

The 24th International Symposium on Advanced Technology (ISAT-24)

November 22-23, 2025

Kogakuin University of Technology and Engineering, Japan

Main theme of ISAT-24: Innovations in Engineering for a Sustainable and Inclusive Future

TOPICS of ISAT-24: Topics of interest include, but not limited to:

1. Sustainable Materials and Manufacturing
2. Smart Systems and Automation
3. Energy Systems and Environmental Engineering
4. Urban Infrastructure and Resilience
5. Bioscience and Food Engineering
6. Advanced Functional Materials
7. Architecture and Civil Engineering Innovations
8. Chemical and Environmental Engineering
9. Information Technology and Informatics
10. Education and Human Science

Language: English will be the official language during the conference.

Conference Venue: ONSITE: Kogakuin University of Technology and Engineering, Hachioji Campus
2665-1 Nakano-Machi, Hachioji-City, Tokyo, Japan

ONLINE: Zoom

Conference website: <https://www.kogakuin.ac.jp/isat/>

Abstract: https://www.kogakuin.ac.jp/isat/g8rt6a00000000fm-att/isat24_2025.pdf



Presentation Guidelines

➤ Keynote Presentation

- Time allocation: 25 minutes (including Q&A and setup time)
- A Windows-based computer and projector will be available in the session room.
- Presenters may use their own computer for the presentation if preferred.

➤ Oral Presentation

- Time allocation: 12 minutes (9 min. talk and 3 min. Q&A/setup)
- The session room is equipped with a Windows-based computer and projector.
- Microsoft PowerPoint and a PDF viewer are available.
- (For onsite presenters,) presentation files must be stored on the designated computer in the session room via USB flash drive prior to the session (AM session: 10:25-10:45(JST), PM session: 12:50-13:10(JST)), to ensure smooth session management.
- (For online presenters) Please complete the Zoom pre-registration using the provided link.
<https://us02web.zoom.us/meeting/register/ozFsrRTsTQuPQvqQgqZFNg>
After registration, you will receive a confirmation email from Zoom. Access the session via the URL in that email on the day of your presentation.
- Please share your screen by yourself during your presentation and ensure that your audio and internet connection work properly in advance.

➤ Poster Presentation

- Time allocation: 120 minutes
- Presenters must be present at their poster for 60 minutes during the assigned attendance period (either the first or second half of the session).
- Poster size: A0 vertical format (maximum 1189 mm height × 841 mm width)
- Thumbtacks will be provided for mounting.
- Posters must be set up before the afternoon oral session (OB session), i.e., before 13:10 (JST).
- High-school presenters must complete poster setup before the poster session starts (by 14:40 (JST)). If possible, it is recommended to set up the posters before the afternoon oral session (OB session), i.e., before 13:10 (JST).
- Please remove your poster promptly after the poster session has finished.

General Schedule

Day 0 — November 21 (Fri)

Welcome & Networking Day

This day is specially arranged to welcome faculty members from partner universities and distinguished guests. It serves as an opportunity to strengthen academic and institutional bonds before the main **symposium**.

18:30–20:30 Welcome Dinner (Official Welcome Reception with Partner Universities)

Participants: Partner university faculty members, Kogakuin University executives, organizing committee members and executive committee members

Day 1 —November 22 (Sat)

Main Conference Day

Japan (JST)	Taiwan, Philippines (TST/PTS)	Vietnam (ICT)									
8:30	7:30	6:30	Registration / Room 1N-338, Building 1								
9:00	8:00	7:00	OPENING CEREMONY / Room 1N-338, Building 1								
9:10	8:10	7:10	KEYNOTE PRESENTATION from STUST / Room 1N-338, Building 1								
9:35	8:35	7:35	KEYNOTE PRESENTATION from DUT / Room: 1N-338, Building 1								
10:00	9:00	8:00	KEYNOTE PRESENTATION from UPLB / Room: 1N-338, Building 1								
10:25	10:25	10:25	Break								
			ORAL PRESENTATION: morning session / Online Breakout Room								
			Room	ISAT1	ISAT2	ISAT3	ISAT4	ISAT5	ISAT6	ISAT7	
			Venue	2-664	2-564	2-364	2-313	2-264	2-164	2-214	
10:45	9:45	8:45	Oral 1	1-OA1	2-OA1	3-OA1	4-OA1	5-OA1	6-OA1	7-OA1	
10:57	9:57	8:57	Oral 2	1-OA2	2-OA2	3-OA2	4-OA2	5-OA2	6-OA2	7-OA2	
11:09	10:09	9:09	Oral 3	1-OA3	2-OA3	3-OA3	4-OA3	5-OA3	6-OA3	7-OA3	
11:21	10:21	9:21	Oral 4	1-OA4	2-OA4	3-OA4	4-OA4	5-OA4	6-OA4	7-OA4	
11:33	10:33	9:33	Oral 5	1-OA5	2-OA5	3-OA5	4-OA5	5-OA5	6-OA5	7-OA5	
11:45	10:45	9:45	Oral 6	1-OA6	2-OA6	3-OA6	4-OA6	5-OA6	6-OA6		
11:57	10:57	9:57	Oral 7	1-OA7	2-OA7	3-OA7	4-OA7	5-OA7			
12:09	11:09	10:09	Lunch Break Professors from Partner Institutions: 7th Floor, Building 2 All Students and Audiences: Cafeteria, Building 18								
			ORAL PRESENTATION: Afternoon session / Online Breakout Room								
			Room	ISAT1	ISAT2	ISAT3	ISAT4	ISAT5	ISAT6	ISAT7	
			Venue	2-664	2-564	2-364	2-313	2-264	2-164	2-214	
13:10	12:10	11:10	Oral 8	1-OB1	2-OB1	3-OB1	4-OB1	5-OB1	6-OB1	7-OB1	
13:22	12:22	11:22	Oral 9	1-OB2	2-OB2	3-OB2	4-OB2	5-OB2	6-OB2	7-OB2	
13:34	12:34	11:34	Oral10	1-OB3	2-OB3	3-OB3	4-OB3	5-OB3	6-OB3	7-OB3	
13:46	12:46	11:46	Oral11	1-OB4	2-OB4	3-OB4	4-OB4	5-OB4	6-OB4	7-OB4	
13:58	12:58	11:58	Oral12	1-OB5	2-OB5	3-OB5	4-OB5	5-OB5	6-OB5	7-OB5	
14:10	13:10	12:10	Oral13	1-OB6	2-OB6			5-OB6	6-OB6		
14:22	13:22	12:22	Break								
			Poster Presentation / Venue: 7th Floor, Building 2 (Onsite Only)								
14:40			Presentation Group A: Poster Presentations								
15:40			Presentation Group B: Poster Presentations								
16:40			Break								
17:00	16:00	15:00	KEYNOTE PRESENTATION from UP-Diliman / Room: 1N-338, Building 1								
17:25	16:25	15:25	KEYNOTE PRESENTATION from KUTE / Room: 1N-338, Building 1								
17:50	16:50	15:50	AWARDING CEREMONY and CLOSING CEREMONY / Room 1N-338, Building 1								
18:10	17:10	16:10	End of the Conference								
18:30 -			Students: ISAT24 Symposium Dinner / Cultural and Research Exchange Party Venue: Cafeteria, Building 18, at Kogakuin University								

20:00			Organized by student supporters from Kogakuin University
19:00 – 21:00			Professors and Faculty Members: ISAT24 Symposium Dinner Venue: Keio Plaza Hotel, Hachioji Master of Ceremony: Dr. Hiroki Nagai

Day 2 — November 23 (Sun)

Excursion & Cultural Exchange Day

The excursion will take participants to the Mt. Fuji area, one of Japan's most iconic World Heritage sites.

