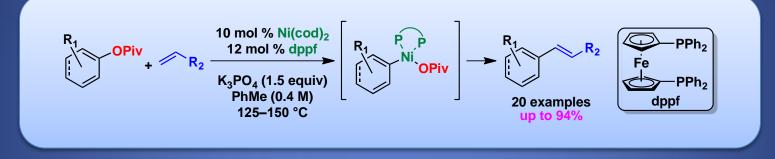
## **Arylalkoxylation of Alkynes & Olefins via Transition Metal-Catalyzed C–O Activation** *Mary P. Watson, Department of Chemistry & Biochemistry, University of Delaware*



In our pursuit to exploit transition metal-catalyzed activation of C–O bonds for the rapid generation of molecular and stereochemistry complexity, we have developed new reactions of both strong C–O bonds and weaker C–N bonds. We are excited to pursue the discovery of new reaction technology in these areas.



We have developed a Heck cross coupling of aryl pivalates. This is one of the first examples of C–C bond formation via activation of a strong C–O bond with a non-organometallic coupling partner.



 $C-N \xrightarrow{Ni} c^{Ni}N$ 

We have developed stereospecific coupling of benzylic ammonium salts with boronic acids. This is the first example of a stereospecific coupling of a benzylic electrophile with a boronic acid.

