

AGENDA
October 4, 2023

8:30 - 9:00	Registration and poster session
9:00 - 9:10	Welcome, Farrah Norton, Science and Technology Program Manager, Atomic Energy of Canada Ltd
9:10 - 9:20	Remarks from Canadian Nuclear Laboratories, Vice President, Science and Technology, Jeff Griffin
9:20 - 9:30	Remarks from co-chair of sub-committee, Guy Jonkmans, Defence Research and Development Canada

Guest Speakers		
9:30 - 9:50	Innovating for an Expanding Global Industry: Nuclear Safety and Security	Rachna Clavero, President and CEO, CANDU Owners Group
9:50 – 10:10	Radiological & Nuclear Priorities & Activities for Defence & Security	Zac Myers, Radiological & Nuclear Portfolio Manager, Defence Research and Development Canada / Centre for Security Science
10:10 - 10:30	US-Canada collaboration in Nuclear Security S&T	Katherine Holt, Program Director, National Nuclear Security Administration
10:30 - 11:00	Break and poster session	

SESSION 1 – Cyber Security		
11:00 - 11:30	CyberSavvy Unleashed: An Improv Approach to Informed Defense and R&D	Christopher Spirito, Nuclear Cyber Security, Idaho National Laboratory
11:30 – 12:00	Cyber Security Resilience for Nuclear and Critical Infrastructure	David Trask, Research Scientist Cyber Security, Canadian National Laboratories
12:00 - 1:00	Lunch and poster sessions	

SESSION 2 – Emergency Preparedness and Response		
1:00 – 1:30	Emergency Management TBD	Tristan Barr, Section Head, Health Canada
1:30 - 2:00	Adapting Emergency Preparedness Frameworks for Evolving Needs	Luke Lebel, Research Scientist, Canadian Nuclear Laboratories
2:00 - 2:30	Break and poster session	

SESSION 3 – Nuclear Forensics and Detection		
2:30 - 3:00	Non-proliferation and bilateral cooperation	Naina Thoppil, Deputy Director, Global Affairs Canada
3:30 - 4:00	Multi-facetted enhancements to support nuclear forensics stakeholders	Marina Totland, Research Scientist, Canadian Nuclear Laboratories
4:00 - 4:30	Detection Systems and Methods for Nuclear Security and Safeguards – Accomplishments and Future Endeavours	Ghaouti Bentoumi ,Research Scientist, Canadian Nuclear Laboratories
4:30 - 4:35	Closing Remarks and Adjourn	

POSTER SESSION

Poster Title	Lead Presenter
Emerging Quantum Technologies for National Defence	Zahra Yamani
Portable Muon Tomography and Liquid Argon for National Security and Response Applications	David Pérez Loureiro
Cyber Security Maturity Model	Abigail Gaulin
User-Centred Human Machine Interfaces (HMIs) for Security Operations Centre	Alex Amos
Attack Libraries Supporting Functional Exercises	Anna Shi
Cyber Security R&D Facilities for Remote SMRs and Wireless Sensor Networks	Karthik Thiyagarajan
Securing the Supply Chain	Matthew Daley
Cyber Security Incident Response Exercises	Richard Brown
Role-based Cyber Security Training	Richard Brown
Post-explosion Radiological Dispersal Device (RDD) Forensics Response.	Ankur Chaudhuri
Radiation Biodosimetry: Triage, Dose Reconstruction, and Mass Casualty Management	Yi Wang
Emergency Planning and Response Optimization	Luke Lebel
Development of advanced algorithms and spectrum processing methods for improved radioisotope identification when using low and mid resolution detectors.	Krassimir Stoev
Strengthening National and International Initiatives and Collaborations for Global nuclear Non-proliferation, Safeguards, and Counter-terrorism	Ghaouti Bentoumi
Distributed Ledger Technology for Nuclear Safeguards and Non-proliferation	Bryan Van der Ende

Enhancing national and global security, nuclear preparedness and emergency response

Improving and testing radiation portal monitor algorithms for detection and identification of SNM for border security	Genevieve Harrisson
Advanced Technologies for Safeguards and Non-Proliferation Applications with a Focus on HALEU Fuel and Advanced Reactor/SMRs	Saeid Taherion Esfahani
Post-accident/incident radiological characterization and recovery	Marat Seydaliev
Radionuclide Dispersion in the Great Lake and Aquatic Radiological Monitoring for Accident Conditions	Volodymyr Korelevych
CANDU-Specific Operational Intervention Levels	Luke Lebel
An Overview of Human Performance and Disaster Informatics Research in Emergency Management	Dev Minotra
Demonstrating production of reference materials at CNL	Anais Fourny
Signatures of Radioactive and Nuclear Materials for Nuclear Forensics	Ike Dimayuga
Development of Radiochronometry techniques at CNL	Anais Fourny
Nuclear Archeology for Non-proliferation Nuclear Forensics	Aditya Ayyagari
Instrumentation and Method Development for Nuclear Forensics	Thomas Domingo
Nuclear Forensic Materials Characterization Exercises - CNL's Leadership and Participation	Aditya Ayyagari
Rapid measurement of hard to detect radionuclides in environmental and bioassay samples	Alex Gagne
Near-Field Atmospheric Dispersion Modeling and Experiments	Robert Bowden
Accident source term reconstruction methods	Lucian Ivan and James Carr