FIRST ANNOUNCEMENT AND CALL FOR ABSTRACTS

Harnessing Nuclear Technologies & Innovation as a Path to Net Zero by 2050



28th International Conference on Structural Mechanics In Reactor Technology

August 10-15, 2025

The Westin Harbour Castle

Please visit, www.smirt28.com









Welcome SMiRT 28 Participants

The SMiRT28 conference will deliberate ways of "harnessing nuclear technologies and innovation as a path to net zero by 2050" in Toronto, "The Nuclear Energy Capital" of Canada, home to two large multi-unit stations in North America, Pickering and Darlington and another multi-unit station in Bruce within 200 km of Toronto. The province of Ontario has invested in 2015 CAD 26 billion in a 15-year program, one of North America's most significant clean energy projects. Canada and the US have recently become the focal point of SMR activities. Given all of the above developments, the 28th SMiRT conference in Toronto, Canada, will bring the international community together to learn from each other how to enhance safety and security in the emerging SMR technologies, among other initiatives Canada has embarked upon, such as isotope production in power reactors, decommissioning projects, and the use of innovative technologies in the nuclear industry. We welcome you to SMiRT28 in Toronto and share your research and experiences in harnessing nuclear technologies and innovation as a path to net zero by 2050.

Dr. Thambiayah (Nithy) Nitheanandan
 Conference Chair

Technical Topics

- Mechanics of Materials
- Fracture Mechanics & Structural Integrity
- Computation Simulation & Visualization
- External, Internal Hazards & Load Characterization
- Modelling, Testing, Response, Analysis of Structure, Systems & Components
- · Design Issues, Codes, Standards
- Safety Reliability, Risk, Safety Margins
- Ageing and Plant Life Management (PLiM),
 Monitoring, Inspection, and Maintenance
- Fuel, Waste Management, Decommissioning
- Construction Management & Role of Advancements and New Technologies
- New Technologies (AI, Digital Twins, etc)

Shibata Early Career Award

SMiRT28 will continue the Shibata Early Career Award, sending in honour of Prof. Heki Shibata's achievements. The award's objective is to identify and recognize the outstanding work of young and early career professionals.

Robert Kennedy Award

In recognition of Dr. Robert Kennedy's significant contributions to the nuclear industry, IASMIRT bestows this award to the author(s) of the best submitted technical paper on subjects related to Dr. Kennedy's field of practice.

International Scientific Committee

Chaired by Prof Daman K. Panesar, University of Toronto, Canada

Venue

The Westin Harbour Castle, Toronto, is a hotel that offers well-appointed, luxurious accommodations with select rooms boasting views of Lake Ontario and Toronto's spectacular city skyline. The Westin Harbour Castle Toronto is within walking distance from the Harbourfront Centre, Scotiabank Arena, & the Toronto Eaton Centre.

Key Dates

Deadline for abstract submission: November 1st, 2024

Deadline for paper submission: February 1st, 2025