The 18th International Workshop on Regional Innovation Studies (IWRIS2026: October 15-16, 2026)

Workshop Room: Regional Innovation Hall, Building C, Regional Innovation Center, Mie University

(Presenters / 1~16)
Presentation time: total 15 minutes (presentation: 10 minutes + discussion: 5 minutes)
Bell Timing: 8 minutes, 10 minutes, 14 minutes *Switching time: 5 minutes
(Kyenote lectures / K-1 and K-2)
Presentation time: total 20 minutes (presentation: 15 minutes + discussion: 5 minutes)
Bell Timing: 13 minutes, 15 minutes, 19 minutes *Switching time: 5 minutes

I. First Day: October 15 (Thursday)

10:30-10:35 **Opening**
Keita Suwabe (Dean of Graduate School of Regional Innovation Studies, Mie University)

Session 1 Engineering I for Regional Innovation
(K-1) 10:35-11:00
Analysis of the parameters' sensitivity for cooling performance of copper pipe heat exchangers 1
Thiri Shoon Wai[1], Naoki Maruyama[1], Nappasawan Wongmongkol[2], Chatchawan Chaichana[2], Smith Eiamsa-ard[3] and Masafumi Hirota[4]
[1] Engineering Innovation Unit, Graduate School of Regional Innovation Studies, Mie University, Tsu, Japan
[2] Department of Mechanical Engineering, Faculty of Engineering, Chiang Mai University, Chiang Mai, Thailand
[3] Department of Mechanical Engineering, School of Engineering and Industrial Technology, Mahanakorn University of Technology, Bangkok, Thailand
[4] Department of Mechanical Engineering, Faculty of Engineering, Aichi Institute of Technology, Toyota, Japan
1) 11:00-11:20
Classification of Imbalanced Defective Wafer Map Data Using VGG16 Features and LightGBM 5
Shu Konishi[1], Hiroharu Kawanaka[1], Takumi Kitajima[1]

[1] Graduate School of Engineering, Mie University, Tsu, Japan

2) 11:20-11:40

RGB Image Generation From RG Ultra-Widefield Fundus Images Using an Optimized CycleGAN 9

Haru Hirano[1], Takumi Kitajima[1] , Yoshitsugu Matsui[2] , Kumiko Kato[2] , Akiko Ota[2] , Hiroharu Kawanaka[1] , Mineo Kondo[2]

[1] Div. of Electrical and Electronic Eng., Graduate School of Eng., Mie University, Tsu, Japan

[2] Dept. of Ophthalmology, Mie University Graduate School of Medicine, Tsu, Japan

11:40-13:30 Lunch Time

Invited Lecture I

Presentation time: total 30 minutes (presentation: 20 minutes + discussion: 10 minutes)

(I-1) 13:30-14:00

The Effect of Robotic Assisted Gait Training on Physical Activity, Motor Function, and Quality of Life in Children with Spastic Cerebral Palsy: Exploratory Pilot Study 13

Yeon-Gyu Jeong[1], Won-Cheol Kim[2], Yeon-Jae Jeong[2], Ha-Neul Jang[3], Joo-Young Lee[3], Jae-Soon Chung[4], Kyu-Hoon Lee[2]

[1] Department of Physical Therapy, Yeoju Institute of Technology, Yeoju, Republic of Korea

[2] Department of Physical Medicine and Rehabilitation, Hanyang University Medical Center, Seoul, Republic of Korea

[3] Department of Physical Medicine and Rehabilitation, SRC Hospital, Gwangju, Republic of Korea

[4] Department of Sports & Health Care, Korea National University of Transportation, Chungju, Republic of Korea

Invited Lecture II

Presentation time: total 30 minutes (presentation: 20 minutes + discussion: 10 minutes)

(I-2) 14:00-14:30

From Temporary Project to Sustained Collective Action: The Case of Sonmat-itgi Project in South Korea 17

Jiae Seo[1]

[1] Department of Civil Society and NGOs, Graduate School of Public Policy & Civic Engagement, Kyung Hee University, Republic of Korea

14:30-15:00 Break

Session 2 Biological Science for Regional Innovation

(K-2) 15:00-15:25

Rice Husk Utilization for Biomass Power: Energy Potential and Value Addition 21

Trissa Silvian[1], Dwi Wulan Sari[1], Thirtawati[1], and Yulian Junaidi[1]

[1] Department of Agricultural Socio-economics, Universitas Sriwijaya, Ogan Ilir Regency, Indonesia

Session 3 Social Science I for Regional Innovation

3) 15:25-15:45

The Performance Effects of Innovation Diversification under Different Levels of R&D Intensity: Evidence from Japanese Listed Firms 25

Chia-Hui Huang[1] and Yuan-Ru Chang[2]

[1] Department of International Trade, Takming University of Science and Technology, Taipei City, Taiwan

[2] Department of Economics, Aletheia University, New Taipei City, Taiwan

4) 15:45-16:05

Innovation without Expansion: Patents and Firm Performance in Taiwan's Electronics Industry 29

Chia-Hui Huang[1] and Chieh-Ling Chang[2]

[1] Department of International Trade, Takming University of Science and Technology, Taipei City, Taiwan

[2] Department of Economics, Aletheia University, New Taipei City, Taiwan

5) 16:05-16:25

Effects of Cross-Boundary Learning in Depopulated Local Communities on Corporate Employees: An Exploratory Study of Employee Engagement 33

Takashi Shibayama[1]

[1] Graduate School of Regional Innovation Studies, Mie University, Japan

6) 16:25-16:45

An Exploratory Case Study on the Knowledge Creation Process in a Non-Profit Organization 37

