

AN INTERNATIONAL CONFERENCE IN HALIFAX, NOVA SCOTIA • 21-22 JUNE 2012



The Regulation of Continental Shelf Development: Rethinking International Standards

Programme

**36th Annual Conference of the Center for Oceans Law and Policy, School of Law,
University of Virginia, in conjunction with the
Marine & Environmental Law Institute, Schulich School of Law, Dalhousie University**



The Regulation of Continental Shelf Development Conference is the 36th Annual Center for Oceans Law and Policy Conference and marks the 30th anniversary since the adoption of the United Nations Convention on the Law of the Sea. Leading experts from around the world will consider the state of existing and further need for international regulation of continental shelf activities, focusing in particular on the exploration and exploitation of hydrocarbons.

The conference is co-convened by the Center for Oceans Law & Policy, School of Law, University of Virginia, and the Marine & Environmental Law Institute, Schulich School of Law, Dalhousie University. The Convenors would like to acknowledge the generous support of the following sponsors of this Conference:

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PROGRAMME

Wednesday, 20 June

14:00-16:00 WALKING TOUR OF DOWNTOWN HALIFAX & WATERFRONT

Meet in the Lord Nelson Foyer at 13:45

16:00-18:00 PRE-CONFERENCE REGISTRATION

Regency Ballroom, Lord Nelson Hotel

17:45 Join others walking to the Opening Reception

Meet in the Lord Nelson Foyer

18:00 Bus leaves for the Opening Reception

Meet in the Lord Nelson Foyer at 17:50

18:00-20:00 OPENING RECEPTION & OFFICIAL WELCOMES (CASH BAR)

Life Sciences Research Institute, Dalhousie University

Dr. Martha Crago

Vice President Research, Dalhousie University

Dr. Brian Flemming, CM, QC

Chair of the Conference Steering Committee

Professor Kim Brooks

Dean, Schulich School of Law, Dalhousie University

Professor John Norton Moore

Director, Center for Oceans Law & Policy, School of Law, University of Virginia

Professor Douglas Wallace

Scientific Director, Halifax Marine Research Institute and Network of Centres of Excellence MEOPAR (Marine Environmental Observation Prediction and Response), and Canada Excellence Research Chair in Ocean Science and Technology, Dalhousie University

Thursday, 21 June

07:30- REGISTRATION & COFFEE
Regency Ballroom, Lord Nelson Hotel

08:15-09:00 WORDS OF WELCOME, CONFERENCE PURPOSE AND LOGISTICS
Imperial Ballroom, Lord Nelson Hotel

Professor Aldo Chircop
Marine & Environmental Law Institute, Schulich School of Law, Dalhousie University

Professor Myron H. Nordquist
Center for Oceans Law & Policy, School of Law, University of Virginia

INTRODUCTION OF THE KEYNOTE SPEAKER

Professor John Norton Moore
Center for Oceans Law & Policy, School of Law, University of Virginia

OPENING CONFERENCE ADDRESS

*The Continental Shelf Regime under the UN Convention of the Law of the Sea:
Reflections after Thirty Years*

Professor S. Jayakumar
Former Deputy Prime Minister and Senior Minister, Republic of Singapore;
and Centre for International Law, National University of Singapore

09:00-10:30 PANEL 1: CONTEMPORARY USES OF THE CONTINENTAL SHELF
Imperial Ballroom, Lord Nelson Hotel

MODERATOR

Judge Jin-Hyun Paik
International Tribunal for the Law of the Sea

PANELISTS

*Offshore Wind Energy Development and Ecosystem-based Marine
Management in the European Union*

Dr. Ronán Long
School of Law, National University of Ireland Galway

Submarine Cable Issues on the Continental Shelf

Mr. Douglas Burnett

International Cable Protection Committee

Mining of Marine Minerals

Professor Georgy Cherkashov

VNIIOkeangeologia

Carbon Capture and Storage and the London Protocol

Dr. Jørg Aarnes

DNV KEMA Energy and Sustainability

**10:30-10:40 PRESENTATION OF *INTERNATIONAL CABLE PROTECTION COMMITTEE WRITING PRIZE*
BY MR. DOUGLAS BURNETT**

10:40-11:00 HEALTH BREAK

Regency Ballroom, Lord Nelson Hotel

**11:00-12:30 PANEL 2: SCOPING THE CHALLENGE: LESSONS LEARNED FROM CONTEMPORARY
OFFSHORE DEVELOPMENT**

Imperial Ballroom, Lord Nelson Hotel

MODERATOR

Dr. David VanderZwaag

Marine & Environmental Law Institute, Schulich School of Law, Dalhousie
University

PANELISTS

Lessons Learned from Offshore Casualties since the Ocean Ranger

Mr. Wylie Spicer QC

McInnes Cooper

Lessons Learned from Deepwater Horizon

Professor Larry Mayer

Center for Coastal & Ocean Mapping/Joint Hydrographic Center, University of
New Hampshire

International Seabed Area Mining Standards

Mr. Michael Lodge

International Seabed Authority

12:30-14:00 LUNCH

Regency Ballroom, Lord Nelson Hotel

14:00-15:30 PANEL 3: ASSESSING THE ADEQUACY OF CURRENT INTERNATIONAL LAW AND REGULATION FOR ENVIRONMENT PROTECTION, SAFETY AND SECURITY OF OFFSHORE ACTIVITIES

Imperial Ballroom, Lord Nelson Hotel

MODERATOR

Professor Kuen-chen Fu

Center for Oceans Law and Policy, KoGuan Law School, Shanghai Jiao Tong University

PANELISTS

The Continental Shelf Beyond 200 NM: A First Look at the Bay of Bengal (Bangladesh/Myanmar) Case

Professor Ted L. McDorman

Faculty of Law, University of Victoria, and Department of Foreign Affairs and International Trade

International Regulation of Offshore Drilling

Captain J. Ashley Roach

U.S. Department of State (ret.)