Through visits to scenic and cultural landmarks, this program aims to promote friendship and mutual understanding among partner university faculty members and students.

08:00–15:30 Excursion to Mt. Fuji Area and Hachioji Local Area

Highlights include:

- Lake Kawaguchi and Mt. Fuji viewpoints
- Lunch at a local restaurant
- Cultural experience

Keynote Presentation

Onsite Venue: Room# 1N-338 / Online: Zoom

Time (JST)	Presentation No.	Title	Presenter
9:10	KP-STUST	AI Landing Applications and Practical AI Talents Cultivating Platform Chairperson: Prof. Miyuki Kamachi (KUTE)	Prof. Nen-Fu Huang President, Southern Taiwan University of Science and Technology
9:35	KP-DUT	Smart Production Solutions: Robot-Based Intelligent Classification of Varied Products Using Advanced Imaging Techniques Chairperson: Prof. Yutaka Fukuoka (KUTE)	Dr. Anh-Duc Pham Lecturer, Faculty of Mechanical Engineering The University of Danang - University of Science and Technology
10:00	KP-UPLB	From Green Technologies to Circular Economy: Advancing UPLB Sustainability Programs through Life Cycle Assessment Chairperson: Prof. Motoyasu Kobayashi (KUTE)	Prof. Rex Bacaling Demafelis Dean, College of Engineering and Agro-industrial Technology, University of the Philippines Los Baños
17:00	KP-UPD	Revolutionizing Transparent Conducting Films: Aluminum Zinc Oxide via Pressed-Sintered Target Deposition Chairperson: Prof. Tomohide Takami(KUTE)	Prof. Magdaleno Rigodon Vasquez Jr College of Engineering, University of the Philippines-Diliman
17:25	KP-KUTE	Human Movement and Knee Biomechanics Chairperson: Prof. Takashi Yamamoto (KUTE)	Prof. Yoshimori Kiriya Dean, Graduate School Associate Vice President Kogakuin University of Technology and Engineering

Oral Presentation

ISAT-1

1, Sustainable Materials and Manufacturing

8. Chemical and Environmental Engineering

Onsite Venue: Room# 2-664 / Online: Breakout Room #1

Time (JST)	Presentation No.	Title	Presenter	
Chairperson: Mr. Glenson Panghulan (UP) / Prof. Masaki Tamura (KUTE)				
10:45	1-OA1	Parametric Study for the Fenton-assisted Treatment of Synthetic Melanoidin using Al ₂ O ₃ -supported α-Fe ₂ O ₃ photocatalysts	Christian Laurence Ecleo Aquino (UP)	Topic 8
10:57	1-OA2	Modeling Sediment Transport in the Quinali River, Albay, Philippines	Rostylyn Belleza Octavo (UP)	Topic 8
11:09	1-OA3	Optimizing a Cement-Kiln Based Carbon Dioxide Removal Network Using a Linear Program	Carlito Zayas Reyes (UP)	Topic 8
11:21	1-OA4	Flow Control Using Synthetic Jets Produced with Beak Shaped Slot in a Tank	Daiki Iwaya (KUTE)	Topic 8
11:33	1-OA5	Photocatalytic Degradation of Methylene Blue by Water Hyacinth (Pontederia Crassipes Mart.) Ash for Wastewater	Alan Vincent Lasac Rodas (UP)	Topic 8 Online
11:45	1-OA6	Automated Marginal Abatement Cost (AMAC) Approach for Techno-Economic Optimization of Net-Zero Emissions in Instant Coffee Processing	Laureana Mari Rosita Baylon (UP)	Topic 8 Online
11:57	1-OA7	Potential of Recycling Urban Sewage Sludge Through Vermicomposting for Quarry Waste Land Reclamation	Le Hai Yen (DUT)	Topic 8 Online
12:09	Lunch			
Chairperson: Dr. Christian Laurence Ecleo Aquino (UP) / Prof. Masaki Tamura (KUTE)				
13:10	1-OB1	Effect of Atmospheric Pressure Plasma Treatment to Polyhydroxybutyrate (PHB) Films	Glenson Panghulan (UP)	Topic 1
13:22	1-OB2	Non-Destructive Prediction of Film Thickness Assisted by Optical Coating Design	Ching-Min Chang (STUST)	Topic 1
13:34	1-OB3	Fuzzy Model for Material Selection for Microfluidic Devices	Butch Galicia Bataller (UP)	Topic 1
13:46	1-OB4	Advancing Argon Plasma Treatment Towards Sustainable Fabrication of Rare-Metal-Free Amorphous Oxide Source-Gated Transistors	Mark Denusta Ilasin (NAIST, UP)	Topic 1
13:58	1-OB5	Evaluation of Basic Properties and Surface Quality of PCa Components Using Concrete Finished with Carbon-Fixing Scallop Shell Sand Concrete	Nene Uesugi (KUTE)	Topic 1
14:10	1-OB6	Hydrogel Synthesis using Bacterial Cellulose from Nata De Coco and Pomelo Peel Powder for Controlled Delivery Applications	Jeffson Roi Villanueva Escartin (UP)	Topic 1 Online

Oral Presentation

ISAT-2

4.Urban Infrastructure and Resilience

7.Architecture and Civil Engineering Innovations

Onsite: Room# 2-564 / Online: Breakout Room #2

Time (JST)	Presentation No.	Title	Presenter	
Chairperson: Prof. Ryo Takagi (KUTE) / Prof. Yukari Hirayama (KUTE)				
10:45	2-OA1	Benefits and Limitations of 4D BIM Adoption in the Philippine Construction Industry	Maricel A. Eneria (UP)	Topic 7 Online
10:57	2-OA2	Characterization of Dredged Mud from Manila Bay, Philippines: Effects of Moisture Content and Depth on Undrained Shear Strength for Land Reclamation using the Field Vane Shear Test	Shean Reyes Ebreo (UP)	Topic 7 Online
11:09	2-OA3	Exploring Functional Coexistence Strategies for Smoking and Non-Smoking Areas in Outdoor Public Space	Konan Tsutsui (KUTE)	Topic 7
11:21	2-OA4	Calculation Method of Theoretical CO ₂ Fixation Values and Production Evaluation on Environmental Conscious Interlocking Blocks	Natsuka Hosoda (KUTE)	Topic 7
11:33	2-OA5	Generative Design for Apartment Complex Modeling and Multi-Stage Evaluation Based on Multiple Performance Indicators	Hayato Nakao (KUTE)	Topic 7
11:57	2-OA6	Architectural Forms and Spatial Transitions of Modern Gokoku Shrines	Karin Ishida (KUTE)	Topic 7
12:09	2-OA7	A Study on the Usefulness of Specification Selection Utilizing AI	Takumi Baba (KUTE)	Topic 7
12:09	Lunch			
Chairperson: Dr. Anh-Duc Pham (DUT) / Prof. Yukari Hirayama (KUTE)				
13:10	2-OB1	Ultra-high Frequency Train Operation: A Research Overview at Kogakuin’s Electric Railway Systems Laboratory	Ryo Takagi (KUTE)	Topic 4
13:22	2-OB2	A Study on Store Layout in Street Markets to Encourage People's Activities	Mina Sakuma (KUTE)	Topic 4
13:34	2-OB3	Compressive Strength of Fire-Exposed Concrete under Different Cooling Regimes and Re-Curing Duration	Richelle Zafra, Aaron Lee Catubao Verterra (UP)	Topic 4 Online
13:46	2-OB4	Predicting the Compressive Strength of Fire-Exposed Concrete under Different Cooling Regimes and Re-Curing Duration Using Artificial Neural Network	David Choven Bermudez Uy (UP)	Topic 4 Online
13:58	2-OB5	Experimental Study on Restoring Force and Its Damping of Column Rodking in Traditional Timber Structure	Kaoru Ashino (KUTE)	Topic 7
14:10	2-OB6	The Effect of Environmental Conditions on the Deterioration of a Sloping Concrete Wall Introducing Transparent Protective Resin	Naoki Yoshikawa (KUTE)	Topic 7

