

TECH TALK



B.C. FOOD TECHNOLOGISTS NEWSLETTER
Published by B. C. Food Technologists
November 2008 Volume 58, No. 3
www.bcft.ca



08/09 BCFT EXECUTIVE

NAME	POSITION	COMPANY
Peter Taylor	Chair	taylor58@telus.net
Margaret Daskis	Past Chair/Asst Program Chair	freshideas@telus.net
Kyrsten Dewinetz	Secretary	dewinetz@nealanders.com
Smita Shah	Treasurer	smita@dccnet.com
Cassandra Menzies	Program Chair	cmenzies@carmiflavors.com
Crystal Cinq-Mars	Membership Chair	freshideas@telus.net
Anne McCannel	Awards Chair	Anne_McCannel@bcit.ca
Brian Jang	Newsletter Editor	bjang@cantest.com
Nilmini Wijewickreme	Advertising Chair	anilmini@cantest.com
Nancy Ross	Banquet Chair	info@foodquality.ca
Daphne Tsai	Suppliers Night	
Jack Phillips	Suppliers Night	Phillips_ingredients@telus.net
Thu Pham	Suppliers Night	tbpham@olympicdairy.com
Mike Dolling	Suppliers Night	mdolling@canadacolors.com
Sandy Conroy	Golf Tournament	sandy.conroy@univarcana.com
Melanie Thomson	Website/Employment Services	mthomson@bdo.ca
Reena Mistry	Director at Large	rmistry@interchange.ubc.ca
Maggie Ho	UBC Student Rep	mho66@my.bcit.ca
Theresia Leung	UBC Student Rep	tleung85@my.bcit.ca
Ashley McNeill	UBC Student Rep	ashleymcneill@gmail.com
Yulietta Chondra	UBC Student Rep	yulietta_chondra@yahoo.ca
Kim Mayes	UBC Student Rep	kfmayes@hotmail.com



CALENDAR OF EVENTS

1. Tuesday, January 13, 2008

What: 2008 Annual BCFT Student Night
Hosted by BCIT Students
When: 5:30 to 8:15 p.m.
Where: SE2, Townsquare A / B
Rooms 212A and 212B
3700 Willingdon Avenue
BCIT Campus
Burnaby

3. Wednesday, February 25, 2008

What: BCFT Suppliers' Night
For more info,
please visit: www.bcft.ca
When: 4:00 pm to 7:30 pm
Where: Coast Hotel and Convention Centre
20393 Fraser Highway
Langley

2009 Annual BCFT Student Night

“Value of Gold Standard Recipes and Their Role in Product Development”

Want to find out more about what goes on in the kitchen and elsewhere to convert a recipe into something that can be used commercially? BCIT will be hosting the 2009 Annual BCFT Student Night *Value of Gold Standard Recipes and Their Role in Product Development* on January 13th at the Townsquare A/B, BCIT. Come and enjoy an interesting talk by an IFT Distinguished Speaker.

A Challenge Cup will start out the night testing your knowledge of food science, and allowing you to compete with and against other teams composed of students and industry members. The winning team will receive a prize. After the Challenge Cup a light dinner will be served and there will be networking opportunities.

The highlight of the evening will be our IFT Distinguished Speaker, Charlie Baggs from Chicago. He will be speaking about how Gold Standard Recipes can be converted to commercial formulas. Charlie will be discussing the following topics: using functional ingredients, importance of the prototype and prototype handling, bench work set up, freeze thaw to re-thermalization, the approval process, project management including communication and delegating, digital library, conversion to formula, preparing and showing samples, support documentation requirements, following production processes, documentation of processing instructions, identifying key processes that need developing, and quality control documentation during pilot testing.

Charlie Baggs is the President and founder of Charlie Baggs, Inc. and has been part of the food industry for over 20 years. Having graduated with honors at the world famous Culinary Institute of America and holding a bachelor's degree from Purdue University's School of Hotel, Tourism and Management, Chef Baggs now shares his widely acknowledged expertise and creativity with clients worldwide. Before starting Charlie Baggs, Inc., Chef Baggs was a chef at the internationally renowned Ambria and Spiaggia Restaurants in Chicago. Other outstanding work experience include being the Executive Chef of Culinary Development with Creative Food Solutions and being the creator and producer of various training documentaries for the Continuing Education Department of the Culinary Institute of America. Additionally, Chef Charlie has authored culinary articles in various industry publications.

