



Environment and
Climate Change Canada

Environnement et
Changement climatique Canada

PROGRAM PROGRAMME



**44th AMOP
Technical Seminar
on Environmental
Contamination
and Response**

June 7 – 9, 2022

**44e Colloque
technique de l'AMOP –
Contamination de
l'environnement
et intervention**

7 – 9 juin 2022

Canada 

*We cannot guarantee that all papers will be presented at the Seminar.
Nous ne pouvons pas garantir que tous les documents seront présentés lors du colloque.*

**Tuesday, June 7 – Mardi 7 juin
Room 1 – Salle 1**

**Response Technologies and Countermeasures for Oil Spills
Technologies d'intervention et mesures de prévention pour les déversements d'hydrocarbures**

Session Chair – Président de séance

Benjamin G. Fieldhouse

10:00 Formation of Oil-SPM Aggregates Using Cetyltrimethylammonium Bromide (CTAB) Modified Kaolin
Juan Sun, Zuxian Yu, Ran Li, Xiaoyang Wang, Zihao Wang, Pengshuo Wei, Quiying Chen, Shuangxin Shi, and Xinyu Xu
China University of Petroleum, College of Chemistry and Chemical Engineering, Qingdao, Shandong Province, China
Juan Sun
State Key Laboratory of Petroleum Pollution Control Beijing, China, and CNPC Safety and Environmental Protection Technology Research Institute, Beijing, China

Speaker's Corner – Tribune libre

10:20 Integration of Physical Separation, Demulsification, and Advanced Oxidation for the On-site Decantation during Oil Spill Cleanup
Bo Liu, Bing Chen, Jingjing Ling, Guihua Dong, Ethan J. Matchinski, Xudong Ye, and Baiyu Zhang
Memorial University, Faculty of Engineering and Applied Science, Northern Region Persistent Organic Pollution Control (NRPOP) Laboratory, St. John's, Newfoundland, Canada

Speaker's Corner – Tribune libre

10:40 Effectiveness of Activated Carbon to Sequester TPHs and PAHs in Emulsified Oil/Water Mixture
Nadia Khan, Zahra A. Tabasi, Jaibin Liu, Baiyu Zhang, and Yuming Zhao
Memorial University of Newfoundland, Environmental Science, St. John's, Newfoundland, Canada

11:00 The Development of an Artificial Sediment to Assess the Inherent Toxicity of Oil Spill Treating Agents on Sediment Dwelling Species
Megan Bauer, Taylor Shaw, and Paula Jackman
Environment & Climate Change Canada, Atlantic Laboratory for Environmental Testing, Moncton, New Brunswick, Canada
Benjamin G. Fieldhouse
Environment & Climate Change Canada, Emergencies Science & Technology Section, Ottawa, Ontario, Canada

Speaker's Corner – Tribune libre

11:20 Dispersant Use in the Canadian Context: A Review of Considerations, Challenges, and Opportunities
David J. Creber and Emily Davis
Dillon Consulting, Fredericton, New Brunswick, Canada
Rob Willis
Dillon Consulting, Halifax, Nova Scotia, Canada

11:40 Oil Foaming of Crude Oil Fires on Water
Hsin-Hsiu Ho, Nathaniel G. Sauer, Mahesh Kottalgi, and Ali S. Rangwala
Worcester Polytechnic Institute, Fire Protection Engineering, Worcester, Massachusetts, USA
Kemal S. Arsava
US Army Corps of Engineers, Cold Regions Research and Engineering Laboratory (CRREL), Hanover, New Hampshire, USA
Karen N. Stone
United States Department of the Interior, Bureau of Safety and Environmental Enforcement (BSEE), Sterling, Virginia, USA

Tuesday, June 7 – Mardi 7 juin
Room 1 – Salle 1

Response Technologies and Countermeasures for Oil Spills (continued)
Technologies d'intervention et mesures de prévention pour les déversements d'hydrocarbures (suite)

- 12:00 Updated Ohmsett Dispersant Effectiveness Test Protocol**
James L. McCourt, David C. Cooper, and Stephen G. Potter
SL Ross Environmental Research Ltd., Ottawa, Ontario, Canada
Kristi. J. McKinney and Gina M. Coelho
United States Department of the Interior, Bureau of Safety and Environmental Enforcement (BSEE), Sterling, Virginia, USA
Alan G. Guarino and Thomas S. Coolbaugh
Applied Research Associates (ARA), Leonardo, New Jersey, USA
- 12:20 Intermission - Pause**
- 13:00 Oil-Water Separation in Marine Oil Spill Response: Current Status, Challenges, and Perspectives**
Yuan Yao, Konstantin Volchek, Benjamin G. Fieldhouse, Carl E. Brown (retired), and Patrick G. Lambert
Environment and Climate Change Canada, Emergencies Science and Technology Section, Ottawa, Ontario, Canada
Katrina Roebuck and André Tremblay
University of Ottawa, Department of Chemical and Biological Engineering, Ottawa, Ontario, Canada
- 13:20 Experimental Characterization of Enhanced In-situ Burning Using Fire Whirls on a Three-wall Structure**
Joseph L. Dowling, Mohammadhadi Hajilou, and Michael J. Gollner
University of California, Department of Mechanical Engineering, Berkeley, California, USA

Shoreline Response
Interventions en milieu côtier

Session Chair – Président de séance

Sonia Laforest

- 13:40 The Objectives and Results of the Environment and Climate Change Canada's Shoreline Working Group**
Sonia Laforest, Michael Goldthorp, Kevin Watson, and Patrick G. Lambert
Environment and Climate Change Canada Emergencies Science and Technology Section, Montréal, Québec, Canada and Ottawa, Ontario, Canada
Merlo Gauvreau, Ayumi Therrien, Anne-Marie Demers, and Lee Britton
Environment and Climate Change Canada, National Environmental Emergencies Centre, Montréal, Québec, Canada and Vancouver, British Columbia, Canada
- 14:00 The 2021 Bligh Island, British Columbia SCAT Survey – Case Study**
John R. Harper and Sean Daley
Coastal & Ocean Resources, Victoria, British Columbia, Canada
Lee Britton and Jim Sheehan
Environment and Climate Change Canada, National Environmental Emergencies Centre, Vancouver, British Columbia, Canada
Kristina Cary and Zachary Scher
British Columbia Ministry of Environment and Climate Change Strategy, Victoria, British, Columbia, Canada
Chief Jerry Jack Jr.
Mowachaht/Muchalaht First Nation, Gold River, British Columbia, Canada
Ayumi Therrien
Environment and Climate Change Canada, National Environmental Emergencies Centre, Montréal, Québec, Canada

Tuesday, June 7 – Mardi 7 juin
Room 1 – Salle 1

Shoreline Response (continued)
Interventions en milieu côtier (suite)

14:20 The FAST Job Aid: Feasibility Analysis for Shoreline Treatment, a Decision Support Tool

Edward H. Owens

Owens Coastal Consultants, Bainbridge Island, Washington, USA

Elliott Taylor

Polaris Applied Sciences, Inc., Bainbridge Island, Washington, USA

Tristan Owens

Zero+ Productions, Porvoo, Finland

14:40 End of Day – Fin de la journée

Tuesday, June 7 – Mardi 7 juin
Room 2 – Salle 2

Detection, Tracking, and Remote Sensing of Oil Spills
Détection, suivi, et télédétection des déversements d'hydrocarbures

