ADVANCING THE WAVE!

Building on the success and momentum of the first event in 2018, the theme for the second International Conference on Generation IV and Small Reactors (G4SR-2) is “Advancing the Wave in SMR Deployment, Overcoming Barriers, and Pursuing Innovations and Collaborations to Fight Climate Change”.

It is a tremendous privilege for the G4SR-2 Organizing Committee to receive international co-operation from the prestigious organizations listed below, as co-operating partners in shaping this momentous event, by developing conference content, by supporting CNS workshops, and by contributing their expertise and experience on R&D for Advanced Reactors and SMRs.

This conference is an important international forum for the nuclear and non-nuclear industries and stakeholders to work together to seek solutions through dialogue, engagement and collaboration on one of the most pressing nuclear issues of our time – positioning SMR deployment as a clean energy source in the global energy landscape to fight climate change.

In this context, this conference first updates the international status on advancing the wave in SMR deployment, including R&D and potential projects for on-grid, remote off-grid, mining and industrial applications.

Next, the conference identifies potential barriers for SMR deployment and seeks opportunities to overcome, from an international perspective, challenges in licensing, economics, waste, advanced manufacturing, public acceptance, etc.

In fostering the low-carbon energy transition to meet net-zero carbon emission by mid-century in order to meet the global warming target in the Paris Agreement, this conference advocates pathways in pursuing innovations and collaborations, utilizing SMR generated electricity, heat and hydrogen, to support decarbonization in sectors such as transportation, mining and resource extraction, petrochemical refinery, etc.

The G4SR conference program has developed comprehensive Plenary and Technical Programs for technology developers, regulators, industry, researchers and policy makers to encourage the deployment of Generation IV and Small Modular Reactor (SMR) technologies, while exchanging policy ideas and research and development experience on SMRs.

THE CANADIAN NUCLEAR SOCIETY (CNS) IS HOSTING THE 2ND INTERNATIONAL CONFERENCE ON GENERATION IV AND SMALL REACTORS (G4SR-2) IN CO-OPERATION WITH PARTNERS IN INDUSTRY AND GOVERNMENT.
CONFERENCE HIGHLIGHTS  

**Nov. 9 (Monday)**  
*Optional CNS Workshops / Separate registration*  
- Integrated Safety Assessment Methodology (ISAM): Chair - Canadian Nuclear Safety Commission  
- Establishing requirements for advanced reactors: Chairs - CANDU Owners Group (COG); Electric Power Research Institute  
- Advanced Manufacturing: Chair - UK’s Nuclear Advanced Manufacturing Research Centre  
- Nuclear Materials Challenge Workshop for SMR and Advanced Reactors: Co-Chair - U.S. Idaho National Lab.; Co-Chair - OPG  
- Half-day - Advanced Water Cooled SMR Technologies and Demonstration with IAEA iPWR Basic Principle Simulator: Chair - International Atomic Energy Agency (IAEA)  

**Nov. 9 Evening – G4SR-2 Conference Reception**

**Nov. 10 (Tuesday) Conference Kick-off**  
Keynote Speakers  
Full Day Plenary Tracks  
- International Perspectives on Advancing SMR Deployment to Combat Climate Change  
  - Impact of Nuclear Energy on Global Climate Change Policy  
  - Contrasting Perspectives on Nuclear & Renewables in Combating Climate Change  
- International Gen IV Reactor and SMR Development  
- International Perspectives on Overcoming Barriers to SMR Deployment  
  - Regulatory Harmonization  
  - SMR Economic Competitiveness

**Nov. 10 Evening – Innovation Night:**  
SMR Researchers’ Innovation Tech Talks & Reception

**Nov. 11 (Wednesday)**  
Keynote Speaker  
Two Plenary Tracks  
- US Advanced Reactors Development  
- Advancing SMR deployment in Canada & Strategic Plan  
Parallel Technical Session Tracks  
- Safety Assessment & Licensing of Advanced Reactors & SMRs  
- Research & Development Supporting Advanced Reactor & SMRs  
- Advanced Reactors and SMR Deployment  
- Decommissioning, Waste Management & Fuel Cycle for Advanced Reactors & SMRs