BCFT thanks IFT for their sponsorship of this event through the IFT Distinguished Lectureship Program.

MORE ABOUT BCFT STUDENT NIGHT

When: Tuesday, January 13th 2009
5:30 – 8:15 pm

Where: SE2, Townsquare A/B
(Rooms 212A & 212B)
3700 Willingdon Avenue
BCIT Burnaby Campus

Highlights of the Event:

5:30 pm – 6:00 pm Check-in/Registration
6:00 pm Challenge Cup
6:30 pm Refreshments, Light meal, Networking
7:00 pm Speaker—Chef Charlie Baggs, President and Founder of Charlie Baggs, Inc.
“Value of Gold Standard Recipes and Their Role in Product Development”
8:00 pm Door Prizes

Cost:

Student Members:	FREE
Student Non-Members:	\$5
Members:	\$20
Non-Members:	\$40

PRE-REGISTRATION IS REQUIRED or the cost will be \$40 at the door regardless of membership status.

PARKING

Parking is conveniently located in staff lots 5, 7 or 8; these lots are available to the public after 4:30 pm at a cost of \$3.50 for the evening. These parking lots are not accessible from Willingdon. Access from either Canada Way or Wayburne. Please see map at <http://www.bcit.ca/files/about/pdf/bcitmap.pdf>.



Consumer Testings Services

SGS Canada Inc.
50-655 W. Kent Avenue N.
Vancouver, BC V6P 6T7
www.ca.sgs.com

Ron Kuriyedath

Chief Chemist
Agri-Food Laboratories

t (604) 324-1166
1-877-728-1188
f (604) 324-1177

e ron.kuriyath@sgs.com

Student Experiences with Food Technology— Volunteering at the IFT Annual Meeting

By Jane Zhao

During my past year at UBC, I was a member of BCFT for the second year in a row. As a student member, I contributed to events such as Student Night and Career Fair and opened my eyes to other continental excursions such as the 2008 Institute of Food Technologist (IFT) Annual Meeting and Food Exposition in New Orleans. I was encouraged to participate as a student volunteer, which included perks such as free hotel accommodation and admission to the Expo. To be eligible, I had to be a student member of IFT. As well, a completed form of the Session Monitor Program Application signed by a major professor had to be submitted in April. The Food Expo, held in New Orleans at the end of June, was the one-stop ticket for buyers and sellers in the food industry to learn

“the New Orleans Memorial Center was entirely filled with over 1,900 exhibitors ... it was the biggest exhibition I had ever seen!”

about the latest discoveries, newest products, and most lavished food technologies from around the world (read more at www.ift.org). Upon arrival, I had no idea about the extent of an IFT major conference. Posters hung on the sides of all street lamps like banners, the New Orleans Memorial Center was entirely filled with over 1,900 exhibitors, more than 20 high-class hotels were occupied by participants, and private coach services ran by the hour - it was the biggest exhibition I had ever seen!

As a volunteer, I cooperated in a training session on the first day. I was one of the few assigned to work on the Expo floor at the demo pavilion with the Research Chefs Association. The RCA, established in 1996, is a group of food professionals who mix culinary art with food science. This year the theme was The Sustainable Plate: From Farm to Table and three teams from the Pacific, Central and Atlantic regions of USA competed during the three full days of the Expo (read more at <http://www.culinology.com/node/402>). My job consisted of passing samples such as seafood pot pie, Louisiana bouillabaisse and vegetarian calas to the 100 plus audience. The rest of the students engaged as session monitors by overseeing various educational seminars and



