SYNTHESIS OF DIFFERENT α-NAPHTHOLS AND DEAROMATIZATION

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Phenol and its derivatives are widespread in different natural products and bioactive molecules [1]. Also, phenols and naphthols are wildly used as starting materials in organic synthesis. The catalytic asymmetric dearomatization reactions of phenols have evolved as enabling methods for the synthesis of highly functionalized chiral cyclic enones which frequently appear as basic skeletons in biologically active natural products [2]. In recent years several papers have been published in which different β -naphthols were synthesised and dearomatizated. Thus, therefore alkylation of α -naphthols and dearomatization is not studied thoroughly.

In this work we report synthesis of different substituted α -naphthols using α -naphthol as a starting material and dearomatization of those substituted α -naphthols (Fig. 1).

Fig 1. Dearomatization of α -naphthols by alkylation

References

- 1. W.-T. Wu, L. Zhang S.-L. You, Chem. Soc. Rev, 2016, 45, 1570-1580
- 2. H.-F. Tu, C. Zheng, et al, Angew. Chem. Int. Ed., 2017, 56, 3237-3241

