

WPRS Benchmarks Workshops 2026

[Register for the event](#)

The next annual Benchmarks Workshops of the [Working Party on Scientific Issues and Uncertainty Analysis of Reactor Systems](#) (WPRS) will be hosted by [Nuclear Operations & Facilities](#) and the [Department of Engineering Physics](#) at McMaster University, and located in Hamilton, ON, Canada.

The event is mainly supported by the Safety Licensing Program of [Conexus Nuclear Inc.](#) (formerly CANDU Owners Group), on behalf of its four Canadian domestic funding members (*Bruce Power (BP)*, *Canadian Nuclear Laboratories (CNL)*, *New Brunswick Power (NBP)*, and *Ontario Power Generation (OPG)*), and three international funding members (*Societatea Nationala Nuclearelectrica S.A. (SNN)*, Romania, *Korea Hydro and Nuclear Power Company (KHNP)*, Korea, and *CNNP Nuclear Power Operations Management Company Ltd. (CNNO)*, China).

From 11 to 15 May 2026, participants of the different [WPRS Benchmark Activities](#) will meet, exchange results and discuss future activities. The WPRS Benchmarks Workshops will address [benchmarks for neutronics, thermal-hydraulics, fuel performance, and multi-physics aspects](#) of reactor core simulations in light-water reactors (LWRs), high-temperature gas-cooled reactors (HTGRs), sodium-cooled fast reactors (SFRs), lead-cooled fast reactors (LFRs), and molten-salt reactors (MSRs).

Two topical sessions will take place during the workshops:

- Modelling, simulation, verification, validation, and uncertainty quantification of microreactors
- Modelling, simulation, verification, validation, and uncertainty quantification of molten salt reactors

The fourth edition of the NEA [International School on Simulation of Nuclear Reactor Systems \(SINUS\)](#) will be co-organised with the Workshops.

Conference venue

The workshops will take place at McMaster University, in Hamilton, ON, Canada.

Agenda, registration, and meeting material

Early bird registration deadline: 13 March 2026

Final registration deadline: 8 May 2026

[Register now!](#)

Registered users will be given access to a dedicated [NEA SharePoint page](#) with detailed agendas and all meeting material.

Provisional meeting agenda

	from	to	track 1	track 2	track 3
Monday 11 May	08:30	09:00	plenary opening		
	09:00	10:30	UAM-SFR 1	LFR T/H 1	SINUS
	10:30	11:00	coffee break		
	11:00	12:30	UAM-SFR 2	LFR T/H 2	SINUS
	12:30	13:30	lunch		
	13:30	15:30	TVA-WB1 Fluence 1	C5G7-TD 1	SINUS
	15:30	16:00	coffee break		
	16:00	18:00	TVA-WB1 Fluence 2	C5G7-TD 2	SINUS
	from	to	track 1	track 2	track 3
Tuesday 12 May	08:30	10:00	AI&ML 1	TVA-WB1 multiphysics 1	SINUS

	10:00	10:30	coffee break		
	10:30	12:30	AI&ML 2	TVA-WB1 multiphysics 2	SINUS
	12:30	13:30	lunch		
	13:30	15:30	AI&ML 3	TVA-WB1 multiphysics 3	SINUS
	15:30	16:00	coffee break		
	16:00	18:00	Topical session: M&S and VVUQ of Microreactors (+SINUS)	MPCMIV	
	from	to	track 1	track 2	track 3
Wednesday 13 May	08:30	10:00	AI&ML 4	HP-MR 1	SINUS
	10:00	10:30	coffee break		
	10:30	12:30	AI&ML 5	HP-MR 2	SINUS
	12:30	13:30	lunch		
	13:30	15:30	UAM-LWR 1 (+SINUS)	Rostov-2 1	FHR
	15:30	16:00	coffee break		

	16:00	18:00	UAM-LWR 2 (+SINUS)	Rostov-2 2	Topical session: M&S and VVUQ of Molten Salt Reactors
	from	to	track 1	track 2	track 3
Thursday 14 May	08:30	10:30	LW-SMR 1 (SINUS)	HTGR-T/H 1	CTF user group 1
	10:30	11:00	coffee break		
	11:00	12:30	LW-SMR 2 (SINUS)	HTGR-T/H 2	CTF user group 2
	12:30	13:30	lunch		
	13:30	15:30	LW-SMR 3 (SINUS)	HTGR-T/H 3	CTF training 1
	15:30	16:00	coffee break		
	16:00	18:00	SINUS closing session	EGMUP Task Force on Fuel Temperature Assumptions in Depletion Analyses	CTF training 2
	from	to	track 1	track 2	track 3
Friday 15 May	08:30	10:30	LMFR-T/H 1	LFR Neutronics	
	10:30	11:00	coffee break		
	11:00	12:30	LMFR-T/H 2		

Organising committee

Local organisers

- David NOVOG, McMaster University, Canada
- Raluca PETRIA, McMaster University, Canada
- Karin STEPHENSON, McMaster University, Canada
- Wei SHEN, Conexus Nuclear Inc., Canada

Technical programme advisor

- Prof. Kostadin IVANOV, North Carolina State University (NCSU), United States

Session chairs

- Dr. Agustin ABARCA, NCSU, United States
- Dr. Arzu ALPAN, Oak Ridge National Laboratory, United States
- Prof. Dr. Maria N. AVRAMOVA, NCSU, United States
- Dr. Laurent BUIRON, CEA, France
- Dr. Roberto DA VIÀ, ENEA, Italy
- Dr. Grigorios DELIPEI, NCSU, United States
- Dr. Aaron EPINEY, Idaho National Laboratory, United States
- Prof. Nuria GARCIA HERRANZ, Universidad Politécnica de Madrid (UPM), Spain
- Prof. Alireza HAGHIGHAT, Virginia Tech, United States
- Dr. Jason HOU, NCSU, United States
- Dr. Jean-Marie LE CORRE, Westinghouse, Sweden
- Dr. Francesco LODI, ENEA, Italy
- Prof. Bojan PETROVIC, Georgia Institute of Technology, United States
- Mr. Géraud PRULHIÈRE, CEA, France
- Dr. Pascal ROUXELIN, NCSU, United States
- Dr. Nicolas STAUFF, Argonne National Laboratory, United States
- Dr. Claire VAGLIO-GAUDARD, CEA, France
- Prof. Xu WU, NCSU, United States
- Prof. Xingang ZHAO, University of Tennessee, United States

NEA Secretariat

- Dr. Davide MANCUSI, WPRS Secretariat
- Mr. Charles BORY, SINBAD TRG Secretariat

When?

11 - 15 May 2026

McMaster University, Hamilton, ON, Canada

Contact

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[Register now!](#)