

S01-4 Asymmetric induction based on the intramolecular haloetherification of chiral diene acetals and its application

○Hiromichi FUJIOKA¹

¹Graduate School of Pharmaceutical Sciences, Osaka University

Asymmetric syntheses have been developing rapidly and are recognized to be useful tools for getting optically active compounds. However, asymmetric inductions at remote multiple centers are still difficult issue to be solved. We found that the intramolecular haloetherifications of the ene or diene acetals, which have chiral acetals as a chiral auxiliary, proceed in diastereoselective manners to cause asymmetric inductions at remote multiple centers. The obtained products contain the chiral auxiliary unites. We applied the reactions to asymmetric syntheses of biologically active compounds using chiral auxiliary units not only as a protecting group of hydroxyl functions but also as the controllers in regio- and stereoselective transformations. In this symposium, we present the recent studies on these chemistries.

