



55th Atlantic Fisheries Technology Conference

Seafood and Aquaculture in Focus:
Resources, Processing, Biotechnology, Safety and Health
September 7-10, 2010

AFTC Meeting (Scientific Program)

September 8

- 8:50 a.m. Opening Remarks
Heather Manuel and Fereidoon Shahidi, Canada
- 9:00 a.m. Remarks from Minister of Fisheries & Aquaculture (NL)
Honourable Clyde Jackman
- 9:30 a.m. Management, Conservation and Ecological Balance in the Harvest of Fish Stocks
George A. Rose, Fisheries and Marine Institute of Memorial University, Canada
- 10:00 a.m. Marine Bioprospecting for Natural Products – The Challenges and Opportunities
Russell Kerr, University of Prince Edward Island, Canada

10:30-11:00 NUTRITION BREAK

- 11:00 a.m. Challenges in Supply, Commercialization and Marketing of Marine Nutraceuticals
Robert Orr, Ocean Nutrition Canada, Dartmouth, Canada
- 11:30 a.m. Biotechnology and Genomics in Fisheries and Aquaculture Research
Mathew Rise, Ocean Sciences Centre, Memorial University, St. John's, Canada
- 12:00 p.m. Fishmeal and Fish Oil Update 2010: Turmoil and Transition Since 1998
Anthony P. Bimbo, International Fisheries Technology, USA

12:30-2:00 p.m. LUNCH BREAK

- 2:00 p.m. Aquaculture Waste Management – Going Green
Cyr Couturier, Newfoundland Aquaculture Industry Association and Marine Institute of Memorial University, Canada
- 2:30 p.m. Sterol Content and Composition of Mussels Fed Different Diets
I.A. Hailat, C.C. Parrish and R.J. Helleur, Memorial University, St. John's, Canada
- 2:50 p.m. Biochemical Composition of Blue Mussels (*Mytilus edulis*) Fed Effluent from an Onshore Atlantic Cod (*Gadus morhua*) Aquaculture Facility
A. Both, C.C. Parrish, R. Penney and R.J. Thompson, Ocean Sciences Centre, Memorial University, Canada

3:10 p.m. Effect of Diet and Temperature on Muscle Lipid and Fatty Acid Composition in Adult and Juvenile Steelhead Trout (*Oncorhynchus mykiss*)
M.A. Wijekoon, C.C. Parrish, K. Nag, A.A.H. Mansour and D. Whelan,
Memorial University and Department of Fisheries and Oceans, St. John 's, Canada

3:30-4:00 p.m. NUTRITION BREAK

4:00 p.m. Alternative Species in Fisheries and Aquaculture
Annie Mercier, *Ocean Science Centre, Memorial University, Canada*

4:30 p.m. Future Fish Processing Technologies
Robert Verge, *Canadian Centre for Fisheries Innovation (CCFI), St. John 's, Canada*

4:50 p.m. Lipid Class and Fatty Acid Content and Composition of Bivalves in the Vicinity of Atlantic Salmon Farms in Coastal British Columbia
E. Marie George and *Christopher C. Parrish, Memorial University, Canada*

5:10 p.m. Life Cycle Analysis of Biofuels from Fish Waste Remote Fish Processing Plants in Newfoundland and Labrador
Punyama Jayasinghe and *Kelly Hawboldt, Memorial University, Canada*

September 9

- 9:00 a.m. Novel Functionality of Marine Allenic Carotenoids
Kazuo Miyashita, *Hokkaido University, Japan*
- 9:30 a.m. Seafood Processing By-products and their Value Added Use
Hordur G. Kristinsson, *MATIS – Icelandic Food & Biotech R & D, Iceland*
- 10:00 a.m. Extraction and Processing of Omega-3 Oils from Microbial Biomass
U. Wanasundara, *POS Pilot Plant, Canada*

