



UNIVERSITY OF MINNESOTA  
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# Department of Chemistry

## *Special Seminar*

9:45 a.m. Tuesday, April 26 • 331 Smith Hall

Assistant Professor

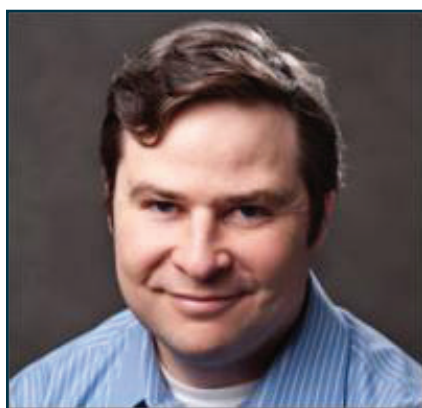
**Jeffrey Byers**

Department of Chemistry  
Boston

### ***Iron-Based Catalysts for the Diversification of a Biodegradable Polymer***

Website:

<http://capricorn.bc.edu/ByersGroup/research.htm>



### **Abstract**

The synthesis and characterization of bis(imino)pyridine, iminopyridine, and bis(amidinato)-N-heterocyclic carbene iron alkoxide complexes are described and applied as catalysts for the synthesis of biodegradable polymers. By altering the identity of the initiator and the oxidation state of the catalyst, biodegradable polymers based on poly(lactic acid) with a range of tacticity, architecture, and composition can be controlled. In addition to describing the application of these complexes for polymerization catalysis, a discussion about the electronic effects and potential redox activity of the novel bis(amidinato)-N-heterocyclic carbene ligands will be disclosed.

Host: Professor Ian Tonks