MMSNF-2023 Announcement

"Modelling approaches to best align with experimental programmes to enhance understanding of modern fuels and accelerate the design and qualification cycle of advanced reactor fuel materials."

28-30 November 2023, McMaster University, Hamilton ON, Canada

The **Materials Modelling and Simulation for Nuclear Fuels (MMSNF) Workshop** is a forum for the stimulation and discussion of state-of-the-art modelling and simulation techniques for nuclear fuels and cladding materials. The 2023 edition will be jointly hosted by the Canadian Nuclear Laboratories, McMaster University, with the co-sponsorship of the OECD Nuclear Energy Agency.

Examples of topics include the development of innovative techniques to model fuel behaviour, the coupling of various physical phenomena to enhance material predictions, and the utilisation of such techniques to better interpret experimental measurements. Presentations are grouped by scales following a multiscale paradigm and range in space-time scale including:

- Atomistic/ab-initio
- Thermodynamics
- Mesoscale/microstructural
- Continuum scale/Fuel performance

The rationale behind this workshop is to contribute to improving the communication and to stimulate synergies among different groups.

The format of the event is to feature a limited number of broad presentations on recent insightful and exciting topics with ample time for discussions to facilitate more of a workshop format. Large poster sessions will showcase individual work in a manner that permits focussed interaction and discussion with international experts and colleagues.

Practical information

Abstracts may be submitted here (150-200 words, using the template), **no later than Sept. 15, 2023**.

The abstracts will be reviewed by the technical committee and invited to present oral or poster presentations. Due to the limited number of oral presentations available, they will be allocated according to a combination of presenter preference, technical merit as well as the diversity and novelty of the approach in order to promote discussion and generation of innovative ideas.

Registration will open on the NEA website on 17 September 2023. Through self-organisation, collaboration, and sponsorship, MMSNF keeps a moderate registration fee (~150 EUR) to encourage the widest possible participation. **In response to demand, we have decided to move to a hybrid format for the oral presentations and discussions. However, preference will be given to oral presentations delivered in person.**