

Abstract

This thesis deals with the preparation of enantiomerically and diastereomerically pure spirocompounds using asymmetric organocatalysis.

The first part is focused on the enantioselective synthesis of spirocompounds by organocatalytic reaction of α,β -unsaturated aldehydes with sulfur heterocyclic compounds catalysed with secondary amines. It is a domino Michael/Michael/aldol reaction using iminium and enamine activation.

The second part is focused on the subsequent transformation of the prepared spirocompounds.