Session Chair – Président de séance

Carl E. Brown

- 10:00 The Development of Job Aids to Support the Use of Field Instruments, Methods, and Techniques by Environment and Climate Change Canada's Environmental Emergency Personnel**
Kevin Watson, Patrick G. Lambert, Michael Goldthorp, Diane Dey, Sonia Laforest, Natalie C. Jones, and James Yao
Environment and Climate Change Canada Emergencies Science and Technology Section, Ottawa, Ontario, Canada
- 10:20 Enhancing Backtracking of Polluters at Sea**
Marko Perkovič and Milan Batista
University of Ljubljana, Faculty of Maritime Studies and Transport, Portorož, Slovenia
Lucjan Gucma
Maritime University of Szczecin, Faculty of Navigation, Szczecin, Poland
- 10:40 A Preliminary Study of the Odorants of Interest in Native Crude Oils to Oil Detection Canines**
Lauryn E. DeGreeff
Florida International University, International Forensic Research Institute, Miami, Florida, USA (Formerly of the Naval Research Laboratory Washington, District of Columbia, USA)
Stephanie R. Vaughan
National Research Council, Naval Research Laboratory, Washington, District of Columbia, USA
Vidia Gokool and Michelle Karpinsky
Florida International University, International Forensic Research Institute, Miami, Florida, USA
Paul Bunker
Chiron K9, San Antonio, Texas, USA
Edward H. Owens
Owens Coastal Consultants, Bainbridge Island, Washington, USA
Steven G. Tuttle
Naval Research Laboratory, Washington, District of Columbia, USA
- 11:00 The Detection of Underwater Oil by Oil Detection Canines**
Paul Bunker
Chiron K9, San Antonio, Texas, USA
Stephanie R. Vaughan
National Research Council, Naval Research Laboratory, Washington, District of Columbia, USA
Lauryn E. DeGreeff
Florida International University, International Forensic Research Institute, Miami, Florida, USA (Formerly of the Naval Research Laboratory, Washington, District of Columbia, USA)
Edward H. Owens
Owens Coastal Consultants, Bainbridge Island, Washington, USA
Steven G. Tuttle
Naval Research Laboratory, Washington, District of Columbia, USA
- 11:20 The Role of Multispectral Satellite Imagery for Inland Spill Response in Alberta**
J. Catherine Evans
Alberta Energy Regulator, Edmonton, Alberta, Canada
Subir Chowdhury
Alberta Geological Survey, Edmonton, Alberta, Canada

Tuesday, June 7 – Mardi 7 juin
Room 2 – Salle 2

Detection, Tracking, and Remote Sensing of Oil Spills (continued)
Détection, suivi, et télédétection des déversements d'hydrocarbures (suite)

- 11:40 Application of a Fixed Camera System for Real-time Oil Monitoring along Remote Shoreline at Bligh Island, British Columbia**
Leif-Matthias Herborg
Fisheries and Oceans Canada, Institute of Ocean Sciences, Sidney, British Columbia, Canada
Michelle Bigg and Vanessa Hodes
Fisheries and Oceans Canada, Pacific Biological Station, Nanaimo, British Columbia, Canada
Fatemeh S. Mirnaghi, Michael Goldthorp, Patrick G. Lambert, and Bruce P. Hollebone
Environment Climate Change Canada, Emergency Science and Technology Section, Ottawa, Ontario, Canada
Stephen Ban
Ministry of Environment and Climate Change Strategy, BC Parks, Victoria, British Columbia, Canada
- 12:00 Three-decades of Rocky Intertidal Photo Series Documenting Interannual Variability in Western Prince William Sound**
Alan Mearns (Emeritus)
National Oceanic and Atmospheric Administration, Edmonds, Washington, USA
David Janka
Auklet Charter Services, Cordova, Alaska, USA
Scott Pegau and Robert Campbell
Prince William Sound Science Center, Cordova, Alaska, USA
Brian Robinson
US Geological Survey, Anchorage, Alaska, USA
- 12:20 Intermission - Pause**

Fate and Effects of Oil
Devenir et effets des hydrocarbures

Session Chair – Président de séance

Thomas L. King

Speaker's Corner – Tribune libre

- 13:00 Assessing the Behavior of Dilbit in Freshwater with Sediment in a Cold Climate**
Brandon K. Booker, Timothy J. Cooke, and Payton H. Stearns
US Army Corps of Engineers, Engineering Research and Development Center, Cold Regions Research and Engineering Lab, Hanover, New Hampshire, USA
Michel C. Boufadel
New Jersey Institute of Technology, Civil & Environmental Engineering, Newark, New Jersey, USA
Michael A. Wurl and Benedette S. Adewale
US Coast Guard Research and Development Center, New London, Connecticut, USA

Speaker's Corner – Tribune libre

- 13:20 Microbial Community Dynamics in Understanding the Fate of Bioremediation of Oil-contaminated Environments**
Saba Miri and Satinder Kaur Brar
Department of Civil Engineering, Lassonde School of Engineering, York University, North York, Ontario, Canada
Richard Martel and Tarek Rouissi
Institut National de la Recherche Scientifique - Centre Eau Terre Environnement (INRS-ÉITÉ), Université du Québec, Québec, Canada

Tuesday, June 7 – Mardi 7 juin
Room 2 – Salle 2

Fate and Effects of Oil (continued)
Devenir et effets des hydrocarbures (suite)

13:40 The Fate and Behavior of Petroleum Biomarkers in Diluted Bitumen and Conventional Crude Oil Exposed to Natural Sunlight in Simulated Seawater
Zeyu Yang, Keval Shah, Claire Courtemanche, Bruce P. Hollebone, Chun Yang, and Vanessa Beaulac
Environment and Climate Change Canada, Emergencies Science and Technology Section, Ottawa, Ontario, Canada

Speaker's Corner – Tribune libre

14:00 Assessing the Effects of Ultraviolet Light on the Toxicity of Individual Polycyclic Aromatic Compounds to American Lobster Larvae (*Homarus americanus*)
Danielle Philibert and Benjamin de Jourdan
Huntsman Marine Science Centre, St. Andrews, New Brunswick, Canada

Speaker's Corner – Tribune libre

14:20 Effect of Oil Properties on the Generation of Nano Aerosols during Bubble Bursting through Crude Oil-Dispersant Slicks
Diego F. Muriel, Subhamoy Gupta, and Joseph Katz
Johns Hopkins University, Department of Mechanical Engineering, Laboratory for Experimental Fluid Dynamics, Baltimore, Maryland, USA

Speaker's Corner – Tribune libre

14:40 Microbial Community Responses to Chemical Dispersant Application during a Marine Dilbit Spill
Yiqi Cao, Baiyu Zhang, and Bing Chen
Memorial University, Faculty of Engineering and Applied Science, Northern Region Persistent Organic Pollutant Control (NRPOP) Laboratory, St. John's, Newfoundland, Canada
Charles W. Greer
National Research Council Canada, Energy, Mining and Environment Research Centre, Montreal, Quebec, Canada
Kenneth Lee
Fisheries and Oceans Canada, Ocean and Ecosystem Science, Ottawa, Ontario, Canada

