

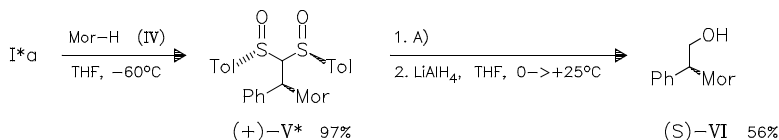
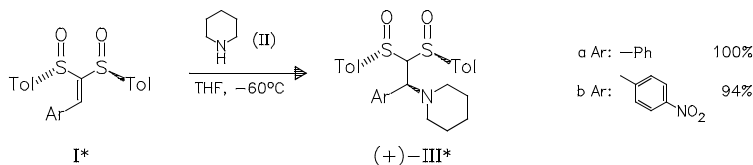
Sulfoxides
Q 0600

11- 092

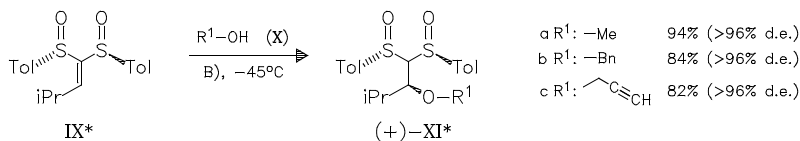
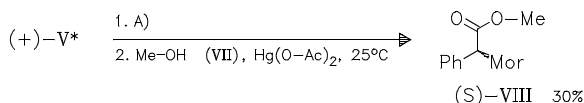
Highly Diastereoselective Conjugate Addition to Alkylidene Bis(sulfoxides):

Asymmetric Synthesis of (+)-erythro-Roccellic Acid. — Alkylidene bis(sulfoxide) derivatives are used for diastereoselective Michael addition reactions. Various hetero-nucleophiles such as amines and alkoxides lead to the formation of enantiopure α -amino and α -hydroxy acids, β -amino alcohols and diols. Stereoselection can be controlled by means of chelation or lack of chelation affected by the appropriate counterion. The bis-sulfoxide (XVIIIa) is transformed to (R)-fenoprofen (XIX).

(+)-Erythro-roccellic acid is obtained by the same procedure from (XXII). This first asymmetric synthesis provides a new route to enantiopure succinate derivatives. — (BREBION, F.; DELOUVRIE, B.; NAJERA, F.; FENSTERBANK*, L.; MALACRIA*, M.; VAISSERMANN, J.; *Angew. Chem., Int. Ed.* 42 (2003) 43, 5342-5345; *Lab. Chim. Org., CNRS, Univ. P. et M. Curie, F-75252 Paris, Fr.; Eng.*) — S. Adam



A): TFAA, Py, CH_2Cl_2 , 0°C Mor: $-\text{N} \begin{array}{c} \diagup \diagdown \\ \text{O} \end{array}$



B): NaH, THF