Oral Presentation

ISAT-3

2. Smart Systems and Automation

5. Food Engineering and Biotechnology

10. Education and Human Science

Onsite: Room# 2-364 / Online: Breakout Room #3

Time (JST)	Presentation No.	Title	Presenter	
Chairperson: Mr. Ven-Rem Bill Ang Pasion (UP) / Prof. Tetsuo Shindo (KUTE)				
10:45	3-OA1	Assessment of Occupational Health Risks of Graveyard Shift Logistics Truck Drivers Related to Sleep Deprivation	Stephanie Caridad Dela Rosa Landicho (UP)	Topic 10
10:57	3-OA2	In Vitro Propagation Protocol for Vietnamese Ginseng (<i>Panax vietnamensis</i> Ha et Grushv.)	Hieu Trung Hoang Nguyen (DUT)	Topic 5
11:09	3-OA3	A Control of Dual Drone to Extend Big Payload	Mai Hoang Nguyen (DUT)	Topic 2 Online Video
11:21	3-OA4	Estimating the Viewing Position of a Castle Using an Image of Its Lower Structure Only	Zhengwei Chen (KUTE)	Topic 2
11:33	3-OA5	Microgrid Distribution Panel Modules Identification Base on YOLO 11 and Its Application	Nin-Hsaing Chang (STUST)	Topic 2
11:45	3-OA6	Design and Implementation of Intelligent In-Vehicle Systems Based on Local LLM and Multimodal Speech Processing	Ming-Chan Hsu (STUST)	Topic 2
11:57	3-OA7	Development of an Intelligent Algae Farming System Using IoT Technologies	Ching-Ni Yang (STUST)	Topic 2
12:09	Lunch			
Chairperson: Dr. Nguyen Hoang Trung Hieu (DUT) / Prof. Tetsuo Shindo (KUTE)				
13:10	3-OB1	Design of a Carbon Emissions Raw Data Input System Prototype for the Carbon Footprint Calculator of the University of the Philippines Los Baños (UPLB), Laguna	Ven-Rem Bill Ang Pasion (UP)	Topic 2
13:22	3-OB2	Review on the Effects of Shallow Water Conditions on Ship Maneuverability	Nguyen Quynh Thi Thu (VMU, DUT)	Topic 2
13:34	3-OB3	A Delivery Points Allocation Algorithm for Combined Truck and Drone Delivery	Kodai Nizuma (KUTE)	Topic 2
13:46	3-OB4	Non-Contact Bedside Patient Care Detection and Intelligent Monitoring System	Jia-Yun Li (STUST)	Topic 2
13:58	3-OB5	Automatic Detection of Grasping Pose and Location for a Robotic Arm System by Using YOLO AI Model	Tsebe Victorin (STUST)	Topic 2
14:10				

Oral Presentation

ISAT-4

6. Advanced Functional Materials

Onsite: Room# 2-313 / Online: Breakout Room #4

Time (JST)	Presentation No.	Title	Presenter	
Chairperson: Ms. Rozen Grace Boholano Madera (UP) / Prof. Hiroki Nagai (KUTE)				
10:45	4-OA1	Topografiner: The Oblivious Microscopy	Tomohide Takami (KUTE)	Topic 6
10:57	4-OA2	Enhanced Photovoltaic Performance of PEDOT:PSS/Silicon Nanowire-Based Hybrid Solar Cells via Heterostructure Design	Ta-Cheng Wei (STUST)	Topic 6
11:09	4-OA3	Towards Realization of p-Type SnSO ₄ Thin Films	Kento Moriya (KUTE)	Topic 6
11:21	4-OA4	Role of Poly(vinyl alcohol) Crystallinity in the Resistive Switching of CuSO ₄ –PVA Memory Devices	Yuji Iwasawa (KUTE)	Topic 6
11:33	4-OA5	Effects of Annealing Treatments on the Photocatalytic Properties of TiO ₂ /Cu Thin Films	Ryuto Ito (KUTE)	Topic 6
11:45	4-OA6	Estimation of Work Function of B-doped In ₂ O ₃ Thin Films and Their Application to Rectifier Devices	Yuya Yasaki (KUTE)	Topic 6
11:57	4-OA7	Soft Robotics: Enabling Safe and Adaptive Human-Robot Collaboration	Hoai Nam Le (DUT)	Topic -
12:09	Lunch			
Chairperson: Prof. Tomohide Takami (KUTE) / Prof. Hiroki Nagai (KUTE)				
13:10	4-OB1	Exploration of Sputtered ZnO and AZO Films as Piezoelectric Material for MEMS-Based Sensors	Rozen Grace Boholano Madera (UP)	Topic 6
13:22	4-OB2	Effects of Annealing Temperature on the Characteristics of Zr doped ZnO Transparent Conducting Films	Kosuke Matsumoto (KUTE)	Topic 6
13:34	4-OB3	Surface Modification of PTFE by Using Low-Angle H ₃ ⁺ Ion Irradiation	Toshihiro Yokogawa (KUTE)	Topic 6
13:46	4-OB4	Influence of Underlying GaN Nanocolumns on Selective Area Growth of GaInN Using RF-Plasma-Assisted Molecular Beam Epitaxy	Takuto Katogi (KUTE)	Topic 6
13:58	4-OB5	Sputtering Power and Si Substrate Dependence of SnO Thin Film Fabrication	Yoshikazu Shin (KUTE)	Topic 6
14:10				

Oral Presentation

ISAT-5

9. Information Technology and Informatics

10. Education and Human Science

Onsite: Room# 2-264 / Online: Breakout Room #5

Time (JST)	Presentation No.	Title	Presenter	
Chairperson: Dr. Maria Liezel Carоче Eusebio (UP) / Prof. Naiwala Pathirannehelage Chandrasiri (KUTE)				
10:45	5-OA1	Designing a Faculty Record and Evaluation Data (FRED) System for the University of the Philippines Los Baños (UPLB)	Julius Angelo De Jasmin Galang (UP)	Topic 9 Online
10:57	5-OA2	Wi-Fi 7 Four-port MIMO CPW-Fed Antennas for Access Point Applications	Wen-Shan Chen (STUST)	Topic 9
11:09	5-OA3	A Study on Access Control Methods for User Data in IoT Data Distribution	Masaki Yoshii (KUTE)	Topic 9
11:21	5-OA4	Basic Study on the Performance of Core Allocation Algorithms in Distributed-Control SDM-EON with 7-Core MCF under Inter-Core XT	Takuma Saito (KUTE)	Topic 9
11:33	5-OA5	Composite Design of AP Antennas for 5G C-Band (n77, n78, n79) and Wi-Fi 7 Applications	Hao-Hsuan Hung (STUST)	Topic 9
11:45	5-OA6	Optimization of Statistical Shape Models for Non-invasive Prediction of Tooth Root Shape	Ryosuke Kusama (KUTE)	Topic 9
11:57	5-OA7	Backup Path Design Using a Segment Backup Scheme in SDM Elastic Optical Network	Koichi Morita (KUTE)	Topic 9
12:09	Lunch			
Chairperson: Prof. Wen-Shan Chen (STUST) / Prof. Naiwala Pathirannehelage Chandrasiri (KUTE)				
13:10	5-OB1	Balancing the Room Utilization and Seat Occupancy Rates of Facilities of the University of the Philippines Los Baños Department of Industrial Engineering (UPLB DIE) using Binary Integer Linear Programming (BILP) Model	Maria Liezel Carоче Eusebio (UP)	Topic 10
13:22	5-OB2	How Student-Led Robotics Teams Use Generative AI: Usage Patterns and Design Implications from a Survey	Genki Sakai (KUTE)	Topic 10
13:34	5-OB3	Innovation in Deep Learning Approaches: the Case of Wind Turbine Anomaly Detection	Pham Le Minh Hoang (DUT)	Topic 9 Online
13:46	5-OB4	Evaluation of ϵ -Greedy-Based Route and Spectrum Assignment in Elastic Optical Networks	Riku Wakabayashi (KUTE)	Topic 9
13:58	5-OB5	Toward Usable LLM-Generated Personas in Human-Centered Design for Medication Adherence: A Pilot Study	Tomoki Koike (KUTE)	Topic 9
14:10	5-OB6	Fairness Improvement in TCP BBR by Queue Control	Yuki Kuramo (KUTE)	Topic 9

