The 10th International Conference on Materials Engineering for Resources

ICMR2025 AKITA

Conference Program

(20251020)

October 24 Fri. - 25 Sat., 2025, ALVE, Akita, Japan

Organized by

The Society of Materials Engineering for Resources of JAPAN

Co-organized by

Akita University

Akita Prefectural University

The 10th International Conference on Materials Engineering for Resources

October 24 Fri – 25 Sat, 2025
Akita Community-based Center 'ALVE', Akita.
The Society of Materials Engineering for Resources of Japan
Co-organized by Akita University and Akita Prefectural University

The 10th International Conference on Materials Engineering for Resources (ICMR2025 AKITA) will be held at the building ‘ALVE’. In the situation where society is undergoing major changes toward the formation of a sustainable society, prominent domestic and foreign researchers will be invited to share recent research results. In addition to the lectures invited, oral and poster presentations on the following five themes related to materials will be presented from a wide range of researchers, including graduate students.

After the conference, full papers adapted from full abstracts can be submitted as original papers for a special issue of the “International Journal of the Society of Materials Engineering for Resources”

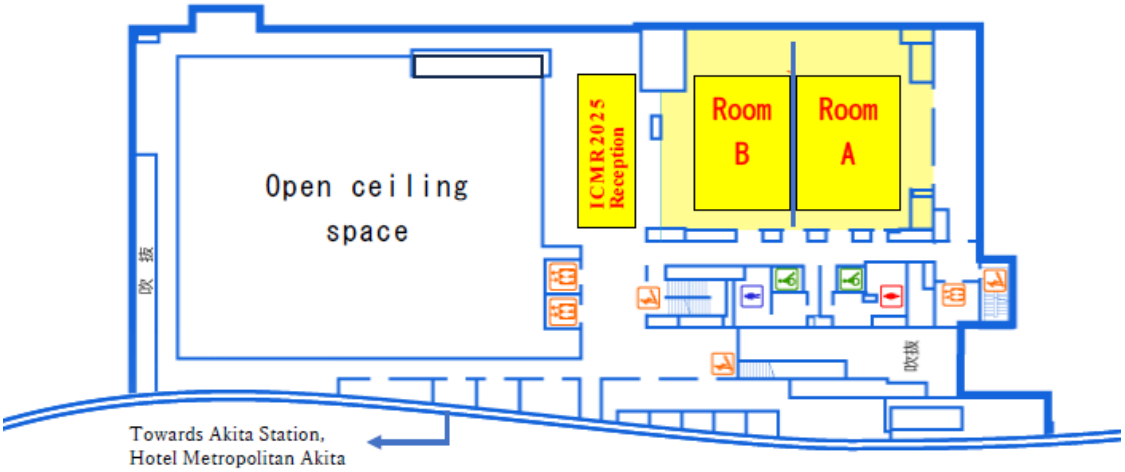
1. Strategies for Environment, Resources, Recycling, and Energy
2. Materials and Intelligent Technologies in Super-Smart Society
3. Biomaterials and Nanotechnology
4. Processing and Characterization of Functional Materials
5. Engineering Materials for Sustainable Development


Oga Peninsula, AKITA

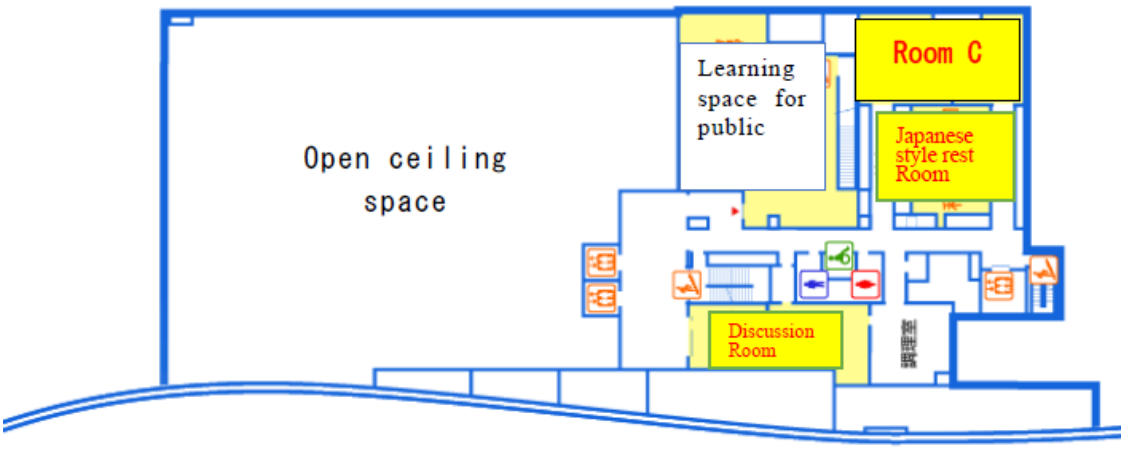
Floor Map of 'ALVE'

