# Bio-Industrial Opportunities Section

# Overview

The Bio-Industrial Opportunities (BIO) Section helps to advance the circular economy, create jobs, and stimulate economic diversification by enhancing the value of Alberta's biomass. By providing technical and business development support to stakeholders, the BIO Section enables innovative products and processes to be scaled up and commercialized. A team of dedicated professionals can help you advance your bio-based project, from biomaterials and bio-based chemicals to bioenergy and natural health products. Our focuses include:

# **New opportunities**

For agricultural/forestry processing and production of value-added products from waste streams and by-products

# **Maximizing value**

Through fractionation of biomass to extract and purify high-value ingredients and intermediates

### **Facilitate commercialization**

And market access through industry development and extension activities

# **Operations and Facilities Unit**

The Bio Processing Innovation Centre (BPIC) provides essential product development and scale-up support for fibre decortication and refinement,



grain fractionation, separation, extraction, polymerization and extrusion. With a natural health product (NHP) license from Health Canada, the facility can also work with cosmetic/personal care products and NHPs.

The Bio-Industrial Opportunities Section offers a suite of facilities, equipment and expertise to help your company succeed. These assets are uniquely positioned between lab scale and full-scale

production, giving companies the ability to test and improve their proof-of-concept ideas and processes before committing to full production.



State-of-the-art equipment for the following processes are available at a competitive rate:

- Wet and dry fractionation
- Extraction and purification
- Freeze drying and spray drying
- Extrusion
- Ozonolysis and hydrogenation



- Pelletization
- Testing and analysis
- Formulation and scale-up production of cosmetic/personal care products
- NHP batching and filling
- Packaging and labeling



# **Industry Development**

Our Industry Development Officers work continuously with industry, government, academic researchers, and funders to help the bioindustry succeed.

Select completed and ongoing projects and crossministry working groups include:

- Specialty/Renewable Chemical & Ingredients Initiative
- Market Opportunity Assessment for Alternatives to Formaldehyde
- Unleashing Value of Industrial Hemp in Alberta
- A Tutorial on Alberta's Hemp Food, Beverage and Textile Business Directory and Retail Demand Study for Hemp and Flax
- Hemp Absorbents for Industrial and Consumer Markets
- Sustainable Packaging Alberta Opportunities
- Industrial Hemp Seed Production Costs and Returns in Alberta
- Meeting Green Building Product Requirements: An Analysis Tool and Case Study
- Nutrient Recycling Program Pilot in a Greenhouse Operation

- An Organic Waste Inventory for Alberta's Agrifood Sector
- Canadian Food Loss and Waste Case Study Series
- Food Processing Wastewater Treatment
- Alberta Biogas Industry 2016 A White Paper on Policy and Economic Outlook
- Bioenergy Producer Program
- Alberta Clean Fuel Standard

# Contact Us



### Hong Qi

Director
Tel 780-644-8128
Hong.Qi@gov.ab.ca

O.S. Longman Building 4th Floor, 6909 116 Street Edmonton, Alberta T6H 4P2

### **Gabriel Chemello**

Lead, Operations & Facilities Tel 780-644-8129

Gabriel.Chemello@gov.ab.ca

Bio Processing Innovation Centre 5520 36 Street NW Edmonton, AB T6B 3P3

