Category

Synthesis of Materials and Unnatural Products

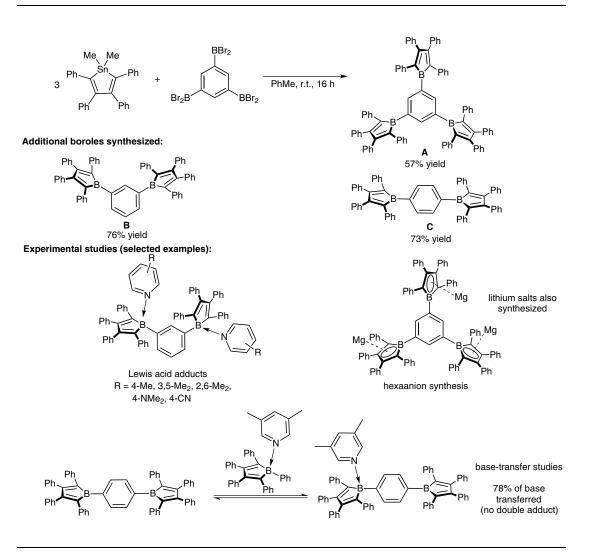
Key words

oligoboroles

organoboron compounds

H. BRAUNSCHWEIG,* C.-W. CHIU, A. DAMME, B. ENGELS, D. GAMON, C. HÖRL, T. KUPFER, I. KRUMMENACHER, K. RADACKI, C. WALTER (JULIUS-MAXIMILIANS-UNIVERSITÄT WÜRZBURG, GERMANY AND NATIONAL TAIWAN UNIVERSITY, TAPEI, TAIWAN) Oligo(borolyl)benzenes–Synthesis and Properties *Chem. Eur. J.* **2012**, *18*, 14292–14304.

Synthesis of New Borolylbenzenes



Significance: The synthesis and properties of a new class of oligoboroles are reported. These compounds represent the first examples of antiar-omatic borolyl moieties connected by an organic π -conjugated system (i.e. benzene) and are synthesized via tin-boron exchange. Adducts of the oligoboroles with various pyridine derivatives and their hexaanion salts with magnesium and lithium are reported and extensively studied.

SYNFACTS Contributors: Timothy M. Swager, Gregory D. Gutierrez Synfacts 2013, 9(1), 0044 Published online: 17.12.2012 DOI: 10.1055/s-0032-1317883; Reg-No.: S13112SF **Comment:** The Lewis acidities of boroles **B** and **C** are assessed by base-transfer studies with a pentaphenylborole–3,5-lutidine adduct. The authors conclude that there is an effective electronic communication between the *para*-functionalized borolyl groups of **C** because its double adduct is not observed during the exchange experiment. However, base-transfer studies of **B** indicate the formation of both single and double adducts, thus suggesting less interaction between the *meta*-substituted boroles.

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