Oral Presentation

ISAT-6

9. Information Technology and Informatics

Onsite: Room# 2-164 / Online: Breakout Room #6

Time (JST)	Presentation No.	Title	Presenter	
Chairperson: Prof. Shu-Chen Cheng (STUST) / Prof. Kanta Tachibana (KUTE)				
10:45	6-OA1	Time- and Frequency-Domain Features Fusion for Electrocardiogram-Based Cardiovascular Diseases Classification	Yeou-Jiunn Chen (STUST)	Topic 9
10:58	6-OA2	A Study on Indoor Location Estimation Method using BLE with AoA	Jundai Hirakawa (KUTE)	Topic 9
11:09	6-OA3	An Optical Path Establishment Method considering Path Priority in Elastic Optical Networks	Kaishi Morishita (KUTE)	Topic 9
11:21	6-OA4	The effects of Potential Real-Time Information Feedback on AR Game Users	Takeru Morimasa (KUTE)	Topic 9
11:33	6-OA5	Move to Poster Session	-----	-----
11:45	6-OA6	Mine, Grab, Lock: Modelling Value Co-Creation and Its Influence on Purchase Intention in Live Selling	Frances Bless J. Villafania (UP)	Topic 9 Online
11:57				
12:09	Lunch			
Chairperson: Prof. Yeou-Jiunn Chen (STUST) / Prof. Kanta Tachibana (KUTE)				
13:10	6-OB1	Improving User Access to Campus Announcements via Text Mining and Intelligent Information Retrieval Techniques	Shu-Chen Cheng (STUST)	Topic 9
13:22	6-OB2	Evaluation of an EEG Recording Device Custom-Built in Our Laboratory Focusing on Frequency Analysis	Shusuke Kon (KUTE)	Topic 9
13:34	6-OB3	Effects of the Presence of a Virtual Cat, Which Appears in Conjunction with Heart Rate, on the User’s Physiology and Psychology	Koki Matsumoto (KUTE)	Topic 9
13:46	6-OB4	Development and Validation of a Static Finite Element Analysis Model for Self-Expanding Braided Colonic Stents	Tsuyoshi Koyama (KUTE)	Topic 9
13:58	6-OB5	Using LLM to Predict Learner Motivation in Foreign Language Learning	Aika Kuboki (KUTE)	Topic 9
14:10	6-OB6	CRYPTOZERØ: A Blockchain Portfolio and Real-Time Tracking App Developed with Flutter and FastAPI	Shi-Wei Wang (STUST)	Topic 9

Oral Presentation

ISAT-7

3. Energy Systems and Environmental Engineering

Onsite: Room# 2-214 / Online: Breakout Room #7

Time (JST)	Presentation No.	Title	Presenter	
Chairperson: Dr. Van Trieu Nguyen (DUT) / Prof. Yuji Sakai (KUTE)				
10:45	7-OA1	Evaluating the Potential of Solar Energy in Driving Proton Exchange Membrane (PEM) Water Electrolysis for Hydrogen Production.	Ming-Hau Chang (STUST)	Topic 3
10:57	7-OA2	Unsteady Flow Characteristics Downstream of a Circular Cylinder with Tangential Blowing	Yuya Higashi (KUTE)	Topic 3
11:09	7-OA3	Comparative Study of Wind Turbine Designs Inspired by Ash and Mahogany Seeds	Gabriela Monica Marquez Gonzales (UP)	Topic 3
11:21	7-OA4	Study on Flow Control by Synthetic Jet in Rectangular Tanks	Shinnosuke Tanaka (KUTE)	Topic 3
11:33	7-OA5	Modeling the Effects of Sediment Deposition on Flood Risk in Bato Lake, Camarines Sur, Philippines Using HEC-RAS	Jeremiah Guatno Magallanes (UP)	Topic 3
11:45				
11:57				
12:09	Lunch			
Chairperson: Dr. Gabriela Monica Marquez Gonzales (UP) / Prof. Yuji Sakai (KUTE)				
13:10	7-OB1	A Comprehensive Review of the Effects of Rudder Types on Ship Maneuverability	Van Trieu Nguyen (DUT)	Topic 3
13:22	7-OB2	GIS-Based Site Suitability Analysis for Potential Development of Small Water Impounding Projects (SWIPs) in Jones, Isabela	Melanie Aquino Baguio (UP)	Topic 3 Online
13:34	7-OB3	Applying the YOLOv11 model to build a smart trash can model to classify trash on the campus of the Da Nang University of Science and Technology - University of Da Nang	Dang Quang Huy (DUT)	Topic 3 Online
13:46	7-OB4	Experimental Study on Two-Dimensional Bubble in Various Rectangular Cavities	Ryuichi Inoue (KUTE)	Topic 3
13:58	7-OB5	Jet Vectoring Using a Circular Cylinder with Two Jet Sheets	Raichi Naito (KUTE)	Topic 3
14:10				

Poster Presentation

Group A: 14:40-15:40 / Group B: 15:40-16:40

1. Sustainable Materials and Manufacturing

Presentation No.	Title	Presenter	Presentation Group
1-P01	Derivation of Sound Absorption Properties of Porous Materials Using Mixing Rule	Motoki Ueyama (KUTE)	A
1-P02	Development of the Three-Dimensional Residual Stress Estimation Method Using X-ray Diffraction and the Eigenstrain Method for Rolling Fatigue Materials	Kazuma Muraoka (KUTE)	B
1-P03	Improvement of the Estimation Accuracy of the Three-Dimensional Residual Stress Evaluation Method Using X-ray Diffraction for Resistance Spot Welding Joints	Yuki Inoue (KUTE)	A
1-P04	Adhesion of Poly(Vinyl Chloride) Substrates by Polymer-grafted Nano-particles	Yuta Furuno (KUTE)	B
1-P05	Improving Sound Insulation Performance in the Low-Frequency Range by Double-Wall Acoustic Metamaterials	Kotaro Urano (KUTE)	A
1-P06	Dependence of Cu Film Deposition Behavior on the pH value of Precursor Solutions in Complex Reduction Method	Daichi Homma (KUTE)	B
1-P07	Development of Na ₂ O-Y ₂ O ₃ -V ₂ O ₅ -SiO ₂ Glass-Ceramics for Single-Phase All-Solid-State Na-Ion Batteries	Yuto Tsuchiwata (KUTE)	A
1-P08	A Study on the Improvement of Acoustic Environment by Applying Concrete Finishing Materials with Composite Rough Surfaces	Ayana Suzuki (KUTE)	B
1-P09	Development of three-dimensional analysis method for small samples by FIB-TOF SIMS	Naoki Sakashita (KUTE)	A
1-P10	Development of a micro-volume 3D analysis method using Dual FIB-TOF-SIMS	Kota Kawada (KUTE)	B
1-P11	Data-Efficient Machine Learning for Curved-Tube Absorbers toward Sustainable Design	Ruoyu Wang (KUTE)	A
1-P12	Evaluation of Wall Heating Temperature and Residual Fire Resistance Strength of Carbon-Fixing Scallop Shell Sand Concrete	Kenta Tsuji (KUTE)	B
1-P13	A Novel Cross-Sectioning Method Using Femtosecond Laser for Large Sample Analysis with FIB-TOF-SIMS	Takeshi Sano (KUTE)	A

