

IEEE SMC Japan Workshop 2026 (Friday & Saturday)

at Rinku Campus of Osaka Metropolitan University <https://www.omu.ac.jp/en/about/access/>
Floor Map of the Rinku Campus <https://www.omu.ac.jp/vet/campus/>

Friday, Jan 23, 2026

Venue: Cafeteria (2F, Orange Area in the map)

Invited Talk Session

- 1630-1700 **Invited 1** Chair: Tadahiko Murata (Program Chair, The University of Osaka)
From Cohort to Individual: Generative Simulation for PersonalisedOncology Clinical Trials
Speaker Ms. Lihong Wen (Muroran Institute of Technology, Ph.D Candidate)
- 1700-1730 **Invited 2** Chair: Naoki Masuyama (Financial Chair, Osaka Metropolitan University)
Effects of a Mobile Robot’s Gaze on Pedestrians in Passing Situations
Speaker Mr. Ryo Takata (Toyama Prefecture University, Ph.D Candidate)
- 1730-1800 **Invited 3** Chair: Naoyuki Kubota (International Liaison Chair, Tokyo Metropolitan University)
Fair Fuzzy System Design via Evolutionary Multi-objective Optimization
Speaker Mr. Takeru Konishi (Osaka Metropolitan University, Ph.D Candidate)
- 1800-1830 **Invited 4** Chair: Syoji Kobashi (General Chair, University of Hyogo)
Deciding the Amount of Learning in Humarn-Robot Collaborative Learning: To Promote Proactive Learning in Educational-Support Robots
Speaker Mr. Hiroki Kaede (Aichi Prefectural University, Master Course Student)

1830-1900 Recess

Venue: Dining Anzu (Rinku Papillio 2F in Rinku Town Station, No. 8 on the map) http://www.rinku-town.jp/papillio/shop_floor.html

Opening Reception

- 1900-2100 **Opening Reception at Anzu, Rinku Town Station**
- 1900-1910 **Welcome Greetings**
Syoji Kobashi (General Chair, Ex IEEE SMC Japan Chapter Chair, University of Hyogo)
- 1910-1940 **Introduction for IEEE SMC Society Japan Chapter**
Syoji Kobashi (General Chair, Ex IEEE SMC Japan Chapter Chair, University of Hyogo)
- 1940-2010 **Intoroduction for IEEE SMC Society**
Tadahiko Murata (Program Chair, Ex Vice President of IEEE SMC Society, The University of Osaka)
- 2010-2200 **Open Discussion on Activities in International Societies**
All Attendees

Saturday, Jan 24, 2026

Venue: Multi-Purpose Room (In front of the garden area on 5F)

Plenary Talk Session

- 0900-0930 Registration
- 0930-0940 **Opening Greetings**
Syoji Kobashi (General Chair, Ex IEEE SMC Japan Chapter Chair, University of Hyogo)
- 0940-1040 **Plenary 1** Chair: Naoyuki Kubota (International Liaison Chair, Ex IEEE SMC Japan Chapter Chair, Tokyo Metropolitan University)
Obstacle-Avoiding Path Planning for Various Robotics Applications
Speaker Prof. Po Ting Lin (National Taiwan University of Science and Technology)
- 1040-1140 **Plenary 2** Chair: Naoyuki Kubota (International Liaison Chair, Ex IEEE SMC Japan Chapter Chair, Tokyo Metropolitan University)
AI-driven Brain Computer Interface for Human Machine Interaction
Speaker Prof. Li-Wei Ko (National Yang Ming Chiao Tung University)

1140-1300 Lunch

Plenary Talk Session

- 1300-1400 **Plenary 3** Chair: Yusuke Nojima (Local Chair, Osaka Metropolitan University)
Transparent Assistive Actuation for Enhancing the Sense of Agency in Neurorehabilitation
Speaker Prof. Tomoyuki Noda (Advanced Telecommunications Research Institute International (ATR))
- 1400-1430 **Invited 5** Chair: Kento Morita (Publicity Chair, Mie University)
AI-Enhanced Block Design Test Integrated with Traditional Play for Early Cognitive Decline Screening: A Community Co-Creation Approach
Speaker Dr. Adnan Rachmat Anom Besari

1430-1445 Recess

General Session

- 1445-1515 E53 **Quantum Computational Intelligence and Generative AI for Human-Machine Co-Learning**
Chang-Shing Lee (National University of Tainan, Taiwan)
- 1515-1545 J45 **Multiscopic Topological Intelligence in Human-robot Interaction**
Naoyuki Kubota (Tokyo Metoropolitan University)
- 1545-1615 J40 **Agent-Based Simulation on Society Digital Twin Using Synthetic Population**
Tadahiko Murata (The University of Osaka)
- 1615-1645 J24 **Beyond Post-hoc XAI: Explainable Dynamic Causality with Fuzzy LTI Modeling**
Kanta Tachibana (Kogakuin University)
- 1645-1715 J28 **How can we promote the fuzzy theory in 2000 era?**
Junji Nishino (Tamagawa University)