15:00 End of Day – Fin de la journée

Wednesday, June 8 – Mercredi 8 juin
Room 1 – Salle 1

Remediation, Restoration, and Rehabilitation of Oil Spills
Dépollution, restauration, et remise en état en cas de déversements d'hydrocarbures

Session Chair – Président de séance

Bruce P. Hollebone/Fatemeh S. Mirnaghi

- 10:00 Study on Biodegradation of Benzo[a]pyrene in Marine Environment by *Chlorella vulgaris* LH-1 with Heterotrophic Ability**
Qingguo Chen, Zhao Song, Yu Chen, Baikang Zhu, and Mei Liu
Zhejiang Ocean University, School of Marine Science & Technology, Zhoushan, Zhejiang, China
Zhao Song, Yu Chen, and Yijing Li
Zhejiang Ocean University, School of Marine Science & Technology, Zhoushan, China
Zhi Chen
Concordia University, Faculty of Engineering & Computer Sciences Department of Building, Civil and Environmental Engineering, Montreal, Quebec, Canada
- 10:20 A Review of Conditions that Favour Marine Oil Snow Formation after an Oil Spill**
Akshaya Thakku Rajan and Murali Kantharaj
Indian Institute of Technology Madras, Department of Ocean Engineering, Chennai, Tamil Nadu, India
- 10:40 Historical Trends in US Natural Resource Damage Assessments**
Dagmar Schmidt Etkin
Environmental Research Consulting (ERC), Cortlandt Manor, New York, USA
- 11:00 The Removal of Crude Oil from Cultural Resources**
Vrinda Jariwala, Mary F. Striegel (retired), and Jason Church
National Center for Preservation Technology and Training, National Park Service, Natchitoches, Louisiana, USA
Enrique Salmon
California State University – East Bay, Hayward, California, USA
- 11:20 Preparation of a Biosurfactant Foam/Nanoparticle Mixture for Removing the Oil from Contaminated Soil**
Kien A. Vu and Catherine N. Mulligan
Concordia University, Department of Building, Civil, and Environmental Engineering, Montreal, Quebec, Canada

Speaker's Corner – Tribune libre

- 11:40 The Potential of Crude Oil Photooxidation and Biodegradation in First-year Sea Ice**
Durell Sterling Desmond, Diana Saltymakova, Teresinha Wolfe, Nolan Snyder,
Katarzyna Polcwiartek, Marcos Lemes, David G. Barber, Dustin Isleifson, and Gary A. Stern
University of Manitoba, Winnipeg, Manitoba, Canada
Alastair Smith, María Bautista, and Casey R.J. Hubert
University of Calgary, Calgary, Alberta, Canada

Speaker's Corner – Tribune libre

- 12:00 Evaluating the Rate of Weathering of Cold Lake Diluted Bitumen over a Range of Seawater Temperatures**
Thomas L. King, Patrick Toole, Brian Robinson, Jennifer Mason, and Kenneth Lee
Fisheries and Oceans Canada, Bedford Institute of Oceanography, Dartmouth, Nova Scotia, Canada
Michel C. Boufadel
New Jersey Institute of Technology, Department of Civil and Environmental Engineering, Newark, New Jersey, USA
- 12:20 Intermission - Pause**

Wednesday, June 8 – Mercredi 8 juin
Room 1 – Salle 1

Remediation, Restoration, and Rehabilitation of Oil Spills (continued)
Dépollution, restauration, et remise en état en cas de déversements d'hydrocarbures (suite)

Speaker's Corner – Tribune libre

13:00 Factors Affecting the Fate and Behaviour of Diesel in Seawater and Impacts on Microbial Community Responses

Alice C. Ortmann, Camilla Ryther, Susan E. Cobanli, Gary Wohlgeschaffen, Stanley (Ho Yin) Poon, Brian Robinson, and Thomas L. King
Fisheries and Oceans Canada, Bedford Institute of Oceanography, Dartmouth, Nova Scotia, Canada

Oil Spill Contingency Planning, Preparation, and Prevention
Planification des mesures d'urgence, préparation, et prévention des déversements d'hydrocarbures

Session Chair – Président de séance

Elise DeCola

Speaker's Corner – Tribune libre

13:20 Risk-aware Path Planning for Autonomous Underwater Vehicles in Oil Spill Environments

Xi Chen
Memorial University of Newfoundland, St. John's Newfoundland, Canada

Speaker's Corner – Tribune libre

13:40 Development of a New Multi-criteria Emergency Response System and its Application for Marine Oil Spills

Xudong Ye, Bing Chen, and Baiyu Zhang
Memorial University of Newfoundland, Faculty of Engineering and Applied Science, Northern Region Persistent Organic Pollution Control (NRPOP) Laboratory, St. John's Newfoundland, Canada
Kenneth Lee
Fisheries and Oceans Canada, Ocean and Ecosystem Science, Ottawa, Ontario, Canada
Rune Storesund
University of California, Center for Catastrophic Risk Management (CCRM), Berkeley, California, USA

14:00 First Nations Capacity-building through Geographic Response Strategy Development during COVID-19: Supporting Data Management for a Remote Field Season during a Global Pandemic

Olivia Norton and Elise DeCola
Nuka Research & Planning Group, LLC, Plymouth, Massachusetts, USA

Speaker's Corner – Tribune libre

14:20 Exploring the Intersection between Oil Spill Preparedness and Response and Climate Change

Elise De Cola
Nuka Research & Planning Group, LLC, Plymouth, Massachusetts, USA
Katie McPherson
Resilience and Foresight Services, Whitehorse, Yukon Territory, Canada
Stephen Mahoney
Massachusetts Department of Environmental Protection, Boston, Massachusetts, USA

Wednesday, June 8 – Mercredi 8 juin
Room 1 – Salle 1

Oil Spill Contingency Planning, Preparation, and Prevention (continued)
Planification des mesures d'urgence, préparation, et prévention des
déversements d'hydrocarbures (suite)

Speaker's Corner – Tribune libre

- 14:40 An Ecosystem Approach to Spill Response Planning**
Sara Mynott, Raisha Lovindeer, Javier Porobic, Beth Fulton, Susan Allen, Doug Latornell, Heidi Pethybridge,
Jess Melbourne-Thomas, and Natalie Ban
University of Victoria, Victoria, British Columbia, Canada
- 15:00 End of Day – Fin de la journée**

Wednesday, June 8 – Mercredi 8 juin
Room 2 – Salle 2

Oil Spill Modelling
Modélisation des déversements d'hydrocarbures

Session Chair – Président de séance

Hossein Babaei

Speaker's Corner – Tribune libre

- 10:00 An Operational Model for Mobile Sources of Oil Spills**
Kuo-Hsien Chang, Felix Therrien, Paul Pestieau, Guillaume Marcotte, Laura Lam, Serge Trudel, Eric Legault-
Ouellet, and Yves Pelletier
Environment & Climate Change Canada, Canadian Meteorological Centre, Environmental Emergency Response
Section, Dorval, Québec, Canada
Graigory Sutherland
Environment and Climate Change Canada, Canadian Meteorological Centre, Meteorological Research Division
Dorval, Québec, Canada

