



Sunday October 18, 2026	
17:00–20:00	Welcome Reception TRATTORIA AL POMPIERE Located on the 13th floor of Hankyu Umeda Main Store, in the heart of Osaka

Monday – October 19, 2026	
8:20–9:10	Registration
Opening Ceremony	
9:10–9:30	Welcome * Mr. Kondo – Honorary Chairman, Toyo Tanso Co., Ltd. * Mr. Aibe – METI (Ministry of Economy, Trade and Industry)
9:30–9:50	Keynote Toyo Tanso's Contributions to High-Temperature Gas Reactors and Future Prospects Mr. Tatsuro Hamada Director, Corporate Planning Division – Toyo Tanso Co., Ltd.
9:50–10:10	Keynote Overview of HTGR Project in JAEA Mr. Nariaki Sakaba Director, HTGR Project Management Office - JAEA
10:10–10:40	 Coffee Break

Session 1: Microstructure and characterization Chairs: Shinichi Okayama – Toyo Tanso Co., Ltd., and Nidia Gallego – Oak Ridge National Laboratory	
10:40–11:00	P1 Fundamental study on graphite grinding control and its effects on physical properties Junji Takada – Toyo Tanso Co., Ltd.
11:00–11:20	P2 Nanometre-to-micrometre pore analysis of nuclear graphite via inverse modelling of microscopy, gas adsorption and porosimetry Bradley Moresby-White – University of Manchester/University of Plymouth
11:20–11:40	P3 Multi-scale Microstructural Characterisation and Investigation of Coupled Irradiation and Fission Product Interactions in Nuclear Graphite Emily Aradi – The University of Manchester
11:40–12:00	P4 Modelling Dislocation Induced Buckling and Dimensional Change in Graphite Daria Nasartdinova – Loughborough University
12:00–12:20	P5 Study of irradiation dimensional change using microstructure-based modelling Xun Zhang – The University of Manchester
12:20–13:40	 Lunch (on your own)
13:40–14:00	P6 Micromechanical Modeling of Graphite Turnaround Under Neutron Irradiation Mihir Pai – University of Texas at Austin
14:00–14:20	P7 Influence of Microstructure on Thermal Oxidation Behaviour of Nuclear Graphite Saleh Zaila – University of Manchester
14:20–14:40	P8 Effect of Low-Temperature Oxidation on Porosity Evolution and Thermal Conductivity in NBG-18 Nuclear Graphite Mouna Saoudi – Canadian Nuclear Laboratories
14:40–15:00	P9 Advancing ORNL's Nuclear Graphite Microstructure Library in NDMAS J. David Arregui-Mena – Oak Ridge National Laboratory
15:00–15:30	 Coffee Break
15:30–15:50	P10 Deep Learning–Enhanced Microstructural Analysis of Nuclear Graphite J. David Arregui-Mena – Oak Ridge National Laboratory

Session 2: Thermo-physical, thermo-chemical, and mechanical properties of graphite Chair: Nassia Tzelepi - UK National Nuclear Laboratory	
15:50–16:10	P11 Effect of Grain Size and Sample Thickness on Graphite Mechanical Behavior Lianshan Lin – Oak Ridge National Laboratory
16:10–16:30	P12 Rapid High Temperature Strength Testing of Graphite Anne Campbell – Oak Ridge National Laboratory
16:30–16:50	P13 From First Reactor to Fleet: Industrializing a 60 MWth HTR and Its Graphite Supply Antoine Guyot – Jimmy Energy
16:50–17:10	Group Photo - Instructions TBD
17:10	Adjourn

Tuesday – October 20, 2026

Session 2: Thermo-physical, thermo-chemical, and mechanical properties of graphite
Cont'd **Chair: Nassia Tzelepi - UK National Nuclear Laboratory**

8:20–8:30	Announcements
8:30–8:50	P14 Determining the Young's and shear modulus of irradiated nuclear graphite from the ACCENT MTR programme Molli Forber – The University of Manchester
8:50–9:10	P15 Fracture toughness assessment of nuclear graphite using small DCDC specimens and 3D displacement-field analysis Hongniao Chen – Guizhou University
9:10–9:30	P16 Partially Grade-Independent Modeling of Irradiated Graphite Michael Saitta – MPR Associates
9:30–9:50	P17 Modelling Graphite Fracture and Strain Rate Dependency Jonathan Wright - EDF Energy
9:50–10:10	P18 An Empirical Thermal Annealing Model for Thermal Conductivity Michael Saitta - MPR Associates
10:10–10:40	 Coffee Break
10:40–11:00	P19 High-temperature thermal cycling and mechanical stability of uranium-impregnated IG-110U, IG-430U graphites for IGR reactor conversion Kuanysh Samarkhanov – National Nuclear Center (Kazakhstan) [Presented by Laura M. Jamison, Argonne National Laboratory]
11:00–11:20	P20 Control of Properties of Boron-Containing Carbon Materials for High Temperature Gas-cooled Reactor Control Rods Kunio Taguchi – Toyo Tanso Co., Ltd
Session 3: Advanced reactors using graphite Chairs: Tjark van Staveren- NRG Chichi Li - NRG	
11:20–11:40	P21 Lessons Learnt from the UK AMR Phase B Programme Athanasia Tzelepi – UKNNL
11:40–12:00	P22 Progress on the UK ENLIGHT programme - Enabling a Lifecycle approach to Graphite for AMR Abbie Jones –The University of Manchester
12:00–12:20	P24 Discrete Element Method for Pebble-Bed Reactors Jona Melia (presented by Saurav Sarkar) – Amentum