2. Smart Systems and Automation

Presentation No.	Title	Presenter	Presentation Group
2-P01	Basic Investigation of Channel Thickness Toward Thin Optical Control Devices Using Liquid Metal	Kento Yoshida (KUTE)	B
2-P02	Gait Recognition Based on Inner and Outer Product Relationships of Acceleration Vectors	Luo Shuaifan (KUTE)	A
2-P03	Basic Study on Fine Liquid Crystal Alignment Control by IR Semiconductor Laser Irradiation	Kosei Mochizuki (KUTE)	B
2-P04	Response Time of an Optical Device Driven by the Electrical Motion of Liquid Metal Droplets	Reo Tazawa (KUTE)	A
2-P05	Effect of Crystalline Orientation Ratio on In ₂ O ₃ for TFT-Type CO ₂ Gas Sensor	Yuichiro Ebisawa (KUTE)	B

2-P06	UV Irradiation Energy for Inducing Pretilt Angles through Novel Photoalignment Control of Liquid Crystals Doped with Photoreactive Monomers	Shun Shimizu (KUTE)	A
2-P07	Development on a monitoring system of lasers for two-color resonance ionization	Tsubasa Sasaki (KUTE)	B
2-P08	Accuracy Analysis of Palm Print Recognition Using a Convolutional Neural Network Model with Local Region Extraction and Data Augmentation	Shota Odagiri (KUTE)	A
2-P09	A Study on Model Predictive Control for Rotary Inverted Pendulum using Deep Neural Network	Yuki Asaga (KUTE)	B

3. Energy Systems and Environmental Engineering

Presentation No.	Title	Presenter	Presentation Group
3-P01	Experimental Verification of Transverse Magnetic Flux Type Linear Switched Reluctance Motor for Transport System	George Miyao (KUTE)	A
3-P02	Difference in wind noise between left and right side of wind direction in vertical-axis wind turbine equipped with helical blades having wide helix angle	Kaho Kobori (KUTE)	B
3-P03	Simulation-based Analysis of the Introduction of Short Superconducting Cables in a DC Electric Traction Power Supply System	Tomoharu Kuronuma (KUTE)	A
3-P04	Classification of molten particles collected in Hiroshima City based on FIB-TOF-SIMS analysis in relation to B and Li isotope ratios	Kei Nagone (KUTE)	B
3-P05	Comparison of Hiroshima molten particles and firework particles	Yousuke Ishii (KUTE)	A
3-P06	Evaluation of the Thermal Environment in an Apartment's Common Corridors with Evaporative Cooling Bricks in Indonesia	Daia Saito (KUTE)	B
3-P07	Development of Resonance Ionization Laser SNMS for Fuel Debris Characterization Analysis	Riku Tokunaga (KUTE)	A
3-P08	Experimental Verification of Online Winding Resistance Identification for Linear Switched Reluctance Motor	Sakuya Ebashi (KUTE)	B

4. Urban Infrastructure and Resilience

Presentation No.	Title	Presenter	Presentation Group
4-P02	Japanese Castle Sites and Urban Design The Uniqueness of Castle Sites through Comparative Analysis of Historic Sites	Yuki Matsumura (KUTE)	B
4-P03	Increasing Transport Capacity on a Railway Line Using Shorter Trainsets: Technique in Which Two or More Trainsets Share the Same Platform in a Station	Takashi Nishikubo (KUTE)	A
4-P04	Study on the prediction of future inpatient numbers and required number of hospital beds by secondary medical area.	Aiko Minamiguchi (KUTE)	B

5. Food Engineering and Biotechnology

Presentation No.	Title	Presenter	Presentation Group
5-P01	TOF-SIMS Analysis of Single Cells Using Rapid Freezing Method	Junichiro Takikawa (KUTE)	A
5-P02	Exploration of UV-C Resistant Microorganisms	Ryu Terashima (KUTE)	B
5-P03	Modulation of Plasma Discharge via Applied Potential: Impacts on Onion Seed Germination	Aldrin Asagra Tan (UPD)	A
5-P04	Contribution and Dynamics of Aroma Compounds in Boiled Wagyu Beef during Cooking	Kenta Ito (KUTE)	B
5-P05	Examination of Planarian Cell Culture: Specific Binding to Laminin 511E8	Masahiro Miyamoto (KUTE)	A
5-P06	Clarification of the Regulatory Mechanism of Type IV Collagen Expression by Notch Signaling.	Ren Ota (KUTE)	B
5-P07	Preparation of Peptide-based Enzyme Inhibitors Incorporating Modified Lysine Residues	Arisa Tatsunami (Kanto Gakuin, KUTE)	A
5-P08	Preparation of Peptide-based BACE1 Inhibitors Using Effective Substrate Sequences	Shinji Katsuoka (Kanto Gakuin, KUTE)	B
5-P09	A Novel Cross-Sectioning Method Using a Femtosecond Laser for Secondary Ion Mass Spectrometry of Large Samples	Tsukasa Ishino (KUTE)	A
5-P10	Isolation and Characterization of Acidophylic Amylase-Producing Microbes	Fumiya Kobayashi (KUTE)	B
5-P11	Notch3 Signaling Regulates Type IV Collagen Expression During Angiogenesis	Kazuki Kukita (KUTE)	A
5-P12	Internal Distribution Analysis of Medicine Administrated to a Spheroid by Using FIB-TOF-SIMS	Ryunosuke Hayasaki (KUTE)	B

6. Advanced Functional Materials

Presentation No.	Title	Presenter	Presentation Group
6-P01	Improving the Performance of Silicon-Based Hybrid Solar Cells through Incorporation of MoS ₂ @Colloidal Carbon Dots with PEDOT:PSS as the Hole Transport Layer	Meng-Jung Kang (STUST)	A
6-P02	MEMS-Based Gas Sensors with Co-Sputtered NiO–MoO ₃ Thin Films for Trace NO ₂ Detection	Qian-Yu Yi (STUST)	B
6-P03	Relationship between Indentation Depth and Indentation Diagonal Lengths in Brittle Materials	Keigo Harada (KUTE)	A
6-P04	Thin-Plate Specimens of Brittle Materials	Suzu Harada (KUTE)	B
6-P05	Investigation into Mechanical Strength of Resin-Containing Dissimilar Material Joints	Masashi Utada (KUTE)	A
6-P06	Investigation of the Correlation between Electrode Surface and Changes in Forming and Switching Characteristics in ITO/SiO _x /ITO ReRAM	Yuito Makishima (KUTE)	B
6-P07	Characteristics Improvement of As-Deposited Amorphous IGZO Thin-Film Transistors by UV Irradiation	Koga Nakamura (KUTE)	A
6-P08	Facet Induced Growth of Wurtzite Structure in Rocksalt-structured MgZnO Alloys Evaluated Complementarily by Photoluminescence Mapping and X-ray Pole Figure Measurements	Kyosuke Tanaka (KUTE)	B