Compliance Issues under the London Ocean Dumping Convention and Protocol

Mr. Chang-Hoon Shin

The Asan Institute for Policy Studies

15:30-16:00 HEALTH BREAK

Regency Ballroom, Lord Nelson Hotel

16:00-17:30 PANEL 4: COMPARATIVE BEST PRACTICES IN ENVIRONMENTAL REGULATION OF CONTINENTAL SHELF ACTIVITIES

Imperial Ballroom, Lord Nelson Hotel

MODERATOR

Professor Ernst Nordtveit

Faculty of Law, University of Bergen

PANELISTS

Renewable Energy and Marine Spatial Planning: Scientific and Legal Implications

Dr. Hartwig H. Kremer

Helmholtz-Zentrum Geesthacht, Centre for Materials and Coastal Research

The Legal Framework for the Regulation of Safety and Environmental Issues on the Outer Continental Shelf

Professor Joanna Mossop

Faculty of Law, Victoria University of Wellington

Risk Regulatory Regimes of the Norwegian Petroleum Sector and the 'Nordic Model'

Dr. Ole Andreas Engen

Department of Media, Culture and Social Sciences, University of Stavanger

The Role of the Industry in the Norwegian Safety Regulation Regime and New European Regulation

Mr. Øystein Joranger

Norwegian Oil Industry Association

17:50- First bus departs for Reception at McInnes Cooper

Meet in the Lord Nelson Foyer

18:00-20:00 RECEPTION AT MCINNES COOPER

Purdy's Wharf Tower II, 1300-1969 Upper Water Street

Dinner on your own

Friday, 22 June

08:00- **REGISTRATION & COFFEE**
Regency Ballroom, Lord Nelson Hotel

08:30-10:00 **PANEL 5: PROBABILISTIC RISK ASSESSMENT FOR CONTINENTAL SHELF DEVELOPMENT**
Imperial Ballroom, Lord Nelson Hotel

MODERATOR

Dr. Quenton Dokken
Gulf of Mexico Foundation

PANELISTS

Beyond Off-the-shelf Solutions for On-the-shelf Risks

Dr. Ronald Pelot
Department of Industrial Engineering, Dalhousie University

Environmental Regulation and Probabilistic Risk Assessment

Mr. Martin Malsch
Egan, Fitzpatrick, Malsch & Lawrence, PLLC

Disasters and the Continental Shelf: Exploring New Frontiers of Risk

Professor Bruce Glavovic
School of People, Environment and Planning, Massey University

10:00-10:30 **HEALTH BREAK**
Regency Ballroom, Lord Nelson Hotel

10:30-12:00 **PANEL 6: DECOMMISSIONING OF OFFSHORE INSTALLATIONS AND STRUCTURES**
Imperial Ballroom, Lord Nelson Hotel

MODERATOR

Judge Zhiguo Gao
International Tribunal for the Law of the Sea and China Institute of Marine
Affairs, State Oceanic Administration

PANELISTS

*Global Legal Regime on the Decommissioning of Offshore Installations and
Structures*

Associate Professor Robert Beckman
Centre for International Law, National University of Singapore

The Regional Regulation of Decommissioning by the OSPAR Commission

Professor David Johnson

OSPAR Commission

Abandoned Offshore Installations in Southeast Asia and the Opportunity for 'Rigs-to-Reefs'

Ms. Youna Lyons

Centre for International Law, National University of Singapore

Decommissioning Practices in the Gulf of Mexico and off California

Professor Ian Townsend-Gault

Faculty of Law, University of British Columbia

12:00-13:30 LUNCH

Regency Ballroom, Lord Nelson Hotel

MODERATOR

Mr. Norman Letalik

Borden Ladner Gervais LLP

Presentation by **Dean Kim Brooks**, Schulich School of Law, Dalhousie University

SPEAKER

Beyond the Outer Limit: 60-Year Reflections

Dr. Edgar Gold, CM, AM, QC

13:30-15:00 PANEL 7: LIABILITY AND COMPENSATION

Imperial Ballroom, Lord Nelson Hotel

MODERATOR

Judge Helmut Tuerk

International Tribunal for the Law of the Sea

PANELISTS

The Regime for Liability and Compensation for Oil Pollution Damage from Ships

Mr. Alfred H. Popp QC

Ship-source Oil Pollution Fund

Benefits and Risk of the Northern Sea Route to the North Pacific

Dr. Sung-Woo Lee

International Logistics Research, Korea Maritime Institute

The Macondo Incident: Comparing the Pre-existing Legal Context of U.S. Offshore Accidents and the Actual Regulatory/Legislative/Judicial Response Thereafter

Mr. Frank Gonynor

Gard (North America) Inc.

