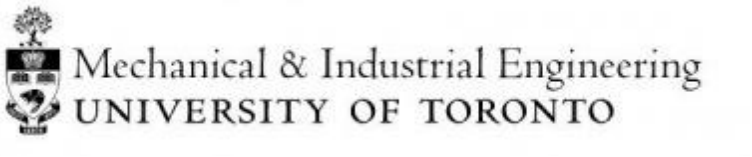

Fabrication and characterization of self-healing polymer material

Self-healing gels are specialized type of polymer gel with supramolecular characteristic where it has ability to spontaneous repair their damaged bonds. The structure of the gels along with electrostatic attraction forces creates new bonds through reconstructive covalent dangling side chain or non-covalent hydrogen bonding. There are three-types of healing systems including capsule-based healing system, vascular healing system and intrinsic healing polymers. There are few studies done on the self-healing polymer materials that studies full recovery of their shape and properties. This project will focus on literature review on self-healing materials and fabrication and characterization of the self-healing polymer materials.

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