10:30-11:00 NUTRITION BREAK

- 11:00 a.m. Understanding the Impact of Marine Mammals on Fish Resources in Atlantic Canada
Garry B. Stenson, *Department of Fisheries and Oceans, St. John's, Canada*
- 11:30 a.m. Fish Protein Hydrolysates from Cod/Salmon that could be Promising for Anti-diabetic Functional Foods
Hasan Fida, Andre Marette and Tom A. Gill, *Dalhousie University and Laval University, Canada*
- 12:00 p.m. Fish Protamine (Ptm), a Promising Antibacterial Bioactive: Mechanism of Interaction through Outer Membrane Protein (Porins) of Escherichia Coli and Other Gram-Negative Bacteria
Hasan M. Fida, Mukund Mohan, Mathias Winterhalter and Tom A. Gill, *Dalhousie University, Canada and Jacobs University Bremen, Germany*
- 12:30 p.m. Protamine Interacting with Inner Membranes of Gram-negative Bacteria
David A. Pink and Bonnie Quinn, *St. Francis Xavier University, Antigonish, Canada*

1:00-2:00 p.m. LUNCH BREAK

- 2:00 p.m. Supercritical Fluid Extraction and Chromatography of Marine Bioactives
Isabelle Vu Trieu, *Waters Corporation, Milford, USA*
- 2:30 p.m. Detecting Taint in Seafood During the Gulf of Mexico Oil Spill
Lucina E. Lampila, *Louisiana State University, USA*

2:50 p.m. Effect of Enzymatic Randomization on Positional Distribution and Stability of Omega-3 Triacylglycerols
Jiankang Wang and Fereidoon Shahidi, Memorial University, Canada

3:20 p.m. Enzymatic Synthesis of Phytosterol Esters with Omega-3 Fatty Acids from Marine Resource
Zhuliang Tan and Fereidoon Shahidi, Memorial University, Canada

3:40-4:10 NUTRITION BREAK

4:10 p.m. Exploratory Fishing Surveys and Biological Resource Assessment of Atlantic Hagfish (*Myxine glutinosa*) in the Newfoundland Region
S.M. Grant, W. Hiscock, G. Bishop and R. Sullivan
Marine Institute of Memorial University, Canada

4:30 p.m. Recovery and Characterization of a Serine Collagenolytic Extract from Snow Crab (*Chionoecetes opilio*) By-products
Nathalie Souchet, Serge Laplante and Piotr Bryl, MERINOV, Gaspé, Québec, Canada

4:50 p.m. Enhancing Sustainable Mussel Industry Production and Growth through Assessment and Removal of Constraints in Seed Supply
Tracy Granter, C. Dawe, K. Best, T. Brown and D. Green, Marine Institute of Memorial University and Newfoundland Aquaculture Industry Association, St. John's, Canada

5:10 p.m. Development of an Underwater Camera System to Observe the Harvesting Techniques of Commercial Species
Melanie Underwood, Paul Winger and George Legge
Fisheries and Marine Institute of Memorial University, Canada

September 10

- 9:00 a.m. Utilization of Marine Oils in Food and Non-Food Applications
Roland Verhe, Ghent University, Belgium
- 9:30 a.m. Protein and Lipid Oxidation in Fish and Fish Products
Caroline P. Baron, Technical University of Denmark, Denmark
- 10:00 a.m. Use of Bioreactor for Production of Marine Nutraceuticals
Se-Kwon Kim, Pukyong National University, Korea

10:30-11:00 NUTRITION BREAK

- 11:00 a.m. Vitellogenin for Determination of Fish Sexual and Reproductive Maturation and Presence of Xenobiotics
Joseph Banoub, Department of Fisheries and Oceans, St. John's, Canada
- 11:30 a.m. The Use of High Pressure Treatment for Increasing the Shelf-Life of Seafood-Based Chowder
*Malco E. Cruz-Romero, R. Erdilal, C. Legrand, D. Gilroy and J.P. Kerry
University College, Cork, Ireland*
- 12:00 p.m. The Interactive Center for Fish ("Centre Interactiu del Peix", CIP) in Barcelona, Spain
Reyes Pla, Universitat Autònoma de Barcelona, Spain
- 12:30 p.m. Development of a Fish Oil Derived Biodiesel Production System in Newfoundland and Labrador
Heather Manuel and Wade Murphy, Marine Institute of Memorial University, Canada
- 1:00 p.m. **CLOSING REMARKS**