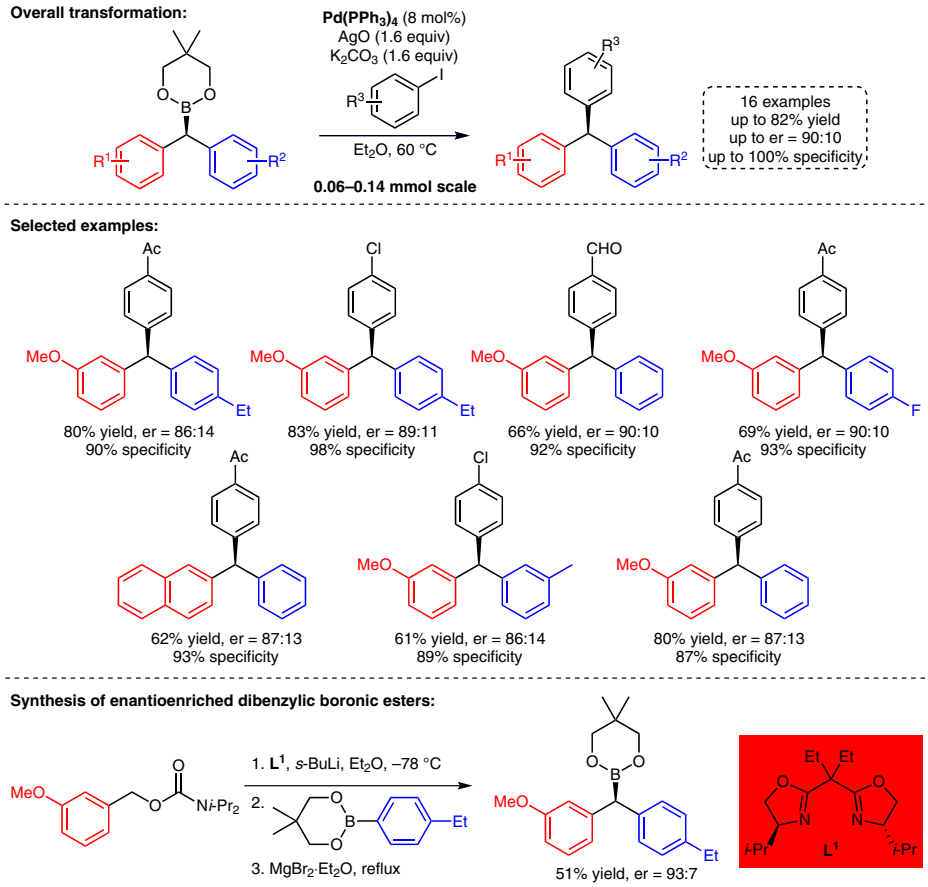
S. C. MATTHEW, B. W. GLASSPOOLE, P. EISENBERGER, C. M. CRUDDEN* (QUEEN'S UNIVERSITY, KINGSTON, CANADA AND NAGOYA UNIVERSITY, JAPAN)

Synthesis of Enantiomerically Enriched Triarylmethanes by Enantiospecific Suzuki–Miyura Cross-Coupling Reactions

J. Am. Chem. Soc. **2014**, *136*, 5828–5831.

Chiral Triarylmethanes via an Enantiospecific Palladium-Catalyzed Cross-Coupling



Significance: Recently, enantioselective cross-couplings have received increased attention due to their potential for easily constructing valuable chiral molecules. However, when compared to non-enantioselective variants, there are only a limited number of reports which describe desirable levels of selectivities. The group of Crudden reports a novel route towards valuable chiral triarylmethanes via a stereospecific Suzuki cross-coupling.

Comment: The authors utilize chiral dibenzylic boronic esters (synthesis described) and aryl iodides to stereospecifically access chiral triarylmethanes using the inexpensive palladium pre-catalyst $Pd(PPh_3)_4$. A range of chiral boronic esters are synthesized from the benzyl carbamates with good to excellent enantiomeric ratios, which are easily converted into the target products with up to 100% stereospecificity.

SYNFACTS Contributors: Mark Lautens, David A. Petrone
Synfacts 2014, 10(7), 0707 Published online: 16.06.2014
DOI: 10.1055/s-0034-1378291; **Reg-No.:** L06914SF