Jane Zhao at the 2008 Institute of Food Technologist (IFT) Annual Meeting and Food Exposition

keeping a record of attendees. To put into perspective, there were more than 200 sessions and over 10 000 attendees from around 80 countries. Every volunteer had a different schedule. For me, most of my afternoons and evenings were free to browse the Expo and discover exciting trends such as new probiotic strains that were heat resistant, desserts that contained essential fatty acids, or polysaccharides that helped decrease crystallization. Practically every booth had something to sample, thus my lunch involved devouring steak served with enhanced thickened cream sauce, and dumplings dipped in sodium reduced soy sauce or lactose-free ice cream made from a complex starch to name a few. There were also keynote sessions, symposiums, poster presentations, professional and student seminars, company receptions, mixers, student socials, and fundraisers for rebuilding homes. Due to time restrictions, I was not able to attend every event, but I heard some of the latest food science and marketing inventions, networked with professionals, enjoyed socializing with other students, experienced New Orleans culture, and tasted some of the best Louisiana seafood. Overall, being a small part of this large venture was the most exciting volunteer trip I whipped up and I encourage every student to sample it.

For more information on becoming a volunteer for the IFT Annual Meeting, keep checking for updates by the IFT Student Association at <http://www.iftsa.org/am/#funding>.

15th Annual BCFT Supplier's Night and Seminars

Please join us on February 25, 2009 in four seminars which will follow by the Supplier's Night Show.

Presentation 1 will be presented by **3M Microbiology Products**, a division of 3M Canada Company. Raquel Lenati, M.Sc. Professional Services Advisor for 3M Microbiology in Canada will be speaking on Environmental Monitoring and Sanitation Verification via ATP and Microbiology Tests.

Maintaining an environmental monitoring program is critical in the food industry today. Programs that monitor and manage areas of microbiological risk in the plant environment can serve as "early warning systems" to identify and eliminate sources of potential contamination. Overall objectives for environmental monitoring programs may include:

- To find possible indicator or spoilage organisms and/or pathogens
- To determine the effectiveness of cleaning and sanitizing procedures
- To determine cleaning frequency
- To reinforce employee training programs

Monitoring your plant environment with microbial tests as well as ATP will provide information of cleaning and sanitation effectiveness.

Investing on data trending will allow you to assess whether hygiene standards are being maintained. Data trending also provides concise reports for management meetings, customers or auditors.

In this seminar environmental monitoring methods will be presented together with examples and advantages for different scenarios.

Presentation 2 will be offered by **Denomega Nutritional Oils**. Please join Ron Wheelright, Senior Account Manager at Denomega in a discussion of Overcoming the Challenges of Formulating Foods and Beverages with EPA and DHA Omega-3.

Denomega Nutritional Oils is the leading manufacturer of all natural taste-and-odor-free omega-3 ingredients.

They have been involved with the refining and processing of marine oils for nearly 100 years. Their omega-3 is

sourced from a sustainable supply and is Kosher and Halal certified. They are a solutions-oriented company with a variety of omega-3 options. Their experienced technical team can assist manufacturers in incorporating omega-3 into a wide variety of food and beverage products without an impact on taste or odor.

Omega-3 can be a challenging ingredient to work with. But with the right information, many of these challenges can be overcome. Whether you are looking at introducing your first omega-3 product or have had a bad experience in the past, this presentation will give you new "food for thought."

Presentation 3 will be presented by **Kerry Ingredients and Flavours**. Please join Guylaine Trachy, Technical Director at Kerry for the answer to your questions – What is a functional ingredient in food and why are we using it?

What is a functional ingredient in food and why are we using it? This is the general question that we will answer during this presentation. First we will review the history of functional ingredients and their relationship with trends over the years. We will look at the most important functional ingredients in various food categories including beverages, bars, bakery, confectionary, and dairy. We will discuss proteins, gums, enzymes, emulsifiers, antioxidants, fibers, vitamins and other nutraceutical ingredients. We will also discuss flavor as a functional ingredient that can be used as a masking agent or to replace salt, cocoa, sugar, fat and more.

Presentation 4 will be offered by **Ecolab, The Food & Beverage Division**. The Food & Beverage Division of Ecolab is the leading provider of critical environment sanitation products and systems for the dairy, food and beverage processing, dairy agricultural and pharmaceutical markets. By meeting high standards of sanitation and service, Ecolab has gained an increasing amount of business from major corporate and regional customers throughout the world.

Ecolab provides a comprehensive program that combines Integrated Intervention Systems with thorough Operational Productivity Services, customized for each processing facility's unique operating conditions.

