

## Abstract

Project Code : TRG5780169

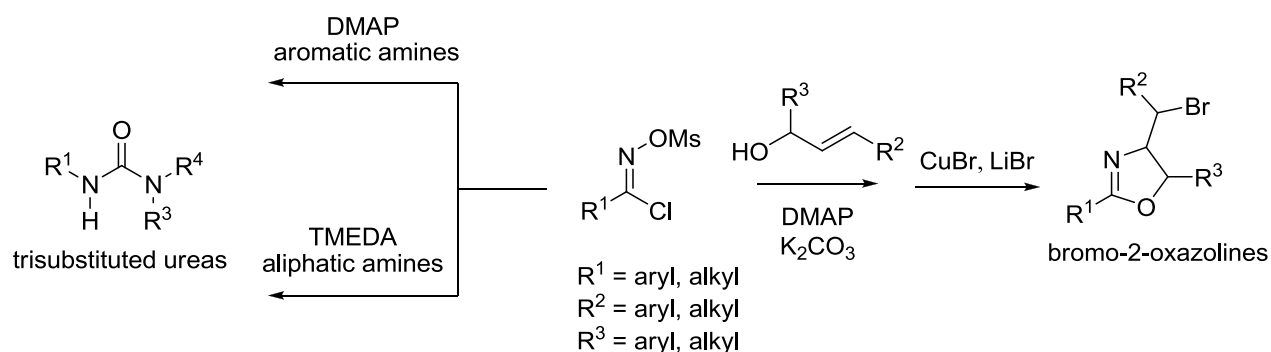
Project Title : Synthesis of 2-Oxazolines and Trisubstituted Ureas from Bench-Stable  $\alpha$ -Chloroaldoxime O-Methanesulfonates

Investigator : Dr. Juthanat Kaeobamrung

E-mail Address : juthanat.k@psu.ac.th

Project Period : 2 years

### Abstract:



The aim of our research investigation is to explore reactivity of a bench stable  $\alpha$ -chloroaldoxime O-methanesulfonate in the synthesis of 2-bromooxazoline and trisubstituted urea. Derivatives of 2-bromooxazoline were accomplished via two-step procedures in which the first transformation was nucleophilic substitution with allylic alcohols. The second formation was copper-catalyzed cycloaddition involved addition of bromine radical. On the other hand, trisubstituted ureas were achieved under mild reaction conditions. Two simple protocols were developed to obtain various ureas from both aromatic amines and aliphatic amines.

**Keywords :** Trisubstituted ureas, oxazolines, copper-catalyzed cyclization, Tiemann rearrangement