

## CNS NWMDER 2016: Technical Committee

### **Technical Committee Chair:**

**M1:** APM DGR Engineered Barrier System, **T3:** APM DGR Material Properties & Thermal Analysis, **W2:** APM Repository Design & Safety Case



**Track Chair:**

Jennifer Noronha

**Position (Affiliation):**

Repository Engineering Director (Nuclear Waste Management Organization)

**Biography:**

She started work at the Darlington Nuclear Station, a 4 unit 881 MWe station in 1987 as part of its commissioning team. She held various roles at Darlington including Radiation Protection Mgr, Outage Manager-Strategic Planning, WANO Host Peer. She moved to Pickering in 2006 as the Performance Improvement & Nuclear Oversight Director & Equipment Reliability Director roles. She spent some time in Refurbishment before moving to NWMO in 2011 and has been supporting the two Deep Geological Repository projects as the Repository Engineering Director since that time.

**Degrees Earned:**

B.Eng. Engineering Physics Nuclear Option (McMaster), MBA (University of Toronto). Registered Professional Engineer

## Technical Committee Members:

**M1:** APM DGR Engineered Barrier System, **T3:** APM DGR Material Properties & Thermal Analysis



**Track Chair:**

Miklos (Mike) Garamszeghy

**Position (Affiliation):**

Design Authority and Manager, Technology Assessment & Planning (Nuclear Waste Management Organization)

**Biography:**

He is currently Design Authority and Manager of Technology Assessment and Planning at the NWMO. He has more than 35 years of experience in radioactive waste and used fuel management.

He has contributed to numerous IAEA, OECD-NEA and EDRAM reports, peer reviews and projects for over 30 years, dealing with varied aspects of radioactive waste, advanced fuel cycles and used fuel management. He is past chair of the CSA N292 committee; current chair of the Standards Council of Canada's ISO TC-85/SC-5 committee and represents ISO on the IAEA's Waste Safety Standards Committee.

**Degrees Earned:**

BASc (University of Toronto), MASc (University of Toronto)

**M2: Remediation Technologies**



**Track Chair:**

Shafi Andseta

**Position (Affiliation):**

Environmental Department Manager (Sirati& Partners Consultants Limited)

**Biography:**

She has over 25 years of experience in the academic, private and government sectors. Her areas of expertise include environmental site assessments, remediation, geology and hydrogeology. She also specializes in designated substances and hazardous material management projects.

Dr. Andseta has managed numerous environmental projects within Ontario and, in addition, has coordinated Environmental Projects of the Post-Graduate Diploma students at Sheridan College, Brampton, Ontario.

Dr. Andseta is designated as a Qualified Person to prepare Risk Assessments under Ontario Regulation 153 and is a registered professional geoscientist in Ontario.

**Degrees Earned:**

Ph.D. in Geology (National University of Athens-Greece)

### M3: Waste Transportation

**Track Chair:**

Sylvain Faille

**Position (Affiliation):**

Director, Transport Licensing and Strategic Support Division  
(Canadian Nuclear Safety Commission)

**Biography:**

Over 18 years of experience in the field of packaging and transport of nuclear substances. He authored and co-authored papers presented at various PATRAM and participated in the development of a joint Canada-US application guide with the USNRC and USDOT for the certification of Type B and fissile material packages.

He is the CNSC representative at the IAEA Transport Safety Standard Committee (TRANSSC) responsible for the establishment of International transport related documents.

**Degrees Earned:**

Bachelor in engineering (École Polytechnique de Montréal)

**M3: Waste Transportation**

**Track Chair:**

Chase Amyot

**Position (Affiliation):**

Manager, Work Management – Decommissioning Nuclear Waste Management Division(Ontario Power Generation)



**Biography:**

Chase is responsible for overseeing the planning, scheduling and work coordination process at OPG's waste facilities. This includes Low and Intermediate Level Waste work management processes at the Western Facility, and integration of Used Fuel processing/storage at the Pickering, Darlington and Western Used Fuel Facilities.

An addition, a major current focus is on the planning and coordination of the processing and storage of waste generated from the Darlington Refurbishment Project.

**Degrees Earned:**

Mechanical Engineering Technology – Robotics and Automation (Diploma), Project Management Professional (PMP)

**M4: Government Policies, Programs & Oversight**



**Track Chair:**

Douglas Metcalfe

**Position (Affiliation):**

Senior Manager (Natural Resources Canada)

**Biography:**

He is responsible for radioactive waste and nuclear decommissioning policy matters. Doug has 30 years of experience in the fields of radioactive and hazardous waste management, decommissioning and site restoration. Doug has worked as a consultant and in government policy and regulatory environments.