1715-1800 Recess

Venue: Rooftop Bar at OMO Kansai Airport 22nd Floor <https://hoshinoresorts.com/en/hotels/omokansaiairport/dining/>

Banquet

- Chair: Naoyuki Kubota (International Liaison Chair, Ex IEEE SMC Japan Chapter Chair, Tokyo Metropolitan University)
- 1800-1810 **Introduction of Guests from Taiwan**
Naoyuki Kubota (International Liaison Chair, Ex IEEE SMC Japan Chapter Chair, Tokyo Metropolitan University)
- 1810-1830 **Introduction of Activities of IEEE in Taiwan**
Li-Wei Ko (IEEE SMCS Taipei Chapter Chair, National Yang Ming Chiao Tung University)
Chang-Shing Lee (Ex IEEE Tainan Chapter Chair, Ex IEEE CIS Taipei Chapter Chair, National University of Tainan)
- 1830-1850 **Introduction of Japanese Society for Evolutionary Computation**
Kei Ohnishi (Financial Co-Chair, Board Member of JPNSEC, Kyushu Institute of Technology)
- 1850-1910 **Introduction of International Fuzzy Systems Association**
Yusuke Nojima (Local Chair, President-Elect of IFSA, Osaka Metropolitan University)
- 1910-1930 **IFSA-IEEE Relationship and International Activities**
Yusuke Nojima (President-Elect of IFSA, Osaka Metropolitan University)
Tadahiko Murata (Program Chair, Ex Vice President of IEEE SMC Society, The University of Osaka)
- 1930-2100 **Open Discussion**
All Attendees

J or E before Presentation Number shows language used in the presentation

IEEE SMC Japan Workshop 2026 (Sunday)

Sunday, Jan 25, 2026

Class Rooms on 2F

General Sessions

0920-0930 Registration

General Sessions

Room1

Medical Informatics: Chair Kento Morita & Syoji Kobashi

Room 2

Explainable AI & Optimization : Chair Kei Ohnishi

Room 3

Natural Language (1): Chair Naoyuki Kubota

0930-1000	J20	腹部MRIからCTへのドメイン変換による 治療診断支援の可能性 Yudai Adachi (University of Hyogo)	E30	Engineering Hybrid AI Systems for the Codification and Transfer of Experiential Expertise Shuo-Yan Chou (National Taiwan University of Science and Technology)	E44	Integrating QCI&AI-FML and Whisper-Taiwanese Tv0.5 for Human-Machine Co-Learning: Project Implementation and Validation Chao-Cyuan Yue (National University of Tainan) Mei-Hui Wang (National University of Tainan) Chang-Shing Lee (National University of Tainan)
1000-1030	J23	椎骨動脈損傷リスク評価に向けた 頸椎の解剖学的領域別骨折検出AIの開発 Yuya Sakaguchi (University of Hyogo)	E27	Improving Generalization Performance of Multi- objective Fuzzy Genetics-Based Machine Learning using Synthetic Training Data Generated from High-Performance Black-Box Models Yuji Shuto (Osaka Metropolitan University) Naoki Masuyama (Osaka Metropolitan University) Yusuke Nojima (Osaka Metropolitan University)	E47	Application of Whisper Taiwanese Models in Student Outdoor Learning Environments Chun Han Lin (National University of Tainan Computer Science and Information Engineering) Mei-Hui Wang (National University of Tainan) Chang-Shing Lee (National University of Tainan)
1030-1100	J29	Stool Segmentation Using Anatomical Multi-task Learning and Multi-channel Input for Constipation Diagnosis Naoya Takashima (University of Hyogo) Tsuyoshi Sanuki (Hyogo Prefectural Harima-Himeji General Medical Center) Yoshikazu Kinoshita (Hyogo Prefectural Harima-Himeji General Medical Center) Syoji Kobashi (University of Hyogo)	E42	A study of Pareto set learning with a linear inverse model Takato Kinoshita (Osaka Metropolitan University) Naoki Masuyama (Osaka Metropolitan University) Yusuke Nojima (Osaka Metropolitan University)	E50	Semantic Analysis of Taiwanese Texts Using Whisper Taiwanese Low-Iteration Fine-Tuned Models Chun-Chieh Tseng (National University of Tainan) Mei-Hui Wang (National University of Tainan) Chang-Shing Lee (National University of Tainan)
1100-1130	J37	Three-step approach for detection of MRONJ lesions in Panoramic X-ray Images Manami Inoue (Mie University)	E32	Performance Degradation and Recovery of Tactile Texture Sensors Due to Ridge Abrasion Muhammad Yanwari (Politeknik Negeri Semarang) Shogo Okamoto (Tokyo Metropolitan University)	E48	Whisper Taiwanese Model for Applications in Human-Intelligence Texts Hsin-Wei Chen (National University of Tainan) Mei-Hui Wang (National University of Tainan) Chang-Shing Lee (National University of Tainan)
1130-1200	E16	A Predictive Modeling Approach for ADHD Symptom Dimension Estimation in Preschool Children Using EEG Biomarkers Jo-Wei Lin (National Yang Ming Chiao Tung University) Dar-Shong Lin (Mackay Memorial Hospital) Li-Wei Ko (National Yang Ming Chiao Tung University)				

