

INGSM-26 Program

Time	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday
8:20-8:30			Announcements	Announcements	Announcements	Announcements
8:30-8:50		Registration	P14 Determining the Young's and shear modulus of irradiated nuclear graphite from the ACCENT MTR programme Molli Forber The University of Manchester	P13 Investigating Molten Salt Interactions with Nuclear Grade Graphites Alex Theodosiou The University of Manchester	late start after late conference dinner	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			P15 Fracture toughness assessment of nuclear graphite using small CDCC specimens and 3D displacement-field analysis Hongtao Chen Research Center of Space Structures, Guizhou University, Guiyang 550025, China	P14 Comparing FLiNaK and FLiBe infiltration in graphite for molten salt reactors Diego-Muñoz Anne Campbell University of Michigan		P61 Impurity-Driven Activation of Graphite Moderators in Advanced Reactor Systems Thaneswor Kaloni Canadian Nuclear Laboratories, Chalk River Laboratories, Chalk River, ON K0J1J0, Canada
9:10-9:30		Welcome * Mr. Kondo - Toyo - Honorary Chairman * from METI (Ministry of Economy, Trade and Industry)	P16 Partially Grade-Independent Modeling of Irradiated Graphite Michael Salitta MPR Associates	P15 The effect of graphite characteristics on the extent of infiltration of molten LiCl-KCl salt Francesca Brooks-Ward The University of Manchester	P43 NRG's graphite irradiation projects for SIAMC for HTR application Chichi Li NRG Pallas	P62 Validating a Null Result: Wigner Energy Assessment of Irradiated FRJ-2 Reflector Graphite Dominik Boya TU Wien
9:30-9:50		Keynote Toyo Tanso's Contributions to High-Temperature Gas Reactors and Future Prospects Tatsuro Hamada, Director, Corporate Planning Division - Toyo Tanso	P17 Modelling Graphite Fracture and Strain Rate Dependency Jonathan Wright EDF Energy UK	P16 Revisit graphite brick design of MSRE Derek Tsang Melody Tech	P44 Results from X Energy Size Effect and Post-Irradiation Examination Campaigns Anne Campbell Oak Ridge National Laboratory	P63 Full-Scale Experimental Validation at Latina NPP of an Advanced End Effector for Graphite Block Retrieval Riccardo Chebac GraphCore S.r.l
9:50-10:10		Keynote Overview of HTGR Project in JAEA Nariaki Sakaba, Director, HTGR Project Management Office - JAEA	P18 An Empirical Thermal Annealing Model for Thermal Conductivity Diana Liepinya MPR Associates	P17 Understanding Wetting Behavior of Graphite: the Importance of Experimental Conditions on Contact Angle Measurement Nidia Gallego Oak Ridge National Laboratory	P45 Graphite Qualification Irradiation for the Terrestrial Energy IMSR reactor Tjark van Staveren NRG PALLAS	P64 From retrieval to conditioning: developing the Nibble and Vacuum technique for graphite decommissioning Nathalie-Edwards Abbie Jones University of Manchester
10:10-10:40		☕ Coffee Break	☕ Coffee Break	☕ Coffee Break	☕ Coffee Break	☕ Coffee Break
10:40-11:00		P1 Fundamental study on graphite grinding control and its effects on physical properties Junji Takada - Toyo Tanso Co., Ltd.	P19 High-temperature thermal cycling and mechanical stability of uranium-impregnated IG-110U, IG-430U graphites for IGR reactor conversion Kuanysh Samarkhanov Institute of Atomic Energy Branch of National Nuclear Center of the Republic of Kazakhstan	P18 Preparation and Thermal Properties of Graphite-based TRISO Particle Dispersed Fuel Elements in Molten salt reactors Yajuan Zhong Shanghai Institute of Applied Physics, Chinese Academy of Sciences	P46 NRG PALLAS graphite qualification program for Kairos Power Tjark van Staveren NRG PALLAS	P65 Recent characterisation activities to inform decommissioning strategies for the Tröfessfnydd Magnox reactors Richard Harris Nuclear Restoration Services
