

# On Demand Switching of Polymerization Mechanism

Brett Fors<sup>1</sup>

<sup>1</sup>Cornell University, Ithaca NY, 14853 USA

Obtaining control over polymer chain growth in cationic polymerizations with an external stimulus would expand the utility of these methods and allow the synthesis of novel complex architectures. This presentation will detail the development of a cationic polymerization reactions regulated by visible light and electrochemistry. These polymerizations proceed under mild conditions and allow for the synthesis of various poly(vinyl ether)s with good control over molar mass and dispersity. Additionally, combining these methods with photocontrolled radical polymerizations enables switching of polymerization mechanism and, hence, monomer selectivity in situ to give control over polymer sequence and structure.

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