Please join Terry Lum for a discussion about the Effective Use of Chemical in Sanitation of Niche Areas. Terry will review the importance of cleaning a production plant, and answer questions of what, where, and when we should be cleaning. In addition, he will provide information on how to clean and who is responsible for the cleanliness of the plant. Lastly, he will review monitoring steps to ensure the effectiveness of the sanitation program.

L. V. LOMAS LIMITED
1587 DERWENT WAY
ANNACIS ISLAND
DELTA, B.C.
V3M 6K8

CHARMAINE FERNANDES
TECHNICAL SALES REPRESENTATIVE
CELLULAR 604-306-3075

TELEPHONE 604-521-7779
1-800-668-1221
FAX 604-521-2323

EMAIL: cfernandes@lvmomas.com

RESPONSIBLE DISTRIBUTION
• OUR COMMITMENT •

SUPPLIER'S NIGHT

FREE SEMINARS

When: February 25, 2009
 Time: Two Seminars hold concurrently from **1:30 to 2:30pm**
 Two Seminars hold concurrently from **2:30 to 3:30pm**
 Where: **Coastal Hotel & Convention Centre**,
 20393 Fraser Highway, Langley
 604-530-1500
 Rooms: TBA

Presented by:

1. 3M Canada Company

Topic: Environmental Monitoring and Sanitation Verification (ATP and microbiology tests)

Speaker: Raquel Lenati, M. Sc.,
 Professional Services Advisor

2. Denomega Nutritional Oils

Topic: Overcoming the Challenges of Formulating Foods and Beverages with EPA+DHA Omega-3

Speaker: Ron Wheelwright, Senior Account Mgr.

3. Kerry Ingredients and Flavours

Topic: What is a functional ingredient in food and why are we using it?

Speaker: Guylaine Trachy, Technical Director

4. ECOLAB, The Food & Beverage Division

Topic: Effective Use of Chemical in Sanitation of Niche Areas

Speaker: Terry Lum, Account Manager

Registration: thu.pham@olympicdairy.com

Deadline: TBA

Fee: Complimentary of Supplier's Night Show Registration

Seats are limited. Please register early to attend.

WANTED: Directed Studies Projects for BCIT Students!

The BCIT Food Technology Program is again accepting project proposals from companies willing to sponsor students taking the Directed Studies course in Food Technology. Past projects have included: HACCP and prerequisite program development, food product development, shelf life studies, nutritional analysis, evaluation of sanitation practices, etc.

The students have four hours per week (Wednesdays) from Jan. to April to devote to the project. The student must complete a literature review on the project area, develop methodology with assistance of the sponsor, and then carry out the specific research. Work may be done at BCIT and/or company premises. During the project, the student has access to BCIT Food Technology pilot plant and analytical equipment. Presentation of oral and written reports will take place in mid-May. The sponsor is asked to be available to advise the student throughout the project, attend the oral presentation, complete a brief evaluation of the student, and cover costs of consumables. For information, please contact Anne McCannel at (604) 432-8269 or Anne_McCannel@bcit.ca. Projects must be submitted by Dec. 19 to be considered. Project acceptance depends on suitability and interest by the students.

Employers & Job Searchers

BCFT sponsors 'no-charge' job postings and resume postings on our website. Please ensure the posting is in pdf or word document form. Optionally, we can provide a form for the job posting.

Check out the current positions available at this link.
http://bcft.ca/Positions_available.htm

For more information or to post a job, contact Melanie Thomson at webmaster@bcft.ca



UNIVAR

Sandy Conroy

Sales Representative
 Food and Pharmaceuticals

Tel 604 273 1441

Cell 604 813 9996

Fax 604 231 5294

Univar Canada Ltd.

9800 Van Horne Way

Richmond, BC

V6X 1W5

TF 1 800 663 9628 (BC Only)

sandy.conroy@univarcanada.com

www.univarcanada.com



Making the Switch....

Sunflower oil offers a zero trans fat option that brings optimal results in food processing and the foodservice industry

By Chris Gould

While most food companies have already reduced or eliminated trans fat from their products, many who rushed to meet the deadline are now reformulating and analyzing their products based on rising commodity costs and consumer feedback. In addition, many foodservice operators are also keen to obtain trans fat free alternatives, in order to meet the 2009 deadline that will set new limits to the amount of trans fat in their menu items.

