Highly reactive and enantioselective hydrolytic kinetic resolution of terminal epoxides using new chiral (salen) Co: AlCl₃ complex

Thakur Santosh Singh, 김건중* 인하대학교 (kimgj@inha.ac.kr*)

A wide variety of highly selective asymmetric reactions catalyzed by chiral (salen) metal complexes have been disclosed over the past decade. The solvent free hydrolytic kinetic resolution (HKR) of terminal epoxides catalyzed by a new chiral (salen) Co: $AlCl_3$ complex is described. The catalyst shows high reactivity and selectivity in good yields of > 98% ee under ambient condition within 1 h.