STEREOCONTROLLED SYNTHESIS OF BETTI BASES

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The Betti reaction is a special case of the aza-Friedel-Crafts reaction - one of the most useful method to create a carbon – carbon bond. The substrates used in the reaction are derivatives of imines and naphthol, which leads to 1-(α-aminoalkyl)-2-naphthols, called Betti bases [1]. Stereocontrolled variant of Betti reaction (Fig. 1) using chiral ligands and catalysts is an effective method leading to compounds with high application potential, commonly found in many biologically active compounds [2]. Due to the promising biological and catalytic properties, synthesis of variously substituted derivatives of Betti bases become an interesting research problem for scientists from around the world. Based on previous literature, it can be concluded that there are only a few examples of this reaction carried out in the stereocontrolled way [3,4,5].

My poster will present the results that I obtained using new ligands based the aziridine ring in the Betti reaction.

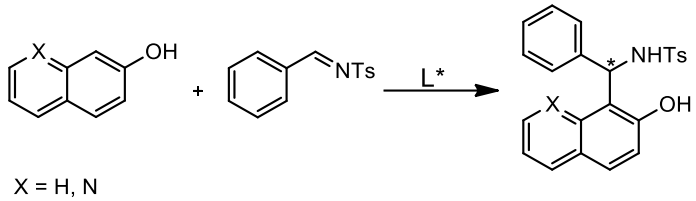

Fig. 1. Stereocontrolled Betti reaction.

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[4] X.-P. Hui et al., Asymmetric Aza-Friedel-Crafts Reaction of 2-Naphthol with Tosylimines Catalyzed by a Dinuclear Zinc Complex, Synlett **5**, 765-768 (2010).
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