6-P09	Development of p-type SnO Thin Films via a Low-Temperature Solution Process with DUV Irradiation	Bowen Cao (KUTE)	A
6-P10	Impact of Growth Temperature on α -Al ₂ O ₃ Layers Grown by Mist CVD	Daiki Namba (KUTE)	B
6-P11	PL Spectra of GaN Layers Observed from Their Surface and Backside Directions	Chisato Ohta (KUTE)	A
6-P12	Synthesis of Benzoxaborole Derivatives and Evaluation of Their Properties.	Koki Saito (KUTE)	B
6-P13	Removal of Copper from Aqueous Solution Using Polyethyleneimine-Modified Activated Carbon from Water Hyacinth	Ramon Christian Eusebio (UP)	A
6-P14	Flexible Birefringence Material for the UV-cured Time Measurements in a Polarization Interferometer	Chen-En Lin (STUST)	B
6-P15	A New Formation Model of the CV Chondrite Matrix Based on Al-rich and Fe Particles Revealed by FIB-TOF-SIMS Analysis	Shion Shirai (KUTE)	A
6-P16	Impact of Annealing on Te Oxidation States and p-Type TeOX TFT Performance	Kazuho Ishi (KUTE)	B
6-P17	Study on Efficiency Enhancement of Inverted Perovskite Solar Cells by Adding Basic Substances to PEDOT:PSS	Yue Ma (KUTE)	A
6-P18	High Lateral Resolution TOF-SIMS Analysis of Matrix in Carbonaceous Chondrites	Mamoru Masuda (KUTE)	B
6-P19	Study on Rapid Epitaxial Growth of β -Ga ₂ O ₃ by Mist CVD Using Polycrystalline Ga ₂ O ₃ Powder	Shohei Abe (KUTE)	A
6-P20	Growth of AlGaIn/GaInN Heterostructure by MOVPE with a He Carrier Gas	Yuki Arai (KUTE)	B

7. Architecture and Civil Engineering Innovations

Presentation No.	Title	Presenter	Presentation Group
7-P01	A Study of Comparison of Apartment Floor Plans in Taiwan and Japan	Saita Mitsui (KUTE)	A
7-P02	Research on Student Spaces on Kogakuin University's Shinjuku Campus	Hiroki Yanagisawa (KUTE)	B
7-P03	Step-by-Step Renovation of an Elemental School	Tatsuya Sakayori (KUTE)	A
7-P04	A Study on the Usage of the Learning Commons on Kogakuin University's Hachioji Campus	Yunosuke Ikusawa (KUTE)	B
7-P05	A Study on the Generational Changes in the Staff Station of the Hospital Wards	Yuya Minoru (KUTE)	A
7-P06	A Study on the Libraries as Third Places for the Elderly	Ririka Murata (KUTE)	B
7-P07	Analysis of Planning Characteristics for Office Buildings in Urban Redevelopment Areas - Focusing on Toranomon, Shibuya, and Shinagawa -	Takanari Kuwana (KUTE)	A
7-P08	Development of Soil Cement Composite Materials for Conserving Sand Resources and Spreading Regional Production System	Mayuko Sakai (KUTE)	B
7-P09	From Urban Voids to Living Landscapes: Human-Ecosystem Interactions in Tokyo	Ayaka Emori (KUTE)	A
7-P10	Proposal and Mixture Composition Assessment of Blue Carbon Functional Concrete Mixed with Phosphorus Recovered from Sewage Sludge	Nene Yanai (KUTE)	B

7-P11	Survey on Human Behavior in Parks and Squares	Kosei Asami (KUTE)	A
7-P12	Application and Market Deployment Strategy for High-Elongation Acrylic–Silicone Surface Protective Coatings in New-Build and Renovated Timber Structures	Miyu Otake (KUTE)	B
7-P13	A Study on Learning Environments and Utilization Characteristics in Special Needs Schools from the Perspective of Activities of Daily Living for Children with Severe and Multiple Disabilities	Natsuki Tsukamoto (KUTE)	A
7-P14	Consideration on the Basic Physical Properties of Carbon Neutral Concrete Using Lightweight Calcium Carbonate	Yuta Furukawa (KUTE)	B
7-P15	Mechanical Properties of Blue Carbon Nutrient-Enriched Concrete Incorporating Phosphorus Recovered from Sewage Sludge	Soshiro Tanaka (KUTE)	A
7-P16	The Effect on Productivity of Subdivision of Work by On-Site Agents and Delegation of Work	Hitoshi Katou (KUTE)	B

8. Chemical and Environmental Engineering

Presentation No.	Title	Presenter	Presentation Group
8-P01	Toluene Combustion Catalyzed by Supported Pd Catalysts	Yuto Sekita (KUTE)	A
8-P02	A Novel Preparation Method for Obtaining Polyethylenimine-Loaded Silicone-Based Microcapsules Using Glass Capillary Microfluidic Devices	Ukyo Ichikawa (KUTE)	B
8-P03	Effect of Additives on the Various Products of Gold in Bipolar AC Electrolysis	Miku Yoshizawa (KUTE)	A
8-P04	Changes in Ecosystem Carbon Stocks through Mangrove Forestation in Sumba Island, Indonesia	Hikaru Kamiya (KUTE)	B
8-P05	Quantitative Assessment of Transitional and Steady Foiling States through GPS and Wind Data Integration	Go Fukino (KUTE)	A
8-P06	Single Particle Analysis of Yellow Sands Using FIB-TOF-SIMS	Reo Nukui (KUTE)	B
8-P07	Development of Marine-Based Fertilizers and Field Validation of Seaweed Aquaculture in Sea	Hee-Joon Kim (KUTE)	A

9. Information Technology and Informatics

Presentation No.	Title	Presenter	Presentation Group
9-P01	A Hierarchical Consensus Agreement Method among Entities for an IoT Data Distribution Model	Shun Fuse (KUTE)	B
9-P02	Basic Evaluation of Superposition Path Establishment Method based on Distance Decay in Elastic Optical Networks	Yohei Tanaka (KUTE)	A
9-P03	Blink-Triggered Ear-EEG Alignment for Mental Fatigue Assessment	Wataru Wakayama (KUTE)	B
9-P04	IoT-ZTN based Access Control Enhancement using IDS information	Koki Hashimoto (KUTE)	A
9-P05	The Dynamic Route Reconfiguration Methods for ICN Based Sensor Networks	Satsuki Watanabe (KUTE)	B
9-P06	Extension of the IoT-ZTN System to Provide	Kosei Shirao	A

