Ocean Technology in New England and Atlantic Canada

Promoting a Network of Collaboration April 27-28, 2016

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Wednesday, April 27, 6-9PM

Buchanan Alumni House

Thursday, April 28, 8AM-3:30PM
Wells Conference Center, Room 1

Presented by:

Canadian-American Center, University of Maine
Maine International Trade Center









Global Resources. Local Expertise.





A warm welcome to *Ocean Technology in New England and Atlantic Canada: Promoting a Network of Collaboration*, an international conference at the University of Maine.

The goal of the conference is to bring together members of the business community, representatives of government, and academics from American and Canadian universities in a wideranging discussion about the role of new ocean technologies in the cross-border maritime region of New England and Atlantic Canada. The region boasts world-renowned institutions, companies, industry associations, and cluster organizations engaged in providing solutions for offshore energy development, fisheries and aquaculture, ocean observation and monitoring, transportation, climate change adaptation, marine recreation and tourism, and defense and security. The conference provides an opportunity for networking, information sharing, and exploring potential collaboration in these varied ocean technology sectors in New England and Atlantic Canada.

The conference is jointly organized by the Canadian-American Center, University of Maine, and the Maine International Trade Center. The Canadian-American Center is a Title VI National Resource Center on Canada funded by the U.S. Department of Education. The mission of Maine International Trade Center is to expand Maine's economy through increased international trade in goods and services, and related activities.

The organizers would like to express their sincere thanks to the Consulate General of Canada in Boston, the U.S. Department of Education Title VI Program, the Maine Sea Grant College Program at the University of Maine, and TD Bank Financial Group for their generous support of the conference.

Stephen J. Hornsby Director, Canadian-American Center

Jeff Bennett Maine International Trade Center

Ocean Technology in New England and Atlantic Canada:

Promoting a Network of Collaboration

Wednesday, April 27th

Buchanan Alumni House

6:00-7:00PM: **Opening Reception**

Treat Family Room

& Andrews Leadership Hall

Refreshments sponsored by the Consulate General of Canada in Boston

7:00-9:00PM: **Dinner**

McIntire Room

Welcome remarks

Dr. Stephen J. Hornsby

Director, Canadian-American Center at University of Maine

Orono, ME

Dana Eidsness

Director, Maine North Atlantic Development Office at MITC

Portland, ME

Plenary speaker

Neville James Gilfoy

Publisher, Progress Media Group

Halifax, NS

Thursday, April 28th

Wells Conference Center, Room 1

8:00-9:00AM: **Networking breakfast**

9:00-10:15AM: Marine Food, Aquaculture, and Resource Utilization

(Chair) Sebastian Belle

Executive Director, Maine Aquaculture Association

Hallowell, ME

Prof. Barry A. Costa-Pierce

Director, Marine Science Center, University of New England

Biddeford, ME

Paul S. Anderson

Director, Maine Sea Grant

Orono, ME

Michael Szemerda

VP Saltwater Operations, Cooke Aquaculture

Black's Harbour, NB

10:15-10:45AM: Refreshment break

Refreshments sponsored by Maine Sea Grant

10:45AM-12:00PM: Offshore Energy & Marine Infrastructure

(Chair) Prof. Krish P. Thiagarajan Professor, University of Maine

Orono, ME

Nathan Johnson

Director of Environmental Affairs, Ocean Renewable Power

Company Portland, ME

Prof. Habib J. Dagher

Executive Director, Advanced Structures and Composites Center

Orono, ME

Dr. Bruce Colbourne

Professor, Memorial University of Newfoundland

St. John's, NL

12:00-1:00PM:

Lunch

Opening remarks

Dr. Emily A. Haddad Dean, College of Liberal Arts & Science at University of Maine Orono, ME

Elizabeth Schneider MacTaggart Regional Representative for Senator Angus S. King Jr. Bangor, ME

Virtual address

The Honorable Angus S. King Jr. Senator, United States Congress Washington, DC

Plenary speaker

Prof. Charles H. Norchi Professor of Law, University of Maine School of Law Portland, ME

