

Preliminary

Programme

SMaRRt 2026

SMR-AMR and R&D: Innovating Together

22 April 2026

Leiden, The Netherlands



EUROPEAN NUCLEAR SOCIETY

Wednesday 22 April 2026

SMR-AMR and R&D: Innovating Together – SMaRRt 2026

9am – 10.30am Opening Session – Clearing the hurdles: Safety, Licensing, and Support Frameworks for SMR Deployment

Chair: S. Monti, European Nuclear Society

European Commission SMR IA: Present Status and Key Issues

B. Salha, SNETP

Critical Challenges for Innovative Reactor Technologies

F. Reitsma, IAEA

Rolls-Royce – Towards reactor licensing: progress and challenges

S. McFarlane Smith (tbc)

Advancing U.S. Reactor Demonstrations: An Overview of the 2025–2026 Pilot Program

N.N. , DOE (tbc)

10.30am – 11.00am Coffee Break

11.00am – 12.30pm Joining Competences to Overcome Critical Challenges in Fuel Development (SMaRRt)

Chair:

Overview on developments for advanced fuel, with a specific focus on HTR project development

O. Tougait, Framatome

Progress and timeline for Molten salt fuel manufacturing and reprocessing

E. CAPELLI, ORANO

Thorizon's developments related to fuel development

S. de Groot, Thorizon

Eagle 300: recent advances in fuel development

M. Frignani, Ansaldo

Each presenter will give a presentation of 10 minutes, followed by a Panel Discussion with all presenters.

12.30pm – 1.30pm **Lunch**

1.30pm – 2.50pm **Addressing Reactor Design and Technology Challenges (SMaRRt)**

Chair:

Industrializing sodium-cooled fast reactors for a carbon-free future

C. Bisot, HEXANA, France

Licensing of a novel nuclear test facility for the safe testing of new reactor concepts – A project by Copenhagen Atomics and PSI

M. Streit, PSI, Switzerland

LEANDREA – Advancing the design for timely realization

M. Greco, SCK-CEN, Belgium

Advances in Lead Cooled Reactor Safety, Materials, and Instrumentation (tbc)

N.N. Newcleo

2.50pm – 3.20pm **Coffee Break**

3:20pm – 5.20pm **R&D Support for Testing and Safety Assessment (SMaRRt)**

Chair:

Advancing MSR Technology: The Copenhagen Atomics-PSI Molten Salt Experiment – Progress Since RRFM 2025

Pavel, P. (1); Streit, M. (1); Stubsgaard, A. (2);
Swalwell, G. (2); Chierici, L. (2); Pautz, A. (1)
1 – Paul Scherrer Institut, Switzerland
2 – Copenhagen Atomics A/S, Switzerland

HITEC – In-pile Creep evaluation for materials of advanced reactors

Laot, M. (1); Hania, R. (1); Naziris, K. (1); Fedorov, S. (1); Elenbaas, J. (1); Rossouw, D. (1);
Kronenberg, T. (1)
1 – NRG PALLAS, Netherlands

Fuel Irradiation Testing Capabilities at BR2 for Small Modular Reactors

Boer, B. (1); Bosch, R.-W. (1); Bonny, G. (1);
Verwerft, M. (1)
1 – SCK CEN (Belgian Nuclear Research Centre), Belgium

Impact of Corrosion and Estimation of Effective Corrosion Depth in 15-15Ti Cladding Tubes Using the Small Punch Test Technique	Holmstrom, S. (1); Simonovski, I. (2); Nindiyasari, F. (3) 1 - SCKCEN, Belgium 2 - JRC, Joint Research Centre, Netherlands 3 - NRG PALLAS, Netherlands
Analysis and preparation of the methodology for assessing the placement of small and medium reactors in the Czech Republic conditions	Novak, O. (1); Kozic, J. (1); Frantova, M. (1); Stemberk, P. (1); Rastislav, M. (1); Zemanova, A. (1); Vojackova, J. (2); Hroch, T. (3); Jelínek, J. (3) 1 - Czech Technical University in Prague, Czech Republic 2 - Brno University of Technology, Czech Republic 3 - Czech Geological Survey, Czech Republic
A Comparative Analysis of Thermal Design Predictions and In-Pile Temperature Measurements for High-Temperature Neutron Irradiation Testing of Materials in HANARO	Kim, J. W. (1); Yang, S. W. (1); Park, J. (1); Choo, K. N. (1) 1 - Korea Atomic Energy Research Institute, Korea, Republic of

SMaRRt - Poster

Irradiation Performance of Ni-base Structural Alloys for Applications in Molten Salt Nuclear Reactors	Naziris, K. (1); Marques Pereira, V. (1); Hania, R. (1); Rossouw, D. (1) 1 - NRG PALLAS, Netherlands
Pre-Feasibility Study of Uranium Silicide-Aluminium Dispersion Fuel as an Alternative Fuel in WWR-K Research Reactor	Sairanbayev, D. (1); Shaimerdenov, A. (1); Gizatulin, S. (1) 1 - Institute of Nuclear Physics, Kazakhstan

7.30pm – 0.00am Conference Dinner

Important – Participation is subject to the purchase of a conference dinner ticket.



EUROPEAN NUCLEAR SOCIETY