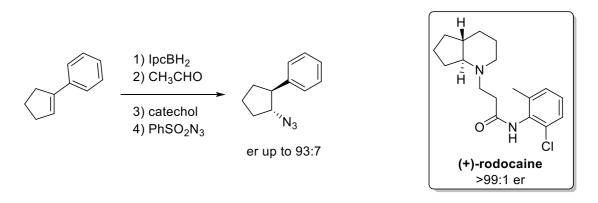
Radical-Mediated Enantioselective Hydroazidation of Alkenes

D. Meyer, P. Renaud*

Department of Chemistry and Biochemistry, University of Bern, Freiestrasse 3, 3012 Bern, Switzerland daniel.meyer@dcb.unibe.ch

The formation of carbon-nitrogen bonds using organic azides as radical traps has attracted the attention of many different research groups. We recently described a radical procedure for the *anti*-Markovnikov hydroazidation using catecholborane as hydroboration agent followed by reaction with benzenesulfonyl azide as radical trap.[1] We developed now an enantioselective type of this reaction using isopinocampheylborane as chiral hydroboration agent.[2] This four-step-one-pot procedure includes the further conversion of the chiral alkylborane into the diethyl boronic ester,[3] transesterification to the alkylcatecholborane and final radical azidation.



In order to demonstrate the utility of the method, the first enantioselective synthesis of (+)-rodocaine was achieved.

- [1] A. Kapat, A. König, F. Montermini, P. Renaud, J. Am. Chem. Soc. 2011, 133, 13890.
- [2] H. C. Brown, P. K. Jadhav, A. K. Mandal, J. Org. Chem. 1982, 47, 5074.
- [3] H. C. Brown, K.-W. Kim, T. E. Cole, B. Singaram, J. Am. Chem. Soc. 1986, 108, 6761.