1:00-2:15PM:

Ocean Observation & Science

(Chair) Erin Daily Donahue Trade Commissioner, Ocean Technologies, Consulate General of Canada in Boston Boston, MA

George Kendrick Senior Principal Consultant, Stantec Vinalhaven, ME

Doug J. Schillinger East Coast Sales, RBR and RBR Atlantic Halifax, NS

Dr. Neal R. Pettigrew Professor of Physical Oceanography, University of Maine Orono, ME

2:15-3:30PM: **Marine Transportation**

(Chair) Dana Eidsness Director, Maine North Atlantic Development Office at MITC Portland, ME

Larus Isfeld
Managing Director, Eimskip USA and Eimskip Logistics
Portland, ME

John H. Henshaw Executive Director, Maine Port Authority Augusta, ME

Donald J. Cormier

VP Operations and Safety Management, Bay Ferries Ltd.
Charlottetown, PE

4:00-4:30PM: **Tour of Harold Alfond W2 Ocean Engineering Lab**

Interested participants should meet at the Advanced Structures & Composites Center, 35 Flagstaff Road.

Speakers & Panelists



Paul Anderson

Paul Anderson is the Director of the Maine Sea Grant College Program at the University of Maine. Sea Grant is a state-federal partnership between NOAA and the University that conducts research, education and outreach activities related to many issues facing our coast. Paul is also Director of the University's Aquaculture Research Institute and is serving as Research Director for the \$20M NSF-funded Sustainable Ecological Aquaculture Network project. This 5-year project is the state's current EPSCoR Track 1 project. Paul earned his graduate degree in Microbiology at UMaine and has worked with fisheries, aquaculture and other working waterfront sectors for over 30 years. He resides in Winterport, Maine.



Sebastian Belle

Sebastian Belle began his career as a commercial fisherman, working his way through the university as a mate on offshore lobster boats. Currently, Mr. Belle is the Executive Director of the Maine Aquaculture Association, a private non-profit association representing Maine shellfish and finfish growers. Mr. Belle sits on the National Organics Standards Board Aquaculture Task Force, the Standards Oversight Committee of the Global Aquaculture Alliance and the Boards of Directors for the USDA Northeast Regional Aquaculture Center and the International Salmon Farmers Association. Prior to joining the Maine Aquaculture Association, Mr. Belle was the state aquaculture coordinator working for the Maine Department of Marine Resources and managed commercial salmon and tuna farms. Mr. Belle holds degrees in fisheries biology and agricultural economics and has served as a technical consultant and manager of a commercial-scale aquaculture research and development foundation in Norway.



Bruce Colbourne

Bruce Colbourne is Professor in Ocean & Naval Architectural Engineering at Memorial University of Newfoundland. He holds a B.Eng. from Memorial University, a S.M. in Naval Architecture from the Massachusetts Institute of Technology and a Ph.D. in Ocean Engineering from Memorial . Dr. Colbourne joined the National Research Council (NRC), Institute for Marine Dynamics in 1986 and spent his research career working on problems of environmental loads on marine systems, with industry partners, from major offshore operators to small aquaculture companies. He worked extensively with OceansAdvance, the Newfoundland Ocean Technology Cluster initiative and helped develop the 2009 Ocean Technology Strategy for the Province of Newfoundland and Labrador. He is a member of the Canadian Committee to ISO TC67/SC7 Offshore Structures Standards, and Chair of the Canadian Working Group on Marine Operations.



Donald Cormier

Educated in New Brunswick, Donald Cormier completed a degree in Industrial Engineering in 1982 and obtained his MBA in 1986. His career in the transportation industry has included positions in the railway and marine sectors. Joining Northumberland/Bay Ferries Limited in 1997 as General Manager, responsible for Bay of Fundy ferry services, he played an integral role in turning heavily subsidized ferry routes into successful privately operated businesses. Appointed Vice-President, Operations and Safety Management for Northumberland and Bay Ferries Limited in 1998, he is focused on upholding and improving the company's tradition of safe and reliable marine transportation services.



