Abstract

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Title of thesis: Synthesis of substituted pyridines catalyzed by gold complexes

This work is focused on the synthesis of 3,4-disubstituted pyridine derivatives. MBS-protected propargylamine reacts with methyl propiolate to form 1,5-enyne that undergoes Sonogashira coupling with aryl iodides.

Substituted enyne undergoes cyclization to tetrahydropyridine in the presence of tris(2-furanyl)phosphinegold(I)chloride. Deprotection leads to the preparation of substituted pyridines, which could serve as intermediates in organic synthesis or as potential biologically active substances.

Keywords: gold catalysis, enyne cyclization, pyridine derivatives