



MICHIGAN STATE UNIVERSITY

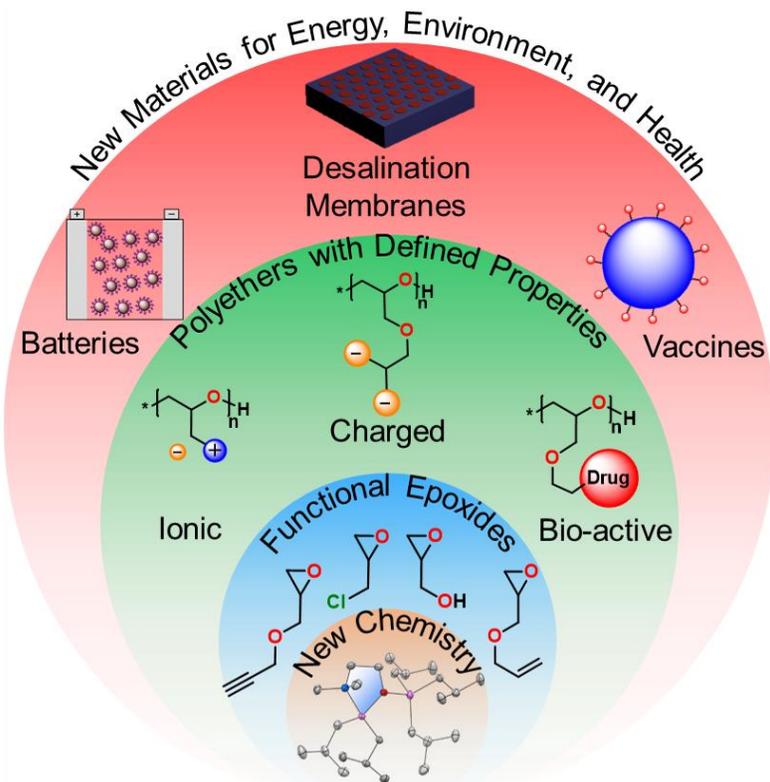
College of Engineering

Ferrier Group: Solving Challenges in Energy, Environment, and Health through Polymer Engineering



Group Overview

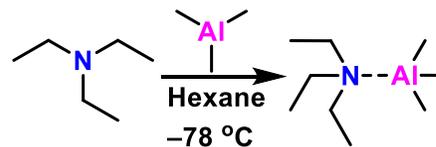
Earth abundant aluminum initiators for new polymeric materials



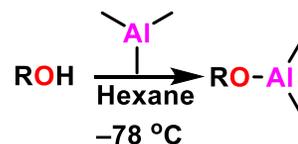
Chemistry Overview

Facile and tunable polymer synthesis through initiator design

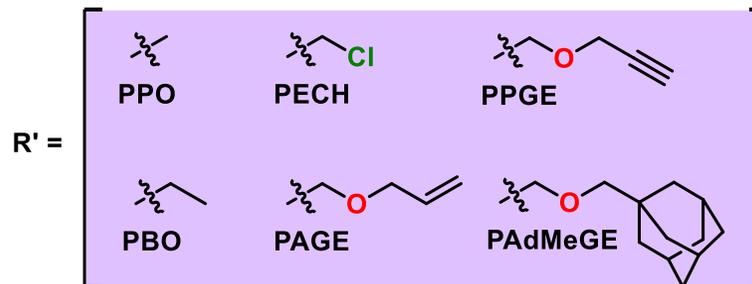
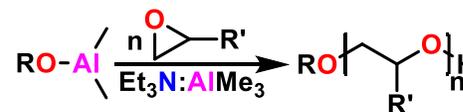
Catalyst Synthesis:



Initiator Synthesis:



Polyether Synthesis:



What You Will Do

- Catalyst / initiator development
- Monomer / polymer synthesis
- Investigation of polymer composition - property relationships

What You Will Learn

- Polymer characterization techniques such as NMR, GPC, DSC, FTIR
- Synthetic skills such as Schlenk techniques, distillation, and purification.
- Polymer physics such as polymer self-assembly and polymer-polymer interactions