12:20–13:40	🍽️ Lunch (on your own)
13:40–14:00	P23 QCOS: An Alternative Approach to Whole-Core Seismic Modelling Saurav Sarkar – Amentum
14:00–14:20	P26 Effect of Fabrication Parameters on the Properties and Performance of Fuel Matrix Compacts Sandra Ike – Idaho National Laboratory
14:20–14:40	P27 Graphite Matrix Production, Characterisation and Qualification at the United Kingdom National Nuclear Laboratory Rachel Smith – UK National Nuclear Laboratory (UKNNL)
14:40–15:00	P69 (replaces P25) Robotic In-situ Graphite Characterisation: From Raman Spectroscopy to the Arkenlight Diamond Beta Spectrometer Jarred Minards – University of Bristol
15:00–15:30	☕ Coffee Break
15:30–15:50	P28 Cesium-Getter Matrix Graphite for HTGR Fuel: Source-Term Reduction without TRISO Redesign Koei Sasaki – Japan Atomic Energy Agency
15:50–16:10	P29 Development of In-situ Ion Irradiation Facility for Rapid Evaluation of Irradiation-Induced Dimensional Changes in Graphite Zhoutong He – Shanghai Institute of Applied Physics
16:10–16:30	P30 Advancing Predictive Capability for Irradiated Graphite: UK Experience, Model Development and Benchmarking Richard Gray – Frazer-Nash Consultancy
16:30–16:50	P31 Determining the Behaviour and Migration of Metallic Fission Products in Nuclear Graphite Gregory Blom – University of Manchester
16:50–17:10	P32 From Reactor Measurements to Atomistic Mechanisms of Radioactive Dust in HTGRs Rui Nie – Tsinghua University
17:10	Adjourn

Wednesday – October 21, 2026	
8:20–8:30	Announcements
Session 4: Advanced reactors using graphite (emphasis MSRs) Chairs: J. David Arregui-Mena – Oak Ridge National Laboratory	
8:30–8:50	P33 Investigating Molten Salt Interactions with Nuclear Grade Graphites. Alex Theodosiou – The University of Manchester
8:50–9:10	P34 Comparing FLiNaK and FLiBe infiltration in graphite for molten salt reactors Diego Muzquiz – University of Michigan (presented by Anne Campbell)
9:10–9:30	P35 The effect of graphite characteristics on the extent of infiltration of molten LiCl-KCl salt Francesca Brooks-Ward – The University of Manchester
9:30–9:50	P37 Understanding Wetting Behavior of Graphite: the Importance of Experimental Conditions on Contact Angle Measurement Nidia Gallego – Oak Ridge National Laboratory
9:50–10:10	P38 Preparation and Thermal Properties of Graphite-based TRISO Particle Dispersed Fuel Elements in Molten salt reactors Yajuan Zhong – Shanghai Institute of Applied Physics
10:10–10:40	 Coffee Break
Session 5: Irradiation damage and in-pile experiments Chairs: Will Windes – Idaho National Laboratory	
10:40–11:00	P40 Graphite Irradiation Testing at the Idaho National Laboratory Kip Kleimenhagen – Idaho National Laboratory
11:00–11:20	P41 High Dose Neutron Irradiation Experiment of Different Graphite Formulations and Conditions. Matthew Arrowood (Presented by Kip Kleimenhagen) Idaho National Laboratory
11:20–11:40	P42 Highlights of the IAEA Nuclear Graphite Knowledge Base and Creep TECDOC-2125 Alina Constantin – International Atomic Energy Agency, IAEA
11:40–12:00	Announcements – Future INGSMs
12:00–17:00	 Lunch (on your own) - Free time and travel time to dinner
17:00–20:00	Conference Dinner FUNATSURU Kyoto Kamogawa Resort (See program for details)