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	P20 Control of Properties of Boron-Containing Carbon Materials for High Temperature Gas-cooled Reactor Control Rods Kunio Taguchi TOYO TANSO Co., Ltd	P19 Pyrolytic Graphite Coatings for Molten Salt Reactors: Superior Corrosion Resistance in FLiNaK at 800 °C Santosh M. Indira Gandhi Centre for Atomic Research-Kalpakkam, Homi Bhabha National Institute-Mumbai	P47 Isotropic Graphite Ready for HTGR and MSR Mark Davies (Marad) / Houzheng Wu (SIAMC)	P66 Fast Raman Spectroscopy and Beta Spectrometry for In-Situ Graphite Characterisation Josh Saunders University of Bristol
11:20-11:40		P3 Multi-scale Microstructural Characterisation and Investigation of Coupled Irradiation and Fission Product Interactions in Nuclear Graphite Emily Aradi Nuclear Graphite Research Group, Department of Mechanical and Aerospace Engineering, School of Engineering, Henry Royce Institute, University of Manchester, M13 9LP, UK	P21 Lessons Learnt from the UK AMR Phase 8 Programme Athanasia Tzelepi UKNNL	P40 Graphite Irradiation Testing at the Idaho National Laboratory Kip Kleinenhagen Idaho National Laboratory	P48 Graphite Oxidation Assessment for HTGR Core Components during Normal Operation Valentina Angelici MPR Associates	P67 Selective Removal of β- and γ-Emitting Radionuclides from Irradiated Reactor Graphite Using Thermal Treatment Lorie Meunier Technische Hochschule Mannheim and Department of Chemistry – TRIGA Site, Johannes Gutenberg University Mainz
11:40-12:00		P4 Modelling Dislocation Induced Buckling and Dimensional Change in Graphite Daria Nasartdinova Loughborough University	P22 Progress on the UK ENLIGHT programme - Enabling a Lifecycle approach to Graphite for AMR Abbie Jones Nuclear Graphite Research Group - The University of Manchester UK	P41 High Dose Neutron Irradiation Experiment of Different Graphite Formulations and Conditions. Matthew-Accowood-Kip Kleinenhagen Idaho National Laboratory	P49 Consequences of Post-Cracking Behaviour of the UK Advanced Gas-cooled Reactors Rory Miller EDF	P68 Decontamination of β- and γ-Emitters from i-Graphite Using Super- and Subcritical Fluid Extraction Niklas Heil "Technische Hochschule Mannheim" AND "Department of Chemistry – TRIGA Site, Johannes Gutenberg University Mainz"
12:00-12:20		P5 Study of irradiation dimensional change using microstructure-based modelling Xun Zhang The Nuclear Graphite Research Group (NGRG), Department of Mechanical and Aerospace Engineering, Henry Royce Institute, The University of Manchester	P23 QCOS: An Alternative Approach to Whole-Core Seismic Modelling Saurav Sarkar Amentum	P42 Highlights of the IAEA Nuclear Graphite Knowledge Base and Creep TECDOC-2125 Alina Constantin IAEA	P50 Probabilistic Modelling of Potential Cracking Pathways in AGR Graphite Cores Ahmadreza Farrokhnia University of Manchester	Workshop Ends
12:20-1:40		🍽 Lunch	🍽 Lunch	🍽 Lunch	🍽 Lunch	
1:40-2:00		P6 Micromechanical Modeling of Graphite Turnaround Under Neutron Irradiation Mihir Pai The University of Texas at Austin	P24 Discrete Element Method for Pebble-Bed Reactors Jing-Meliss Saurav Sarkar Amentum	Free time and Travel time to dinner	P51 Acid-Free Purification of Albany Breccia-Pipe Graphite to SN, in Search of a Specification Mohammed (Moe) Iwan Zentek Ltd	—