1st Floor

2nd Floor



4th Floor



ICMR2025AKITA

Conference Program Time Schedule （tentative）

October 24 (Friday)

9:00～ 9:10	**Opening Ceremony　　Room A, B (2F)**

9:10 ～10:55	**Plenary Lectures　　Room A, B (2F)**	
9:10～ 9:45	PL-1	Trends in Aircraft Electrification Technology and JAXA's Activities **Akira Nishizawa　　JAXA**
9:45～10:20	PL-2	Slide-Ring Materials for Circular Economy **Kohzo Ito　　The University of Tokyo/ National Institute for Materials Science**
10:20～10:55	PL-3	Porous Polymer Particles by A2+B3 Polycondensation for Environmental Applications **Sang Youl Kim　　KAIST**
10:55～11:15	Coffee Break	

Room A (2F)		Room B (2F)		Room C (4F)	
11:15～ 11:55	**Special Session Electrification of Aircraft** **A1-1, A1-2**	11:15～ 11:55	**Processing and Characterization of Functional Materials** **B1-1, B1-2**	11:15～ 12:05	**Special Session of Resource Science and Technology (Graduate School of International Resource Sciences, Akita University)** **C-1, C-2**
12:00～13:00	**Lunch Break**				
13:00～ 15:00	**Special Session Electrification of Aircraft** **A1-3, A1-4, A1-5, A1-6, A1-7, A1-8**	13:00～ 15:00	**Processing and Characterization of Functional Materials** **B1-3, B1-4, B-1-5, B1-6, B1-7, B1-8**	13:00～ 14:40	**Special Session of Resource Science and Technology** **C-3, C-4, C-5, C-6**
				14:40～15:00	Break
15:00～15:20	Break	15:00～15:20	Break	15:00～ 17:05	**Special Session of Resource Science and Technology** **C-7, C-8, C-9, C-10, C-11**
15:20～ 17:00	**Materials and Intelligent Technologies in Super-Smart Society** **A2-1, A2-2, A2-3, A2-4, A2-5**	15:20～ 17:00	**Engineering Materials for Sustainable Development** **B2-1, B2-2, B2-3, B2-4, B2-5**		
18:00～ 20:00	**Conference Party (Hotel Metropolitan Akita)**				

October 25 (Saturday)

Room A , B (2F)		Room C (4F)	
9:00～10:40	**Materials and Intelligent Technologies in Super-Smart Society and others** **A3-1, A3-2, A3-3, A3-4, A3-5**	9:00～10:40	**Strategies for Environment, Resources, Recycling, and Energy** **C-12, C-13, C-14, C-15, C-16**

11:00～12:00	**Poster Presentation (Introduction)**
First Floor, KIRAMEKI Hall Introduction of presenter name and affiliation, and poster title in 30 seconds.	
12:00～13:00	**Lunch Break**

ICMR2025Akita Open Event Time			
13:00～15:30	**(1) Poster Presentation (Core time)** **(2) Corporate Exhibition** **(3) Techno Festa (Manufacturing class)** **(4) Mini-Labo (Laboratory Introduction)**		
Event Location: First Floor, KIRAMEKI Hall Participation of the public is welcome.			
(1) Poster	(2) Corporate Exhibitions	(3) Techno Festa	(4) Mini-Labo

16:20～16:40	**Closing Ceremony Room A, B**

ICMR2025 AKITA

October 24 (Friday)　　2nd Floor Room　A, B

9：00 – 9：10 Opening Ceremony

9：10 – 10：55 Plenary Lecture

Chairperson: **Katsubumi Tajima**

9:10～9:45 PL-1 Trends in Aircraft Electrification Technology and JAXA's Activities
Akira Nishizawa, JAXA

Chairperson: **Satoru Yoshimura**

9:45～10:20 PL-2 Slide-Ring Materials for Circular Economy
Kohzo Ito, The University of Tokyo/ National Institute for Materials Science

