

FOOD TECHNOLOGY CENTRE

Innovation for the Food & Bioresource Industries

Prince Edward Island, CANADA

NEWSLETTER

Summer 2007

Featured in this issue:

- Nutrisciences and Health 2007 Conference
- Kason Fluid Bed Processor
- Thermal Processing Workshop
- Supercritical Fluid Extraction Workshop
- Succession Planning Support Program

Free Preliminary Consultation

FTC provides free preliminary consultation services and FTC will help you source appropriate funding for your food development projects.

The **Prince Edward Island Food Products Development Fund** will assist Island businesses with projects conducted at the Food Technology Centre. Companies from neighbouring provinces, NB and NS, also have funding support available from their provincial governments for product development activities conducted at FTC. Contact Yaw Dako, Food Technologist (902-569-7699).

Microbiology Laboratory Services:

- [Sample Submission forms](#)
- [Requirements for the collection and shipping of samples](#)
- [Specific instructions for the collection and shipping of shellfish samples](#)

To obtain swabbing supplies and sterile bottles, or for further information about our laboratory services, please call our microbiology laboratory at (902) 368-5937.

FTC provides certified **organic processing** services. Contact Dr. Leigh Gao, Food Scientist/Engineer at 902-368-5465.

FTC can provide solutions in **natural products extraction** and nutraceuticals/functional foods product development. Contact Dr. Edward Charter, Manager, Food Science & Natural Products Extraction, at 902-368-5912.

P.E.I. on the World Map for Nutrisciences Research

By Stephen Gould, Sr. Extraction Technologist

The Nutrisciences and Health 2007 Conference was held at the Delta Prince Edward, Charlottetown, July 10-12. The theme, **Bioprospecting for Neuroprotectants**, focused on the need for using a multi-disciplinary approach when seeking cures for some of our most common diseases and ailments. Over 150 delegates from across Canada and the US as well as five European countries and China attended.



Members of the Food Technology Centre's Natural Products Extraction team presented a scientific poster entitled, **Recovery of Polyphenolic Compounds from Apple Peels**, which featured our recent extraction work with the Nova Scotia Fruit Growers Association, Nova Scotia Agricultural College and the Tree Fruit Bioproduct Research Program. This research was led by Dr. Muhammad Yousaf (*pictured*), Organic-Purification Chemist at the Food Technology Centre, and Dr. Vasantha Rupasinghe, Assistant Professor Bio-products of NSAC. During the conference, several impromptu tours of the Food Technology Centre were conducted. FTC's capacity to extract and purify natural products and to process functional foods was of interest to several participants.

As explained in an introductory workshop at the conference, **Nutrigenomics** was defined as "analyzing the effects of diet on the activity of an individual's genes and health and the effect of an individual's genes on metabolism of dietary chemicals". Nutritional genomics, nutraceuticals, functional foods, and traditional food science technologies are all involved in the field of **Nutrisciences**. Most of the conference's in depth presentations explored the positive health effects on mammals that consume products extracted from natural sources. An expert panel interacted with the conference participants to explore business strategies to bring natural products to the pharmaceutical, nutraceutical and functional foods market place.

The NRC Institute for Nutrisciences and Health, PEI Business Development Inc., The Prince Edward Island BioAlliance, and several other local and international sponsors are to be congratulated for planning this conference. Prince Edward Island is solidly on the world map for **Nutrisciences** research.

Featured Equipment: Kason Fluid Bed Processor

By Leigh Gao, Ph.D., Food Scientist/Engineer



In processing applications, materials may easily become sticky, browned or otherwise negatively affected if not mixed, heated or cooled effectively. High efficiency heat and mass transfer is usually critical for the quality of the product. The Kason Fluid Bed Processor is ideal for drying, moisturizing, heating or cooling a variety of solid food and natural products materials under sanitary

Supercritical Fluid Extraction Workshop

The [SFE workshop](#) which was postponed has been tentatively rescheduled to be held September 17-19, 2007. Please contact ftcweb@gov.pe.ca if you are interested in attending. (We will be getting in touch with those who replied to our first call for interest.)

Food Safety Workshops:

[Seafood HACCP-QMP Workshop](#) Sept. 10-12, 2007. The Food Technology Centre in cooperation with the New Brunswick Food & Beverage Processors Association are planning a three day Seafood HACCP-QMP Workshop to be held in Moncton.

[HACCP \(FSEP\) Workshop](#) Sept. 24-26, 2007. The Food Technology Centre in cooperation with the New Brunswick Food & Beverage Processors Association are planning a 3 day HACCP (FSEP) Workshop to be held in Moncton.

Course outlines of all our Food Safety Workshops are available on the [Training page](#) of our FTC website.

For further information on these, or if you would like a course held in your area, please contact Jim Landrigan at 902-368-5772 or by email at jklndri@gov.pe.ca

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Feedback: If you have ideas for future newsletters or any comments, we would love to hear from you. Please call Janet Docherty at 902-368-5226 or email jvdocher@gov.pe.ca

conditions. This dryer is suitable for drying solid biomass while retaining its desired shape and size and minimizing chemical changes. The principle of its operation relies on vibratory motion and air to "fluidize" the product. In a covered chamber, particulate materials literally "float" in the air and behave like a fluid. Continuous air flow and vibration separate and fluidize individual particles, maximizing the surface area of the materials and, accordingly, the rate at which drying, moisturizing, heating, or cooling can occur. The fluidized mode of operation provides very efficient mixing of different materials and contact of heating or cooling medium with the materials. Among other processes, it can be used to dry potato granules, and coat granules with protective or identity coatings.

The system is available for rental for use in your plant or in FTC's food processing pilot plants. It requires a three phase, 480V and 175A electricity plug-in. The system occupies a small footprint, and is complete with auxiliary components that are all mounted on a skid for easy maneuvering.

For further information on the Kason Fluid Bed Processor, contact Dr. Leigh Gao, Food Scientist/Engineer, at 902-368-5465.

Training for Retort Operators

October 1-5, 2007, the Food Technology Centre will be presenting a five day retort operator's course entitled **Canned Foods: Thermal Processing and Container Evaluation**. The instructor for the course will be Joe Dunford of the Marine Institute, NF. Cost of the course is \$900. [Link to registration form](#).

The course will:

- Allow participants to meet employee qualifications for retort operators;
- Meet training requirements of the personnel section of the Canadian Food Industry Code of Practice for the Heat Processing of Low Acid and Acidified Low Acid Foods in Hermetically Sealed Containers;
- Provide training for employees who have direct involvement with canned foods in hermetically-sealed containers; and
- Train post secondary students in the subject area.

For further information, please contact Ebo Budu-Amoako, Senior Microbiologist/Laboratory Manager at 902-368-5769.

Funding Profile: Succession Planning Support Program

P.E.I. Business Development offers a portfolio of financial assistance programs for businesses. The [Succession Planning Support Program](#) is designed to assist Prince Edward Island business owners address critical business transition issues. Small business owners often invest years of their lives and the greater part of their financial assets in their companies. It is inevitable that someone other than the owner will own and operate the business in the future. Succession planning is an extremely important process and participants should be aware of the need to work together to achieve an optimal solution for the business and its stakeholders - including owners, clients, employees and suppliers.

PEI Business Development specializes in one-on-one business counseling. Staff can provide information regarding most business development programs offered by government agencies across Prince Edward Island. Application forms and information can be obtained online at www.peibusinessdevelopment.com, from the Business Development Officers located at Access PEI centres, and at: PEI Business Development Inc., 94 Euston Street, PO Box 910, Charlottetown, PE C1A 7L9. Toll Free: 1-800-563-3734.