**Nov. 11 Evening**  
Cocktails, Conference Banquet, Speakers & Entertainment

**Nov. 12 (Thursday)**  
Parallel Technical Session Tracks  
- Safety Assessment & Licensing of Advanced Reactors & SMRs  
- Research & Development Supporting Advanced Reactor & SMRs  
- Advanced Reactors and SMR Deployment  
- Decommissioning, Waste Management & Fuel Cycle for Advanced Reactors & SMRs  
- SMR Manufacturing & Supply Chain  
- SMR Economics, Finance, Business Models  
- Public Policy & Engagement  
- Skill Development & Nuclear Knowledge Management  
- Nuclear Hybrid Energy Systems & Cogeneration  
- Research Reactors

Keynote Speaker  
Two Plenary Tracks  
- Advancing Nuclear Innovations for SMR Development;  
- SMR Deployment Strategies

**TOUR DAY: NOV. 13 (FRIDAY)**  
ONTARIO POWER GENERATION (OPG) DARLINGTON REFURBISHMENT MOCK–UP & TRAINING FACILITY

Space is limited to 46 participants.  
Sign up early at [www.G4SR.org](http://www.G4SR.org)
CALL FOR PAPERS:
ABSTRACT SUBMISSION DEADLINE: MARCH 20, 2020

The G4SR-2 Technical Organizing Committee welcomes the submission of full-length technical papers, which will be peer reviewed.

Papers that have been approved for presentation will be published in the Conference Proceedings. G4SR-2 will organize a set of specialized technical sessions along the following Track Themes:

• Safety Assessment & Licensing of Advanced Reactors & SMRs;
• Research & Development Supporting Advanced Reactor & SMRs;
• Advanced Reactor and SMR Deployment;
• Decommissioning, Waste Management & Fuel Cycle for Advanced Reactors & SMRs;
• SMR Manufacturing & Supply Chain;
• SMR Economics, Finance, Business Models;
• Public Policy & Engagement;
• Skill Development & Nuclear Knowledge Management;
• Nuclear Hybrid Energy Systems & Cogeneration;
• Research Reactors

Note: For the tentative set of session topics along with the above Track Themes, please see the following link: http://www.g4sr.org/uploads/program.pdf

All authors will present their approved papers in English. About 20 minutes will be allotted for each paper. At least one author is required to register for the Conference by the early bird registration deadline. Authors should submit a one page ~150 word abstract, contact information and preferred track number by March 20, 2020. Following Abstract acceptance, authors will be required to submit a full paper and a short (<100 words) biographical note.

Please follow the G4SR-2 paper submission guide found on www.g4sr.org

FOR MORE INFORMATION:
Full details for the conference can be found online at www.g4sr.org.
To be added to a mailing list for updates contact: roubenb@alum.mit.edu

www.G4SR.org
ORGANIZING COMMITTEE CHAIRS

Wilson Lam: G4SR-2 General Chair, Ontario Gov. Senior Advisor on Nuclear Technology

Paul Thompson: Plenary Co-Chair NB Power’s Team Lead in Advanced SMR Development

Dave Hummel: Technical Program Chair Research Scientist, Canadian Nuclear Laboratories

Benjamin Rouben: Deputy Chair, President, 12 & 1 Consulting

Metin Yetisir: G4SR-2 Program Advisor Advanced Reactor Technologies, Canadian Nuclear Laboratories

For the complete organizing committee visit www.g4sr.org

CONFERENCE FEES AND REGISTRATION

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<th>Registering</th>
<th>By Sept. 30, 2020</th>
<th>After Sept. 30, 2020</th>
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<tbody>
<tr>
<td>CNS Member</td>
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Full-Day Workshop Fees (including coffee, snacks and buffet lunch):
- Registration to a CNS Workshop Only: $480
- Registration to a CNS Workshop if registering also for the G4SR-2 Conference: $400
- Student Members: Please contact CNS for workshop registration

Half-Day Workshop Fees (including coffee, snacks and buffet lunch):
- Registration to a CNS Workshop if registering also for the G4SR-2 Conference: $240
- Registration to a CNS Workshop Only: $288

ACCOMMODATION & VENUE

Click here to reserve!

Nov. 9-12, 2020

Delta Hotels Toronto Airport & Conference Centre
655 Dixon Road, Toronto, Ontario,
Canada M9W 1J3

Book by Oct 23, 2020, to take advantage of the special rate for G4SR-2 (CAD $189 per night). We do expect the block of rooms reserved for the event to sell out quickly.

Register through the link on www.G4SR.org

www.G4SR.org