Speaker's Corner – Tribune libre

- 10:20 Application of Computational Fluid Dynamics Using the Immersed Boundary Methods for the Downscaling
of Ocean Currents in Complex Coastal Areas**
Amina El Kasmi
Environment & Climate Change Canada, Canadian Meteorological Centre, Dorval, Québec, Canada

Speaker's Corner – Tribune libre

- 10:40 Development and Testing of a 3D Deep Water Oil Spill Modelling Tool for the Eastern Canada Region**
Zhi Chen, Zhaoyang Yang, and Zunaira Asif
Concordia University, Faculty of Engineering & Computer Sciences Department of Building, Civil and
Environmental Engineering, Montreal, Quebec, Canada
Scott A. Socolofsky
Texas A&M University, College Station, Texas, USA
Deborah French McCay
RPS Ocean Science, South Kingstown, Rhode Island, USA
Michel C. Boufadel
New Jersey Institute of Technology, Civil & Environmental Engineering, Newark, New Jersey, USA
Kenneth Lee
Fisheries and Oceans Canada, Dartmouth, Nova Scotia, Canada

Wednesday, June 8 – Mercredi 8 juin
Room 2 – Salle 2

Oil Spill Modelling (continued)
Modélisation des déversements d'hydrocarbures (suite)

- 11:00 Modeling the Effect of Surface Heating on Oil Spread near an Ice Wall**
Sharanya Nair, Hamed F. Farahani, and Ali S. Rangwala
Worcester Polytechnic Institute, Fire Protection Engineering Department, Worcester, Massachusetts, USA
Tatsunori Hayashi and Hirotaka Sakaue
University of Notre Dame, Department of Aerospace and Mechanical Engineering, Notre Dame, Indiana, USA
- 11:20 Development of an Empirically-based Algorithm for Crude Oil Solubility in Water**
Merv F. Fingas
Spill Science, Edmonton, Alberta, Canada
- 11:40 Empirical-based Algorithms for Oil Fate Prediction**
Merv F. Fingas
Spill Science, Edmonton, Alberta, Canada

Speaker's Corner – Tribune libre

- 12:00 Near-field Modeling of Subsea Oil Spills for Development of an Offshore Response Guidance Table**
Scott A. Socolofsky and Inok Jun
Texas A&M University, College Station, Texas, USA
Michel C. Boufadel
New Jersey Institute of Technology, Civil & Environmental Engineering, Newark, New Jersey, USA
J. Samuel Arey
Woods Hole Oceanographic Institution, Woods Hole, Massachusetts, USA
Kelly M. McFarlin
ExxonMobil Biomedical Sciences Inc., Annadale, New Jersey, USA

12:20 Intermission - Pause

Speaker's Corner – Tribune libre

- 13:00 Fates Modeling and Near-field to Far-field Coupling for Trajectory Modeling of Oil and Gas Released from Subsea Oil Spills**
Scott A. Socolofsky
Texas A&M University, College Station, Texas, USA
Michel C. Boufadel
New Jersey Institute of Technology, Civil & Environmental Engineering, Newark, New Jersey, USA
Deborah French-McCay
RPS Ocean Science, South Kingstown, Rhode Island, USA
Zhi Chen
Concordia University, Faculty of Engineering & Computer Sciences Department of Building, Civil and Environmental Engineering, Montreal, Quebec, Canada

Speaker's Corner – Tribune libre

- 13:20 Increasing Confidence in Data Used for Modelling Multispecies Ecosystem Impacts from Oil Contamination**
Raisha Lovindeer, Sara Mynott, Heidi Pethybridge, Sharon Hook, Javier Porobic, Beth Fulton, Susan Allen, and Doug Latornell
University of British Columbia, Department of Earth, Ocean & Atmospheric Science, Vancouver, British Columbia, Canada

Wednesday, June 8 – Mercredi 8 juin
Room 2 – Salle 2

Oil Spill Modelling (continued)
Modélisation des déversements d'hydrocarbures (suite)

Speaker's Corner – Tribune libre

- 13:40 Oil Spill Preparedness Planning and Response: Utilizing Species Distribution Models to Fill Critical Data Gaps**
Ashley P. Park, Candice St. Germain, Jessica Nephin, E.J. Gregr, and Jessica L. Finney
Fisheries and Oceans Canada, Ecosystem Sciences Division, Sidney, British Columbia, Canada
- 14:00 A Generic Algorithm Framework to Apply Existing Oil Spreading Models to Lagrangian Oil Fate and Transport Models**
Xiaolong (Leo) Geng, Christopher H. Barker, R.K. Jones, and Amy MacFayden
National Oceanic Atmospheric Administration (NOAA), Emergency Response Division, Seattle, Washington, USA
Xiaolong (Leo) Geng
Genwest Systems Inc., Edmonds, Washington, USA
- 14:20 Optimizing the Boiling Points for a Pseudo Component Based Oil Weathering Model**
Xiaolong (Leo) Geng, Christopher H. Barker, Robert K. Jones, and Caitlin O'Connor
National Oceanic Atmospheric Administration (NOAA), Emergency Response Division, Seattle Washington, USA
Xiaolong (Leo) Geng
Genwest Systems Inc., Edmonds, Washington, USA
- 14:40 End of day – Fin de la journée**

Thursday, June 9 – Jeudi 9 juin
Room 1 – Salle 1

Monitoring and Assessment of Chemical and Hazardous Material Spills
Surveillance et évaluation des déversements de produits chimiques et de matières dangereuses

Session Chair – Président de séance

Michael Goldthorp

- 10:00 An Operational System to Forecast Marine and Atmospheric Pollution from Chemical Spills in Harbour Areas: A Case Study at Huelva Estuary**
Ana Julia Abascal, G. Aragón, B. Pérez-Díaz, J.F. Bárcena, A. Martinez, L. Pedraz, J. García-Alba, A. García, and R. Medina
IHCantabria - Instituto de Hidráulica Ambiental de la Universidad de Cantabria, Santander, Cantabria, Spain
M. Gonzalez
Compañía Española de Petróleos, S.A. (CEPSA), Madrid, Spain
A.M. Largo and B. Lamothe
Centro de Investigación, Compañía Española de Petróleos, S.A (CEPSA), Madrid, Spain
- 10:20 Selection of the Chemical Ionization Time-of-Flight Mass Spectrometer to Replace the Triple Quadrupole Mass Spectrometer for Air Monitoring Operations**
David B. Mickunas and Stephen L. Blaze
US Environment Protection Agency (EPA), Emergency Response Team, Research Triangle Park, North Carolina, USA
Jordan Krechmer and Megan Claflin
Aerodyne Research, Inc., Billerica, Massachusetts, USA

Thursday, June 9 – Jeudi 9 juin
Room 1 – Salle 1

Remediation, Restoration, and Rehabilitation of Chemical and Hazardous Material Spills
Dépollution, restauration, et remise en état en cas de déversements de produits chimiques et de
matières dangereuses

Session Chair – Président de séance

Patrick Lambert

- 10:40 Enhanced Phytoremediation of Chromium Contaminated Soil Using Cowpea**
Chioma Bella Aliku
University of Nigeria, Centre of Environmental Management and Control, Enugu, Nigeria
Oreva Oghene Aliku
University of Ibadan, Department of Soil Resources Management, Ibadan, Nigeria
- 11:00 Ohmsett Wastewater Treatment and Response to High Volumes of Cement Runoff**
Philip Sontag, Pete Reno, Joanne Letson, Allen Cannone, and Thomas Coolbaugh
Applied Research Associates, Inc. - Ohmsett, Leonardo, New Jersey, USA

