

# Hydrolytic Degradation of Biorenewable Epoxy Resins

## Research Themes

- Degradable polymers derived from renewable sources
- Advanced materials for wind energy
- Characterization of polymer properties

## Recent Accomplishments

- Epoxy resins with high epoxidized soybean oil (ESO) content exhibited accelerated degradation rates
- Phenolic acids produced degradable epoxy resins while retaining desirable mechanical and thermal properties
- Significant potential for ESO and phenolic acid based epoxy resins

## Issues

- Synthesizing epoxy resins from renewable sources with significant degradation behavior while maintaining desirable mechanical and thermal properties
- Exploring other sustainable materials with degradation potential
- Characterizing thermal properties of synthesized materials



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