The 10th International Workshop on Regional Innovation Studies
(IWRIS2018: October 18-19, 2018)

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

Presentation time: total 15 minutes (presentation: 10 minutes + discussion: 5 minutes)
Bell Timing: 8 minutes, 10 minutes, 14 minutes

I. First Day: October 18 (Thursday)

10:00-10:15 Opening
Hideto Miyake (Dean of Graduate School of Regional Innovation Studies, Mie University)

Session 1 Engineering I for Regional Innovation

1) 10:15-10:30 A Study on Segmentation Method for Blood Images Using U-Net
Tomohiro Hayakawa¹, Hiroharu Kawanaka¹, V. B. Surya Prasath², Bruce J. Aronow², and Shinji Tsuruoka¹
¹Graduate School of Engineering, Mie University
²Div. of Biomedical Informatics, Cincinnati Children’s Hospital Medical Center, USA

2) 10:30-10:45 Automatic Diagnosis of Best-corrected Visual Acuity Using ResNet for Optical Coherency
Tomohiro Hayakawa¹, Hiroharu Kawanaka¹, V. B. Surya Prasath², Bruce J. Aronow², and Shinji Tsuruoka¹
¹Graduate School of Engineering, Mie University
²Div. of Biomedical Informatics, Cincinnati Children’s Hospital Medical Center, USA

3) 10:45-11:00 A Study on Classification Method for Automatic Lung Image Annotation
Shu Isaka¹, Hiroharu Kawanaka¹, V. B. Surya Prasath², Bruce J. Aronow², and Shinji Tsuruoka¹
¹Graduate School of Engineering, Mie University
²Dep. of Biomedical Informatics, Cincinnati Children’s Hospital Medical Center, USA
4) 11:00-11:15
   Aggregation structure of cellulose microfibers in polystyrene and
dynamic viscoelastic property of the polymer composite
Shuji Suzuki, Yoshihisa Fujii and Naoya Torikai
Graduate School of Engineering, Mie University

11:15-11:30 Break

Session 2 Engineering II for Regional Innovation

5) 11:30-11:45
   High-temperature annealing of sputter-deposited AlN films on patterned sapphire substrates
Kentaro Tanigawa¹, Kanako Shojiki², Yusuke Hayashi¹ and Hideto Miyake¹,²
¹Graduate School of Regional Innovation Studies, Mie University
²Graduate School of Engineering, Mie University

6) 11:45-12:00
   Influences of the mixing of anionic surfactant and fumed silica on water-silicone oil emulsions
Hiroto Katoh¹, Yoshihisa Fujii² and Naoya Torikai²
¹Graduate School of Regional Innovation Studies, Mie University
²Graduate School of Engineering, Mie University

7) 12:00-12:15
   Face-to-face annealing and HVPE growth of sputter-deposited $a$-plane AlN on $r$-plane
sapphire
Ryo Fukuta¹, Kanako Shojiki¹, Jiang Nan¹, Kenjiro Uesugi², Yusuke Hayashi³, Xiao Shiyu³,
Hideto Miyake¹,³
¹Graduate School of Engineering, Mie University
²Strategic Planning Office for Regional Revitalization, Mie University
³Graduate School of Regional Innovation Studies, Mie University

8) 12:15-12:30
   Quantitative evaluation of strain-relaxation in annealed sputter-deposited AlN film
Shuichi Tanaka¹, Kanako Shojiki¹, Kenjiro Uesugi² and Hideto Miyake¹,³
¹Graduate School of Engineering, Mie University
²Organization for the Promotion of Regional Innovation, Mie University
³Graduate School of Regional Innovation Studies, Mie University

12:30-13:30 Lunch Time
Session 3 Invited Lectures I
Presentation time: total 30 minutes (presentation: 20 minutes + discussion: 10 minutes)
13:30-15:30
(I-1) 13:30-14:00
   The recent progress of AlGaN-based ultraviolet materials and devices
   Dabing Li
   Changchun Institute of Optics, Fine Mechanics and Physics, Chinese Academy of Sciences, China
(I-2) 14:00-14:30
   Current Status of New Renewable Energy and Implication for the Future
   Jeongin Kim
   Department of Economics, Chung-Ang University, Korea
(I-3) 14:30-15:00
   Airborne Fine Particulate Matter Management Health Effect – Sources - Improvement Perspectives
   Jong-In Dong
   Department of Environmental Engineering, The University of Seoul, Korea
(I-4) 15:00-15:30
   Economic Growth and Air Pollution: Empirical Study on Basis of the Urban Panel Data from China
   Wen Gao and Xin Yang
   Nanjing Audit University, School of Economics, China

15:30-15:45 Break

Session 4 Bio-Science for Regional Innovation
9) 15:45-16:00
   Effect of Dry Heat Treatment on Physical Properties of Sago Starch
   Takato Miyazaki¹, Hiroshi Ehara², Yukio Toyoda³, Hitoshi Naito⁴, Akemi Itaya⁵, Tomohiro Uchiyama⁶, and Takashi Mishima⁷*
   ¹Graduate School of Regional Innovation Studies, Mie University
   ²Applied Social System Institute of Asia, Nagoya University
   ³College of Tourism, Rikkyo University
   ⁴Kurashiki University of Science and the Arts
10) 16:00-16:15
The utilization of waste from citrus fruit ‘Yamato-Tachibana’ as functional food material
Yuka Yamada¹, Hiroko Nakayama¹,², Yasuhito Shimada²,³, and Takashi Mishima⁴
¹Graduate school of Regional Innovation Studies, Mie University
²Mie University Zebrafish Drug Screening Center
³Graduate school of Medicine, Mie University
⁴Graduate school of Bioresources, Mie University

