Biomaterials and Nanobiomaterials

The Department offers strong support to the healthcare industry sector through advanced polymer research, particularly with biodegradable nanobiomaterials that are either artificially synthesized or naturally occurring. Novel functional biomaterials are sought as 3-D scaffolds, skin substitutes, organ implants, and drug delivery systems. Novel materials and devices at the nano scale are also important for electronics, transportation, the environment, and for national security. Researchers also participate in the Biomedical Engineering research area at Ryerson.

Multidisciplinary research in this area is performed with physicochemical characterization techniques normally used in the medical field.

The research activities performed in this area fit well within the University's research themes of *Health and Well Being* and of *Technical Innovation*. Nanobiomaterials have been heralded as "the next industrial revolution".