

CALL FOR PAPERS

For the Research Reactor Conference (RRFM) 2023

The Research Reactor Conference (RRFM) 2023 will take place from 16 – 20 April 2023 in Antwerp, Belgium.

The Research Reactor Conference (RRFM) 2023 is meant to include research reactors of all powers and critical and sub-critical facilities. Contributions on synergies between research reactors and prototype SMR's are also welcome.

The Programme Committee is calling for both oral and poster presentations regarding

- **Research reactor nuclear fuel cycle from front-end to back-end-** conversion to LEU fuels; fissile material supply; fresh fuel and targets: origin, fuel development, qualification, fabrication; in-core fuel management and safety; fuel transportation; fuel and reactor licensing; fuel back-end management including reprocessing, spent fuel storage, corrosion and degradation; fuel cycle economics.
- **Utilisation of research reactors** – capacity building; E&T programmes; nuclear science and technology including support for nuclear power programmes; neutron beam applications; industrial and medical applications, including radio-isotopes production and irradiation/transmutation technology; strategic and business plans; networks and coalitions.
- **Innovative methods in reactor physics and thermo-hydraulics** – development and application of advanced computational methods and tools for core load management (operational and safety analysis, and fuel cycle physics); benchmark exercises; nuclear data improvements.
- **New research reactor projects** – national/regional plans or construction updates; lessons learned from new research reactor projects – design, construction and start of operation; proliferation resistance; development of national infrastructures; design for decommissioning; synergies between research reactors and prototype SMR's.
- **Research reactor operation & maintenance and ageing management** – managing reliability issues (commissioning, early operation to end of life related

issues); ageing management, modernization, refurbishment, long term operation and life-time extension; maintenance management systems; human resource development and training programmes.

- **Research reactor safety and security** – implementation of updated international safety and security standards; application of graded approach to regulatory safety and security requirements; review of national regulatory requirements on safety and of licensing activities; design review and upgrades including associated facilities (spent fuel storage facilities); safety analysis methods and approaches; safety of experiments and experimental devices; assessment of fire safety; management of the interface between nuclear safety and security; cyber security issues; review of emergency and contingency plans;
- **Decommissioning and dismantling of research reactors and waste management** – strategies and concepts; radiological characterisation; decommissioning planning; economics and cost estimation; licensing; backend solutions for reflector and shielding materials; decontamination and measures to reduce radiation exposure; radiation and environmental protection; treatment, storage and disposal of radioactive waste; logistics and transportation; on-going projects; D&D lessons learned.

INSTRUCTIONS AND DEADLINES

Authors should submit their abstract through the [ENS Abstract Submission System](#).

Deadline for abstract submission: **25.11.2022**

Author notification of acceptance: **16.12.2022**

Deadline for full paper submission: **1.3.2023**

Deadline for submission of PowerPoints: **31.3.2023**

Conference: 16 – 20 April 2023

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