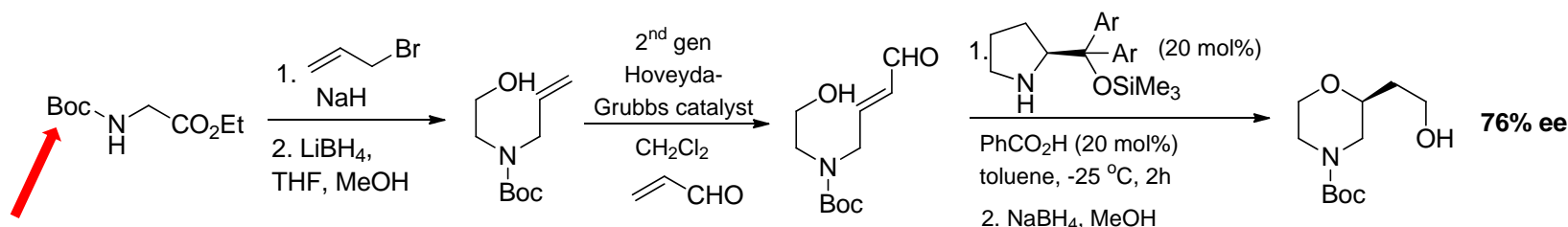


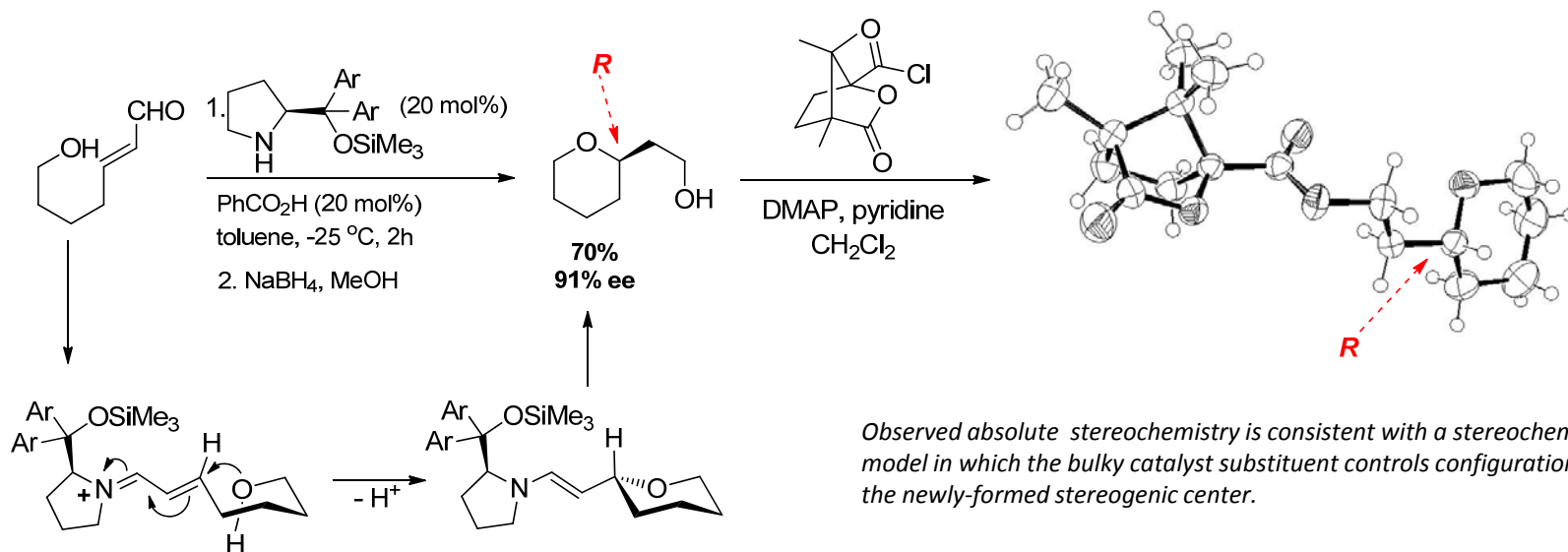
Asymmetric Organocatalyzed Oxa-Michael Cyclizations

Derivatization of N-Boc glycine affords enantioenriched 2-morpholine ethanol:



Use of the Boc protecting group is essential to substrate synthesis.

Synthesis and X-ray diffraction of a camphanoyl derivative of 2H-pyran-2-ylethanol reveals absolute configuration of oxa-Michael cyclization products:



Observed absolute stereochemistry is consistent with a stereochemical model in which the bulky catalyst substituent controls configuration at the newly-formed stereogenic center.