L. HE, C.-F. NG, Z. LIU, D. KUCK*, H.-F. CHOW* (THE CHINESE UNIVERSITY OF HONG KONG, SHATIN, HONG KONG AND UNIVERSITÄT BIELEFELD, GERMANY)

Trefoil-Shaped Porous Nanographenes Bearing a Tribenzotriquinacene Core by Three-fold Scholl Macrocyclization *Angew. Chem. Int. Ed.* **2018**, *57*, 13635–13639.

Five Points for Graphene Nanobowls!

Significance: Given the difficulty of studying the chemical properties of graphene directly, many researchers have turned to the use of small molecules as model systems. In this report, the authors demonstrate the synthesis of a model system for porous nanographenes. Anion binding, electronic properties, and aggregation are probed in the final product.

SYNFACTS Contributors: Timothy M. Swager, Samuel I. Etkind Synfacts 2018, 14(11), 1137 Published online: 18.10.2018 **DOI:** 10.1055/s-0037-1611285; **Reg-No.:** S10118SF

Comment: The formation of large polycyclic aromatic hydrocarbons can be low yielding. The iterative process developed by the authors, involving the deprotection of an alkoxyphenol with Br₃B, followed by triflation and subsequent Suzuki–Miyaura coupling, however, allowed for the expedient synthesis of **5** in good yield. Elaboration to form **7** enabled analysis by X-ray crystallography, revealing a 'wizard-hat shaped' molecule.

Category

Synthesis of Materials and Unnatural Products

Key words

nanographenes

polycyclic aromatic hydrocarbons

Scholl cyclization

