

Towards a more sustainable chemistry through depolymerization

With the advent of the reversible deactivation radical polymerization (RDRP), the synthesis of polymers with controlled dispersity, architecture, sequence, and end-group fidelity has become common place. But with the rising temperatures and the awareness of the climate change, the research is focussing now on controlling the opposite reaction: depolymerization. Aiming for a more sustainable way to recycle the synthesized polymers, depolymerization offers a way to regain the monomers directly. The project done within this master thesis will be focussing on applying these methods to different polymers in solution. Can the methods be applied directly or do they need to be modified? Can these experiments help understanding the underlying mechanisms of controlling the depolymerization process?

Project type: Master thesis