Hazardous and Noxious Substances (HNS)
Substances nocives ou potentiellement dangereuses (SNPD)

Session Chair – Président de séance

Michael Goldthorp

- 11:20 Evaporation Behavior of Volatile Fuel in Waves**
Nathaniel G. Sauer, Adam Saar, Hsin-Hsiu Ho, Sharanya Nair, Leonard Zabilansky, and Ali S. Rangwala
Worcester Polytechnic Institute, Fire Protection Engineering Department, Worcester, Massachusetts, USA

Contingency Planning, Preparation, and Prevention of Spills of Chemicals and
Hazardous Materials
Déversements de produits chimiques et de matières dangereuses - Planification des mesures
d'urgence, préparation, et prévention

Session Chair – Président de séance

Michael Goldthorp

Speaker's Corner – Tribune libre

- 11:40 Emergency Preparedness through Exercises and Public Notification: Environmental Emergency**
Regulations, 2019
Daniel Vermeulen
Environment and Climate Change Canada, Vancouver, British Columbia, Canada

Thursday, June 9 – Jeudi 9 juin
Room 1 – Salle 1

Impacts on Oiled Wildlife and Response
Effets sur les espèces sauvages mazoutées et l'intervention

Session Chair – Président de séance

Patrick O'Hara/Sherri Cox

12:00 Sun Corals - A Resistant Invader: Assessment of the Acute Toxicity of Contaminants Associated with Petroleum and Petrochemical Activities in the Species *Tubastraea coccinea*
Letícia May Fukushima and Denis Moledo de Souza Abessa
São Paulo State University, Campus Litoral Paulista, Departamento de Ciências Biológicas
Praia Grande, São Paulo, Brazil
Katia Cristina Cruz Capel
Universidade Federal de São Paulo (UNIFESP), Campus Baixada Santista, Departamento de Ciências do Mar,
Praia Grande, São Paulo, Brazil

12:20 Intermission - Pause

Speaker's Corner – Tribune libre

13:00 Development and Use of Genomic and Metabolomics Tools to Assess the Impacts of Oil-related Contaminants in Arctic Seabirds
Jennifer F. Provencher, Y. Zahaby, S.N. Sarma, P. Thomas, S. Naz, B. Pauli, B.M. Braune,
R. Franckowiak, M. Gendron, G. Tomy, I. Idowu, G. Savard, D. Crump, J. O'Brien,
Patrick D. O'Hara, and M.L. Mallory
Environment and Climate Change Canada, Ottawa, Ontario Canada

Speaker's Corner – Tribune libre

13:20 The Effects of Spill Treatment Agents (STAs) on Marine Birds in Canada
Patrick D. O'Hara, Orla Osborne, Megan Willie, and Sarah Hudson
Environment and Climate Change Canada, Canadian Wildlife Service, Institute of Ocean Sciences, Sidney,
British Columbia, Canada

Speaker's Corner – Tribune libre

13:40 A Modelling Drifters-on-water Observations Procedure to Optimize Assessment of Wildlife Impact and Oil Spill Modelling in the Canadian West Coast
Jose Rios, Lana Battaglia, and Chris Battaglia
Focus Wildlife Canada, LLC, North Vancouver, British Columbia, Canada
Ali Khelifa
Environment and Climate Change Canada, Emergencies Science and Technology Division, Ottawa, Ontario,
Canada
Leif-Matthias Herborg
Fisheries and Oceans Canada, Institute of Ocean Sciences, Sidney, British Columbia, Canada Megan Willie
Environment and Climate Change Canada, Canadian Wildlife Service, Sidney, British Columbia, Canada
Lee Britton
Environment and Climate Change Canada, National Environmental Emergencies Centre, Vancouver, British
Columbia, Canada
Eric Legault-Ouellet
Environment and Climate Change Canada, Canadian Meteorological Centre Operations, Dorval, Quebec,
Canada

Thursday, June 9 – Jeudi 9 juin
Room 1 – Salle 1

Impacts on Oiled Wildlife and Response (continued)
Effets sur les espèces sauvages mazoutées et l'intervention (suite)

Speaker's Corner – Tribune libre

14:00 Booming Considerations for Enhancing Wildlife Protection during an Oil Spill

Jose Rios, Lana Battaglia, and Chris Battaglia

Focus Wildlife Canada, LLC, North Vancouver, British Columbia, Canada

Megan Willie

Environment and Climate Change Canada, Canadian Wildlife Service, Sidney, British Columbia, Canada

Kristina Cary

British Columbia Ministry of Environment and Climate Change Strategy, Victoria, British Columbia, Canada

Lee Britton

Environment and Climate Change Canada, National Environmental Emergencies Centre, Vancouver, British Columbia, Canada

Speaker's Corner – Tribune libre

14:20 Application of a Framework to Assess Vulnerability of Biological Components to Diesel and Gasoline, Bunker C, and Diluted Bitumen in the Marine Environment of the Pacific Region

Candice St. Germain, Sharon Jeffery, Lucie Hannah, and Jessica L. Finney

Focus Wildlife Canada, LLC, North Vancouver, British Columbia, Canada

Leif-Matthias Herborg

Fisheries and Oceans Canada, Institute of Ocean Sciences, Sidney, British Columbia, Canada

Monique Punt

MPunt Environmental Consulting, Ottawa, Ontario, Canada

Speaker's Corner – Tribune libre

14:40 Oiled Wildlife Emergency Response during the 2020-2021 *MV Schiedyk* Shipwreck Incident near Bligh Island, British Columbia

Megan Willie

Environment and Climate Change Canada, Canadian Wildlife Service, Sidney, British Columbia, Canada

Kristina Cary

British Columbia Ministry of Environment and Climate Change Strategy, Victoria, British Columbia, Canada

Jose Rios

Focus Wildlife Canada, LLC, North Vancouver, British Columbia, Canada

15:00 End of Technical Seminar - Fin du Colloque technique

Thursday, June 9 – Jeudi 9 juin
Room 2 – Salle 2

Physical and Chemical Properties and Behaviour of Oil Spills
Comportement et caractéristiques physiques et chimiques des déversements d'hydrocarbures