Chairperson: **Mitsutoshi Jikei**

10:20～10:55 PL-3 Porous Polymer Particles by A2+B3 Polycondensation for Environmental Applications
Sang Youl Kim, KAIST (Korea Advanced Institute of Science and Technology)

10:55 ～ 11:15 **Coffee Break**

ICMR2025 AKITA

October 24 (Friday) Oral Presentation

2nd Floor Room A

Session name: *Special Session, Electrification of Aircraft*

11：15 – 17：00 Oral Presentation A1-1～A1-8

Chairperson: **Katsubumi Tajima**

11:15-11:35 A1-1 Demonstration of enhanced thermal management in the aircraft under laboratory flight conditions
Victor Norrefeldt, Fraunhofer IBP, Germany

11:35-11:55 A1-2 Turboprop Aircraft Electrification - from Mild Hybridisation to Electric Propulsion
Tao Yang, University of Nottingham, UK

12:00～13:00 **Lunch Break**

Chairperson: **Takahiro Adachi, Takeshi Akinaga**

13:00-13:20 A1-3 Construction of Thermally Conductive Networks within Polymer Composites for Power Electronics Thermal Management
Fang Xu, University of Nottingham, UK

13:20-13:40 A1-4 Recycling and Reusing Power Systems Materials and Technology for Future Aircraft Applications
Patrick Norman, University of Strathclyde, UK

13:40-14:00 A1-5 Light-weighting Aircraft Electrical Power Systems via Electrification of Carbon Fiber Composites
Catherine Jones, University of Strathclyde, UK

14:00-14:20 A1-6 Design Requirement and Partial Discharge Characteristics in a Converter-Fed Motor Winding Model for Electric Propulsion Aircraft
Yuichi Tanaka, JAXA

14:20-14:40 A1-7 Introduction to Efforts in Electrification of Aircraft and Cooling Technologies of Electrification
Shu Fujimoto, IHI

14:40-15:00 A1-8 Experimental Evaluation of Partial Discharge and Insulation Breakdown in Aircraft Motor Coils
Yukihiro Yoshida, Akita University

15:00～15:20 **Coffee Break**

Session name: *Materials and Intelligent Technologies in Super-Smart Society*

15：20 – 17：00 Oral Presentation A2-1～A2-5 (2F)

Chairperson: **Yoichi Kageyama**

15:20-15:40 A2-1 Development of Remote Sensing Technology Combining Satellite Images and Drone Images for Ground Surface Observation at Resource Development Sites
Kazuhide Sumida, Graduate School of International Resource Sciences, Akita University

15:40-16:00 A2-2 UAV Based Mapping and Modelling in Underground Inaccessible Areas
Adrian Binala, Akita University

16:00-16:20 A2-3 Performance of Wi-Fi Halow WSN in real underground mine site
Daniyar Malgazhdar, Graduate School of International Resources Sciences, Akita University

16:20-16:40 A2-4 Reducing Computational Complexity of a CNN Model for In-Situ Hyperspectral Analysis
Ryohei Kawabata, Graduate School of International Resource Sciences, Akita University

16:40-17:00 A2-5 Development of Multi Modal Modelling Methods for GSHP Utilization by Machine Learning
Bozor Ibodov, Graduate School of International Resource Sciences, Akita University

18:00～20：00 **Conference Party (Hotel Metropolitan Akita)**

ICMR2025 AKITA

October 24 (Friday) Oral Presentation

2nd Floor Room B

Session name: *Processing and Characterization of Functional Materials*

11：15 – 15：20 Oral Presentation B1-1～B1-8

Chairperson: **Mamoru Takahashi, Osamu Kamiya**

11:15-11:35 B1-1 A Vision of Machinery: Latent and Ubiquitous AI
Steven Schmid, University of North Carolina at Charlotte, USA

11:35-11:55 B1-2 Blue Diode Laser in Manufacturing: Case Studies on Cu Foil and Hairpin
Tim Pasang, Western Michigan University, USA

12:00～13:00 **Lunch Break**

Chairperson: **Sumio Kato, Nobuaki Kikuchi**

13:00-13:20 B1-3 Effect of microstructure on ionic conductivity of Li-Al-Ti-P oxide solid electrolyte by quantification of SEM images
Takashi Miyazaki, TDK Corporation

13:20-13:40 B1-4 Selective synthesis of thiacalix[n]arenes and the supramolecular functionality of them
Fumio Hamada, Akita University

