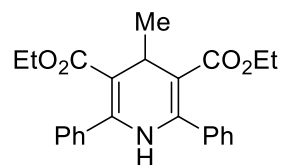


1. The so-called Hantzsch esters (dihydropyridines) became recently popular reducing agents for a number of different modern catalytic reductions. Provide the appropriate starting materials to synthesize the shown product and indicate the mechanism.



2. Illustrate the mechanism of a *Skraup*-quinoline synthesis using 4-Methoxyaniline as substrate.

3. The *bis*-oxazole **2** is accessed by a condensation reaction from a linear precursor **1**. Show **1** and provide the mechanism and name for the reaction.

