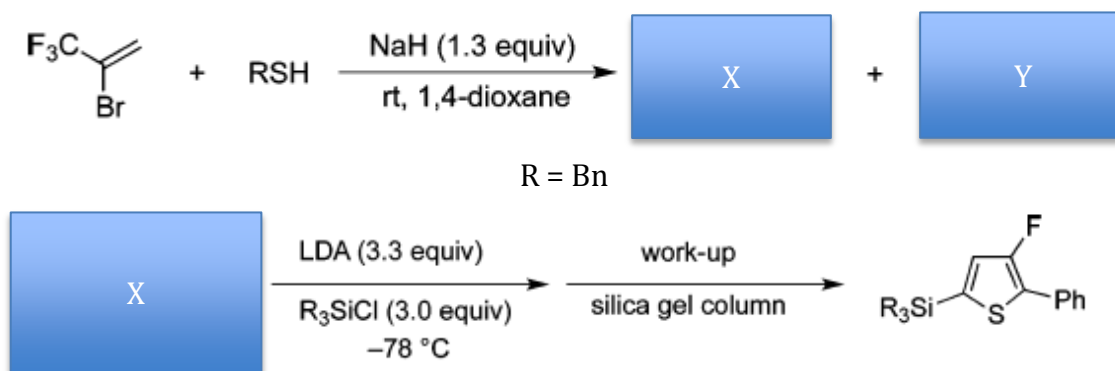
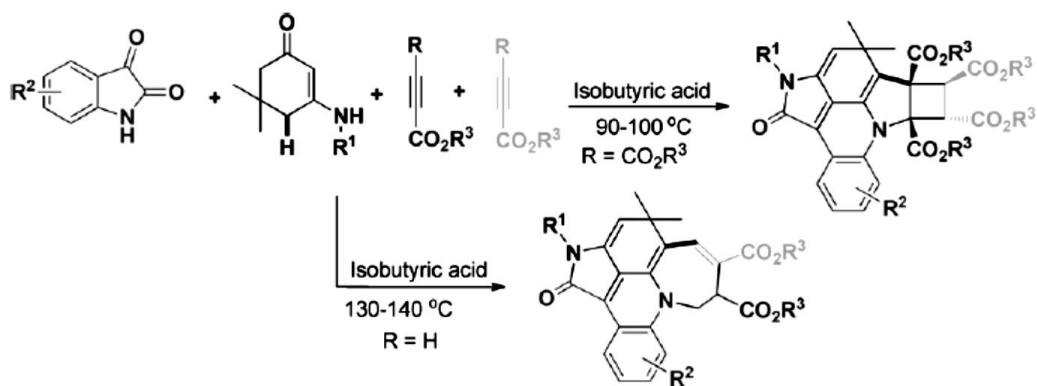


1. Suggest the structures for X and Y, and a plausible mechanism for the following transformation.



2. Propose a suitable mechanism for formation of the following two structures.



3. Muxi and Deep will duel for a question involving biosynthesis/math derivations/total synthesis.