Value-added Fractionation Program

About the Value-added Fractionation Program

The Value-added Fractionation Program was developed in late 2014 to provide business and technical services to companies wanting to develop natural ingredients as well as utilization into finished products. We work with companies at all stages of growth, from very early stage to mature companies.

Our industrial business officers help companies in many different ways, from marketing data to potential funding opportunities.

From the technical side, the Bio-Industrial Opportunities Section moved into new offices and laboratories in April 2017. Here we can help companies develop their concepts prior to scale-up in our pilot plant. We carefully chose the laboratory's extraction and purification equipment, and our pilot plant contains similar commercially scalable equipment. This accelerates the client's new product's scale-up.

We have one dedicated formulation lab that allows clients' formulators to develop new cosmetic/personal care and topical national health products. We provide training on a wide range of equipment as well as a regulatory perspective.



Business services offered

- Business planning
- Strategic counsel
- · Collaboration and networking
- Industry advocacy

We are a champion for Alberta's bio-economy!

Technical services offered

- Particle size profiling and analysis
- High temp/pressure reactors
- Pressurized extraction
- · Essential oil extractors
- UHPLC, NIR, FTIR
- Thermo-combustion protein analyzer
- Low/Medium pressure chromatography
- Molecular filtration
- Cosmetic and natural health product formulation



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Natural Health Products (NHP)

Our new Bio Processing Innovation Centre (BPIC) received an NHP site licence from Health Canada. In it, there is about 4,800 sq. ft. of wet processing area to accommodate the extraction and purification of a wide range of biomass, including oilseeds, cereal grains, specialty crops, botanicals and biomass process streams.



Process equipment is available for purifying and concentrating crude botanical extracts and a large pilot scale spray dryer is anticipated to be installed in late 2017-early 2018.

BPIC pilot-scale wet processing equipment

- Milling capability
- Sieving capability
- Seed Oil expeller
- 300 L Timatic automated pressurized extractor



- Filter press
- Membrane filtration (MF/UF/NF/RO) using spiral and tubular membranes

BPIC also has an 800-sq. ft. clean room to allow companies to fill and package cosmetic/personal care products and NHP in a clean environment. We can provide a complete filling line from labelling, filling and product coding.

Our batching and filling equipment can handle a wide range of bottle, jar and tube sizes to suit our client's needs.

Assisting companies until they are able to either manufacture on their own or engage a contract manufacturer is critical for their ultimate success!

BPIC clean room processing equipment

- Bottle and tube labeler (15-125 ml)
- Bottle and tube labeler (125-500 ml)
- Sample filler (up to 50 ml)
- Piston filler (50-4000 ml)
- Bottle cappers
- Tube sealers
- Product coder
- Miscellaneous conveyors and accumulation tables

For more information:

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