

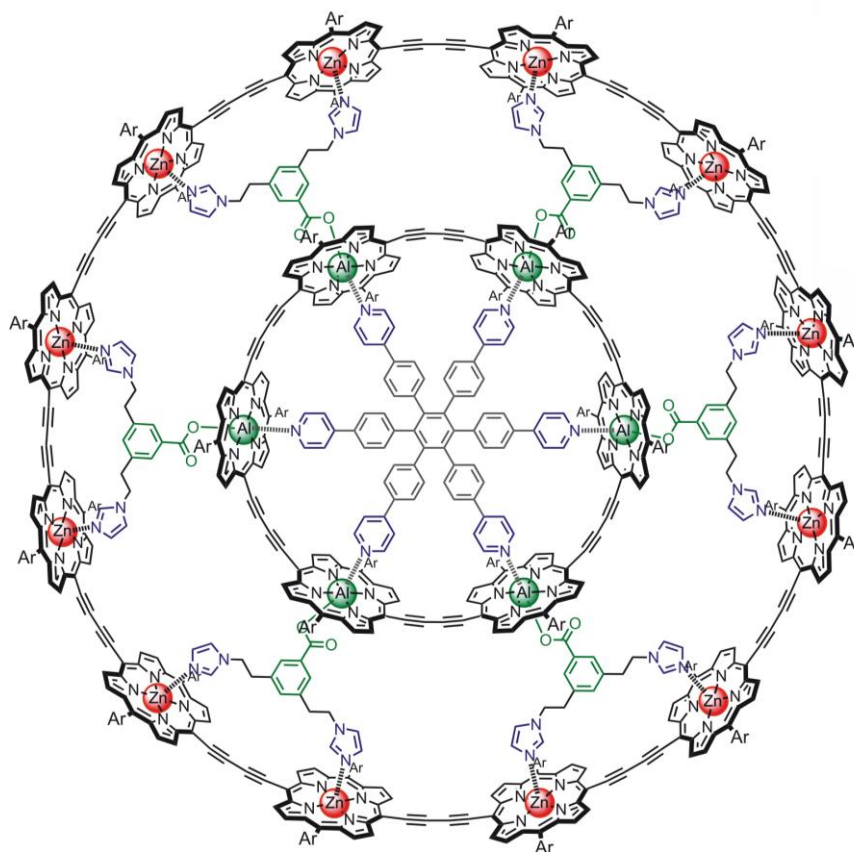
## Nested Nanorings: Molecular Russian Dolls

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We have previously prepared and studied various oligomeric linear and cyclic nanostructures based on porphyrin building blocks. Strong electronic coupling between the individual porphyrins gives rise to efficient migration of charge and electronic excitation, mimicking natural photosynthetic systems.<sup>1-3</sup>

In this contribution, the synthesis and properties of nested Russian Doll assemblies such as that shown in Figure 1 will be presented.



**Figure 1:** Russian Doll nested nanorings.

<sup>1</sup> Hoffmann, M. *et al.*, *Angew. Chem. Int. Ed.* **2008**, 47, 4993–4996.

<sup>2</sup> O'Sullivan, M. C. *et al.*, *Nature* **2011**, 469, 72-75.

<sup>3</sup> Kondratuk, D. V. *et al.*, *Nature Chem.* **2015**, 7, 317-322.