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


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(PPh₃)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.