Barry Costa-Pierce

Barry Costa-Pierce is the Henry & Grace Doherty Professor and Chair of Marine Sciences and Director of the Marine Science Center at the University of New England. He has a PhD in Oceanography from the University of Hawaii. Before coming to Maine, he spent 11 years as Professor of Fisheries & Aquaculture and Director of the Rhode Island Sea Grant College Program at the University of Rhode Island. His research interests are in "ocean food ecosystems": how seafood systems throughout the world interact with marine ecosystems, fisheries, aquaculture, and people. Dr. Costa-Pierce has spent a career developing local to global scientific and educational programs and partnerships. He is widely recognized as a pioneer of the field of "Ecological Aquaculture" and led the United Nation's Food and Agriculture Organization's development of global protocols regarding aquaculture.



Habib Dagher

As the founding Director of the University of Maine's Advanced Structures and Composites Center, Dr. Dagher is a world-leading advocate for high-performance and cost-effective composite materials in advanced structural applications. Dr. Dagher earned his Ph.D. in structural engineering from the University of Wisconsin-Madison and joined the University of Maine faculty in 1985. He has chaired national committees focused on structural bridge engineering and composite materials. He has testified before the Senate Committee on Homeland Security and Governmental Affairs, advocating for a national commitment to research and development of deepwater offshore wind energy as a pathway to national energy independence.



Erin Donahue

Erin Daily Donahue is a Trade Commissioner responsible for defense, aerospace, and ocean technologies at the Canadian Consulate General in Boston. Since joining the Canadian Consulate team in 2005, Erin has held a variety of positions within both the Consular and International Business Development divisions. Prior to taking on responsibility for the defense and ocean technologies file, Erin was responsible for seafood and aquaculture sectors. As part of the Canadian Trade Commissioner Service, she provides strategic market information and market access solutions for Canadian companies looking to export, invest abroad, or develop innovation and R&D partnerships in the U.S. She also assists U.S. companies planning to establish or expand their operations in Canada. A Massachusetts native, Erin graduated from Clark University with a BA in Government and International Relations.



Dana Eidsness

Dana started the Maine North Atlantic Development Office (MENADO) in January, 2014 as an initiative of the Maine International Trade Center. She works closely with MITC, Invest in Maine, and partners to develop trade and investment opportunities for Maine businesses in North Atlantic markets, including Atlantic Canada, Northern Europe, Greenland and Iceland. In addition, Dana interfaces with a variety of groups to ensure that the state has a voice in important discussions regarding climate science, sustainable development, and emerging trade routes in the Arctic. She is a 2015 Arctic Summer College Fellow, serves on the U.S. Delegation to the Arctic Council's Protection of the Arctic Marine Environment Working Group (PAME), and on the Advisory Board of the Arctic Circle Assembly in Reykjavik, Iceland and is Advisory Board Chair to JoNA Magazine—an up and coming web magazine, based in Iceland that will cover North Atlantic affairs for the North Atlantic community. Dana lives on Orr's Island in Maine with her husband and two daughters.



Neville Gilfoy

Publisher of Progress Media Group, Neville has been in the publishing and communications industry for more than 30 years. He has held several leadership positions on boards and committees across the region and was actively involved in development projects in West Africa for which work he was awarded a Rotary International Paul Harris Fellow. He is the recipient of an Honourary Doctorate of Law from Saint Mary's University as well as many other industry and community acknowledgments. He is the Honourary Consul of France in Halifax and as such has close ties with the Government of France in Canada and the French community in Atlantic Canada. Under his direction, Progress Media has advanced the ideals of entrepreneurship, capital investment in small business, business/academic/government partnerships and the notion of creating prosperity through profitable business growth.