Gaps in the Ice: Maritime Boundaries and Hydrocarbon Field Development in the Arctic

Mr. Timothy J. Tyler

Vinson & Elkins LLP

15:00-15:30 HEALTH BREAK

Regency Ballroom, Lord Nelson Hotel

15:30-17:00 PANEL 8: COMPLETING THE UNFINISHED BUSINESS OF UNCLOS III

Imperial Ballroom

MODERATOR

Professor S. Jayakumar

Former Deputy Prime Minister and Senior Minister, Republic of Singapore;
and Centre for International Law, National University of Singapore

PANELISTS

Dr. Brian Flemming, CM, QC

McInnes Cooper and Marine & Environmental Law Institute, Schulich School
of Law, Dalhousie University

Professor John Norton Moore

Center for Oceans Law & Policy, School of Law, University of Virginia

17:00-17:15 CLOSING REMARKS

Imperial Ballroom, Lord Nelson Hotel

Professor Aldo Chircop

Marine & Environmental Law Institute, Schulich School of Law, Dalhousie
University

Professor Myron H. Nordquist

Center for Oceans Law & Policy, School of Law, University of Virginia

18:30-19:00 GALA BANQUET RECEPTION (CASH BAR)

Regency Ballroom, Lord Nelson Hotel

19:00-21:00 GALA BANQUET

Regency Ballroom, Lord Nelson Hotel

INTRODUCTION OF THE SPEAKER

Dr. Brian Flemming, CM, QC

McInnes Cooper and Marine & Environmental Law Institute, Schulich School of Law, Dalhousie University

CLOSING CONFERENCE ADDRESS

The First Maritime Boundary Delimitation Case of the International Tribunal for the Law of the Sea: Insights into Relevant Circumstances, Weighting and Adjustment

Judge Zhiguo Gao

International Tribunal for the Law of the Sea and China Institute of Marine Affairs, State Oceanic Administration

CLOSING REMARKS

Dr. John Newhook

Associate Vice-President Research, Dalhousie University

CONFERENCE CLOSING

Professor John Norton Moore

Center for Oceans Law & Policy, School of Law, University of Virginia

BIOGRAPHICAL NOTES ON SPEAKERS AND MODERATORS

Jørg Aarnes holds a PhD in Applied Mathematics with emphasis on reservoir modelling and simulation. During his time in DNV, Dr. Aarnes has played a key role in building services within Carbon Capture and Storage (CCS), with emphasis on supporting risk management processes associated with selection and qualification of storage sites. As part of the North Sea Basin Taskforce on CCS he contributed to the development of the European CCS Directive and associated guidance documents. In 2010 he moved to Calgary, Canada, to help set up a CCS unit for DNV and to support emerging CCS projects in North America. During his time in Canada he has contributed to develop a bi-national (United States and Canada) standard for CO₂ storage in geological formations and supported projects with risk management and independent validation.

Douglas Burnett is a partner at Squire Sanders (US) LLP. He is based in its New York City office where he is part of the Transportation, Shipping, and Logistic practice group. He has been the International Cable Law Advisor for the International Cable Protection Committee (ICPC) since 1999. The ICPC is an organization composed of about 124 members from about 60 nations which own or operate over 96% of the submarine fiber optic cables in the world as well as almost all of the ships that lay and maintain these cables, and a significant number of the world's submarine power cables. He testified as an expert before the Senate Foreign Relations Committee during its consideration of UNCLOS. He has lectured at the Rhodes Academy. He is a retired Captain in the U.S. Navy. He has practiced before various state and federal courts in the United States, including arguing a case before the U.S. Supreme Court.

Robert Beckman is Director of the Centre for International Law, a university-wide research centre at the National University of Singapore (NUS) (established in 2009), and heads its Ocean Law and Policy Programme. He is Associate Professor, NUS Faculty of Law, where he has taught for more than 30 years. He currently teaches ocean law and policy in Asia and public international law. Professor Beckman lectures in the summer programme at the Rhodes Academy of Oceans Law & Policy in Rhodes, Greece. He is an Adjunct Senior Fellow in the Maritime Security Programme, S Rajaratnam School of International Studies, Nanyang Technological University, Singapore.

Kim Brooks is the Dean at the Schulich School of Law at Dalhousie University, Halifax. Prior to her arrival at Dalhousie, Dean Brooks served as an associate professor and the H. Heward Stikeman Chair in the Law of Taxation at McGill University. She teaches all areas of tax law including individual taxation, corporate tax, and international tax. Before moving to academia, Kim practiced as a tax lawyer with Stikeman Elliott LLP in their Toronto and London (UK) offices.

Georgy Cherkashov is Deputy Director of the Institute for Geology and Mineral Resources of the Ocean (VNIIOkeangeologia), St. Petersburg, Russia, of the Ministry of Natural Resources (since 1996). He holds a Dr. Sci. from St. Petersburg State University where his research focused on seafloor massive sulfide (SMS) deposits of the Mid-Atlantic Ridge. He has served as chief scientist for 13 ocean-going Russian and international expeditions for prospecting of SMS deposits in the Pacific, Atlantic and Indian Oceans (1983-2007). Dr. Cherkashov served as President of International Marine Minerals Society (2011-2012). He is a nominee for the Legal and Technical Commission of the International Seabed Authority (2012). Since 2005 he has lectured part-time at St. Petersburg State University (Marine Geology), in addition to other international seminars.

Aldo Chircop is Professor of Law at the Schulich School of Law and Director at the Marine & Environmental Law Institute, Dalhousie University, Halifax. Dr. Chircop is a member of the Nova Scotia bar and a specialist in international and comparative marine and environmental law and policy. He has worked in several countries and marine regions. Professor Chircop has published extensively, co-authoring and co-editing six major books and 14 volumes of the *Ocean Yearbook* (University of Chicago Press; Transnational Press, New York; Brill/Martinus Nijhoff, Leiden). His most recent book is *The International Regulation of Shipping: Essays in Honour of Edgar Gold* (co-ed. with N. Letalik, T. L. McDorman and S. J. Rolston; Leiden: Nijhoff, 2012). He has published over 70 articles and chapters in books. A recipient of several awards, his co-authored book *Maritime Law* (with E. Gold & H. Kindred; Toronto: Irwin Press, 2003) received a national award from the Canadian Bar Association (2005).