	Cross-Device Services	(KUTE)	
9-P07	Design of a Verification Platform for Information-Centric Networking Streaming Services	Yuto Suehisa (KUTE)	B
9-P08	Estimation of Fatigue and Recovery during Intermittent Exercise Using Wearable Sensors	Shunto Sato (KUTE)	A
9-P09	Analysis and Mitigation on Write Operation Performance Degradation on Flash Storage	Kenta Takabayashi (KUTE)	B
9-P10	Electrooculography-Based Quantification of Visual Fatigue Using a Gaze-Control System	Jumpei Ohashi (KUTE)	A
9-P11	A Generative Adversarial Network Based Method for Generating Fonts that Reflect Landscape Impressions	Souichi Hayama (KUTE)	B
9-P12	Design of a Two-Tier Blockchain Architecture for the IT/OT Aggregation Systems	Ryota Sugano (KUTE)	A
9-P13	Cognitive Assessment of Chinese Speakers Using EEG Features from a P300 Speller-BCI	Kodai Yokoo (KUTE)	B
9-P14	Proposal of CRE Based on NOMA Pairing Criteria in HetNet	Asahi Yoshikawa (KUTE)	A
9-P15	A Study on Flick Input User Data	Tomoya Kikuchi (KUTE)	B
9-P16	Identifying Noisy Training Data Using LLM Inference Interpretability	Shido Hosono (KUTE)	A
9-P17	Proposal of Relay-Type GPS Using G-Vehicles in Many Skyscrapers' Environments	Yuji Komoto (KUTE)	B
9-P18	Core Configuration Strategy Considering XT Blocking for 19-Core MCF in SDM-EON	Osuke Yagasaki (KUTE)	A
9-P19	Reinforcement Learning for Avoiding Moving Obstacles and Reaching Destination	Takafumi Ida (KUTE)	B
9-P20	Improving Mutator Performance in Android ART GC by Adaptive GC Selection and Heap Expansion	Hiroki Yamada (KUTE)	A
9-P21	Frequency Utilization Efficiency Improvements by FEC Metric Masking for OFDM Tone Reservation	Chikara Kawanabe (KUTE)	B
9-P22	Selective Dynamic Multilayering for Evolutionary Neural Network Construction	Yuta Kobayashi (KUTE)	A
9-P23	Orchestration by LLMs with Different Opinions	Hiroto Inoue (KUTE)	B
9-P24	3-Dimensional Drone's Allocation Control Based on UE Clustering in Multi-hop Wireless Networks	Yusuke Furita (KUTE)	A
9-P25	A Study on HTTP/3 Throughput over Lossy Networks	Tsuyoshi Miyashita (KUTE)	B
9-P26	Learning Efficiency in Tetris Depending on Initial Height of the Board through Deep Reinforcement Learning	Masafumi Mukaida (KUTE)	A
9-P27	TDOA-Based Geolocation Using Drone's Positioning by GPS	Itaru Yoshida (KUTE)	B
9-P28	Effective Range Verification of DTN in a terminal Congested Situation	Haruka Ushikubo (KUTE)	A
9-P29	Memory Access Performance in TEE and REE	Shunya Shibata (KUTE)	B
9-P30	Modeling the Temporal Dynamics of Addictive Tendencies Using Reinforcement Learning	Shota Yamauchi (KUTE)	A
9-P31	Bayesian Optimization for Reproducing Body Surface Patterns in Reaction Diffusion Models	Arisu Miyata (KUTE)	B
9-P32	Evaluation of Hallucination in Japanese Large Language Models	Hantao Zhang (KUTE)	A
9-P33	Performance Evaluation of Kotlin and Java	Sota Shinagawa (KUTE)	B
9-P34	Evaluation of a Semi-structured Psychological Rating System Using Large-scale Language Models	Norihiro Inagaki (KUTE)	A

9-P35	Improving 3D Pose Estimation Accuracy in High-Speed Sports: A Case Study on Inline Speed Skating	Wataru Kawaguchi (KUTE)	B
9-P36	Face Image-Based Nationality Classification and Feature Analysis of Three Asian Countries	Shogo Nagaoka (KUTE)	A
9-P37	Performance Evaluation of Service Identification Methods across Different Capture Seasons	Ryo Asaoka (KUTE)	B
9-P38	A Performance Study on Linux Page Cache	Yuya Ishikawa (KUTE)	A
9-P39	Accuracy Simulation of a Cochlear Measurement System Using a Three-Dimensional Spiral	Naoya Osawa (KUTE)	B
9-P40	An Analysis of Generalization Performance for a Dataset from a Prototype Annotation Tool	Yosuke Idei (KUTE)	A
9-P41	Adaptive TCP Congestion Control Using RTT Ratio for High Bandwidth-Delay Product Networks	Hirofumi Shinyama (KUTE)	B
9-P42	The Effects of Low-Precision Arithmetic in the ILU (0) Preconditioned BiCGSTAB Method	Jin Kukita (KUTE)	A
9-P43	Design of a Multi-Vehicle Communication Algorithm for Unsafe Following Distance Detection	Daiki Kobayashi (KUTE)	B
9-P44	Toward an Automated Requirements Specification Ecosystem: A Generative AI-Based Method for Extracting Commonalities and Differences across Multiple Specifications	Arata Yokoi (KUTE)	A
9-P45	Design and Improvement of Logic Circuits Using NAND Gates for Encoding and Decoding of Recording Codes Based on Logical Expression Minimization	Masayuki Hanabusa (KUTE)	B
9-P46	Effects of Luminance on the Direction and Strength of Visual Attention	Yosuke Kuno (KUTE)	A
9-P47	Proposal of User Requirements Content Matching Method Based on Similarity Using Value Elements	Megumi Tanaka (KUTE)	B
9-P48	Toward a Process Model for Innovation in Hackathons: Integrating Requirements Engineering and Design Thinking	Koki Togami (KUTE)	A
9-P49	Clustering Analysis of Common Physical Activity Locations among Older Adults	Haruki Shinno (KUTE)	B
9-P50	Implementation and Energy Evaluation Type Nodes for Information-Centric Sensor Networks	Shonoshin Goto (KUTE)	A
9-P51	A Research on Creating Examination Questions Using a Large Language Model for a Third Class (Class III) Qualified Electrical Engineer's Qualification Examination	Kan Masuda (KUTE)	B
9-P52	Simulation on Integrating Sensory Feedback Systems in Human Upright Posture Control	Takahiro Oinuma (KUTE)	A
9-P53	Reinforcement Learning Methods for Large-Scale Fire Spread Prediction in Urban Area	Yuki Ueda (KUTE)	B
9-P54	Preprocessing Method for Mid-Air Character Recognition in Virtual Reality	Kaisei Ogata (KUTE)	A
9-P55	Data Transfer Method based on Message Importance using DTN between Isolated Areas	Hiroto Kondo (KUTE)	A
9-P56	Performance Evaluation of Service Identification Methods across Different Capture Seasons	Shungo Miyazaki (KUTE)	B

10. Education and Human Science

Presentation No.	Title	Presenter	Presentation Group
10-P01	Signal Processing Methods for Facial Features in Drowsiness Assessment	Shunki Suzuki (KUTE)	B
10-P02	A Prototype of Context-Aware Appearance Adaptation in Avatar Agents	Atsuya Uchida (KUTE)	A

11. High School Special Session

Presentation No.	Title	Authors	Presentation Group
HS-P01	The Relationship Between the Ratio of Glutinous Rice Flour and the Elasticity of Rice Flour Bread	Saya Okada, Chiharu Ueda, Chihiro Uematsu (Toshimagaoka Joshigakuen Senior High School)	A
HS-P02	Changes in Trajectory and Velocity Due to the Shape of an Object	Akari Ku, Kaho Miyazawa, Rin Morimoto, Sana Ban (Toshimagaoka Joshigakuen Senior High School)	A
HS-P03	Accelerating Kiwi Fruit Ripening with Fruit	Rakukei To, Yuzuka Kaneko, Mai Kawabata, Yuki Kawaguchi, Sakurako Hayashi (Toshimagaoka Joshigakuen Senior High School)	A
HS-P04	Research on Power-Generating Microbial Fuel Cells	Ryotaro Zen, Ren Kimura, Takumi Suzuki, Ryunosuke Harada (Tokyo Metropolitan Tama High School of Science and Technology)	A
HS-P05	The Effect of Gelatin and Agar Combination Ratios on Jelly Fluidity	Arisa Nakamura, Yu Arakawa, Mao Hosoda (Toshimagaoka Joshigakuen Senior High School)	A
HS-P06	What Materials Are Suitable for Sound Reflection?	C. Saito, Y. Jinda R. Tanso, M. Yamanaka (Toshimagaoka Joshigakuen Senior High School)	A
HS-P07	Developing an AI Model for Stock Price Prediction	Nagisa Takanarita, Yuna Umetsu, Satsuki Yamada (Toshimagaoka Joshigakuen Senior High School)	A
HS-P08	A Framework for Japanese Sentence-Level Emotion Estimation Using Vad Scores with Negation and Attention Weighting	Haruka Tamura (Tokyo Gakugei University International Secondary School)	A
HS-P09	Safe Cooling Packs: Slowing Ice Melting with Plant-Derived Food Additives	Rinka Kume (Toshimagaoka Joshigakuen Senior High School)	A
HS-P10	Formation of the Metallic Tree	Tomoka Kuwano, Mizuki Kaneda, Misaki Kubota, Hanano Kurokawa (Toshimagaoka Joshigakuen Senior High School)	A
HS-P11	Development of an Underwater Propulsion Model Utilizing Jellyfish Swimming Mechanisms	Saki Nakama (Toshimagaoka Joshigakuen Senior High School)	A