Thursday – October 22, 2026	
9:00	Late start after conference dinner
9:00–9:10	Announcements
Cont'd	Session 5: Irradiation damage and in-pile experiments Chairs: Will Windes – Idaho National Laboratory
9:10–9:30	P43 NRG's graphite irradiation projects for SIAMC for HTR application Chichi Li – NRG Pallas
9:30–9:50	P44 Results from X Energy Size Effect and Post-Irradiation Examination Campaigns Anne Campbell – Oak Ridge National Laboratory
9:50–10:10	P45 Graphite Qualification Irradiation for the Terrestrial Energy IMSR reactor Tjark van Staveren – NRG PALLAS
10:10–10:40	 Coffee Break
10:40–11:00	P46 NRG PALLAS graphite qualification program for Kairos Power Tjark van Staveren – NRG PALLAS
11:00–11:20	P47 Isotropic Graphite Ready for HTGR and MSR Mark Davies (Marad) / Houzheng Wu (SIAMC)
11:20–11:40	P48 Graphite Oxidation Assessment for HTGR Core Components during Normal Operation Valentina Angelici – MPR Associates
11:40–12:00	P49 Consequences of Post-Cracking Behaviour of the UK Advanced Gas-cooled Reactors Rory Miller – EDF
12:00–12:20	P50 Probabilistic Modelling of Potential Cracking Pathways in AGR Graphite Cores Ahmadreza Farrokhnia – University of Manchester
12:20–13:40	 Lunch (on your own)

Session 6: Standards, licensing, and graphite qualification Chair: James McGladdery – Kairos Power	
13:40–14:00	P51 Acid-Free Purification of Albany Breccia-Pipe Graphite to 5N, in Search of a Specification Moe Jiwan – Zentek Ltd
14:00–14:20	P52 How to Qualify Graphite for Nuclear Application William Windes – Idaho National Laboratory
14:20–14:40	P53 Evaluation of IG-110 Graphite for HTGR: Productivity, Quality, and Material Properties Takashi Osaki – Toyo Tanso Co., Ltd.
14:40–15:00	P54 Material Properties and Machinability of Carbon Blocks for HTGR Insulation Tatsuya Akiyama – Toyo Tanso Co., Ltd.
15:00–15:30	 Coffee Break
15:30–15:50	P55 Analysis of sensitivity of Probability of Failure to irradiated material properties for graphite core component Martin Brusconi Musso – NRG PALLAS
Session 7: Graphite waste management and decommissioning Chairs: Abbie Jones – University of Manchester Alex Theodosiou – University of Manchester	
15:50–16:10	P56 A Methodical Approach to HTGR Graphite Waste Management Nassia Tzelepi – UKNNL
16:10–16:30	P57 Introducing ARGO - a UK working group to Advance Reactor Graphite Opportunities Richard Harris – Nuclear Restoration Services
16:30–16:50	P63 Full-Scale Experimental Validation at Latina NPP of an Advanced End Effector for Graphite Block Retrieval Riccardo Chebac – GraphiCore S.r.l.
16:50	Adjourn

Friday – October 23, 2026	
8:20–8:30	Announcements
Cont'd	Session 7: Graphite Waste Management and Decommissioning Chairs: Abbie Jones – University of Manchester Alex Theodosiou – University of Manchester
8:30–8:50	P60 Short-listed options for innovative alternative approaches to the management of Magnox graphite reactor cores Richard Harris – Nuclear Restoration Services
8:50–9:10	P61 Impurity-Driven Activation of Graphite Moderators in Advanced Reactor Systems Thaneshwor Kaloni – Canadian Nuclear Laboratories
9:10–9:30	P62 Validating a Null Result: Wigner Energy Assessment of Irradiated FRJ-2 Reflector Graphite Dominik Boya – TU Wien
9:30–9:50	P58 Irradiated Graphite Waste Management at Tokai Nuclear Power Plant: Challenges and Progress Takayuki Koashi – The Japan Atomic Power Company
9:50–10:10	P64 From retrieval to conditioning: developing the Nibble and Vacuum technique for graphite decommissioning Nathalie Edwards (presented by Abbie Jones) University of Manchester
10:10–10:40	 Coffee Break
10:40–11:00	P65 Recent characterisation activities to inform decommissioning strategies for the Trawsfynydd Magnox reactors Richard Harris – Nuclear Restoration Services
11:00–11:20	P66 ‘Fast Raman’ Spectroscopy and Beta Spectrometry for In-Situ Graphite Characterisation Josh Saunders – University of Bristol
11:20–11:40	P67 Selective Removal of β - and γ -Emitting Radionuclides from Irradiated Reactor Graphite Using Thermal Treatment Lorie Meunier – Johannes Gutenberg University
11:40–12:00	P68 Decontamination of β - and γ -Emitters from i-Graphite Using Super- and Subcritical Fluid Extraction Niklas Heiß – Johannes Gutenberg University Mainz"
12:00–12:20	Workshop Ends