

IAEA Interregional Workshop on Aspects of Modelling and Simulation in Gen-IV Type SMR Developments

Report of Contributions

Contribution ID: 1

Type: **not specified**

Opening Remarks and Introduction by IAEA and Rosatom

Monday 3 November 2025 09:00 (45 minutes)

Presenters: MAZEPOV, Victor; KRIVENTSEV, Vladimir (IAEA)

Contribution ID: 2

Type: **not specified**

Progress in Technology of Innovative Reactors

Presenter: Dr KRIVENTSEV, Vladimir (IAEA)

Contribution ID: 3

Type: **not specified**

CEFR Design and Main Results of the Benchmark Simulations Part 1

Monday 3 November 2025 10:30 (45 minutes)

Presenter: Mr HUO, Xingkai (China Institute of Atomic Energy)

Contribution ID: 4

Type: **not specified**

Small Modular Reactor Designs

Monday 3 November 2025 13:00 (45 minutes)

Presenter: MIASSOEDOV, Alexei

Contribution ID: 5

Type: **not specified**

Review of Six Gen-IV Innovative Concepts

Monday 3 November 2025 09:45 (45 minutes)

Presenter: KRIVENTSEV, Vladimir (IAEA)

Contribution ID: 6

Type: **not specified**

A Perspective on Large-Scale Development of Nuclear Energy in the 21 Century. Part 1

Monday 3 November 2025 13:45 (45 minutes)

(online)

Presenter: Mr SUBBOTIN, Stanislav (Kurchatov Institute)

Contribution ID: 7

Type: **not specified**

OpenMC Monte-Carlo Code, and its Practical Application to the Neutronic Simulation of CEFR Part 1

Tuesday 4 November 2025 09:00 (45 minutes)

Presenter: CHOE, Jiwon (Korea Atomic Energy Research Institute (KAERI))

Contribution ID: 8

Type: **not specified**

MSRs: Potential for Modularity and Sizing

Presenter: KREPEL, Jiri (PSI)

Contribution ID: 9

Type: **not specified**

Radionuclide Migration Modeling for Radiation Safety Assessment: Case Study of the SHELF-M SMR

Tuesday 4 November 2025 15:45 (45 minutes)

Presenter: Mr AZNABAEV, Victor (N.A. Dollezhal Research and Development Institute of Power Engineering)

Contribution ID: **10**

Type: **not specified**

World Status of Fast Reactors: In Operation, In Construction, and under Development

Tuesday 4 November 2025 13:00 (45 minutes)

Presenter: KRIVENTSEV, Vladimir (IAEA)

Contribution ID: **11**

Type: **not specified**

Fuel and Fuel Cycle aspects for Gen-IV reactors

(online)

Presenter: Dr BYCHKOV, Alexander (Expert)

Contribution ID: 12

Type: **not specified**

Overview of IAEA Activities on Safety of Gen-IV Systems

(online)

Presenter: TIBERI, Vincenzo (IAEA)

Contribution ID: 13

Type: **not specified**

Considerations on Safety of LMFR with Focus on Severe Accidents

(online)

Presenter: TIBERI, Vincenzo (IAEA)

Contribution ID: **14**

Type: **not specified**

Production of H₂ and Non-Electrical applications of Gen-IV SMRs

(online)

Presenter: Prof. EL-EMAM, Rami (Ontario Tech.)

Contribution ID: 15

Type: **not specified**

Development and Future of MNSR

Presenter: Dr DAN, Peng (CIAE)

Contribution ID: 16

Type: **not specified**

CEFR Design and Main Results of the Benchmark Simulations Part 2

Monday 3 November 2025 11:30 (45 minutes)

Presenter: Mr HUO, Xingkai (China Institute of Atomic Energy)

Contribution ID: 17

Type: **not specified**

A Perspective on Large-Scale Development of Nuclear Energy in the 21 Century. Part 2

Monday 3 November 2025 15:00 (45 minutes)

(online)

Presenter: Mr SUBBOTIN, Stanislav (Kurchatov Institute)

Contribution ID: **18**

Type: **not specified**

Status of HTGR developments in Russia

Monday 3 November 2025 15:45 (45 minutes)

