Q. ZHANG, H. PENG, G. ZHANG, Q. LU, J. CHANG, Y. DONG, X. SHI, J. WEI* (SHAANXI NORMAL UNIVERSITY, XI'AN, P. R. OF CHINA)
 Facile Bottom-Up Synthesis of Coronene-based 3-Fold Symmetrical and Highly Substituted Nanographenes from Simple Aromatics
J. Am. Chem. Soc. **2014**, *136*, 5057–5064.

Efficient Three-Fold Symmetrical Nanographene Synthesis

Significance: An efficient synthesis of nanographenes is reported. The key is recognizing that hexa-*cata*-hexabenzocoronene (c-HBC) possesses three-fold symmetry and that only seven of the 13 benzene rings are enough to build up c-HBC. **2** reacts with three equivalents of an aromatic aldehyde via Friedel–Crafts and Scholl reaction.

Comment: Alkoxy groups for R^1 and R^2 were employed to generate electron-rich compound **2** which is more reactive towards Friedel–Crafts and Scholl reaction. Bromo-substituted (R^3) c-HBC can be potentially utilized to prepare more functionalized nanographenes.

SYNFACTS Contributors: Timothy M. Swager, Byungjin Koo
 Synfacts 2014, 10(6), 0581 Published online: 16.05.2014
 DOI: 10.1055/s-0033-1339044; Reg-No.: S04814SF

2014 © THIEME STUTTGART • NEW YORK

Category

Synthesis of
Materials and
Unnatural Products

Key words

nanographenes

Friedel–Crafts
reaction

Scholl reaction

SYNFACTS
of the month

This document was downloaded for personal use only. Unauthorized distribution is strictly prohibited.