

Chiral Diporphyrin Nanocalipers: New Host Molecule Next to Nanotweezers for Separation of Single-Walled Carbon Nanotubes

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We have been developing host-guest methodology for separation of single-walled carbon nanotubes (SWNTs) according to the handedness and diameter with gable-type chiral diporphyrins, designated as diporphyrin nanotweezers, consisting of two porphyrins and rigid spacer in between [1-13]. In this paper, we will talk about next generation of the host molecules focusing on larger diameter of SWNTs, named "nanocalipers" (Figure 1).

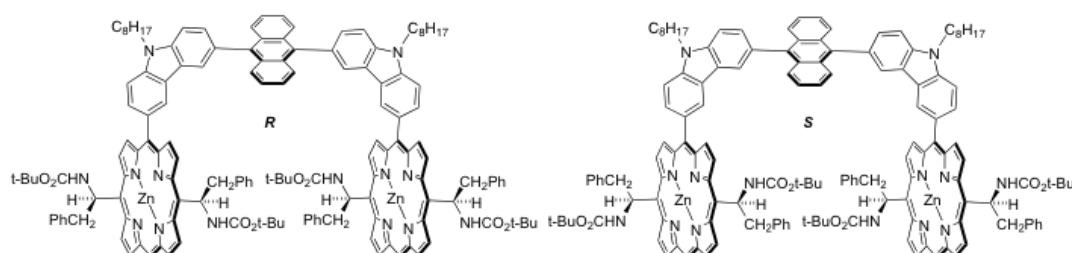


Figure 1. Structures of the chiral diporphyrin nanocalipers.

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