13:40-14:00 B1-5 Polycondensation of A2 and B3 monomers to form hyperbranched polymers.
Mitsutoshi Jikei, Akita University

14:00-14:20 B1-6 A clay-fragrance intercalation compound developed by solid-state reaction
Kanji Saito, Graduate School of Engineering Science, Akita University

14:20-14:40 B1-7 Study of Grinding Silicon Carbide made by Fused Filament Fabrication for Optical Surfaces
Tien P. J. Herd, University of North Carolina at Charlotte, USA

14:40-15:00 B1-8 Optimizing the Magnetic Properties of Metallic Magnetic Tip for Observation of Clear Magnetic and Dielectric Domains in Various $BiFeO_3$-Based Multiferroic Thin Films Induced by a Local Electric Field
Swati Sucharita Das, Akita University

15:00～15:20 **Coffee Break**

Session name: *Engineering Materials for Sustainable Development*

15：20 – 17：00 Oral Presentation B2-1～B2-5 (2F)

Chairperson: **Satoru Yoshimura**

15:20-15:40 B2-1 Effect of Pt surface layer on hydrogen reaction in [Co80Pt20/Ag] plasmonic multilayer

Hisato Shibata, Akita Industrial Technology Center

15:40-16:00 B2-2 Development of FeCoBPSiCr Amorphous Alloy and Powder with High B_S and High Corrosion Resistance

Moe Kimura, TDK Corporation

16:00-16:20 B2-3 Samarium-cobalt micromagnet

Ryogen Fujiwara, Tech & IP HQ, TDK Corporation

16:20-16:40 B2-4 Growth and properties of epitaxial (Bi,K)TiO_3-Bi(Mg,Ti)O_3-$BiFeO_3$ piezoelectric films prepared by PLD method

Yusuke Sato, TDK Corporation

16:40-17:00 B2-5 Proposal of the Sensitive Measuring Method of Wave Impedance of Magnetic Thin Films by Radiating Microwave with Waveguide

Hitoshi Saito, Akita University

18:00～20：00 **Conference Party (Hotel Metropolitan)**

ICMR2025 AKITA

October 24 (Friday) Oral Presentation

4th Floor Room C

Session name: *Special Session of Resource Science and Technology*

11：15 – 17：05 Oral Presentation C-1～C-11 (4F)

Chairperson: **Ryohei Takahashi**

11:15-11:40 C-1 Metal resources associated with major ore deposits in Indonesia: a prerequisite to ensure the sustainable energy transition
Arifudin Idrus, Universitas Gadjah Mada, Indonesia

11:40-12:05 C-2 Tectonic settings of gold metallogenic belts in Thailand: Geochemical, Geophysical and Geochronological Syntheses
Punya Charusiri, Department of Mineral Resources, Thailand

12:00～13:00 **Lunch Break**

Chairperson: **Tsuyoshi Adachi**

13:00-13:25 C-3 Evaluating a Decade Real Option Analysis for Low Grade Ore Nickel Mining at South Sulawesi, Indonesia
Mohammad Rahman Ardhiansyah, Bandung Islamic University, Indonesia

13:25-13:50 C-4 Beyond Automation: AI's Role in Shaping Sustainable and Human-Centric Mining Operations
M Ahsan Mahboob, University of The Witwatersrand, South Africa

13:50-14:15 C-5 Mining Liabilities and Tailings Management in Peru: Challenges and Strategies for a Sustainable Future
Hernán Gabriel Oyola Gonzales, National University of Engineering, Peru

14:15-14:40 C-6 Improving Flotation Performance of Rare Earth Minerals
Courtney Young, Montana Technological University, USA

14:40～15:00 **Coffee Break**

4th Floor Room C

15：00 – 17：05 Oral Presentation C-7～C-11 (4F)

Chairperson: **Atsushi Shibayama**

15:00-15:25 C-7 Securing Critical Minerals from Primary and Secondary Resources for Battery Materials to Support Energy Transition Program in Indonesia
Widi Astuti, National Research and Innovation Agency, Indonesia

15:25-15:50 C-8 Waste generation in Semiconductor industry and their Resources recycling and Waste valorization
Li Pang Wang, National Taipei University of Technology, Taiwan

15:50-16:15 C-9 Recycling of zinc cakes in atmosphere of underground coal gases
Jonibek Ismailov, Tashkent state technical university, Uzbekistan

16:15-16:40 C-10 Neuro-Fuzzy Modelling for Fault Diagnosis in Photovoltaic Systems
Mamadsho Ilolov, National Academy of Sciences of Tajikistan, Tajikistan