Martha Crago is the Vice President (Research) and Professor in Human Communication Disorders at Dalhousie University, Halifax, Canada. Dr. Crago is on the boards of the Nova Scotia Carbon Capture and Storage Research Consortium of Nova Scotia and the Advisory Councils of the Department of Fisheries and Oceans of Canada and the National Research Council-Institute of Marine Biosciences. At Dalhousie University, she chairs a variety of research institutes governing councils and committees. Dr. Crago has been an active researcher in language acquisition. She has published her research extensively in scientific journals and books and is the Editor-in-Chief of *Applied Psycholinguistics* published by Cambridge University Press. Dr. Crago was named Chevalier in l'ordre des Palmes academiques by the government of France in 2009.

Quenton Dokken has been President and CEO of the Gulf of Mexico Foundation, Corpus Christi, USA, a non-profit conservation organization focused on the sustainability and productivity of the natural ecosystems of the Gulf of Mexico and Caribbean Sea and the economic structures of this region since 2006. Prior to 2006, he was Associate Director of the Center for Coastal Studies of Texas A&M University-Corpus Christi. In a leadership role, Dr. Dokken is involved extensively in working with state and federal resource agencies, academic institutions, business and industry, and other conservation organizations in seeking a sustainable quality of life for those who call the coastal zone "home" today and tomorrow.

Ole Andreas Engen is Professor at SEROS (Centre of Risk Management & Societal Safety), University of Stavanger, Norway. He holds a master degree (MPhil) in Economics and a PhD in Sociology. He is also employed part time as a senior researcher at International Research Institute of Stavanger (IRIS).

Brian Flemming, CM, QC, is Counsel to the Atlantic Canada law firm of McInnes Cooper, Halifax, Canada. Dr. Flemming was an advisor to the Government of Canada during the UNCLOS III negotiations until 1976 when he became Assistant Principal Secretary to Prime Minister Pierre Trudeau. In recent years, he was Chair of the Canada Transportation Act Review Panel, first CEO and Chair of the Canadian Air Transport Security Authority, and a Member of the federal Advisory Council on National Security. He is an Honorary Fellow of the Marine and Environmental Law Institute, Dalhousie University, Halifax, and a Research Fellow of the Canadian Defence and

Foreign Affairs Institute in Calgary, Canada. He has written many articles on international law, foreign affairs, and defence, transportation policy, and national and international security policy.

Kuen-chen Fu (a.k.a. Lawrence K.C. Fu) is KoGuan Chair Professor of Law, KoGuan Law School, Shanghai Jiao Tong University, a Professor of Xiamen University Law School, and member of the Board of Directors, (Taiwan) Overseas Fisheries Development Council (OFDC). Professor Fu is the editor-in-chief of *China Oceans Law Review* and a member of the Editorial Board of the *Aegean Review of the Law of the Sea and Maritime Law* (Greece). He serves as an arbitrator in China, Taiwan and the Russia Far East Region with several tribunals, including the China Maritime Arbitration Commission and the China International Economic and Trade Arbitration Commission. Dr. Fu holds a S.J.D. from the School of Law, University of Virginia, Charlottesville, USA.

Zhiguo Gao is a Judge at the International Tribunal of the Law of the Sea, Hamburg, Director of the China Institute for Marine Development Strategies, Beijing, and Executive Director of the China Institute for Marine Affairs, Beijing. He has lectured and published extensively in the fields of China and the international law of the sea, offshore oil and gas law, the international offshore regime, and maritime boundary delimitation. Dr. Gao holds a J.S.D. from the Schulich School of Law, Dalhousie University, Halifax, Canada.

Bruce Glavovic holds the Earthquake Commission (EQC) Chair in Natural Hazards Planning at Massey University, New Zealand, and is Associate Director of the Joint Centre for Disaster Research. He holds degrees in economics and agricultural economics, environmental science, and urban and environmental planning and has over 25 years of experience in academia, private consulting and government. Professor Glavovic has worked mainly in South Africa, the United States, and New Zealand. He is Vice-Chair of the Scientific Steering Committee of IGBP-IHDP Land-Oceans Interactions in the Coastal Zone Programme. His research explores how to build sustainable, hazard-resilient coastal communities, with a focus on coastal governance and lessons learned from post-disaster recovery experiences in Indonesia and the Maldives after the Indian Ocean tsunami, the U.S. Gulf Coast after Hurricane Katrina, and Christchurch since the 4 September 2010 earthquake.

Edgar Gold, AM, CM, QC is Adjunct Professor in the Schulich School of Law and with the Marine Affairs Program, Dalhousie University, Halifax, Canada. He was the founding Executive Director of the Dalhousie Ocean Studies Programme and continued with its subsequent manifestations. He is an Adjunct Professor of Maritime Law and former Canadian Member of the Board of Governors of the World Maritime University, Malmö, Sweden, and a member of the Governing Board of the IMO-International Maritime Law Institute, Malta. Dr. Gold was with the T. C. Beirne School of Law, University of Queensland, Australia between 1997 and 2011. Dr. Gold is a Master Mariner (UK and Canada) and served at sea for 16 years, including several years in command. He was a senior partner with the law firm Huestis Ritch (now Ritch Durnford) in Halifax. His special areas of interest and expertise include maritime law, international marine, offshore energy and environmental law and policy, maritime training, and international ocean development.