Sunflower oil is trans fat free oil that is included in Health Canada's Food Guide. The recently updated version of this guide acknowledges the role of "healthy" fats in the diet and encourages Canadians to consume these fats each day. The guide recommends including 30 to 45 mL (2 to 3 Tbsp) of unsaturated fats or oils, and limiting the amount of saturated and trans fat in the diet.

In Canada, two types of sunflower oil are available — a high-oleic oil and a more commonly used mid-oleic oil, known as NuSun. Both are low in saturated fat and high in Omega-9 fatty acids. Both have only a trace of linolenic fatty acid (Omega 3), which is often associated with an improved flavour profile and both are high in Vitamin E.

Various product applications

Sunflower oil is an excellent choice for the creation and reformulation of snack food and frozen food products, salad dressings and marinades, as well as bakery reformulations and spray coatings. It has superior shelf-life and is flavour-neutral, allowing the true flavour of food to come through.

Excellent stability under intense heat

Many food processors and chefs are also switching to sunflower oil, since it is an ideal choice for deep-frying. Sunflower oil has a high smoke point (450F) and oil costs may be lower, since sunflower oil often lasts longer in a fryer.

Under controlled frying conditions¹, ADM conducted Free Fatty Acid (FFA) tests that measured how much the oil in a fryer deteriorates over a certain period of time. The lower the percentage of FFA the better. Higher FFA levels are associated with fryer smoking. In reviewing the results, mid-oleic sunflower oil had a lower percentage of FFAs when compared to corn oil and similar levels of FFAs when compared to low-linolenic and high-oleic canola oil.

Taste the difference

Although all processed fresh oils are fairly bland, oils from different oilseed sources tend to create unique flavour contributions as frying time progresses. The degradation of linolenic acid, found in most oils, can be a source of "off-flavour" in foods. Since sunflower oil has only trace amounts of linolenic acid, it would be an excellent choice for restaurant operators who deep fry regularly and for food processors who have food products where an extended shelf-life is required.

Tests were conducted at the USDA Agricultural Research Service National Centre for Ag Utilization Research, in Peoria, IL, comparing the taste of potato chips cooked in mid-oleic sunflower oil with those cooked in other oils. After four days of storage, the chips cooked in sunflower oil had a delicious, light taste that was significantly better than the taste of the chips cooked in other oils².

Cholesterol lowering effect

Researchers at Penn State University found that when study participants substituted 30 mL (2 tbsp) of NuSun sunflower oil for the same amount of saturated fat each day, the sunflower oil had a significantly better effect at lowering cholesterol than when the same amount of olive oil was used as a substitute³.

The optimal choice

Consumers are keen to purchase products made with sunflower oil, since a recent study found that almost half of all Canadians indicated that they would purchase a product that was labeled "Made with Sunflower Oil"⁴.

Chris Gould is with the National Sunflower Association. For more information see www.sunflowerusa.com

NuSun® is a product of the USA. NuSun® is a registered trademark of the National Sunflower Association.

1. ADM Controlled frying conditions – Frying temperature was 175 degrees C (+/-3degrees C). The oil was heated continuously for 24 hours in 6.8 kg fryers. 4.6 kg of water-blanched potato cubes were fried daily for 8 days and oil samples were taken

2. Research conducted at USDA/ARS National Center for AG Utilization Research, Peoria, IL.

3. Binkoski, A., Kris-Etherton, P., Wislon, T.A., Mountain, M.L., Nicolosi R.J., *Journal of the American Dietetic Association*, July 2005, Vol.105, No.7.

4. Survey conducted by Market Solutions LLC in April 2005

BCFT Website

Please check out the BCFT website at www.bcft.ca for:

- Up to date information about upcoming BCFT events,
- Job Postings, for those companies needing a hard working food technologist,
- Job Seekers, for those hard working food technologist needing a company,
- Book your table at *Supplier's Night* using our online registration.

If you have any feedback or events that you would like posted, please email Melanie Thomson at webmaster@bcft.ca.



