EuroSciCon

2nd Edition of EuroSciCon Conference on

Chemistry

February 19-20, 2019
Prague, Czech Republic

J Org Inorg Chem 2019, Volume: 5
DOI: 10.21767/2472-1123-C1-021

ASYMMETRIC ORGANOBORANE CONVERSIONS VIA THE AMAZING 9-BORABICYCLO[3.3.2]DECANES

John A Soderquist
University of Puerto Rico, USA

The stereoselective addition of reagents containing the chiral 10-substituted-9-borabicyclo[3.3.2]decane (BBD) moiety to aldehydes, ketones, aldimines and ketimines will be described. The rigid and robust nature of these systems permits a wide variety of organoborane conversions to not only be conducted in a highly enantioselective manner, but also, it facilitates the recovery of the chiral borane by-product which can be recycled through simple operations. Moreover, numerous chemical conversions can be performed on these organoboranes providing remarkable new reagents for organic synthesis. The origin of the observed selectivities will be presented and discussed in terms of the compact chiral reaction centers provided by the BBD systems.

jasoderquist@yahoo.com