**Degrees Earned:**

Bachelor's and Master's degrees in Civil Engineering  
(University of Waterloo)

**M4: Government Policies, Programs & Oversight**



**Track Chair:**

Karine Glenn

**Position (Affiliation):**

Director, Wastes and Decommissioning Division  
(Canadian Nuclear Safety Commission)

**Biography:**

Ms. Glenn, a professional engineer, is responsible for the regulatory oversight of Canada's radioactive waste management facilities (including deep geological repositories), decommissioned uranium mines, and several nuclear facilities undergoing decommissioning. Prior to joining the CNSC, she worked in the area of transportation of radioactive materials.

**Degrees Earned:**

Bachelor's degree in Building Engineering (Concordia University)

**M5: Operations Experience**



**Track Chair:**

Tim Dalpee

**Position (Affiliation):**

Section Manager, Operations, Bruce B Operations Support  
(Bruce Power)

**Biography:**

Tim Dalpee is the Fuel Handling Operations manager for the Bruce B Station at Bruce Power. Since 2008, he has been responsible for the Dry Fuel Storage, Heavy Water handling, Chemical Waste storage and Water Demineralization operations. He is also a member of the CSA N292 Radioactive Waste Management Technical Committee and has supported CSA standards development on Technical Sub Committees for N292.0, N292.1, N292.2 and N292.3.

Tim joined Bruce Power upon its establishment in 2001 as a System Engineer and worked in the Electrical section before moving to Operations.

**Degrees Earned:**

Bachelor of Engineering Electrical(Lakehead University)



**M5: Operations Experience, T1: Stakeholder Engagement**



**Track Chair:**

Dr. Stephen W. Liblong

**Position (Affiliation):**

Director, D&WM S&T/Transition Advisor  
(Canadian Nuclear Laboratories)

**Biography:**

Dr. Liblong is responsible for the oversight of R&D activities carried out in support of the D&WM mission, including ensuring integration of internal R&D support for project-specific needs. He is also the senior advisor for the new CNL D&WM management team, helping to ensure an effective transition under the recently implemented Government Owned – Contractor Operated model (AECL to CNL). Dr. Liblong was previously responsible for all aspects of waste management & environmental remediation projects carried out at AECL, and had operational oversight for all solid waste management operations at CNL's Chalk River Laboratories site.

**Degrees Earned:**

BSc and PhD Inorganic Chemistry(University of Calgary)

**T2: APM DGR Siting**



**Track Chair:**

Mahrez Ben Belfadhel

**Position (Affiliation):**

Director, Geoscientific Site Evaluations (Nuclear Waste Management Organization)

**Biography:**

Dr. Mahrez Ben Belfadhel is the Director of Used Fuel Repository Geoscience at the Nuclear Waste Management Organization. His team is responsible for assessing the geoscientific suitability of potential host sites. Dr. Ben Belfadhel has 30 years of combined multidisciplinary experience in areas related to geotechnical and geoenvironmental engineering. With the Canadian Nuclear Safety Commission, he worked as a safety assessment specialist and Acting Director of the Waste and Decommissioning Division. He has maintained an active involvement in the international nuclear waste community, mainly through his work with the IAEA.

**Degrees Earned:**

Bachelor's, Master's, and Ph.D in Civil and Geotechnical Engineering. Registered Professional Engineer

#### T4: Recycling

**Track Chair:**

Peter Ottensmeyer

**Position (Affiliation):**

Professor Emeritus (University of Toronto)

**Biography:**

Peter Ottensmeyer, BSc (engineering physics, metallurgy), MA (solid state physics), PhD (medical biophysics), formerly Chair of Medical Biophysics at the University of Toronto, is currently Professor Emeritus and Fellow of the Royal Society of Canada. His career included physics and engineering aspects of cancer research associated with radiation and radioisotope tracers at the cellular level. But he crossed disciplines as well, collaborating with AECL of the microanalysis of oxides of pressure tube zircaloy. This laid the groundwork for his current passionate post-retirement pursuit of the productive elimination of nuclear fuel waste, with an urgency enhanced from being a grandfather.

**Degrees Earned:**

Ph.D.

**T5: Uranium Mining & Milling Waste Management**



**Track Chair:**

Tom Kotzer

**Position (Affiliation):**

Chief Geochemist (Cameco Corporation)

**Biography:**

Tom has been involved with various facets of the nuclear energy cycle for the past 30 years, from understanding the geochemical processes with formation of uranium ore deposits and characterization of mill operations for long term controls on uranium mine tailings to evaluating transfer of anthropogenic radionuclides during nuclear reactor operations and storage of low- to high-level spent fuels. As Chief Geochemist, Tom works with national/international exploration, mining and milling operations and developed engineered tailings and geo-metallurgy programs to evaluate long term reliability of mining wastes.