Kyrsten Dewinetz
WESTERN CANADA SALES MANAGER
kdewinetz@nealanders.com

#201-7950 Huston Rd., Delta, BC V4G 1C2
PHONE 604-940-4181 CELL 604-230-0462
FAX 604-940-4180 www.nealanders.com

TORONTO MONTREAL VANCOUVER CALGARY EDMONTON

Nominate a BCFT member for an IFT Award!

IFT has a large number of awards established to honour and recognize individuals involved industry, government and academia. Eligibility depends on the specific award type. Brief descriptions of the awards and nomination forms can be found at <http://members.ift.org/IFT/Awards/>. Please note that the deadline for nominations for all IFT achievement awards is *December 1st, 2008*.

Check out the available awards, and get those nominations in. As Awards Chair, Anne McCannel (anne_mccannel@bcit.ca) can assist with the nominations. Let's recognize our many deserving members through these awards.



FRUIT INGREDIENTS

Aromas
Concentrates
Crushed
Diced
Dried
Flakes
Fresh
Frozen
Pastes
Peels
Powders
Purees

Tel: (604) 273-4641 Fax: (604) 273-7710

Agrisource Food Products Inc.
16291 River Road, Richmond, B.C.
Canada V6V 1L7



LUCIE NICHOLLS
General Manager

#212-1515 Broadway Street
Port Coquitlam, BC
V3C 6M2 Canada

Tel: 604-468-9800
Toll Free: 1-866-468-9800
Fax: 604-468-9801
Cell: 604-866-9804
www.carmiflavors.com
lucienicholls@carmiflavors.com

Nancy Metcalfe
Sr. Account Representative
Microbiology Products



3M Canada Company

804 Carleton Court, Annacis Island
Delta, BC V3M 3M1
604 463 8374 Tel. Home Office
800 265 1840 Toll Free 7423
778 772 3716 Cell
800 665 4759 Fax Orders
nametcalfe@mmm.com

**BRITISH CANADIAN IMPORTERS
(VANCOUVER) LIMITED**



7588 Winston Street
Burnaby, British Columbia
Canada V5A 4X5

Gordon Groundwater

Tel: 604-681-3554 Fax: 604-681-0567
email: ggroundwater@bcimporters.net

Think about advertising in Tech Talk

You can't afford to miss this opportunity to advertise with us!

"Tech Talk" is published approximately nine times a year by the **British Columbia Food Technologists Association (BCFT)**. As the official publication of the association, Tech Talk reaches the local audience of individuals in the Food Science and Technology profession - your ad in Tech Talk will keep you on top of our readership of over 300 individuals.

For complete details on placing your ad in Tech Talk, contact:

Nilmini Wijewickreme
CanTest Ltd.

4606 Canada Way
Burnaby, BC, V5G 1K5.

Tel: 604-734-7276; Fax: 604-731-2386

E-mail: anilmini@cantest.com

We accept either a type written, clear, ready-to-print copy of your ad in PDF or TIFF format in color or black and white, or a hard copy of business cards.

PRICING INFORMATION FOR ADVERTISING IN TECH TALK

Business card (4" x 2")	\$30
Page Sponsor (8" x 2")	\$50
¼ Page Sponsor (4" x 5")	\$60
½ Page Sponsor (4" x 10")	\$90
Full Page Sponsor (8" x 10")	\$150

*Rates indicated are on per issue basis.
*Discounts up to 10% are available for
advertising in multiple issues*).*



Canada Colors and Chemicals Limited

Mike Dolling

TECHNICAL SPECIALIST
Tel: (604) 538-9626 Cellular: (604) 619-8272
E-mail: mdolling@canadacolors.com

1071 Cliveden Avenue, Annacis Island
Delta, British Columbia V3M 6N4
Customer Service / Order Desk:
Tel: (604) 525-3326 Fax: (604) 525-8409
Toll Free: 1-877-698-6620
Website: www.canadacolors.com

CANTEST
•••••

A LIFE SCIENCE COMPANY

 **FOOD SAFETY**

Expertise in Food Analysis

- Pesticide Residues & Hormones
- Nutrition Labelling
- Food Chemistry
- Natural Health Products
- Microbiology
- Gas Testing for Package Evaluation
- Effluent Water Testing

Call 1 800 665 8566, visit www.cantest.com or
email foodsafety@cantest.com for further information

