

## SUPPORTING INFORMATION

### Synthesis of a Catechol-based Poly(ether ether ketone) ("*ortho*-PEEK") by Classical Step-Growth Polymerization and by Entropically-Driven Ring-Opening Polymerization of Macrocyclic Oligomers

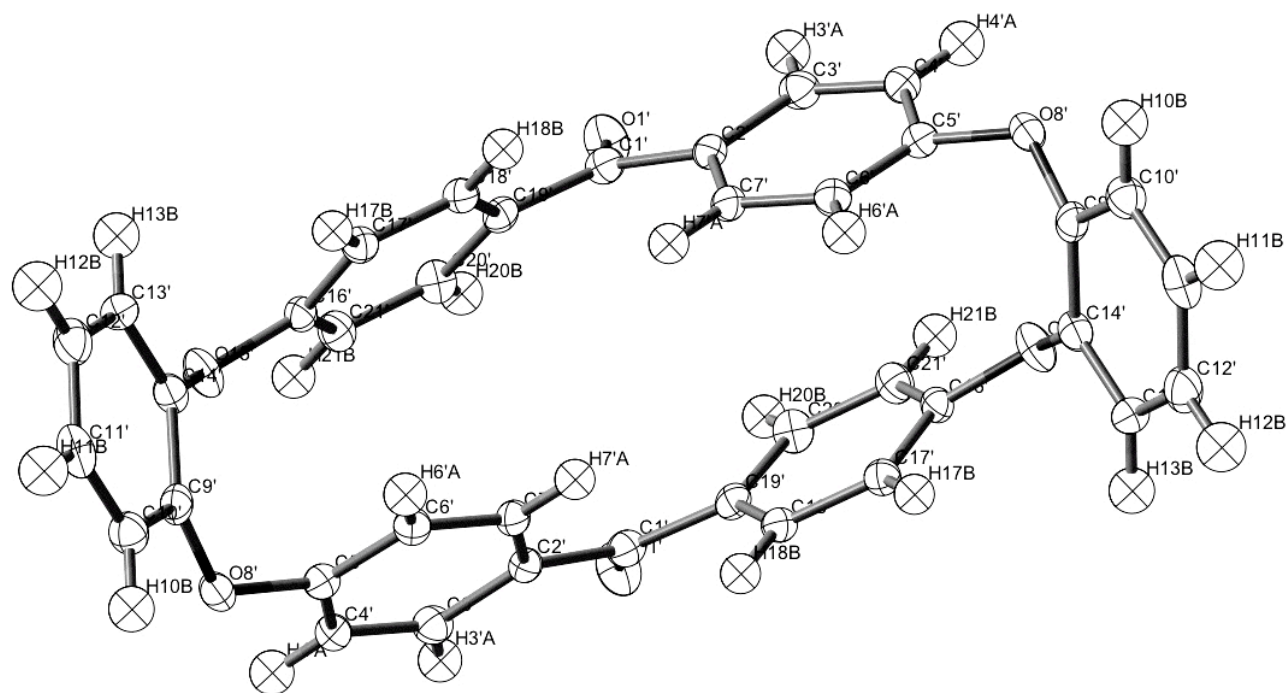
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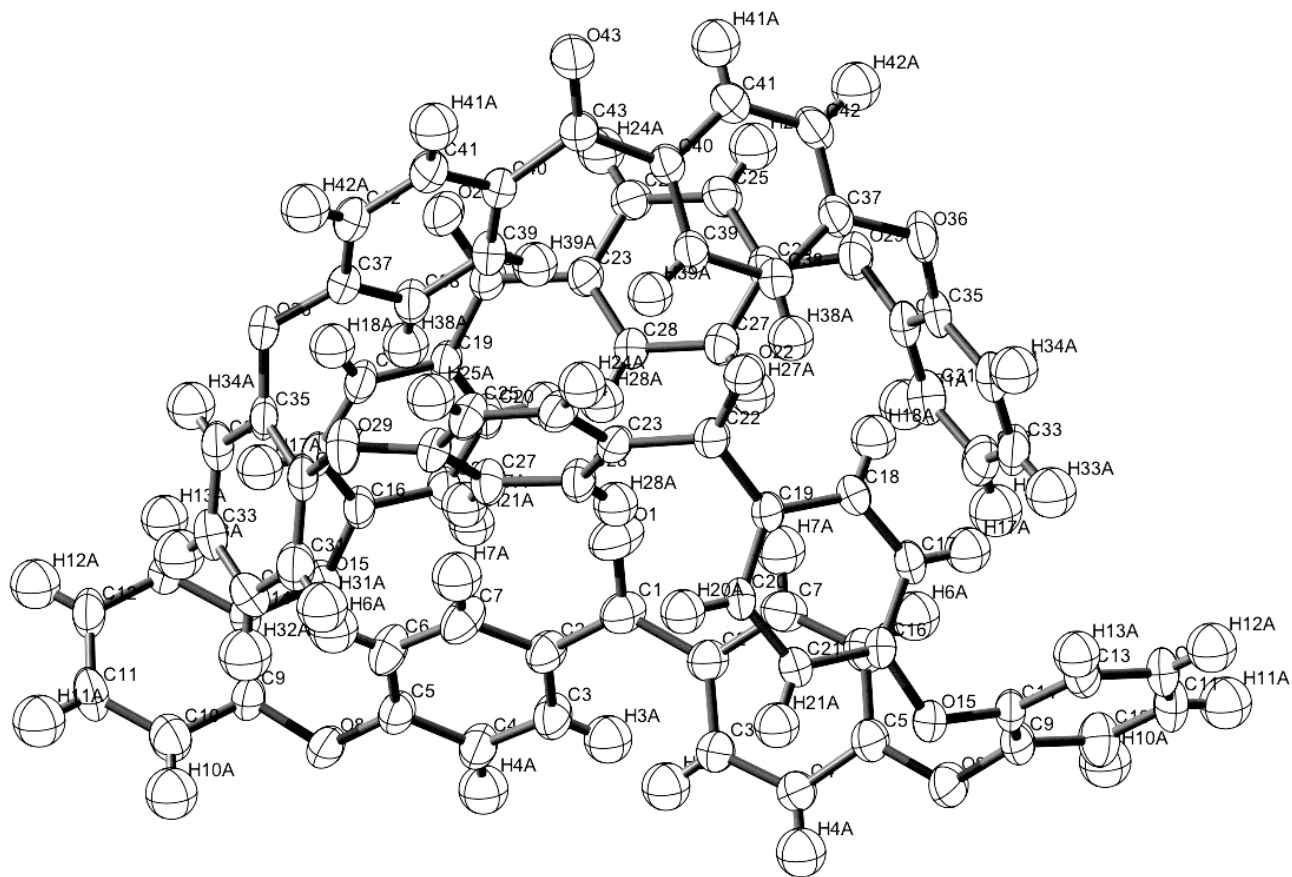
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#### 1. Thermal ellipsoid plot (50% probability) for the X-ray structure of cyclic dimer 3a



2. Thermal ellipsoid plot (50% probability) for the X-ray structure of the cyclic tetramer **3c**



**NOTE:** Full crystallographic data for the structures of **3a** and **3c** are available in CIF format. This material is available free of charge via the internet at <http://pubs.acs.org>.