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**“Using RAFT for the synthesis of functional nanostructures”**

Our research targets the design, synthesis and application of uniquely derived polymeric materials; where control over architecture, functionality and reactivity are central to their application in the field of nanotechnology. We are especially concerned with the synthesis of polymeric materials using controlled radical polymerisation chemistries. The supramolecular assembly of these polymers into precision nanostructures, such as organic/inorganic or hybrid nanoparticles is of interest given their ability to mimic biomolecules in size, structure and function and also possess novel properties, including the ability to behave as hosts or vessels in delivery agents.