16:40-17:05 C-11 Dushanbe Artesian Basin: Geothermal Heat Pump Opportunities
Jamshed Rahmatov, National Academy of Sciences of Tajikistan, Tajikistan

18:00～20：00 **Conference Party (Hotel Metropolitan Akita)**

ICMR2025 AKITA

2nd Floor Room A, B

October 25 (Saturday) Oral Presentation

Session name: *Materials and Intelligent Technologies in Super-Smart Society*

9：00 – 10：40 Oral Presentation A3-1 ～A3-5

Chairperson: **Kabir Mahmudul**

9:00-9:20 A3-1 Research of Ferrite temperature-sensitive switch and development to fire alarm system
Tomoyoshi Yakata, Corporate Planning Office, Shinko Holdings Corporation, Faculty of Engineering, Department of System Innovation, The University of Tokyo

9:20-9:40 A3-2 Water quality analysis of Lake Hachiroko, Japan, using time-series UAV and satellite data
Hikaru Shirai, Akita University

9:40-10:00 A3-3 Study of Emotion Classification Methods Focusing on Facial Skin Temperature and Body Movements in Older Adults when Playing eSports
Ryota Kikuchi, Akita University

10:00-10:20 A3-4 Estimation of Distribution Status of Manganese Nodules from Deep-sea Floor Images Using Generative Adversarial Network (GAN)
Ryosuke Suzuki, Graduate School of International Resource Sciences, Akita University

10:20-10:40 A3-5 Machine Learning for an Image Restoration Captured by a Liquid-Crystal Adaptive-Lens
Ryoya Takewaki, Akita University

October 25 (Saturday) Poster Presentation

11：00 – 12：00 Short Introduction
13：30 – 15：30 Core Presentation Time

CMR2025 AKITA

4th Floor Room C

October 25 (Saturday) Oral Presentation

Session name: *Strategies for Environment, Resources, Recycling, and Energy*

9：00 – 10：40 Oral Presentation C-12 ～C-16 (4F)

Chairperson: **Labone L. Godirilwe**

9:00-9:20 C-12 Application of hafnium isotopes from granitoids to the distribution of metal deposits in Thailand and neighboring areas
Apivut Veeravinantanakul, Division of Geoscience, School of Interdisciplinary Studies, Mahidol University, Thailand

9:20-9:40 C-13 Enhanced CO_2 Sequestration via Direct Mineral Carbonation of Bottom Ash of Different Particle Sizes
Gjergj Dodbiba, The University of Tokyo

9:40-10:00 C-14 Adsorption of heavy metal ions in water by the carbonized tropical fruit wastes for actual utilization
Toyohisa Fujita, Guangxi University, China

10:00-10:20 C-15 Extraction of metal anions with various secondary amido compounds
Keisuke Ohto, Department of Chemistry and Applied Chemistry, Saga University

10:20-10:40 C-16 Highly Selective Precipitation of Platinum Group Metals Using Primary Amine Compounds as Precipitants
Kazuya Matsumoto, Graduate School of Engineering Science, Akita University

CMR2025 AKITA

1st Floor KIRAMEKI Hall

Event Venues

October 25 (Saturday) Poster Presentation

Chairperson: **Kazutoshi Haga**

11：00 – 12：00 **Short Presentation within 30 seconds**
13：30 – 15：30 **Core Presentation time**

11:00-12:00	Short Presentation. "State clearly the author's name, affiliation, and research title"

12:00～13:00	**Lunch Break**

October 25 (Saturday) Open Event Time (1F)

ICMR2025AKITA Open Event Time			
13：00～15：30	**1. Poster Presentation (Core time)** **2. Corporate Exhibition** **3. Techno Fair (Manufacturing class)** **4. +Mini-Labo (Laboratory Introduction)**		
Event Location: First Floor, Kirameki Hall Participation of the public is welcome.			
Poster	Corporate Exhibition	Techno Fair	Mini-Labo

16:20～16:40	**Closing Ceremony Room A (2F)**

October 25 (Saturday) Poster Presentation

Event Location: First Floor, Kirameki Hall

13：30 – 15：30 Core Presentation Time (1F)

Environment, Resource Science and Technology

C1-P1 Eco-friendly recovery of Cu, Ni, and Co from smelter slag via sulfation roasting using pyrite-rich flotation tailings