1200-1330 Lunch

Room 1

Training & Robotics: Chair Syoji Kobashi

Room 2

Semantics: Chair Naoki Masuyama

Room 3

Natural Language (2): Chair Yusuke Nojima

1330-1400	J21	Development of a Tabletop Reaction Measurement Device for Assessing Driving Ability in the Elderly Takahiro Takeda (Daiichi Institute of Technology) Haruto Murakami (Daiichi Institute of Technology) Akihiro Yorita (Daiichi Institute of Technology)	J26	Self-Learning Method for Traversability Perception from Challenging Exploration using Topological Map Yukinaga Kato (Okayama University) Yuichiro Toda (Okayama University) Takayuki Matsuno (Okayama University)	E51	Human Evaluation of a Whisper-Based Taiwanese Model for Classical Chinese Texts Chen-Ruei Fan (Nation University of Tainan) Chang-Shing Lee (Nation University of Tainan) Mei-Hui Wang (Nation University of Tainan)
1400-1430	E19	A Gamified System for Autonomous Evaluation and Training of Oral Frailty Exercises Chyan Zheng Siow (Tokyo Metropolitan University) Yujie Huang (CHANGSHA CULTURAL CREATIVE AND ARTS VOCATIONAL COLLEGE) Qingwei Song (Tokyo Metropolitan University) Naoyuki Kubota (Tokyo Metropolitan University) Adnan Rachmat Anom Besari (Politeknik Elektronika Negeri Surabaya)	E38	Comprehensive Map Representation for Robot Partners through a Multiscopic Topological and Semantic Approach Achmad Fahrul Aji (Tokyo Metropolitan University) Naoyuki Kubota (Tokyo Metropolitan University)	E49	An Evaluation of High-Iteration Model Performance of Whisper Taiwanese on Human Intelligence Texts Rui-Hong Wang (National Chi Nan University) Jun-Kui Chiang (National University of Tainan) Chang-Shing Lee (National University of Tainan)
1430-1500	E34	Kinematic and Static Modeling of a 7R Spherical Mechanism with Load-Dependent Self-Alignment Guan-Zhong Wu (National Taiwan University of Science and Technology) Chen-Ting Wen (National Taiwan University of Science and Technology) Yen-Hua Lin (National Taiwan University of Science and Technology)	E31	Semantic-Topological Cognitive Maps for Assistive Behaviour of a Robot Partner Anhar Risnumawan (Tokyo Metropolitan University) Raditya Artha Rochmanto (Tokyo Metropolitan University) Teuku Zikri Fatahillah (Tokyo Metropolitan University) Naoyuki Kubota (Tokyo Metropolisitan University)	E52	Applications of Generative AI and Quantum CI Tool in Taiwanese-English Human-Machine Interactive Learning CHANG HUA TING (National University of Tainan) Chang-Shing Lee (National University of Tainan) Mei-Hui Wang (National University of Tainan)
1500-1530	E39	Kinematic Derivation Method for Six-Axis Industrial Robots Based on Composite End- Effector Transformation Compensation Bo-Shun Huang (National Taiwan University of Science and Technology) Shu-Hao Liang (National Taiwan University of Science and Technology)	J25	Ant Colony Optimization with Pheromone Reinitalization for Constraint Satisfaction Problems Sagier Wu (Takushoku University) Kazunori Mizuno (Takushoku University)		

1530-1545 Recess

Room 1

Closing Address

1545-1600 Closing Address

Syoji Kobashi (General Chair, Ex IEEE SMC Japan Chapter Chair, University of Hyogo)

1600-1800 IEEE SMC Society Japan Chapter Technical Committee Meeting

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