**Degrees Earned:**

PhD. (Isotope Geochemistry)

## W1: Site Remediation Experience



### **Track Chair:**

Dr Jim McCafferty

### **Position (Affiliation):**

Director of Decommissioning and Site Restoration (Atomic Energy Canada Limited)

### **Biography:**

Jim has over 29 years in the Nuclear Industry spread over three sites.

The majority of his career has been spent in the UK at Dounreay and the Vulcan Naval Test Reactor Establishment in the North of Scotland. In 2012, he moved to Canada to work for AECL and is now responsible for the oversight of the Decommissioning and Site Restoration for the AECL Liabilities at the Chalk River Laboratory and associated Research Reactor Sites. He has a PhD in Mechanical Engineering, a Masters Degree in Business Administration and an Honours Degree in Mechanical Engineering.

### **Degrees Earned:**

Ph.D, MBA, B.Eng

### W3: Waste Characterization



**Track Chair:**

Ruth Burany

**Position (Affiliation):**

Senior Engineer (Kinectrics Inc.)

**Biography:**

Ruth is a project manager and engineer at Kinectrics. Notable project suites include steam generator examinations and initiating a significant facility upgrade (decontamination facility) at Kinectrics. She was part of the team that conducted the first irradiated pressure tube testing at Kinectrics and was recently the project manager of the program of radionuclide characterization of low and intermediate level waste for NWMO. Currently, Ruth supports Materials and Major Components in forensic analysis of failed CANDU components and is also involved in high pressure hydriding of pressure tubes to support end of life estimations.

**Degrees Earned:**

PhD., Chemical Engineering (University of Newcastle-upon-Tyne-UK); BAsC. Chemical Engineering (University of Waterloo)

**W3: Waste Characterization**

**Track Chair:**

Julia Dinner

**Position (Affiliation):**

Decommissioning Analyst (Candesco)

**Biography:**

Since joining Candesco, Julia has worked in the Decommissioning and Health Physics group, providing licensing and decommissioning support in the areas of waste management, decommissioning planning and data analysis. Some of her recent achievements have included:

- Preparing quarterly progress reports on the NRU IIP for submission by CNL to the CNSC.
- Performing data collection and analysis of international decommissioning and waste management policies and regulatory practices for the CNSC.

Preparation of Preliminary Decommissioning Plans, Storage With Surveillance Plans and Interim End State reports for various Canadian and International reactors and waste management facilities.

**Degrees Earned:**

Decommissioning Certificate (Oak Ridge Associated Universities)

Construction Technology certificate (George Brown College)

Project Management Certificate (University of Toronto)



#### W4: Innovation

**Track Chair:**

Paul McClelland

**Position (Affiliation):**

Director Waste Management and Technical Support, Atomic Energy of Canada Limited

**Biography:**

Paul has over 25 years experience almost evenly split between operations of nuclear facilities and radioactive waste management:

- Supporting CANDU power plant operations at the Bruce and Darlington sites 1991-1998
- Supporting Waste Management and Decommissioning with the United Kingdom Atomic Energy Authority at Dounreay, Scotland 1998-2008
- Supporting nuclear facility operations and radioactive waste management at Chalk River Laboratories 2008 to 2015.

Paul's current role is providing primary waste management technical oversight for the performance of Canadian Nuclear Laboratories in executing their agreements with AECL.

**Degrees Earned:**

B.Eng. in Engineering Physics, McMaster University, 1991





**W5: Decommissioning**



**Track Chair:**

Charles Hickman

**Position (Affiliation):**

Director, Emergency Planning and Environment  
(New Brunswick Power Corporation)

**Biography:**

Currently the Director of Emergency Planning and Environment for New Brunswick Power Corporation, Charles Hickman has been involved in the nuclear industry for over 20 years. He has held the positions of Health, Safety and Environment Manager, Licensing Manager, and Environmental Manager all associated with the Corporation's Point Lepreau Nuclear Generating Station. Charles is involved in a number of industry associations, including the Canadian Nuclear Association and the Canadian Electricity Association, and he on a number of Canadian Standards Association committees.

**Degrees Earned:**

Master's in Environmental Studies from Dalhousie University, and a B.Sc. in Marine Biology.

## W5: Decommissioning



**Track Chair:**

Rina Vijay

**Position (Affiliation):**

Section Manager, Safe Storage Engineering (Ontario Power Generation)

**Biography:**

Rina is currently responsible for the engineering activities to support the transition of the Pickering Nuclear Generation Station from operations to a safe storage state for 30 years.

She has over 12 years of experience in decommissioning, radioactive waste management and chemistry. She was responsible for reviewing and updating the decommissioning plans, cost estimates and assumptions for OPG's nuclear generating stations. She has also contributed in optimizing OPG's decommissioning strategy.

**Degrees Earned:**

Bachelor of Applied Science in Chemical Engineering(University of Toronto)