John Henshaw

John Henshaw is the executive director of the Maine Port Authority and director of Ports and Marine Transportation at MaineDOT. In this capacity, he is responsible for the development and maintenance of Maine's port and intermodal infrastructure, and marketing Maine's ports to shippers, carriers, and the cruise shipping industry, to the economic benefit of the state. He co-chairs the Maine & New Hampshire Port Safety Forum and oversees the Maine Pilotage Commission and the CruiseMaine Coalition. The port authority is the operator of the International Marine Terminal at the Port of Portland, Maine. He serves as vice president of the North Atlantic Ports Association, vice-chair of the International Association of Maritime and Port Executives, and as a member of the Maine North Atlantic Office advisory committee. John holds a MALD degree from the Fletcher School at Tufts University.



Larus Isfeld

Larus Isfeld has been the Managing Director of Eimskip USA since Feb 2009. He serves as the Executive Vice President of Eimskip Logistics LLC, Atlantic Intermodal Transport LLC, PIT LLC, and Sea Wave LLC. Prior to joining Eimskip, Larus was the President/Owner of Icexpress LLC a JFK based Air Freight Forwarder and NVOCC and Trucking Company since September 1999. He held the position of Managing Director of Viska hf. an Iceland based investment fund from 2000-2003 and served as Director of Private label for Baugur hf., Iceland's largest retailer, from 1997-2000. Mr. Isfeld graduated with a degree in International Studies from Methodist University in North Carolina in 1996 and received a scholar athlete of the year award from the university in 1995.



Nathan Johnson

Mr. Johnson's professional expertise centers on the nexus of water, energy and the environment. He pioneers innovative approaches to implementing emerging technologies in a cost effective and environmentally responsible manner. Mr. Johnson also focuses on building strategic partnerships and projects to accelerate new industries and contribute to the sustainability of global communities. A native of Long Island, Maine, Nathan has a diverse background that includes renewable energy, groundwater exploration and development, commercial fishing, construction management, and more than ten years in environmental engineering. He serves on the Boards of the Island Institute and the Maine Ocean and Wind Industry Initiative and the Policy Advisory Committee for Maine Sea Grant.



George Kendrick

George Kendrick is a senior principal consultant at Stantec, where he leads strategic planning and project coordination for the firm's renewable energy program across the United States and Europe. Over the past two decades he has coordinated large-scale energy planning, environmental assessments, sustainability evaluations, and technical support for a wide range of energy projects, including work on more than 100 utility-scale wind and solar projects in North America representing over 10,000 MW of generating capacity. His offshore experience includes work on the Cape Wind project in Massachusetts, planning studies for an offshore wind project in Maryland, and siting work for multiple marine projects in the Gulf of Maine. George received his undergraduate education in earth sciences at Dartmouth College, and his graduate degree at the University of Montana. He is a dual citizen of the USA and Ireland, with field experience in Europe, the Baltics, Mexico, and Central America.



Senator Angus King

Angus S. King, Jr. was sworn in as Maine's first Independent United States Senator in 2013. He began his career as a staff attorney for Pine Tree Legal Assistance in Skowhegan, later serving as chief counsel to U.S. Senate Subcommittee on Alcoholism and Narcotics and an attorney of Smith, Loyd and King in Brunswick. In 1983, he was appointed Vice President of Swift River/Hafslund Company, an alternative energy development company working on hydro and biomass projects in Maine and New England. Six years later, he founded Northeast Energy Management, Inc., a developer of large-scale energy conservation initiatives at commercial and industrial facilities in Maine. In 1994, Senator King was elected Maine's 72nd Governor, focusing on economic development and job creation. Senator King graduated from Dartmouth College in 1966 and from University of Virginia Law School in 1969. He lives in Brunswick.