Session Chair – Président de séance

Dagmar Etkin/ Merv F. Fingas

- 10:00 Fingerprint Characteristics of Oil Samples in a Refinery Unit and Identification Analysis**
Juan Sun, Xiaoyang Wang, Xiaoqing Yang, Ran Li, Liuping Cai, Zihao Wang, Chaocheng Zhao, and Xiuxia Zhang
China University of Petroleum, College of Chemistry and Chemical Engineering, Qingdao, Shandong, China
Jiacai Xie and Quanwei Song
State Key Laboratory of Petroleum Pollution Control, and CNPC Safety and Environment Protection Research Institute, Beijing, China
- 10:20 Comparison of Laboratory Protocols for Evaluating Oil Emulsification**
Deborah French-McCay and Melissa Gloekler
RPS Ocean Science, South Kingstown, Rhode Island, USA
Roger Prince
Stonybrook Apiary, Pittstown, New Jersey, USA
Lin Zhao and Tim Nedwed
ExxonMobil, Silver Spring, Texas, USA
Robert Faragher, Bruce Hollebone, Benjamin Fieldhouse, Zeyu Yang, and Chun Yang
Environment & Climate Change Canada, Emergencies Science & Technology Section, Ottawa, Ontario, Canada
Qin Xin and Heather Dettman
Natural Resources Canada, CanmetENERGY, Devon, Alberta, Canada
David Cooper and James McCourt
SL Ross Environmental Research Ltd., Ottawa, Ontario, Canada
Diego F. Muriel, Joseph Katz, Carlos Fuentes-Cabrejo, and Nicolas Escobar-Castaneda
Johns Hopkins University, Department of Mechanical Engineering, Laboratory for Experimental Fluid Dynamics, Baltimore, Maryland, USA
Karen N. Stone
US Department of the Interior, Bureau of Safety and Environmental Enforcement (BSEE), Sterling, Virginia, USA
Alan G. Guarino and Joanne Letson
Ohmsett-Applied Research Associates (ARA), Leonardo, NJ, USA
Wen Ji, Michel C. Boufadel, Anirban Dhulia, and Charbel Abou Khalil
New Jersey Institute of Technology, Civil & Environmental Engineering, Newark, New Jersey, USA
Liv-Guri Faksness and Per Daling
SINTEF Ocean AS, Trondheim, Norway
Christoph Aeppli
Bigelow Laboratory for Ocean Sciences, East Boothbay, Maine, USA
Christopher H. Barker
National Oceanic Atmospheric Administration (NOAA), Emergency Response Division, Seattle, Washington, USA
- 10:40 The Loss of Crude Oil Droplets by Filter Feeders and the Role of Surfactants**
Francis Letendre, Paloma Arena Serrano Ramos, and Christopher B. Cameron
Université de Montréal, Complexe des sciences, Département de sciences biologiques, Montréal, Québec, Canada
- 11:00 Characterization of Residual Oil in the Water Phase following Gravity Separation of Simulated Oily Water Mixtures from Spill Response Operations**
Vladimir Blinov, Benjamin G. Fieldhouse, Chun Yang, Patrick G. Lambert, and Vanessa Beaulac
Environment and Climate Change Canada, Emergencies Science and Technology Section, Ottawa, Ontario, Canada

Thursday, June 9 – Jeudi 9 juin
Room 2 – Salle 2

Physical and Chemical Properties and Behaviour of Oil Spills (continued)
Comportement et caractéristiques physiques et chimiques des déversements d'hydrocarbures
(suite)

11:20 **Chemical Fingerprinting of Ultralow Sulfur Fuel Oils (ULSFO) Using Gas Chromatography-Quadrupole Time-of-Flight Mass Spectrometry (GC-QTOF-MS)**
Chun Yang, Zeyu Yang, Bruce P. Hollebone, Benjamin G. Fieldhouse, Patrick G. Lambert,
and Vanessa Beaulac
Environment and Climate Change Canada, Emergencies Science and Technology Section, Ottawa, Ontario,
Canada

Speaker's Corner – Tribune libre

11:40 **Dispersant Effect on Morphology and Viscosity of Water-in-crude Oil Emulsions**
Diego F. Muriel and Joseph Katz
Johns Hopkins University, Department of Mechanical Engineering, Laboratory for Experimental Fluid Dynamics,
Baltimore, Maryland, USA

12:00 **Simultaneous Measurement of Temperature and Velocity Field in an Oil Adjacent to Ice**
Tatsunori Hayashi, Masafumi Yamazaki, Mitsugu Hasegawa, and Hirotaka Sakaue
University of Notre Dame, Department of Aerospace and Mechanical Engineering, Notre Dame, Indiana, USA
Sharanya Nair, Hamed F. Farahani, and Ali S. Rangwala
Worcester Polytechnic Institute, Fire Protection Engineering Department, Worcester, Massachusetts, USA

12:20 **Intermission - Pause**

Speaker's Corner – Tribune libre

13:00 **Seasonal Effects on Spill Behaviours of One Conventional Crude and One Diluted Bitumen in Freshwater Environments from Mesoscale Tank Studies**
Qin Xin, Hena Farooqi, and Heather D. Dettman
Natural Resources Canada, CanmetENERGY, Devon, Alberta, Canada

Case Histories and Recent Oil Spill Experiences
Cas concrets et expériences récentes de déversements d'hydrocarbures

Session Chair – Président de séance

Vanessa Beaulac/Patrick Lambert

13:20 **Emergency Response and Remediation of a Crude Oil Release in Abbotsford, British Columbia**
Kristjanan Zoras,
GHD Ltd., Abbotsford, British Columbia, Canada
Nisha Jones,
Trans Mountain Corp., Calgary, Alberta, Canada

Speaker's Corner – Tribune libre

13:40 **Recent Oil Spill Experiences**
Angela Pinzón.,
International Tankers Owners Pollution Federation (ITOPF) Ltd., London, England

14:00 **End of Day – Fin du jour**

Posters – Affiches

Effectiveness of the Dispersant Corexit EC9500A on Oils Produced in Newfoundland's Offshore Region

Benjamin G. Fieldhouse, Robert Faragher, Moshtag Aljawahari, Chelsea Aulenback, Jasmine Hong, Adriana Ratts, and Pervez Azmi

Environment and Climate Change Canada, Emergencies Science and Technology Section, Ottawa, Ontario, Canada

* with paper/avec article

Comparison of Vapor Profiles of Fresh and Highly Weathered Crude Oil

Michelle Karpinsky, Stephanie R. Vaughan, and Lauryn E. DeGreeff

Florida International University, Department of Chemistry and Biochemistry, and Florida International University, International Forensic Research Institute, Miami, Florida, USA

Examination of Chemical and Biological Changes Related to Aged Oil from Historical Shipwrecks

Stanley (Ho Yin) Poon, Taylor Strong, Susan E. Cobanli, Gary Wohlgeschaffen, Brian Robinson, Thomas L. King, and Alice C. Ortmann

Fisheries and Oceans Canada, Bedford Institute of Oceanography, Dartmouth, Nova Scotia, Canada

Impact of Natural Dispersion and Weathering on the Fate of Refined Fuel Spills in Marine Waters

Brian Robinson, Thomas L. King, Patrick Toole, Claire McIntyre, Melissa Faulkner, and Jennifer Mason

Fisheries and Oceans Canada, Bedford Institute of Oceanography, Dartmouth, Nova Scotia, Canada

Michel C. Boufadel

New Jersey Institute of Technology, Civil & Environmental Engineering, Newark, New Jersey, USA

Research on Oil Spills in Fresh Water: A Review of a Recent Government of Canada Program

Patrick G. Lambert, Konstantin Volchek, and Carl E. Brown (retired)

Environment and Climate Change Canada, Emergencies Science and Technology Section, Ottawa, Ontario, Canada

Monique Punt

MPunt Environmental Consulting, Ottawa, Ontario, Canada

* with paper/avec article

Oil Trajectories from Hypothetical Leaks near the Fernando de Noronha Chain (Brazil)

Luciana de Freitas Tessarolo and Valdir Innocentini

National Institute for Space Research – INPE, Department of Meteorology, São José dos Campos, São Paulo, Brazil

