

---

# Post-SMiRT 26 Seminar



**18-20 July 2022 | Zürich, Switzerland**

---

**Contribution of Deterministic and  
Probabilistic Assessments for Safety  
Margins and their Practical Application**

**Save the Date!**

## Welcome to Zürich



Situated on the northern end of Lake Zürich, Zürich is an internationally well-connected metropole and with more than 400'000 inhabitants, the largest city in Switzerland. Zürich stands out as one of the cities with the highest quality of life in the world and is a compulsory destination to visit in Switzerland. In summer, visitors can enjoy swimming in the lake and in the river Limmat, visiting the city and its museums, and the proximity with the Alps for refreshing excursions and breathtaking scenery. Although best known for being the financial center of Switzerland, Zürich is also home to the world renowned Swiss Federal Institute of Technology (ETH) and enjoys an outstanding reputation as a science hub.

---

## Nuclear Energy in Switzerland

Around a third of the domestic electricity production in Switzerland comes from the four operating nuclear power plants. Located in the German-speaking part of Switzerland, these take advantage of the big rivers of the Swiss Plateau and reliably deliver low-carbon electricity to millions of inhabitants of major cities like Zürich or Basel. With one of the oldest operating reactor in the world, the Swiss nuclear power plants have a highest safety standard and will be allowed to operate as long as their safety can be guaranteed.

## Topics

- Strategies for integrating deterministic and probabilistic safety analyses to obtain risk insights
- Development and maintenance of database systems with SSCs' digitized plant specific information to be used in deterministic and probabilistic safety evaluations
- Modernization / digitalization of deterministic and probabilistic safety assessment calculations using automation scripts and databases
- Verification of SSC Safety Classification according to IAEA SSG-30: Benefits of DSA and PSA Integration
- Consistency of PSA results in a multi-unit site
- Challenges in consistency verification between deterministic and probabilistic safety assessment results – regulatory aspects
- Extreme Weather related topics:
  - Challenges in probabilistic models for extreme weather conditions
  - Hazard combination strategies for PSA
  - Improvements and challenges in flooding / tsunami hazard
- Seismic hazard related topics:
  - Updating of existing PSHA models for DSA and PSA
  - Development of automation techniques in seismic verifications
  - Assessment and use of Probabilistic Floor Response Spectra for seismic evaluation of systems and components in nuclear power plants
  - Advancements in complex coupled model for seismic verifications of components of the pressurized enclosure of the Reactor Coolant System (RCS)

---

## About the organizers

swissnuclear is the association of the Swiss nuclear power station operators and represents their joint interests in relation to the general public, politics and government. swissnuclear provides support to the nuclear power stations for safe sustainable operations and in the further stages of their life cycle. It is committed to optimizing overall conditions, internally and externally.

We thank the IASMiRT Board for supporting the seminar.

Organization and logistics of the seminar are taken care of by MCI Geneva ([www.wearemci.com](http://www.wearemci.com)).

For more information, please contact: [Post-SMiRT26@mci-group.com](mailto:Post-SMiRT26@mci-group.com)