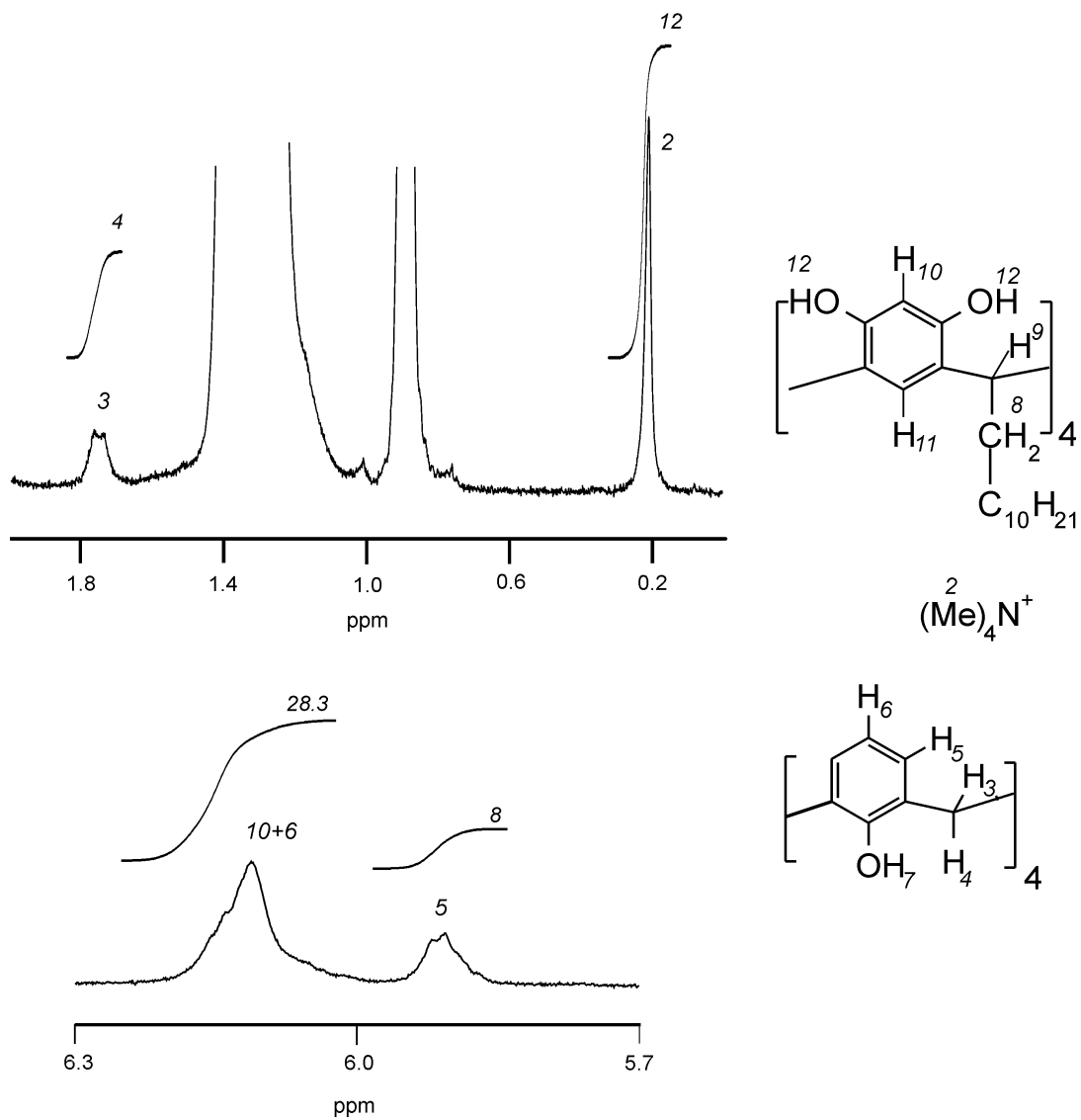


Figure S3. Integration of  $^1\text{H}$  NMR signals for determining stoichiometry of Russian doll type complexes.