Fernando T.C. Barreto

OceanPact, Glória, Rio de Janeiro, Brazil and DHN-REMO, Niterói, Rio de Janeiro, Brazil

Luís H.M.M. Silva

Atlasul Hub Soluções Oceanográficas, Jacareí, São Paulo, Brazil

Julio T.A. Chacaltana and Iury A. Gonçalves

Federal University of Espírito Santo – UFES, Vitória, Espírito Santo, Brazil

* with paper/avec article

Bioremediation of Diesel Oil Polluted Seawater by a Hydrocarbon Degrading Bacterial Consortium with Oleophilic Nutrients

Yunfei Wang, Baikang Zhu, Quingguo Chen, and Wuyang Sun

Zhejiang Ocean University, Zhoushan, Zhejiang, China

* with paper/avec article

Posters – Affiches

A Brief Summary of Environment Canada's Involvement in the Chemical, Biological, Radiological-Nuclear and Explosive (CBRNE) Research & Technology Initiative (CRTI)

Carl E. Brown (retired) and Patrick G. Lambert

Environment and Climate Change Canada, Emergencies Science and Technology Section, Ottawa, Ontario, Canada

Konstantin Volchek

Natural Resources Canada, Ottawa, Ontario, Canada

Marco DiFruscio

Department of National Defence, Ottawa, Ontario, Canada

Scott Sheppard

Royal Canadian Mounted Police, Ottawa, Ontario, Canada

* with paper/avec article

Estimation of the Temperature Dependence of the Octanol-Water Partition Coefficient for Select Chlorobenzenes Using Computational Chemistry

Durell Sterling Desmond, James Xidos, Georg Schreckenbach, David G. Barber, Dustin Isleifson, and

Gary A. Stern

University of Manitoba, Winnipeg, Manitoba, Canada

* with paper/avec article

On-site High Throughput Solid Phase Extraction of PAHs from Oily Water Samples

Fatemeh S. Mirnaghi, Guan Wang, Avey Kudlow, Zeyu Yang, and Bruce P. Hollebone

Environment and Climate Change Canada, Emergencies Science and Technology Section, Ottawa, Ontario, Canada

Petroleum Distribution in Water Containing Fine Alluvial Sediment

Lindsay J. Hounjet, Stanislav R. Stoyanov, and Derek Chao

Natural Resources Canada, CanmetENERGY, Devon, Alberta, Canada

Cover Photo :

Bligh Island, British Columbia (Photo: Fisheries and Oceans Canada, Canadian Coast Guard)

Photo de la couverture :

Bligh Island, Colombie-Britannique (Photographie : Pêches et Océans Canada, Garde côtière canadienne)

See you next year!

We hope you will join us from **June 6 to 8, 2023** at the Chateau Lacombe Hotel in Edmonton, Alberta for the 45th AMOP Technical Seminar on Environmental Contamination and Response.

À l'année prochaine !

Nous espérons vous revoir du **6 au 8 juin 2023** à l'Hôtel Château Lacombe à Edmonton (Alberta) à l'occasion du 45^e Colloque technique de l'AMOP – Contamination de l'environnement et intervention.

About the AMOP Technical Seminar

Environment and Climate Change Canada began the **Arctic and Marine Oilspill Program (AMOP)** in March 1978 to improve the knowledge base and technology for cleaning up Arctic and marine oil spills. The AMOP Technical Seminar soon evolved into an international technical forum about oil spills in any environment as well as other spill-related topics. In 1983, the first Technical Seminar on Chemical Spills (TSOCS) was held in conjunction with the AMOP Seminar and this eventually grew to include counterterrorism issues as a reflection of current priorities. In 1999, the Technical Seminar for Phytoremediation/Biotechnology Solutions for Spills (PHYTO) was added. This seminar changed to Biotechnology Solutions for Spills (BIOSS) and then to Biological Solutions for Site Remediation, Restoration, and Rehabilitation (BIOSOLR3). To remain at the forefront of the dynamic field of spill response, in 2008 all three Seminars were amalgamated under the name **AMOP Technical Seminar on Environmental Contamination and Response**.

The Proceedings of the AMOP Technical Seminar on Environmental Contamination and Response have evolved into a unique collection of papers on environmental topics related to oil and chemical spills. A downloadable bibliography is available Bibliography 1978-2022 and provided to participants at the technical seminar. Access to individual papers from AMOP Technical Seminar proceedings can be obtained directly from the author(s), by written request to Emergencies Science and Technology Section (ESTS) or by contacting ECCC Library Services [ec.bibliotheque-library.ec@canada.ca] for more information or searching the [Federal Science Library](#) catalogue.

All papers that appear in the Proceedings are included annually in Elsevier's abstract and reference databases SCOPUS and Compendex. SCOPUS is the world's largest abstract and citation database of peer-reviewed literature, while Compendex is one of the most comprehensive engineering literature databases available to engineers.

About the Emergencies Science and Technology Section

The AMOP Technical Seminar on Environmental Contamination and Response is organized annually by the **Emergencies Science and Technology Section (ESTS)** of Environment and Climate Change Canada. Staff at ESTS's Centre of Excellence located in Ottawa, Ontario carry out research and development on a variety of topics related to environmental emergencies caused by spilled hazardous materials. For more than 40 years, the Section has run an ongoing national program of research and development (R&D) on:

- properties, behaviour, detection, measurement, and effects of spilled hazardous materials with a focus on conventional and non-conventional petroleum products;
- modelling and remote sensing of spilled hazardous materials;
- spill countermeasures: evaluation, effectiveness, effects, and environmental benefits of mechanical and chemical treating agents; and
- shoreline impact and restoration: utilization of the Shoreline Cleanup Assessment Technique (SCAT).

A unique feature of the R&D is that results are applied to actual spill incidents, providing assistance to spill responders and conversely, feedback to the researchers on the direction of their work. R&D priorities are set and assessed by committees of representatives from all levels of government as well as international government agencies. Technology transfer is an important component of the program and the group provides operational guides, manuals, and training as well as some aspects of contingency planning.

Most of the section's projects are conducted in partnership with other government departments, agencies, and industry and cover a wide spectrum of issues related to spills. They include laboratory and field investigation in terrestrial, freshwater, and marine environments. Among the section's other activities are:

- Participating within the Canadian Safety and Security Program (CSSP);
- Participation in the Chemical Community of Practice, including Chemical, Biological, Radiological, Nuclear & Explosive (CBRNE) decontamination research and development; and
- Assists in security arrangements and provides scientific support during major events such as the 2010 Olympic Games in British Columbia and the G8/G20 Summits, and the 2015 Pan American Games in Ontario.