Ryoya OGURA[1]

[1] Graduate School of Regional Innovation Studies, Mie University, Tsu, Japan

7) 16:45-17:05

Exploring “Omotenashi” Through Sukiyaki: The Essence of Japanese Hospitality 41

Naoko Akatsuka[1]

[1] Graduate School of Regional Innovation Studies, Mie University

17:30-19:00 **Banquet**

II. Second Day: October 16 (Friday)

Session 4 Engineering II for Regional Innovation

8) 10:30-10:50

Numerical simulation of the heat transfer characteristics of serpentine heat exchangers for localized temperature control in greenhouse cultivation 45

Takumi Hirose[1], Naoki Maruyama[1,2], Thiri Shoon Wai[2], Koki Hirose[1], Hiroto Nakamura[3]

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[2] Engineering Innovation Unit, Graduate School of Regional Innovation Studies, Mie University, Tsu, Japan

[3] Course of Mechanical Engineering, Faculty of Engineering, Mie University, Tsu, Japan

9) 10:50-11:10

Evaluation of soil temperature distribution around heat exchangers installed for crop root zones thermal control 49

Masataka Noro[1], Naoki Maruyama[1,2], Thiri Shoon Wai[2], Shiuma Morimoto[3]

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[2] Engineering Innovation Unit, Graduate School of Regional Innovation Studies, Mie University, Tsu, Japan

[3] Course of Mechanical Engineering, Faculty of Engineering, Mie University, Tsu, Japan

10) 11:10-11:30

Influence of channel surface characteristics on compressor oil behavior and heat transfer in a CO_2 evaporator and its visualization 53

Atsuki Hatano[1], Naoki Maruyama[1,2], Thiri Shoon Wai[2], Hiroto Kawamata[1], Ami Hayashi[3]

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[2] Engineering Innovation Unit, Graduate School of Regional Innovation Studies, Mie University, Tsu, Japan

[3]Mechanical Engineering Program, Department of Engineering, Faculty of Engineering, Mie Uni-versity, Tsu, Japan

11) 11:30-11:50

Experimental investigation on heat transfer characteristics and flow visualization of CO_2 refrigerant in microchannels 57

Toru Saito[1], Naoki Maruyama[1,2], Thiri Shoon Wai[2], Yuta Sato[1], Kota Sato[3]

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[2] Engineering Innovation Unit, Graduate School of Regional Innovation Studies, Mie University, Tsu, Japan

[3] Course of Mechanical Engineering, Faculty of Engineering, Mie University, Tsu, Japan

12) 11:50-12:10

Experimental evaluation of Hypochlorous Acid production characteristics and bubble behavior in a flow-type electrolysis device 61

Koki Ito[1], Naoki Maruyama[1,2], Thiri Shoon Wai[2], Ota Makino[2], Yoshinari Nagao[3]

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[2] Engineering Innovation Unit, Graduate School of Regional Innovation Studies, Mie University, Tsu, Japan

[3] Mechanical Engineering Program, Department of Engineering, Faculty of Engineering, Mie University, Tsu, Japan

12:10-13:40 Lunch Time

Invited Lecture III

Presentation time: total 30 minutes (presentation: 20 minutes + discussion: 10 minutes)

(I-3) 13:40-14:10

Latest Status of Japanese-Style Vegetable Production and Distribution in Indonesia: A Case Study of OKIAGARU Farm in West Java 65

Dwi Wulan Sari[1], Akihisa Nonaka[2], Hiromi Tokuda[3], Trissa Silvian[1]

[1] Department of Agricultural Socio-economics, Universitas Sriwijaya, Ogan Ilir Regency 30139, Indonesia

[2] Graduate School of Regional Innovation Studies, Mie University, Tsu, Mie 514-8507, Japan

[3] Graduate School of Bioagricultural Sciences, Nagoya University, Furo-cho, Chikusa-ku, Nagoya, 464-8601, Japan

Invited Lecture IV

Presentation time: total 30 minutes (presentation: 20 minutes + discussion: 10 minutes)

(I-4) 14:10-14:40

Effects of cricket powder (*Acheta domesticus*) on growth performance, immune response, and gene expression of Nile tilapia biofloc culture-based system 69

Khambou Tayyamath[1], Md Afsar Ahmed Sumon1[1] and Hien Van Doan[1]

[1] Chiang Mai University/Department of Animal and Aquatic Sciences, Faculty of Agriculture,

239 Huai Kaew Road, Suthep, Muaeng, Chiang Mai, Thailand

14:40-15:00 Break

Session 5 Social Science II for Regional Innovation

13) 15:00-15:20
Research Trends and Gaps in Court Interpreting Research in Japan: A Systematic Review 79
Qingyang Han[1]
[1] Graduate School of Regional Innovation Studies, Mie University, Tsu, Japan
14) 15:20-15:40
Analysis of Transitive and Intransitive Verb Choicein Chinese–Japanese Courtroom Interpreting 83
Yuejuan Xu[1]
[1] Graduate School of Regional Innovation Studies, Mie University, Tsu City, Japan
15) 15:40-16:00
A Study on Career Education in High Schools-Focusing on High School Students Who Aspire to Become Teachers- 87
Satoshi Ikawa[1]
[1] Graduate School of Regional Innovation Studies, Mie University
16) 16:00-16:20
Marriage Intentions in Mie Prefecture in the Context of National Trends in Japan 91
Ryo Konishi[1]
[1] Graduate School of Regional Innovation Studies, Mie University

16:20-16:25 **Closing**

Hiroshi Suito (Vice Dean of Graduate School of Regional Innovation Studies, Mie University)