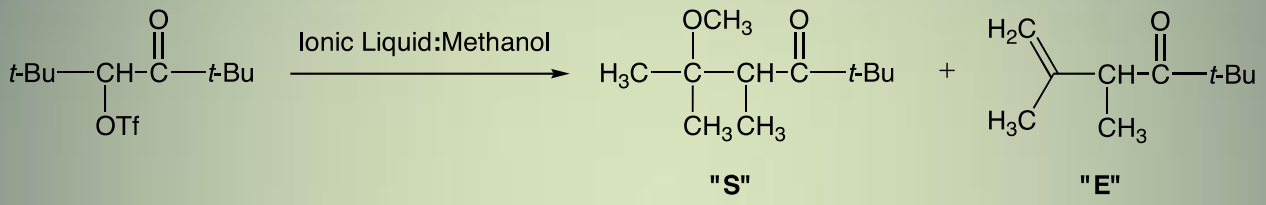
# Novel Nucleophilic Trapping Reactions of Carbocations in Ionic Liquids

Elizabeth D. Kochly, Department of Chemistry & Physics, Mills College

Our current project is an investigation of the effect of ionic liquids on solute nucleophilicity. We are studying the solvolysis of pivaloyl triflate in binary solvent systems of methanol and various ionic liquids. Pivaloyl triflate solvolyzes via a carbocationic intermediate to give rearranged substitution and elimination products (**S** and **E** respectively). It was found that as the concentration of ionic liquid is increased, the amount of E product increases as well. The rate of increase however, varied depending on the identity of the ionic liquid.




## Ionic Liquids: