**Environmentally degradable soft/hard block copolymers**

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The persistence of plastics in the natural world has led to an environmental crisis, and there is an urgent need to design degradable alternatives to conventional materials. This project will create a new class of environmentally degradable block copolymers for real world applications, in collaboration with speciality chemicals company Croda. In particular, this work will develop copolymers featuring soft (low *T*g) and hard (high *T*g) blocks. By using careful catalysis to control the polymer microstructure (*M*n, dispersity, stereochemistry, head-to-tail linkages and copolymer architecture), a broad range of block copolymers will be synthesised and characterised through techniques such as NMR spectroscopy, mass spectrometry, DSC and TGA. Preliminary testing studies will be performed in collaboration with Croda, to identify and exploit the most promising candidates.