Frank J. Gonynor is a lawyer and claims executive with Gard (North America), Inc., the U.S. affiliated office of Gard P&I, Arendal, Norway, having worked for Gard since 2008. Prior to that, he was a partner for 20+ years with the maritime law firm of Eastham, Watson, Dale & Forney LLP, in Houston, Texas. Mr. Gonynor has been directly involved in several large-scale marine pollution

incidents in the United States, as well as in similar cases in Mexico, Spain, China and other countries. He has written numerous articles on the subject of marine environmental law for various law reviews, marine industry publications, and trade journals, and has given presentations on this topic at international conferences, including the annual International Oil Spill Conference, Clean Gulf Conference, and Tulane Admiralty Law Institute. He has also served as an adjunct professor of law at the University of Houston Law Center.

Shunmugam Jayakumar is currently a Professor in the Law Faculty, National University of Singapore. He is formerly the Deputy Prime Minister and Senior Minister in the Government of Singapore. As of May 2011, he retired from politics. Professor Jayakumar served as Singapore's Permanent Representative to the United Nations and High Commissioner to Canada from 1971 to 1974, and was a member of Singapore's delegation to the UN Law of the Sea Conference from 1974 to 1979. Professor Jayakumar has published extensively on the topics of constitutional law, international law, and legal education.

David Johnson is Executive Secretary to the OSPAR Commission and Bonn Agreement based in London and Emeritus Professor of Coastal Management at the Southampton Solent University, United Kingdom. His career has included work in practical conservation, environmental consultancy, and higher education, as well as intergovernmental marine environmental protection. His PhD considered the conservation of inter-tidal wetlands and he has led international work on particularly sensitive sea areas. In 2002 Dr. Johnson held a Caird Fellowship at the UK National Maritime Museum. During his time with OSPAR, David has helped refocus the work of the Commission, through production of the Quality Status Report 2010, taking into account the European Commission's Marine Strategy Framework Directive, climate change impacts, and the challenge of marine protected areas in areas beyond national jurisdiction.

Øystein Joranger is Legal Officer, Manager Supplier Relations, with the Norwegian Oil Industry Association (OLF), Stavanger, Norway. He has been with the OLF since 1998. The Norwegian Oil Industry Association is a professional body and employer's association for oil and supplier companies engaged in the field of exploration and production of oil and gas on the Norwegian Continental Shelf. Mr. Joranger is a lawyer in the area of labor law and safety regulations.

Hartwig H. Kremer is Chief Executive Officer of "Land-Ocean Interactions in the Coastal Zone", LOICZ, an Earth system research project of the International Geosphere-Biosphere Program, IGBP, and the International Human Dimensions Programme on Global Environmental Change, IHDP, based at the Helmholtz-Zentrum Geesthacht, Germany. Dr. Kremer's background covers biological and physical oceanography, fisheries, and pollution. He received his Master (1988) and PhD (1994) in marine zoology, oceanography and fisheries at the University of Kiel. He also holds a degree as Senior Public Advisor for Fisheries Economy from the Ministry for Food, Agriculture, Fisheries/Forestry. He was responsible manager of a training program for Integrated Coastal Zone Management and Food Security tailored to public institutions worldwide. Scientifically he focuses on the interplay of coasts and river-catchments with a focus on social-ecological systems, that is, the interaction between nature and society. He co-designed institutional dimension research in

LOICZ including environmental legislation and governance, and fosters knowledge brokering across the science policy interface on various scales.

Sung-Woo Lee is Director, International Logistics Research Department, Korea Maritime Institute, a public think-tank in Korea specializing in the area of maritime transport and international logistics. Dr. Lee has been involved in various governmental projects, many of which are associated with urban planning and port development. He was previously affiliated with the Centre of Urban Planning and Environmental Management at the University of Hong Kong as a visiting researcher. His interests include managerial and strategic aspects of international logistics and maritime transport, port-city interaction and globalization, and future studies like commercialization of the Northern Sea Route and extension of the Panama Canal. Dr. Lee is a member of International Association of Maritime Economists and is an editor of *International Development Planning Review*, Korean Association of Shipping and Logistics.

Norman Letalik is a Partner, Borden Ladner Gervais LLP, Toronto, Canada. Prior to practicing law, he was a Professor at Dalhousie Law School (1980–1986), Halifax, Canada, and the National University of Singapore (1986–1988). Norm practices in the fields of product liability, maritime and shipping law, and gray market goods. He has delivered numerous papers and presentations throughout the world and is the author of more than 50 publications in many areas of law. His most recent book is *The International Regulation of Shipping: Essays in Honour of Edgar Gold* (co-edited with A. Chircop, T. L. McDorman and S. J. Rolston; Leiden: Martinus Nijhoff, 2012).

Michael Lodge is currently the Deputy to the Secretary-General and Legal Counsel at the International Seabed Authority, the institution established under the Law of the Sea Convention to manage deep seabed mining. He has written widely on the international law of the sea and has lectured at the prestigious Rhodes Academy in Oceans Law and Policy. In 2010, he was appointed as a member of the World Economic Forum Global Agenda Council on Ocean Governance. Amongst other appointments, Mr. Lodge sits on the steering committee of the Global Ocean Biodiversity Initiative, representing the Authority, and from 2008 to 2011 was a member of the Selection Committee for the Pew Fellowship Program in Marine Science. Previously Michael served with the Round Table on Sustainable Development at the OECD, where he was the Secretary of the Ministerially-led High Seas Task Force. During the same period, he was also an Associate Fellow of the Royal Institute of International Affairs (Chatham House) in London. In the 1990s, Michael served as Legal Counsel to the South Pacific Forum Fisheries Agency.