2:00-2:20		P7 Influence of Microstructure on Thermal Oxidation Behaviour of Nuclear Graphite Saleh Zalla University of Manchester	P25 Analysis of Control Rod and Reserve Shutdown Systems for a Scaled-Up U-Battery Design Dilek Kale The University of Manchester		P52 How to Qualify Graphite for Nuclear Application William Windes Idaho National Laboratory	—
2:20-2:40		P8 Effect of Low-Temperature Oxidation on Porosity Evolution and Thermal Conductivity in NBG-18 Nuclear Graphite Mouna Saeidi Advanced Fuels & Reactor Physics Branch, Canadian Nuclear Laboratories, Chalk River, Ontario, Canada	P26 Effect of Fabrication Parameters on the Properties and Performance of Fuel Matrix Compacts Sandra Ike Idaho National Laboratory		P53 Evaluation of IG-110 Graphite for HTGR Productivity, Quality, and Material Properties Takashi Osaki Toyo Tanso Co., Ltd.	—
2:40-3:00		P9 Advancing ORNL's Nuclear Graphite Microstructure Library in NDMAS J. David Arregui-Mena Oak Ridge National Laboratory	P27 Graphite Matrix Production, Characterisation and Qualification at the United Kingdom National Nuclear Laboratory Rachel Smith United Kingdom National Nuclear Laboratory (UKNNL)		P54 Material Properties and Machinability of Carbon Blocks for HTGR Insulation Tatsuya Akiyama Toyo Tanso Co., Ltd.	—
3:00-3:30		☕ Coffee Break	☕ Coffee Break		☕ Coffee Break	—
3:30-3:50		P10 Deep Learning-Enhanced Microstructural Analysis of Nuclear Graphite J. David Arregui-Mena Oak Ridge National Laboratory	P28 Cesium-Getter Matrix Graphite for HTGR Fuel: Source-Term Reduction without TRISO Redesign Koel Sesaki Japan Atomic Energy Agency		P55 Analysis of sensitivity of Probability of Failure to irradiated material properties for graphite core component Martin Brusconi Musso NRG PALLAS	—
3:50-4:10		P11 Effect of Grain Size and Sample Thickness on Graphite Mechanical Behavior Lianshan Lin Oak Ridge National Laboratory	P29 Development of In-situ Ion Irradiation Facility for Rapid Evaluation of Irradiation-Induced Dimensional Changes in Graphite Zhoulong He Shanghai Institute of Applied Physics, Chinese Academy of Sciences		P56 A Methodical Approach to HTGR Graphite Waste Management Nassia Tzelepi UKNNL	—
4:10-4:30		P12 Rapid High Temperature Strength Testing of Graphite Anne Campbell Oak Ridge National Laboratory	P30 Advancing Predictive Capability for Irradiated Graphite: UK Experience, Model Development and Benchmarking Richard Gray Frazer-Nash Consultancy		P57 Introducing ARGO - a UK working group to Advance Reactor Graphite Opportunities Richard Harris Nuclear Restoration Services	—
4:30-4:50		P13 Title: From First Reactor to Fleet: Industrializing a 60 MWe HTR and Its Graphite Supply Clement Parqu - Jimmy Energy	P31 Determining the Behaviour and Migration of Metallic Fission Products in Nuclear Graphite Gregory Blom Nuclear Graphite Research Group, University of Manchester, M13 9LP, UK		P58 Irradiated Graphite Waste Management at Tokai Nuclear Power Plant: Challenges and Progress Takayuki Koashi The Japan Atomic Power Company	—
4:50-5:10		Group Photo - Instructions TBD	P32 From Reactor Measurements to Atomistic Mechanisms of Radioactive Dust in HTGRs Rui Nie Institute of Nuclear and New Energy Technology, Tsinghua University, Beijing 100084, China		P59 Announcements- FUTURE INGSM	
5:00 - 8:00	Welcome Reception	Adjourn	Adjourn	Conference Dinner	Adjourn	

Note

*Please note that this schedule is tentative and may be subject to minor changes. Thank you for your understanding