ONE-POT ALKENE HYDROBORATION/MIGRATORY SUZUKI-MIYAURA CROSS-COUPLING

Yann Baumgartner, Daiki Kato, Diana Cavalli and Olivier Baudoin

Department of Chemistry, University of Basel, 4056 Basel, Switzerland

The development of C-H bond functionalization has exponentially increased since the start of the 21th century expanding the organic reaction toolbox. Challenging site-selective transformations were e.g. achieved with the introduction of a directing group or by exploiting the intrinsic reactivity of the substrates. An alternative to these extensively researched methods exploits the controlled migration of the organotransition-metal species along an alkyl chain to the cross-coupling site. Our group has been employing this strategy multiple times over the last years for the Pd-catalyzed β - or longer-range arylation of ester enolates, secondary organozinc reagents as well as surrogates.

Here we report the one-pot hydroboration of unactivated internal olefins and migratory Suzuki-Miyaura cross-coupling to the benzylic position. The selectivity is achieved by careful selection of reaction conditions, the *o*-chlorine substituent on the electrophilic coupling partner and blocking the terminal position.

^[1] a) Yu, J.-Q., Ed.; Science of Synthesis; Georg Thieme Verlag KG: Stuttgart-New York, 2015; Vol. 1–2. b) Hartwig, J. F. J. Am. Chem. Soc. 2016, 138, 2–24

^[2] H. Sommer, F. Julia-Hernandez, R. Martin, I. Marek, ACS Cent. Sci., 2018, 4, 153-165

^[3] O. Baudoin, *Chimia*, **2016**, *70*, 768-772.