HS-P12	Development of Circular Hovercraft	Haruya Mizoguchi (Tokyo Metropolitan Toyama Highschool)	A
HS-P13	External factors of Hit Songs	T. Hatada, S. Yaguchi, and T. Miyake (Toshimagaoka Joshigakuen Senior High School)	A
HS-P14	Analysis of High School Baseball Games with Extra Innings	Momoka Asano, Mizuki Hirose, and Momo Yoshida (Toshimagaoka Joshigakuen Senior High School)	A
HS-P15	Creating Origami with Edible Materials for the 25th International Symposium on Advanced Technology	Chinatsu Ito, Minami Okubo, Sao Nakano, Tsugumi Ishii (Toshimagaoka Joshigakuen Senior High School)	A
HS-P16	Mongolia's Environment as Observed Through Vegetation Surveys	Momoka Chida, Hazuki Watanabe, Saki Ando, Shihori Sado, Gento Okumura and Ryosuke Yamaguchi (Tokyo Metropolitan Kokubunji High School)	A
HS-P17	Development of an X-Ray-Based Diagnostic Decision-Support and Automatic Report-Generation Model	Karin Hiramatsu (Toshimagaoka Joshigakuen Senior High School)	A
HS-P18	Greening of Toshima City Using Mathematical Optimization	Ena Akiyama, Riho Oizumi, Nanaho Kataoka, Mayumi Yamamoto (Toshimagaoka Joshigakuen Senior High School)	A
HS-P19	Optimal Location of Evacuation Shelters	Momona Akutsu, Izumi Arai, Sayaka Yasui (Toshimagaoka Joshigakuen Senior High School)	A
HS-P20	Development of a Learning Support Application for Toshimagaoka Students	Sarasa Ando, Emi Takeishi (Toshimagaoka Joshigakuen Senior High School)	A
HS-P21	Calculate Cervidae Population by Using Fixed-Point Cameras and Proposal to Prevent Crop Damage Caused by Cervidae	Nagi Matsumoto, Rio Ashida (Tokyo Gakugei University Senior High School)	A
HS-P22	Optimization of Living Space Layout for Disaster Evacuation Shelters	Chiaki Shimoda, Mayu Endo, Hana Kurosaka, Reika Mitsumon (Toshimagaoka Joshigakuen Senior High School)	A
HS-P23	Minimize the Time from Determining the Doctor Car's Location to Contacting the Physician	Sayaka Ikuno, Rina Fujimoto, Chika Hamazaki (Toshimagaoka Joshigakuen Senior High School)	A
HS-P24	Making Adhesive Using Glass Transition	Maya Fujita, Natsuki Takiguchi, Sae Fujino, Mahiro Yoshida (Toshimagaoka Joshigakuen Senior High School)	A

Kogakuin University Hachioji Campus

Building 18

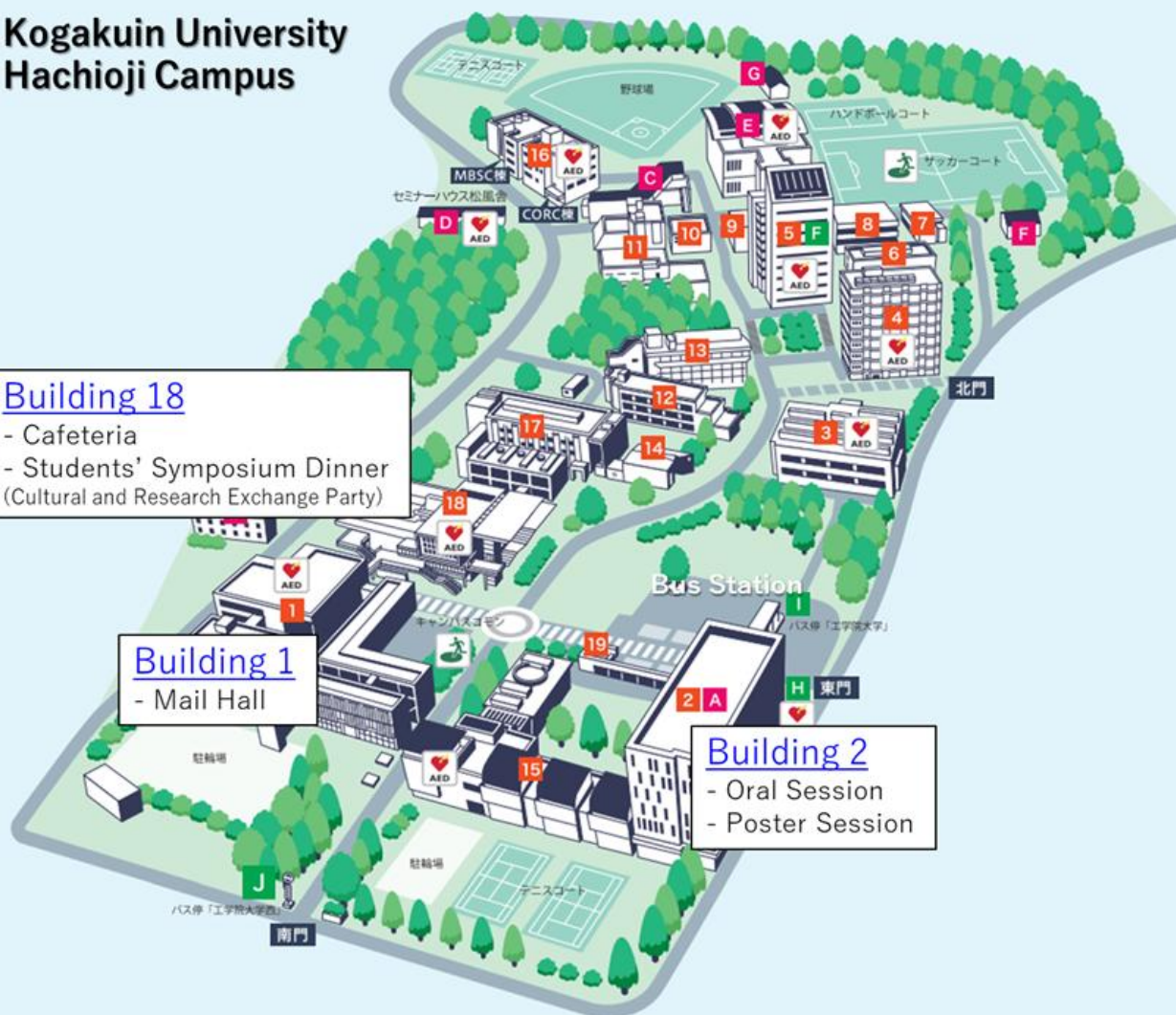
- Cafeteria
- Students' Symposium Dinner
(Cultural and Research Exchange Party)

Building 1

- Mail Hall

Building 2

- Oral Session
- Poster Session



Program of the 24th International Symposium on Advanced Technology (ISAT-24)

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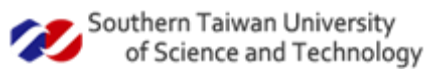
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