

Title: Food Waste for Value-added Bio-based Materials – A Circular Approach

The Circular Economy principle of closed loop systems, envisions a system-based approach to design and implement multiple cycles of resources and products to extend their useful life. We can now design and engineer bio-based materials that utilize some of the non-food, agri-based residues and food processing waste to create new bio-based composite materials. The use of “wastes” to create new materials is a concept that has led us to fully, or partially substitute petroleum-based plastic materials. This synergy of circular and green economy provides many creative options for making new bio-based materials that not only reduce environmental impact but are also commercially viable.

A. K. Mohanty, PhD
Professor, Department of Plant Agriculture and School of Engineering
Director, Bioproducts Discovery and Development Centre
University of Guelph, ON, Canada