



UNIVERSITY
of GUELPH

CHANGING LIVES
IMPROVING LIFE



New Graduate Student Opportunities!

@ the Bioproducts Discovery and Development Centre (BDDC)

Leading to Degrees: M.A.Sc./Ph.D in Biological Engineering

About Bioproducts, Biomaterials, and the Bioeconomy:

Bio-based industries have been widely heralded as the new engine of environmentally sustainable economic growth. As the name implies, a prominent feature of such industries will be the substitute of processes and products based on non-renewable resources, such as fossil fuels and minerals, with those based on biomass from agriculture and forest resources.

A **biomaterial** may be defined as a processed or engineered product obtained fully or partially from renewable feedstock's.

Examples: Natural Fibre Composites, Bioplastics, Biobased Blends, Biobased Nanocomposites etc.



Bioproducts Discovery & Development Centre **BDDC**

Graduate Opportunities

There are several openings for graduate students in the research areas listed below. The candidate will have the opportunity to work with senior scientists from different areas (materials science and engineering, chemical engineering, mechanical engineering, polymer chemistry, packaging and plant agriculture) and will have the chance to work collaboratively with industrial partners.

Research areas at the BDDC include:

- Bioplastics and Biobased polymers
- Biocomposites (Natural Fibre Composites) and Polymer Blends
- Green Composites including recyclability, durability and biodegradability studies
- Biobased Nanocomposites and Nanoblends
- Biomass and Biomaterials Sustainability
- Value-added Biobased Materials from the Coproducts/Byproducts of Biofuel Industries

Opportunities to work under Funded Research Projects:

- a. Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA)- New Directions- Alternative Renewable Fuels (Plus) Research Program
- b. AUTO21 (National Centre of Excellence Research Program)
- c. National Science and Engineering Research Council of Canada (NSERC)-Discovery Grant Program
- d. OMAFRA-University of Guelph (Bioeconomy-Industrial Uses Research Theme)

CONTACT INFORMATION

Dr. Amar Mohanty
Professor & Premier's Research Chair in Biomaterials & Transportation
Director, Bioproducts Discovery & Development Centre (BDDC)
Department of Plant Agriculture and School of Engineering
Crop Science Building, University of Guelph; ON, Canada, N1G 2W1
Tel: 519 824 4120 ext 56664; Fax: 519 763 8933
E-mail: mohanty@uoguelph.ca
<http://www.plant.uoguelph.ca/research/homepages/amohanty/>

Dr. Manjusri Misra
Associate Professor
School of Engineering and the Department of Plant Agriculture
University of Guelph
Tel: 519-824-4120 ext 58935, 56766
E mail: mmisra@uoguelph.ca
http://www.soe.uoguelph.ca/faculty_pages/misra.html