Ronán Long holds the Jean Monnet Chair of European Law at the School of Law at National University of Ireland Galway. He is author of *Marine Resource Law* (Dublin, 2007), co-author of *Enforcing the Common Fisheries Policy* (Oxford, 2000) and co-editor of *Law, Science and Ocean Management* (Boston/Leiden, 2007), and *Legal Challenges in Maritime Security* (Boston/Leiden, 2008). Dr. Long worked previously for the European Commission (1994–2002) and for the Naval Service in Ireland (1981–1993). His current research interest is focused on ecosystem-based management of the marine environment. He is active in several research projects under the European 7th Framework Research Programme including the ODEMM Project and SOCIOEC. He is a keen offshore sailor and has represented Ireland at the top competitive level in offshore sailing.

Youna Lyons is a Senior Research Fellow with the Centre for International Law at the National University of Singapore focusing on regional environmental governance for the seas of Southeast

Asia. Her primary research areas are pollution from offshore oil and gas in Southeast Asia, the use of satellite imagery to inform maritime boundary disputes on islands and features in the South China Sea, the protection of valuable and sensitive marine environments in the seas of Southeast Asia and the underlying legal and institutional governance framework, as well as integrated coastal management. Prior to this, Ms. Lyons created and led the private international law practice of the Litigation and Arbitration Group at Clifford Chance (Paris office) where she worked for more than 12 years. Passionate about the ocean, she has been trained in marine ecology and policy at the College of Ocean and Fisheries of the University of Washington.

Martin Malsch is a partner with the law firm Egan, Fitzpatrick, Malsch & Lawrence PLLC, with offices in Washington D.C., San Antonio, Texas, and Albuquerque, New Mexico. He has practiced law in the nuclear energy and related risk and performance assessment fields for over forty years. His clients have included states and foreign governments potentially affected by proposed or existing nuclear facilities. He has served as Deputy General Counsel, Acting General Counsel, and Inspector General for the United States Nuclear Regulatory Commission, and as an Adjunct Professor of Law at the George Washington University School of Law in Washington, D.C. He studied theoretical physics at the undergraduate and graduate levels before studying law at the University of Connecticut.

Larry Mayer is a Professor and the Director of the Center for Coastal and Ocean Mapping at the University of New Hampshire, Durham, USA. After being selected as an astronaut candidate finalist for NASA's first class of mission specialists, Dr. Mayer went on to a Post-Doc at the School of Oceanography at the University of Rhode Island and then became an Assistant Professor in the Department of Oceanography, Dalhousie University, Halifax, Canada. In 1991, he moved to the University of New Brunswick to take up the NSERC Industrial Research Chair in Ocean Mapping, and in 2000 became the founding director of the Center for Coastal and Ocean Mapping at the University of New Hampshire. Larry has participated in more than 70 cruises and has been chief or co-chief scientist of numerous expeditions, including two legs of the Ocean Drilling Program and five mapping expeditions in the ice-covered regions of the high Arctic. He is the recipient of the Keen Medal for Marine Geology and an Honorary Doctorate from the University of Stockholm. His research deals with sonar imaging and remote characterization of the seafloor, and advanced applications of 3-D visualization to ocean mapping problems.

Ted L. McDorman is Professor in the Faculty of Law, University of Victoria, Canada. Currently, he is seconded to the Legal Bureau of the Department of Foreign Affairs and International Trade (DFAIT) in Ottawa and is working primarily on Arctic-related matters. Professor McDorman's teaching areas include public international law, international trade law, international ocean and environmental law, and private international law (conflicts of law). He has a cross-appointment with the Department of Geography and is an Associate of the Centre for Asia-Pacific Initiatives. Professor McDorman has been a visiting professor at institutions in Thailand, Sweden, the Netherlands, and Canada. In the spring of 2007, he was the Fulbright Visiting Chair in Canada-U.S. Relations at the Woodrow Wilson International Center for Scholars in Washington, D.C. He has published extensively in the areas of ocean law and policy, international trade law and comparative constitutional law. Since 2000, he has been the editor-in-chief of *Ocean Development*

and International Law: The Journal of Marine Affairs. His most recent book is *The International Regulation of Shipping: Essays in Honour of Edgar Gold* (co-edited with A. Chircop, N. Letalik, and S. J. Rolston; Leiden: Nijhoff, 2012).

John Norton Moore is the Walter L. Brown Professor of Law at the School of Law, University of Virginia and Director of the University's Center for Oceans Law and Policy, Charlottesville, USA. In addition to his scholarly career, Professor Moore has a distinguished record of public service. Among seven presidential appointments, he served as Chairman of the National Security Council Interagency Task Force on the Law of the Sea, Ambassador and Deputy Special Representative of the President to the Law of the Sea Conference (1973–1976), and as a Member of the National Advisory Committee on Oceans and Atmosphere (1984–1985). As Director of the Center for Oceans Law and Policy, he is also a co-founder, with the Directors of the Aegean Institute of the Law of the Sea and Maritime Law, the Max Planck Institute for Comparative Public Law and International Law, and the Netherlands Institute for the Law of the Sea, of the international Rhodes Academy of Oceans Law and Policy.

Joanna Mossop is a Senior Lecturer in law at Victoria University of Wellington, New Zealand. Her expertise is in the law of the sea and Antarctica. Ms. Mossop has held positions as Vice-President of the Australian and New Zealand Society of International Law, and co-editor of the *New Zealand Journal of Public and International Law*. She has published on issues including maritime security, whaling and high seas governance. She has two publications on the issues relating to the regulation of activities on the outer continental shelf, with a further publication on this topic forthcoming. The New Zealand Law Foundation has funded Ms. Mossop to undertake a research project to explore the legal framework on the outer continental shelf in more depth and in light of state practice.