Bobur Gayratov, Akita University

C1-P2 Sustainable and Eco-friendly Recovery of Gold by Flotation and Chloride Leaching from a Sulphide Ore in Papua New Guinea

Trancey Vokain, Graduate School of International Resource Sciences, Akita University

C1-P3 Investigation of the chain length on the flotation effect for chalcopyrite recovery of aniline based collector

Jia Zhao, Akita University

C1-P4 Investigation of Coarse Particle Flotation Conditions for the Recovery of Valuable Metals from Xonjiza Polymetallic Ore

Bekhzod Mirzo Gayratov, Akita University

C1-P5 Optimizing the Extraction of Rare Earths Elements from Char: Effects of Particle Size, Time, Temperature

Takumi Ichikawa, The University of Tokyo, Japan

C1-P6 Investigation of Microplastics Flotation Behavior from Seawater by Collector-less Flotation

Hibiki Fujimura, Graduate School of International Resource Science, Akita University

C1-P7 The Status and Issues of the Exploration of Strategic Mineral Resources in Mongolia: Global Silver Market

Jamsran, Mineral Resource Science Laboratory LLC, Mongolian University of Science and Technology, Mongolia

C1-P8 Lead Contamination in the Kwai Noi River, Kanchanaburi, Thailand: Sources and Potential Mobility

Naruemin Ratprakhon, Division of Geoscience, School of Interdisciplinary Studies, Mahidol University Kanchanaburi Campus, Thailand

C1-P9 Upgrading Low-Grade Molybdenum Concentrate by Applying High-Pressure Leaching

Erdenetsogt Bayaraa, Graduate School, Akita University

October 25 (Saturday) Poster Presentation

Event Location: First Floor, Kirameki Hall

13：30 – 15：30 Core Presentation Time

Strategies for Environment, Resources, Recycling, and Energy

A1-P1 Study on the Long-term Performance of Microbial Fuel Cells (MFCs) Using Activated Sludge
TAKU ISHIZAWA, Akita University

A1-P2 Study on Granite under Lightning Impulse Voltage with Equivalent Circuit Models
Naoko Obara, Akita University

A1-P3 Effect of Al and Fe impurities on the electrochemical performance of cathode active material recovered from waste lithium-ion batteries
Yusuke Misawa, Akita University

A1-P4 Porous structure and electrochemical performance of rice husk-derived activated carbon for the electrode materials of electric double-layer capacitors
Sota Yoshida, Akita University

A1-P5 Extraction of recycled carbon fibers using peracetic acid and their application as filler of polylactic acid composites
Sho Fujikawa, Graduate School of Systems Science and Technology, Akita Prefectural University

A1-P6 Effect of tartaric acid on the mechanical properties and marine biodegradability of PLA/TPS composites.
Tomoya Iwayama, Graduate School of Systems Science and Technology, Akita Prefectural University

A1-P7 Effect of reaction conditions on the generation of nanoplastics from polyolefins by thermal oxidation reaction
Hiromu Sato, Graduate School of Systems Science and Technology, Akita Prefectural University

October 25 (Saturday) Poster Presentation

Event Location: First Floor, Kirameki Hall

13：30 – 15：30 Core Presentation Time

Materials and Intelligent Technologies in Super-Smart Society

A2-P1 Supramolecular complexes composed of dyes and polymers for efficient photoinduced electron transfer
Hiroyasu Yamaguchi, Osaka University

A2-P2 Construction of a customer behavior analysis system using sensor fusion technology
Shinichi Ito, Akita University

A2-P3 Detecting Changes of Mine Tunnels using Photogrammetry with a 360-degree Camera
Kaede Sekino, Graduate School of International Resource Sciences, Akita University

A2-P4 Measurement and Analysis of Nursing Suction Techniques Using Magnetic Motion Tracking
Ryosuke Muto, Akita University Graduate School of Health Sciences

A2-P5 Measuring driving behavior by using a bicycle simulator and examining accident triggering factors
Sho Kinouchi, Akita University Graduate School of Engineering Science

A2-P6 Construction of Simultaneous Measurement System for Position, Posture, Contact Force, and Two-Viewpoint Image of Single-finger Pressing Task
Shion Watanabe, HCC, Graduate School of Engineering Science, Akita University

A2-P7 Sidebands Detection Using Two Pump Ultrasonic Wave Sources for Closed Crack Detection
Yuta Kunimoto, Akita University

A2-P8 Comparison of Voice-Controlled and Manual Prosody Adjustment Systems for Synthesized Speech
Shingo Furuyama, Akita University Graduate School of Engineering Science

