**Call for Papers 2021**

The European Research Reactor Conference (RRFM) 2021 will take place from 26 – 30 September 2021 in Helsinki, Finland.

The conference will combine an in-person conference with an online event which allows delegates who cannot or who don't want to travel to Helsinki to participate and present their paper.

The European Research Reactor Conference (RRFM) 2021 is meant to include research reactors of all powers and critical and sub-critical facilities. 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 of new research reactors; lessons learned from new research reactor projects – design, construction and start of operation; proliferation resistance; development of national infrastructures; design for decommissioning.

• **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; safety upgrades based on the safety assessments following the Fukushima Daiichi accident; 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 [Presentation Portal](https://ens.eventsair.com/research-reactor-conference-2021/abstract).

Deadline for abstract submission: **28 May 2021**

Author notification of acceptance: **15 June 2021**

Deadline for full paper submission: **27 August 2021**

**CONFERENCE SECRETARIAT:** European Nuclear Society, 56 Avenue des Arts, 1000 Brussels, Belgium.

Contact: [conferences@euronuclear.org](mailto:conferences@euronuclear.org); +32 473 390 932

Website: <https://www.euronuclear.org/european-research-reactor-conference-2021>