John Newhook is Associate Vice President Research and Director, Centre for Innovation in Infrastructure, Faculty of Engineering, Dalhousie University, Halifax, Canada. Dr. Newhook's research interests are in the areas of structural analysis and design, concrete structures, bridge engineering, structural health monitoring, and innovative materials such as the use of fibre reinforced polymers in civil engineering applications. In the area of structural monitoring, he has considerable experience in the use of fibre optic sensing technology. Dr. Newhook is currently a project leader in the Intelligent Sensing For Innovative Structures (ISIS Canada) Network of Centres of Excellence Program.

Myron H. Nordquist is Associate Director and Editor of the Center for Oceans Law and Policy, and Senior Fellow at the Center for National Security Law at the School of Law, University of Virginia, Charlottesville, USA. He has published extensively and is editor-in-chief of the seven-volume Virginia commentary series, *The United Nations Convention on the Law of the Sea 1982: a Commentary*. Professor Nordquist was formerly a Professor of Law, United States Air Force Academy in Colorado Springs, CO, and the Charles H. Stockton Professor of International Law at the U.S. Naval War College, Newport, RI. He also served as Attorney/Legislative Counsel, Department of State; Deputy General Counsel, Department of the Air Force; and Acting General Counsel, Department of the Air Force. Professor Nordquist was Alternate Representative and Secretary of the U.S. Delegation to the Third UN Conference on the Law of the Sea.

Ernst Nordtveit is a Professor in the Faculty of Law, University of Bergen, Norway. Dr. Nordtveit served as Vice Dean for Research (1996–1998) and Dean (1999-2009). His research areas are property law, natural resources law, petroleum and energy law. He has taught energy law in Norway (Bergen), Australia, New Zealand and Russia. Professor Nordtveit is a former Secretary for the Norwegian Civil Code Committee, Member of the committee to prepare Act on Land Registration, Member of the Norwegian Petroleum Price Board, and Leader of the Conflict Resolution Committee. He has served on the Upstream Natural Gas Pipeline Net since 2011. Professor Nordtveit has organized the annual Bergen Symposium of Petroleum Law since 1995 in cooperation with the University of Oslo and the Norwegian Ministry of Oil and Energy.

Jin-Hyun Paik is Judge of the International Tribunal for the Law of the Sea, Hamburg, Germany, and Dean of the Graduate School of International Studies, Seoul National University, Korea. He has specialized in international law and organization, law of the sea, and international security and conflict management. Dr. Paik was a doctoral fellow at the Hague Academy of International Law, Netherlands; visiting fellow at the Rand Corporation, Santa Monica and Hoover Institution, Stanford; and visiting professor at Johns Hopkins University's School of Advanced International Studies. He is currently President of a few academic associations in Korea including the Sea Lanes of Communication (SLOC) Study Group Korea and the HaeSung Institute for Ethics in International Affairs, a non-profit, private foundation dealing with the role of ethics and norms in international relation. He has edited eight books and written over 100 articles on his field of interests both in English and Korean.

Ronald Pelot is a Professor in the Department of Industrial Engineering at Dalhousie University, Halifax, Canada. Dr. Pelot conducts research in several areas including maritime risk, environmental risk, and critical infrastructure protection. He founded the Maritime Activity & Risk Investigation Network (MARIN) at Dalhousie, and since 1997 has developed new software tools and methods applied to maritime safety (accidents), coastal security, and marine spills. Research methods include spatial risk analysis, GIS modeling, computer algorithms for data processing and pattern analysis, location models for resource allocation, and safety analyses. Applications include search and rescue resource planning, oil spill response, port security, coastal zone management and critical infrastructure protection.

Alfred H. Popp, QC is Administrator of the Ship-source Oil Pollution Fund (SOPF), Ottawa, Canada. Most of his career has been devoted to the development of Canadian and international maritime law. He joined the public service of Canada in 1970. In 1975 he joined the Canadian delegation to the Legal Committee of the International Maritime Organization (IMO), becoming its chairman in 1993, a position that he held until his retirement from the public service in 2005. He has acted as legal advisor on several maritime legislative projects, including the amendments to Canadian legislation that led to the establishment of the SOPF. Mr. Popp has chaired diplomatic conferences leading to the adoption of several international conventions, including the 1992 Protocols to Convention on Civil Liability for Oil Pollution Damage (CLC) and the Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage (IOPC Fund), the 1996 HNS Convention, the 2001 Convention on Civil Liability for Bunker Oil Pollution Damage, and the 2003 Protocol leading to the establishment of the Supplementary Fund. In 2006

he was awarded the prestigious International Maritime Prize by the IMO, as well as the Commissioner's Commendation for outstanding contribution on behalf of the Canadian Coast Guard and the Distinguished Public Service Medal of the U.S. Coast Guard. He is a titular member of the Comité Maritime International.

Captain J. Ashley Roach, JAGC, U.S. Navy (retired) was an attorney adviser in the Office of the Legal Adviser, U.S. Department of State, from 1988 until he retired at the end of January 2009, responsible for law of the sea matters. He has taught, advised and published extensively on national maritime claims and other law of the sea issues. He has negotiated, and participated in the negotiation of, numerous international agreements involving law of the sea issues. Since retiring he has concentrated on piracy and Arctic issues. The third edition of his book, *Excessive Maritime Claims*, is at the publishers.

Shin Chang-Hoon is Research Fellow at the Asan Institute for Policy Studies, Seoul. Dr. Shin is Director of the International Law and Conflict Resolution Program and the Nuclear Policy and Technology Center. His research interests are in dispute settlement, law of the sea, international environmental law, international humanitarian law and non-proliferation of weapons of mass destruction. He has taught public international law, international organizations, international economic law and the law of the sea as a lecturer at Seoul National University and Myongji University. Since 2010, he has been a member of the Compliance Group established by 1996 London Protocol to the Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter.