For additional information, please contact:

Emergencies Science and Technology Section
Environment and Climate Change Canada
335 River Road
Ottawa, Ontario, Canada K1A 0H3
Telephone: 613-998-9622
Fax: 613-991-9485
Email: SpillSeminars@ec.gc.ca

À propos du Colloque technique de l'AMOP

Environnement et Changement climatique Canada a démarré le **Programme de lutte contre les déversements d'hydrocarbures en mer et dans l'Arctique (AMOP)** en mars 1978 afin d'améliorer les connaissances et les techniques en lien avec la lutte contre les déversements de pétrole dans des milieux marins et arctiques. Le Colloque technique de l'AMOP s'est rapidement transformé en un forum technique international sur les déversements d'hydrocarbures dans tout type d'environnement mais aussi sur d'autres types de déversements. En 1983, le premier Colloque technique sur les déversements de produits chimiques (TSOCS) s'est tenu en parallèle du Colloque de l'AMOP pour ensuite englober les questions de lutte anti-terroriste qui font partie des priorités actuelles. En 1999, le Colloque technique de phytoremédiation (PHYTO)/Solutions en biotechnologie lors de déversements fut ajouté. Ce colloque a évolué pour s'intituler Solutions biotechnologiques lors de déversements (BIOSS) puis Solutions biologiques de dépollution, de restauration et de réhabilitation des sites (BIOSOLR3). En 2008, afin de demeurer à l'avant-garde de la lutte contre les déversements, les trois colloques ont été regroupés sous un seul nom : **Colloque technique de l'AMOP – Contamination de l'environnement et intervention**.

Les comptes rendus des quatre dernières décennies du Colloque technique de l'AMOP - Contamination de l'environnement et intervention offrent maintenant une collection unique d'articles sur des sujets environnementaux relatifs aux déversements de produits pétroliers et de produits chimiques. Un exemplaire téléchargeable de la bibliographie des différents colloques techniques est disponible [Bibliographie 1978-2022](#), et une version sera remise aux participants du colloque de cette année. Il est possible d'avoir accès aux articles cités dans les comptes rendus en communiquant avec l'auteur, en envoyant une demande par écrit à la Section des urgences - Science et technologie (SUST), en communiquant avec les Services de bibliothèque d'ECCC [ec.bibliotheque-library.ec@canada.ca] pour obtenir davantage de renseignements ou encore en faisant une recherche dans le catalogue de la [Bibliothèque scientifique fédérale](#).

Tous les articles contenus dans les Procédures sont ajoutés annuellement à la base de documents des abstraits et références SCOPUS et Compendex d'Elsevier. SCOPUS est la plus grande base de document au monde pour ce qui est des résumés et des citations littéraires révisés par des pairs, tandis que Compendex est la base de document littéraire sur l'ingénierie la plus complète disponible pour les ingénieurs.

À propos de la Section des urgences - Science et technologie

Colloque technique de l'AMOP – Contamination de l'environnement et intervention est organisé chaque année par la **Section des urgences - Science et technologie (SUST) d'Environnement et Changement climatique Canada**. Le personnel du Centre d'excellence de la SUST, situé à Ottawa (Ontario), poursuit des travaux en recherche et développement dans le domaine des urgences environnementales causées par des déversements de produits dangereux. Depuis plus de 40 ans, la SUST continue de diriger un programme national de recherche et développement sur :

- les propriétés, le comportement, la détection, la mesure et les effets nottament des produits pétroliers conventionnels et non conventionnels;
- la modélisation et la télédétection des déversements de produits dangereux;
- l'intervention en cas de déversement : évaluation, efficacité, effets et avantages environnementaux de techniques de restauration mécaniques et chimiques et
- Les incidents sur le littoral et la restauration : utilisation de la Technique d'évaluation pour la restauration des rives (TERR).

La particularité des résultats de ce programme de recherche et développement est qu'ils sont appliqués à des déversements réels et permettent de faciliter le travail des équipes d'intervention. En échange, les informations venant des intervenants permettent aux chercheurs de mieux orienter leurs travaux. Les priorités de recherche sont définies et évaluées par des comités de représentants de tous les niveaux de gouvernement et d'organismes gouvernementaux internationaux. Le transfert de technologie est un élément important du programme. La SUST produit des guides opérationnels et des manuels. Elle offre aussi de la formation et contribue dans une certaine mesure à la planification des mesures d'urgence.

La plupart des projets de la section se déroulent en partenariat avec d'autres ministères et organismes du gouvernement, ainsi qu'avec l'industrie, et englobent une vaste gamme de sujets relatifs aux déversements. Ils comprennent des études en laboratoire et sur le terrain, dans des milieux terrestres, en eau douce et en mer. La section comprend d'autres activités :

- la participation au Programme canadien pour la sûreté et la sécurité (PCSS);
- participer à la communauté de pratique chimique, dont la recherche et le développement en matière de décontamination chimique, biologique, radiologique, nucléaire et explosive (CBRNE);
- contribuer aux ententes de sécurité et fournir un appui scientifique durant les événements d'envergure comme les Jeux olympiques de 2010 en Colombie-Britannique et les Sommets du G8 et du G20, de même que les Jeux panaméricains de 2015, en Ontario.

Pour de plus amples renseignements, veuillez contacter :

Section des urgences – Science et technologie
Environnement et Changement climatique Canada
335, chemin River
Ottawa (Ontario) Canada K1A 0H3
Téléphone : 613-998-9622 Fax : 613-991-9485
Courriel : SpillSeminars@ec.gc.ca

Séances d'un coup d'oeil

Séances d'un coup d'oeil														
Jour Salle	10:00	10:20	10:40	11:00	11:20	11:40	12:00	12:20 Pause	130 0	13:20	13:40	14:00	14:20	14:40
mardi 7 juin salle 1	Technologies d'intervention et mesures de prévention pour les déversements d'hydrocarbures									Interventions en milieu côtier				
mardi 7 juin salle 2	Détection, suivi, et télédétection des déversements d'hydrocarbures									Devenir et effets des hydrocarbures				
mercredi 8 juin salle 1	Dépollution, restauration, et remise en état en cas de déversements d'hydrocarbures									Planification des mesures d'urgence, préparation, et prévention des déversements d'hydrocarbures				
mercredi 8 juin salle 2	Modélisation de déversements d'hydrocarbures													
jeudi 9 juin salle 1	Déversements de produits chimiques et de matières dangereuses - Surveillance et évaluation - Dépollution, restauration, et remise en état - Substances nocives ou potentiellement dangereuses - Planification des mesures d'urgence, préparation, et prévention									Effets sur les espèces sauvages mazoutées et l'intervention				
jeudi 9 juin salle 2	Comportement et caractéristiques physiques et chimiques des déversements d'hydrocarbures									Cas concrets et expériences récentes de déversements d'hydrocarbures				

Sessions at a Glance

Sessions at a Glance														
Day Room	10:00	10:20	10:40	11:00	11:20	11:40	12:00	12:20 Break	1300	13:20	13:40	14:00	14:20	14:40
Tuesday June 7 Room 1	Response Technologies and Countermeasures for Oil Spills									Shoreline Response				
Tuesday June 7 Room 2	Detection, Tracking, and Remote Sensing of Oil Spills									Fate and Effects of Oil				
Wednesday June 8 Room 1	Remediation, Restoration, and Rehabilitation of Oil Spills									Oil Spill Contingency Planning, Preparation, and Prevention				
Wednesday June 8 Room 2	Oil Spill Modelling													
Thursday June 9 Room 1	Chemicals and Hazardous Materials Spills - Monitoring and Assessment - Remediation, Restoration, and Rehabilitation - Hazardous and Noxious Substances - Contingency Planning, Preparation, and Prevention					Impacts on Oiled Wildlife and Response								
Thursday June 9 Room 2	Physical and Chemical Properties and Behaviour of Oil									Case Histories and Recent Spill Experiences				