(online)

Presenter: Mr FOMICHENKO, Peter (NRC Kurchatov Institute)

Contribution ID: 19

Type: **not specified**

OpenMC Monte-Carlo Code, and its Practical Application to the Neutronic Simulation of CEFR Part 2

Tuesday 4 November 2025 09:45 (30 minutes)

Presenter: CHOE, Jiwon (Korea Atomic Energy Research Institute (KAERI))

Contribution ID: 20

Type: **not specified**

OpenMC Monte-Carlo Code, and its Practical Application to the Neutronic Simulation of CEFR Part 3

Tuesday 4 November 2025 10:30 (45 minutes)

Presenter: CHOE, Jiwon (Korea Atomic Energy Research Institute (KAERI))

Contribution ID: 21

Type: **not specified**

OpenMC Monte-Carlo Code, and its Practical Application to the Neutronic Simulation of CEFR Part 4

Tuesday 4 November 2025 11:15 (45 minutes)

Presenter: CHOE, Jiwon (Korea Atomic Energy Research Institute (KAERI))

Contribution ID: 22

Type: **not specified**

Molten Salt Reactors: Prospects and problem. Part 1

Tuesday 4 November 2025 13:45 (45 minutes)

Presenter: SUBBOTIN, Stanislav (Kurchatov Institute)

Contribution ID: 23

Type: **not specified**

Molten Salt Reactors: Prospects and problem. Part 2

Tuesday 4 November 2025 15:00 (45 minutes)

Presenter: SUBBOTIN, Stanislav (Kurchatov Institute)

Contribution ID: 24

Type: **not specified**

National Research Nuclear University MEPhI. Training of personnel for modeling the characteristics of innovative nuclear reactors

Wednesday 5 November 2025 10:00 (30 minutes)

Presenter: TIKHOMIROV, Georgy (NRNU MEPhI)

Session Classification: Technical visit to NRNU MEPhI

Contribution ID: 25

Type: **not specified**

Generation IV model design uncertainties related to nuclear data

Wednesday 5 November 2025 10:30 (45 minutes)

Presenter: RYZHKOV, Alexander (National Research Nuclear University MEPhI)

Session Classification: Technical visit to NRNU MEPhI

Contribution ID: 26

Type: **not specified**

Excursion at Virtual Reality Lab

Wednesday 5 November 2025 11:45 (1h 15m)

Session Classification: Technical visit to NRNU MEPhI

Contribution ID: 27

Type: **not specified**

Training: OpenMC Monte-Carlo Code and its Practical Application to the Neutronic Simulation

Wednesday 5 November 2025 13:00 (3 hours)

Presenter: RYZHKOV, Alexander (National Research Nuclear University MEPhI)

Session Classification: Technical visit to NRNU MEPhI

Contribution ID: **28**

Type: **not specified**

Transfer to MEPhI and obtaining pass to territory

Wednesday 5 November 2025 08:00 (1h 30m)

Session Classification: Technical visit to NRNU MEPhI

Contribution ID: 29

Type: **not specified**

IAEA Activities in Support of Modelling and Simulation for Advanced Reactor Designs

Thursday 6 November 2025 10:00 (45 minutes)

Presenter: MLIASSOEDOV, Alexei

Contribution ID: **30**

Type: **not specified**

Virtual Technical Tour to the Beloyarsk NPP

Thursday 6 November 2025 10:45 (1 hour)

Presenter: Ms SOLOVYOVA, Inna (Rosatom Technical Academy)

Contribution ID: 31

Type: **not specified**

Virtual Technical Tour to the First Floating NPP Akademik Lomonosov

Thursday 6 November 2025 12:15 (1 hour)

Presenter: Mr KHARLAMPIEV, Pavel (Rosenergoatom)

Contribution ID: **32**

Type: **not specified**

Closing Ceremony

Thursday 6 November 2025 13:15 (45 minutes)

Presenters: MAZEPOV, Victor; KRIVENTSEV, Vladimir (IAEA)

Contribution ID: **33**

Type: **not specified**

Visit to ATOM Exhibition

Thursday 6 November 2025 15:30 (3h 30m)