A2-P9 Improving the Usability of a Tangible Handwriting Input System for VR
Shuto Sato, Graduate School of Engineering Science, Akita University

A2-P10 Educational Effectiveness of an MR Blood Sampling Training Simulator
Shuta Yamamuro, Graduate School of Advanced Helthcare Engineering, Akita University

A2-P11 Conveying Cinematic Tension through Audio Description: A Preliminary Study on Camerawork and Visual-Auditory Elements
Rentaro Matsumoto, Akita University Graduate School of Engineering Science

A2-P12 Development and preliminary evaluation of plant bioelectric potential measurement system for human behavioral change

Riki Takahashi, Graduate School of Advanced Healthcare Engineering, Akita University

A2-P13 Constructing Tangible Handwriting Input System in Immersive VR Using Magnetic Motion Capture

Yuma Ohori, Graduate School of Engineering Science, Akita University

A2-P14 Evaluating the Educational Impact of Integrating Mixed Reality into Museum Exhibits

Eikan Sunaoshi, Graduate School of International Resource Sciences, Akita University

A2-P15 Research and Development of a Disaster Damage Detection System Using SAR and Optical Satellite Images

Hajime Takahashi, Graduate School of International Resource Sciences, Akita University

A2-P16 Tracking of Floating Bubbles and Particles Using High-Speed Camera

Natsuki Takehara, Graduate School of International Resource Sciences, Akita University

A2-P17 Analysis of Driving Behavior of Drivers by Age Group Using a Pedestrian Dart-out Scenario with a VR Driving Simulator

Ibuki Shibata, Akita University Graduate School of Engineering Science

A2-P18 Development of an iPad-based spiral drawing inspection system for MCI assessment and a cloud-based data aggregation and analysis platform

Soichiro Nasu, Akita University Graduate School of Advanced Institute of Health Care Engineering

A2-P19 Generation of Atrial Fibrillation Waveform for Data Augmentation by Using Denoising Diffusion Probabilistic Model

Hidefumi Kamozawa, Akita University

A2-P20 Study on Anomaly Detection Based on Changes in the Occurrence Probability of Daily Activity Sounds

Taisei Yamada, Akita university

A2-P21 Evaluation of magnetic field application detection unit for magnetic hyperthermia

Kyohei Hayashi, Graduate School of Advanced Healthcare Engineering, Akita University

October 25 (Saturday) Poster Presentation

Event Location: First Floor, Kirameki Hall

13：30 – 15：30 Core Presentation Time

Processing and Characterization of Functional Materials

B1-P1 Pesting Oxidation and Corrosion Behavior of a TiNbMoTaW Alloy in Oxygen with a Slight Amount of HCl Gas at High Temperature
Yoshiyuki Sato, Department of Cooporative Major in Sustainable Engineering, Graduate School of Engineering Science, Akita University

B1-P2 Influence of Amount of Diamond Paste with Diamond Seed Particles on Diamond film Synthesized on Mo Substrates by Flame Combustion
Mamoru Takahashi, Akita University

B1-P3 Evaluation of palladium(II) extraction and extraction mechanism of a thioamide-modified extractant
Manabu Yamada, Akita University

B1-P4 Effect of charge-discharge current densities on the cycling stability of lithium-ion batteries with $LiCoO_2/LiMn_{0.6}Fe_{0.4}PO_4$ composite active materials
Yusuke Abe, Akita University

B1-P5 Charge-discharge performance of lithium-ion capacitors using nano-Si anodes at different prelithiation levels
Cheng Jie Chng, Akita University

B1-P6 High-UV-Transmittable Black Pigment for Advanced Black Resist Processing
Naoyuki Aiba, Mitsubishi Materials Electronic Chemicals Co., Ltd

B1-P7 Effect of pulse repetition frequency on Pt nanoparticles synthesis by laser induced reduction
Kotaro Terao, TDK corporation

B1-P8 Effect of adding complex oxide to Pb-based anode for oxygen evolution overpotential in Zn electrowinning
Hiroki Takahashi, Akita University

B1-P9 Hydrogen evolution characteristics of Ni-CNO
Tomohito Fukuoka, Akita University

B1-P10 Preparation of non-porous mesostructured materials as a solid base catalyst using layered perovskite type K_2NbO_3F
Masataka Ogasawara, Department of Materials Science, Graduate School of Engineering Science, Akita University

B1-P11 Microwave detection by Alternating Magnetic Force Microscopy (A-MFM) by using conductive tip
Marina Makarova, Akita University

B1-P12 Synthesis of Hyperbranched Polyimides from Ortho-Substituted Asymmetric Triamine
Koya Ikemoto, Department of Materials Science, Akita Univ.

