Abstract

The first part of the bachelor thesis deals with enantioselective allylation of thiophene-2-carbaldehyde to the corresponding chiral homoallylic alcohol by using chiral Lewis bases as catalysts. The highest asymmetric induction achieved was 97 % ee. The second part concerns application of the prepared chiral homoallylic alcohol as the crucial intermediate for synthesis of antidepressant (S)-duloxetine.

Key words

enantioselective, allylation, Lewis base, thiophene-2-carbaldehyde, duloxetine