

Summit of Materials Science 2026 and GIMRT User Meeting 2026

Date: November 24-26, 2026

Venue: IMR Auditorium, Tohoku University, Onsite, hybrid available

Day 1 Nov. 24

Date	Time		Category	Name	Affiliation	Title
---	10:30	10:45	Opening (Chair: Rie Y. Umetsu, IMR)			
Session A XXXX (Chair: , IMR)						
A-1	10:45	11:15	Invited	Masahiko Demura	NIMS	Advancing Materials DX: Toward AI-Enabled Materials Innovation
A-2	11:15	11:45	Contributed	Goro Miyamoto	IMR	Challenges Toward AI for Metallurgy
A-3	11:45	12:15	Invited	Sophie Primig	UNSW Sydney	Microstructure Engineering via Additive Manufacturing of Stainless Steels
A-4	12:15	12:45	Invited	Wenjun Cai	Virginia Tech	Self-Adaptive Spinel Oxides Enable High-Temperature Self-Lubrication in Metallic Materials
---	12:45	12:55	Photo Session			
---	12:55	14:10	Lunch Break			
Session B XXXX (Chair: , IMR)						
B-1	14:10	14:40	Invited	Yukako Fujishiro	The University of Tokyo	Exploring Quantum Materials under High Pressure
B-2	14:40	15:10	Invited	Takashi Kurumaji	Caltech	Engineering Unconventional Hall Effects through Crystal Symmetry and Spin Textures
B-3	15:10	15:25	Contributed	Kousuke Ishida	The University of Tokyo	Probing Quantum Phase of Matter via Stress/Strain Tuning
B-4	15:25	15:40	Contributed	Atsushi Miyake	IMR	Magnetic-field-driven shape memory effect in RSb2 (R = Ce, Pr, and Nd)
---	15:40	16:00	Break			
B-5	16:00	16:30	Invited	Steven Van Dyck	SCK-CEN	Material research to support life time management of nuclear installations
---	16:30	18:00	Poster Session			
---	18:00	20:00	Mixer			

Day 2 Nov. 25

Day 2

Nov. 19

Date	Time		category	Name	Affiliation	Title
Session C XXXX (Chair: , IMR)						
C-1	9:30	10:00	Invited	Jia Yan Law	University of Seville	Functional High-Entropy Alloys Beyond the Single-Phase Limitation
C-2	10:00	10:30	Invited	Takao Mori	NIMS	Controlling Electrical and Thermal Transport to Attain High Performance Thermoelectric Materials & Devices for Power Generation and Cooling
C-3	10:30	11:00	Invited	Azusa Muraoka	Japan Women's University	Theoretical Studies on the Physical Properties of Photovoltaic Materials
C-4	11:00	11:30	Invited	Teruyasu Mizoguchi	The University of Tokyo	From Physical Simulation to Inverse Design: AI for Materials Science
---	11:30	11:50	Break			
Session D XXXX (Chair: , IMR)						
D-1	11:50	12:05	Contributed	Shin Kiyohara	IMR	Physics-Based Factorized Machine Learning for High-Dielectric Materials Discovery
D-2	12:05	12:20	Contributed	Yulin Xie	IMR	Design of an Automated Autonomous Experiment System for Structural Metallic Materials
D-3	12:20	12:35	Contributed	Kazuyuki Shimizu	Tottori University	Semicoherent precipitate interfaces control hydrogen embrittlement of Al–Zn–Mg alloys
---	12:35	13:55	Lunch Break			
Session E XXXX (Chair: , IMR)						
E-1	13:55	14:25	Invited	Izabela Szlufarska	University of Wisconsin-Madison	Radiation Effects in High-Temperature Ceramics
E-2	14:25	14:55	Invited	Takuya Nomoto	Tokyo Metropolitan University	A Theoretical Study on Ab Initio High-Throughput Magnetic Structure Prediction
E-3	14:55	15:25	Invited	Silke Biermann	École Polytechnique	(TBA)
---	15:25	15:45	Break			
Session F XXXX (Chair: , IMR)						
F-1	15:45	16:15	Invited	Sanghoon Kim	University of Ulsan	Observation of chiral spin waves with NV circular dichroism
F-2	16:15	16:45	Invited	Kyoko Ishizaka	The University of Tokyo	Spatiotemopral imaging of photoexcited quantum materials by ultrafast electron microscopy
F-3	16:45	17:00	Contributed	Takumi Yamazaki	IMR	Oscillatory behavior of spin current transmission in epitaxial NiO (001) films with Pt underlayer thickness
F-4	17:00	17:15	Contributed	Ping Tang	IMR	Ferrons and the Emergence of Ferronics
---	17:15	?	Lab Tour			

Day 3 Nov. 26

Date	Time	category	Name	Affiliation	Title	
Session G XXXX (Chair: , IMR)						
G-1	9:30	10:00	Invited	Junichi Shiogai	The University of Osaka	Straining and stacking freestanding magnetic oxide membranes
G-2	10:00	10:30	Contributed	Takeshi Seki	IMR	Materials Development for Spin Orbitronic Functions
G-3	10:30	10:45	Contributed	Hsiao-Yi Chen	IMR	Ab Initio Study of p-Wave Spin Splitting and Nonlinear Optical Responses in Nanoscale Helimagnets
G-4	10:45	11:15	Invited	Victorino Franco	University of Seville	Hysteresis and Reversibility of Magnetocaloric Materials
G-5	11:15	11:30	Contributed	Yoichi Ikeda	IMR	How Do Solute Atoms Distort Local Structures in Alloys? — Insights from Dilute Titanium Alloys
---	11:30	12:50	Lunch Break			
Session H XXXX (Chair: , IMR)						
H-1	12:50	13:20	Invited	Lijuan Cui	Sichuan University	The irradiation damage effects in Cr-based materials
H-2	13:20	13:50	Invited	Ayumi Itoh	Institute of Science Tokyo	Elucidation of the Fuel Debris Formation Process Using Synchrotron XRD-XAFS: In-Situ Observation of High-Temperature Non-Equilibrium Reactions of Nuclear Materials
H-3	13:50	14:20	Invited	Naoko Oono	Tohoku University	Entropy engineering of RE sites in REBCO for enhanced neutron irradiation tolerance
H-4	14:20	14:35	Contributed	Yuji Tsuchiya	IMR	Exploring the Performance Limits of REBCO Conductors: From Materials to Ultrahigh-Field Magnets
---	14:35	14:55	Closing			