Wylie Spicer, QC is Counsel to McInnes Cooper, Halifax, Canada. Throughout his career he has advised on issues related to the offshore areas of Canada, the Arctic, and the east and west coasts. He has taught maritime law at the Schulich School of Law, Dalhousie University, Halifax. Wylie is currently working on issues related to the UN Convention on the Law of the Sea and its applicability to businesses and governments with interests in the offshore and the Area.

Ian Townsend-Gault is Associate Professor of Law and Director, Southeast Asian Legal Studies, University of British Columbia, Vancouver, Canada. Professor Townsend-Gault teaches and researches in international law, especially marine resource law, maritime boundaries, maritime co-operation, and the protection of the marine environment. He has acted as a consultant to the United Nations, the Asian Development Bank, and the international development agencies of Canada, Norway, Sweden and Finland, and has advised governments in Southeast Asia and Eastern Europe on international legal issues. He has close links with universities and research institutions in countries such as Cambodia, Indonesia, Laos, Philippines, Thailand, and Vietnam. Professor Townsend-Gault has published extensively in his fields of interest.

Helmut Tuerk is a Judge with International Tribunal for the Law of the Sea, Hamburg, Germany, and served as Vice-President of the Tribunal 2008–2011. Judge Tuerk previously worked with the Austrian Federal Ministry of Foreign Affairs, International Law Department, and served as Ambassador in several capacities. In addition to being a member of the Austrian Delegation to the Third UN Conference on the Law of the Sea, serving as Head of Delegation (1976–1979), he has served as senior representative for Austria in numerous law of the sea activities of the United Nations. Judge Tuerk has published extensively in the areas of the international law of the sea, maritime security, and ocean governance.

Timothy J. Tyler is Counsel with Vinson & Elkins, Houston, USA. His 15-year litigation practice emphasizes both international commercial and investor-state arbitration and U.S. litigation with a non-U.S. element. His work involving contracts with state parties has a strong focus on the oil and gas industry. In practice, he regularly advises on and drafts international arbitration clauses in contracts as well as structuring transactions to gain investment treaty protection. He has been involved in ad hoc arbitrations under the UNCITRAL Rules, as well as institutional arbitrations under the rules of ICC, ICDR, ICSID, AAA, Singapore International Arbitration Centre, and Cairo Regional International Arbitration Centre. In these and other proceedings, his international work encompasses particular experience with clients in Canada, Mexico, the Commonwealth of Independent States, the Middle East, and Europe. Tim has taught international commercial and investor-state arbitration at The University of Texas School of Law, where he has served as an Adjunct Professor. He is a director of the international arbitration section of The University of Texas School of Law Center on Global Energy, International Arbitration, and the Environment.

David VanderZwaag holds the Canada Research Chair (Tier 1) in Ocean Law and Governance at Dalhousie University, Halifax, Canada. He teaches international environmental law. He is the past Co-director of Dalhousie's interdisciplinary Marine Affairs Program (1986–1991) and the past Director of the Marine & Environmental Law Institute. Dr. VanderZwaag is currently a member of the IUCN's Commission on Environmental Law (CEL) and Co-chair of the CEL's Specialist Group on Oceans, Coasts & Coral Reefs. He is a Co-founder and Co-chair of the Australian-Canadian Oceans Research Network (ACORN) and has had extensive research and lecturing experience in South and Southeast Asia, the South Pacific, Europe, and the Caribbean. He is an elected member of the International Council of Environmental Law. Dr. VanderZwaag has authored over 100 papers in the marine and environmental law field.

Douglas Wallace is Canada Excellence Research Chair in Ocean Science and Technology at Dalhousie University, Halifax, Canada. He is also Scientific Director for the Halifax Marine Research Institute and the new Network of Centres of Excellence MEOPAR (Marine Environmental Observation Prediction and Response). A world leader in developing new technologies to measure changes to the world's oceans and building successful multidisciplinary research teams, Dr. Wallace was previously Professor of Marine Chemistry at the Leibniz Institute of Marine Sciences in Kiel, Germany (now the Helmholtz Centre for Ocean Research Kiel). There, he also served as deputy director and head of the Marine Biogeochemistry Research Division. Prior to that, Dr. Wallace worked as a scientist at the prestigious Brookhaven National Laboratory in the United States. He has made significant scientific contributions to his field through a variety of national and international research activities, including the third Assessment Report of the Intergovernmental Panel on Climate Change, and U.S. Department of Energy, German and European projects dealing with the global distribution of fossil-fuel carbon in the oceans.

Contact information for *Continental Shelf Conference Venue*

Lord Nelson Hotel

1515 South Park Street, Halifax, NS

Tel: 1-902-423-6331

Toll free: 1-800-565-2020

Fax: 1-902-423-7148

Registration and Information Desk

The conference registration and information desk will be located at the entry of the Regency Ballroom.

Registration will commence:

1600 on Wednesday, 20 June

0730 on Thursday, 21 June

0800 on Friday, 22 June

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McInnes Cooper and Marine & Environmental Law Institute, Schulich School of Law, Dalhousie University

Conference Steering Committee Chair

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Center for Oceans Law & Policy, School of Law, University of Virginia

Co-Convenor

Dr. Aldo Chircop

Marine & Environmental Law Institute, Schulich School of Law, Dalhousie University

Co-Convenor

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Judge Rüdiger Wolfrum, International Tribunal on the Law of the Sea, Hamburg, Germany