11) 16:15-16:30
Possibility of conferring stress resistance to rice by artificial orientation of epigenetic mutation
Ryo Namba¹, Yuhko Kobayashi², Issei Kobayashi¹,²
¹Graduate School of Regional Innovation Studies, Mie University
²Center for Molecular Biology and Genetics, Organization for the Promotion of Regional Innovation, Mie University

12) 16:30-16:45
Expansion of conferring disease resistance by artificial orientation of epigenetic mutation to crop plants
Kazuki Murata¹, Yuhko Kobayashi², Issei Kobayashi¹,²
¹Graduate School of Regional Innovation Studies, Mie University
²Center for Molecular Biology and Genetics, Mie University

17:30-19:00 Banquet (Restaurant PASEO on campus)
II. Second Day: October 19 (Friday)

Session 5 Social Engineering I for Regional Innovation
13) 10:00-10:15
   Research on Stem Protection as a Measure against the Damage by Animal
   Daisei Okayama and Norihiro Nishimura
   Graduate School of Regional Innovation Studies, Mie University
14) 10:15-10:30
   Importance of adjusting supply meeting demand in fuel market of woody waste power
   generation -From the case of Agatsuma BioPower-
   Taiki Abe, Hisatsuna Mori and Hye-Sook Park
   Graduate School of Regional Innovation Studies, Mie University
15) 10:30-10:45
   Integrated approach to quality teaching that fosters students’ empowerment – Teachers’
   professional development outlook
   Cisse Facinet¹, Hitoshi Susono², Hye-Sook Park¹
   ¹Graduate School of Regional Innovation Studies, Mie University
   ²Center for integrated research and development, Faculty of Education, Mie University
16) 10:45-11:00
   Restrictions on university trademarks and analysis of university trademarks using similar
   group code
   Shogo Nakagawa¹ and Hisanori Yagami²
   ¹Intellectual Property Center, Ehime University
   ²Graduate School of Regional Innovation Studies, Mie University

11:00-11:15 Break

Session 6 Engineering III for Regional Innovation
17) 11:15-11:30
   Estimated Personal Dictionary for Handwritten Hiragana Character Recognition Using Neural
   Network
   Naoki Hayashishita¹, Haruhiko Takase¹, Hiroharu Kawanaka¹, Hisanori Yagami², and Shinji
   Tsuruoka¹
   ¹Graduate School of Engineering, Mie University
   ²Graduate School of Regional Innovation Studies, Mie University
18) 11:30-11:45
   Improve Response to Successive Input Patterns in SpikeProp: A Discussion on Training Performance by the Amount of Training Data
   Kengo Onoda, Haruhiko Takase, Hidehiko Kita, and Hiroharu Kawanaka
   Graduate School of Engineering, Mie University

19) 11:45-12:00
   Extraction of Frequent Sub-sequences from Spiking Neural network - Extraction from Symbol Sequence with the Fluctuation of the Interval -
   Masachika Sawamura, Kenta Morita, Haruhiko Takase, and Hidehiko Kita
   Graduate School of Engineering, Mie University

12:00-13:00 Lunch Time

**Session 7 Invited Lectures II**
Presentation time: total 30 minutes (presentation: 20 minutes + discussion: 10 minutes)
(I-5) 13:00-13:30
   Economic Analysis of Pesticides Management for Effective Agro-Environmental Policy in Context of Sustainable Rural Development
   Hasan Yılmaz
   Department of Agricultural Economics, Faculty of Agriculture Sciences and Technology, Isparta University of Applied Sciences, Turkey

(I-6) 13:30-14:00
   Innovation Quality and Market Value in Taiwan
   Chia-Hui Huang
   Department of Economics, Aletheia University, Taiwan

(I-7) 14:00-14:30
   A Case Study of Tourism Regional Innovation System in rural region in Taiwan
   Ling-Mei Ko¹, Wei-Chun Tai² and Chun-Jia Fang³
   ¹Department of Leisure, Recreation, and Tourism Management, Southern Taiwan University of Science and Technology, Taiwan
   ²Department of Information and Communication, Southern Taiwan University of Science and Technology, Taiwan
   (I-8) 14:30-15:00
   Trial of Japanese Language Education at Regional High School and Its Case
   Loch Leaksmy
Department of Japanese, Royal University of Phnom Penh, Cambodia

15:00-15:15 Break

Session 8 Social Engineering II for Regional Innovation

20) 15:15-15:30
Determinants of Innovation Output: Firm-Level Evidence in Taiwan
Chia-Hui Huang¹, Tony Chieh-Tse Hou² and ○Tzuen-Yau Wu³
¹Department of Economics, Aletheia University, Taiwan
²Department of Finance, National Dong Hwa University, Taiwan

21) 15:30-15:45
An Analysis of Investment Strategies and Excess Returns in the Tokyo Stock Market
Ming-Chin Chin and ○Yu-Ching Chung
Department of Economics, Aletheia University, Taiwan

22) 15:45-16:00
Reduction of Greenhouse gases and introducing personal carbon trading (PCT) scheme in Korea
Hyeonjeong Kim and Jeongin Kim
Department of Economics, Chung-Ang University, Korea

23) 16:00-16:15
Sustainable Development & eco-tourism
Kyoung-Tae Ryou¹ and Jeongin Kim²
¹Research & Business Foundation, Chung-Ang University, Korea
²Department of Economics, Chung-Ang University, Korea

16:15-16:20 Closing
Hideto Miyake (Dean of Graduate School of Regional Innovation Studies, Mie University)