B1-P13 Synthesis and crystal structure of [2+4] type porous organic cages based on calix[4]arene
Yuto Kishimoto, Akita University

B1-P14 Behavior phase diagram of the Y-Si-N system in Ar and Nitrogen atmospheres
Shota Nishi, Fukuoka Institute of Technology

B1-P15 Electrocatalytic activity of high entropy alloy prepared by sputtering electrowinning
Yuta Igari, Akita University

B1-P16 Analysis of CO_2 electroreduction reaction on Pt-Cu electrodes
Naoki Matsumoto, Akita University

B1-P17 Ammonia Oxidation Activity of Pt-Al Alloy Thin Film Electrode in Alkaline Solution
Mitsuki Sugawara, Akita University

B1-P18 Magnetic and electric near-field distributions on microstrip line located CNT-containing ultralight sheet materials
Taiga Fugane, Akita University

October 25 (Saturday) Poster Presentation

Event Location: First Floor, Kirameki Hall

13：30 – 15：30 Core Presentation Time

Engineering Materials for Sustainable Development

B2-P1 Residual crack in aggregate of reinforced concrete by using steam pressure cracking agent
Osamu Kamiya, Akita University

B2-P2 Composite anode of waste solar panel-derived glass and graphite for the application of lithium-ion batteries
Takuya Eguchi, Nihon University

B2-P3 Preparation and Evaluation of Hydrogenation Catalysts by Calcination of Amine Complexes of Ni and Co
Shota Muraoka, Graduate School of Engineering Science, Akita University

B2-P4 Effect of plate thickness formability and joint strength of Micro Multiple Plywood/Polypropylene
Kento Takai, Graduate School of Systems Science and Technology, Akita Prefectural University

B2-P5 Optimization of welding parameters for ultrasonic welding of CFRTP to Aluminum alloy coated with PAMXD6 film
Ryona Okazaki, Graduate School of Systems Science and Technology, Akita Prefectural University

October 25 (Saturday) Poster Presentation

Event Location: First Floor, Kirameki Hall

13：30 – 15：30 Core Presentation time

Others

B-P1 Effect of bead milling conditions on the grindability of concentrated limestone slurry
Naoya Kotake, Yamagta university

B-P2 Chemical conversion of waste tire ash into layered double hydroxide via acid leaching for phosphorus removal
Takaaki Wajima, Chiba University

B-P3 Field-produced bulk emulsion explosives and charges.
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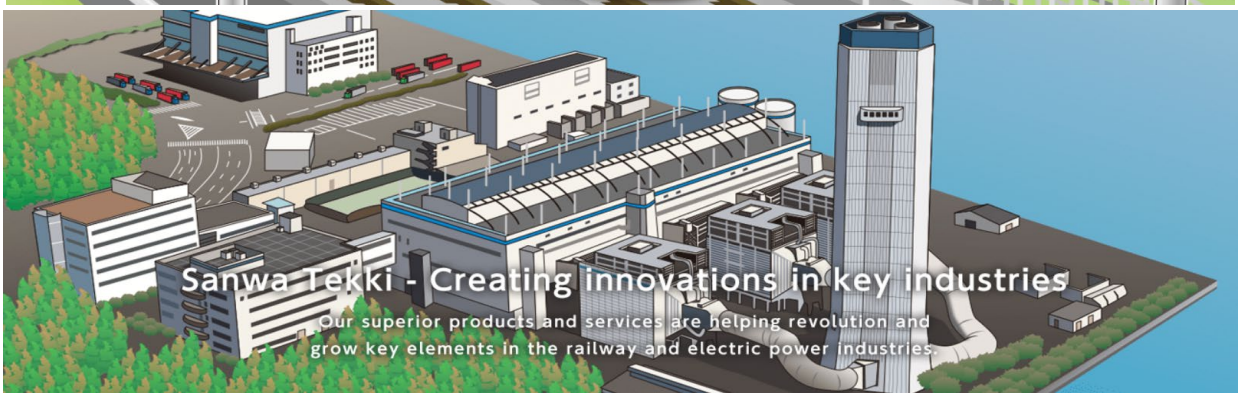

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