Charles Norchi

Professor Charles H. Norchi directs the Center for Oceans & Coastal Law and Graduate Law Programs in the University of Maine School of Law. He teaches International Law, Law of the Sea, International Human Rights and Maritime Law with research interests in the Arctic, the South China Sea, international security, maritime disputes, and international corporate governance. Professor Norchi is co-chair of the Institute for Law & Development Policy (Geneva, Switzerland), a Fellow of the Explorers Club (NY), and serves on the Boards of International Legal Studies (United States Naval War College), the World Affairs Council of Maine, the Harvard Club in Maine, Super-Max, Inc., the Policy Sciences Center, the Hong Kong Centre for Maritime and Transportation Law, and is a member of the Institute of Directors (London, UK). Professor Norchi holds an A.B. from Harvard and J.S.D. from Yale Law School.



Neal Pettigrew

Dr. Pettigrew is a professor of physical Oceanography in the School of Marine Sciences at the University of Maine, and is a director of the Physical Oceanography Group (PhOG), the University of Maine Ocean Observing System (UMOOS), and the Maine Center of Autonomous Marine Surveys (MCAMS). He received an A.B. in physics from Dartmouth College, an M.S. in Marine Science from Louisiana State Univsersity, and a Ph.D. in physical oceanography from the Massachusetts Institute of Technology/Woods Hole Oceanographic Institution joint program. Dr. Pettigrew's research programs focus on ocean circulation and the coupling between biological and physical processes in the coastal ocean. Since 2000, his research group has concentrated on the design and operation of ocean observing systems, and development of sensors for buoys and autonomous wind-powered vehicles.



Doug Schillinger

Doug Schillinger completed his BSc Physics at the University of Guelph, and his MSc Physics and Physical Oceanography from Memorial University. He began his career working as a research assistant in the ocean acoustics lab at Dalhousie University on a project developing real-time monitoring equipment to detect right whales in the Bay of Fundy. Over the course of 12 years at Dalhousie University, Doug worked on the coastal ocean observing system in Lunenburg Bay as part of the Centre of Marine Environmental Prediction, and as a research associate for the benthic ecology group collaborating with Neptune Canada. For the past 4 years Doug has been working for RBR, Ottawa, ON, managing the east coast office in Halifax, NS and coordinating sales in Fastern North America.



Elizabeth Schneider MacTaggart

Elizabeth Montgomery Schneider MacTaggart currently serves as Regional Representative for Senator Angus S. King Jr. She covers tribal, social, and business relations issues in Kennebec, Penobscot, Somerset, Piscatiquis, Hancock, and Washington counties. She started her political career in her local town council. From 2004 to December 2012, Ms. MacTaggart was a Senator in the Maine State Legislature for District 30, during which time she was the Senate Chair of the Business Research and Economic Development Committee; second senator on the Education and Cultural Affairs Committee; and the Chair of CPAC, the Community Preservation Advisory Committee. In addition to being a Senator, Schneider has worked as an independent travel consultant.



Michael Szemerda

Michael Szemerda grew up in the small seaside village of Beaver Harbour in southwestern New Brunswick where he was exposed to traditional fishing and the salmon aquaculture industries. He started working in both industries part time while attending high school. After attending the University of New Brunswick, Michael returned to the area and started working as a site operator for a salmon aquaculture company. A year later, Michael joined Cooke Aquaculture Inc. as a site manager and continued to work up through the company ranks until taking the position of Vice President of Salt Water Operations in 2000. As the VP Salt Water Operations, Michael is responsible for all aquaculture sites in North America, which have a total production of over 45,000 tons of Atlantic salmon and employ over 350 people.



Krish Thiagarajan

Krish Thiagarajan joined the University of Maine in 2011 as the Correll Presidential Chair in Energy. Concurrently he is a Professor of Mechanical Engineering. His research spans design and analysis of energy generating systems located offshore in the deep oceans. In particular, his area of research is dynamics and global performance of floating offshore systems for oil and gas, as well as renewable energy production. Professor Thiagarajan got his PhD in Naval Architecture and Marine Engineering from the University of Michigan in 1993. Until recently, he served as Professor of Mechanical engineering at the University of Western Australia in Perth. From 2007 – 10, he also served as leader of the Offshore and Subsea Facilities research program within the Western Australian Energy Research Alliance based in Perth.