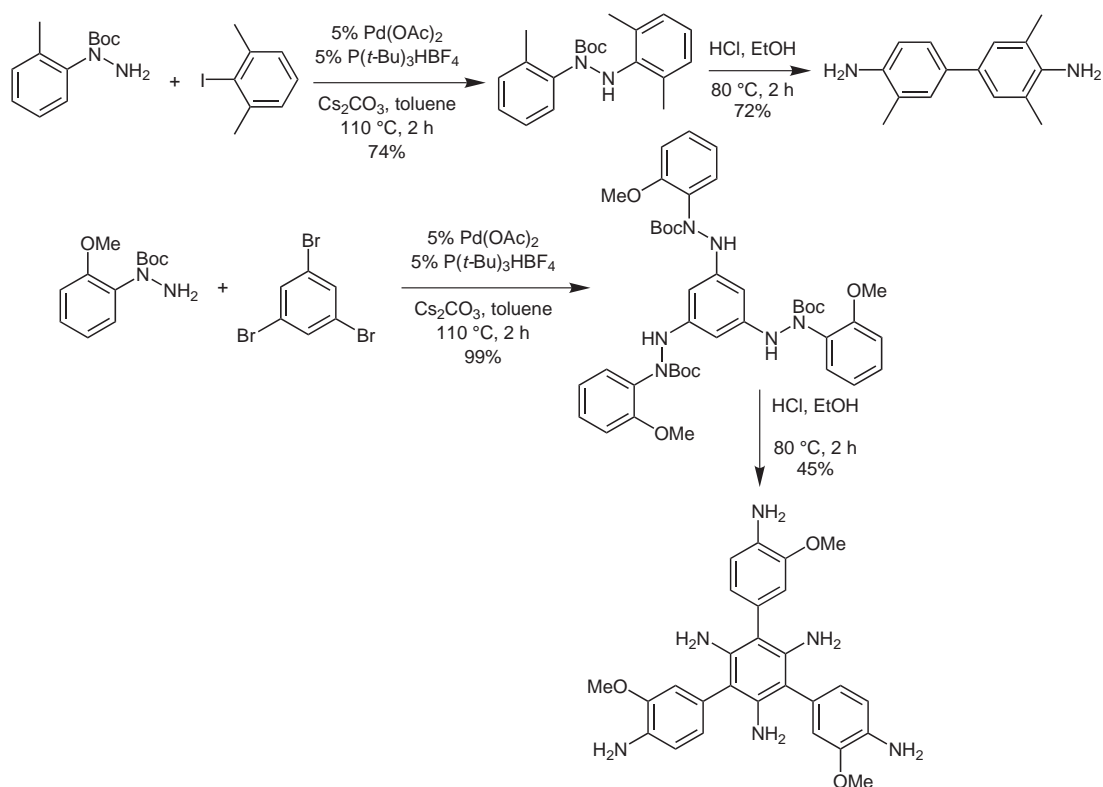


H.-M. KANG, Y.-K. LIM, I.-J. SHIN, H.-Y. KIM, C.-G. CHO\* (HANYANG UNIVERSITY, SEOUL, KOREA)

Regioselective [5,5]-Sigmatropic Rearrangement Reactions of Aryl Hydrazides

*Org. Lett.* **2006**, *8*, 2047-2050.

## A Quick Approach to Valuable Building Blocks Using Multiple Benzidine Rearrangements



**Significance:** Cho and co-workers report a clever strategy, founded on a modern re-exploration of the benzidine rearrangement chemistry, which enables the very rapid preparation of a great diversity of building blocks containing the benzidine (4,4'-diaminobiphenyl) unit. Palladium-catalyzed C–N bond formation between *ortho*- or *meta*-substituted *N*-aryl hydrazines and halobenzenes gives *N,N'*-diaryl hydrazines in excellent yield. Treatment with hydrochloric acid affords the desired rearranged benzidines in a selective manner.

**Comment:** The resulting building blocks are of great interest as possible monomers not only for polyaramides and polyimides, but also for conjugate polymers after conversion of the resulting aminobiphenyls into halobiphenyls to be used as cross-coupling partners. Other promising applications that arise from the derivatization of these building blocks include hole-injection layer materials for light-emitting devices and versatile scaffolds for molecular recognition and host–guest chemistry.

**SYNFACTS Contributors:** Timothy M. Swager, Jean Bouffard  
Synfacts 2006, 8, 0781-0781 Published online: 21.07.2006  
DOI: 10.1055/s-2006-941960; Reg-No.: S07006SF