

# HIGHLANDS IN CHEMISTRY SEMINAR SERIES



## RACHEL O'REILLY

UNIVERSITY OF BIRMINGHAM

### “Precision Polymeric Nanostructures”

There is great current interest in the synthesis of well-defined and functional polymers using controlled radical polymerization (CRP) techniques. The advances in the development of these techniques has enabled access to a wide range of functional and responsive materials for a diverse range of applications. Of the many CRP techniques that have been developed, reversible addition fragmentation chain transfer (RAFT) shows significant promise because of its ability to generate a large range of different architectures, and its tolerance to solvent and functionality within the chain transfer agent and the monomer. In the O'Reilly group we use RAFT techniques to synthesize functional and responsive amphiphilic diblock copolymers from a range of monomers which have unique properties such as responsive capabilities, catalytic activity or selective recognition. We are interested in the solution self assembly and the characterization of the resultant aggregates along with their exploration in a range of applications.

MARCH 26, 2021

2:30PM ET

ZOOM

FACULTY HOST:  
MICHAEL SCHULZ

