

# 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 Hayakawa<sup>1</sup>, Hiroharu Kawanaka<sup>1</sup>, V. B. Surya Prasath<sup>2</sup>, Bruce J. Aronow<sup>2</sup>, and Shinji Tsuruoka<sup>1</sup>

<sup>1</sup>Graduate School of Engineering, Mie University

<sup>2</sup>Div. 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 Tomography Image

Shohei Suzuki<sup>1</sup>, Shinji Tsuruoka<sup>1</sup>, Hiroharu Kawanaka<sup>1</sup>, Haruhiko Takase<sup>1</sup>, Hisanori Yagami<sup>2</sup>, Yoshitsugu Matsui<sup>3</sup>, Hitomi Suimon<sup>3</sup>, Yoko Mase<sup>3</sup>, and Hisashi Matsubara<sup>3</sup>

<sup>1</sup>Graduate School of Engineering, Mie University

<sup>2</sup>Graduate School of Regional Innovation Studies, Mie University

<sup>3</sup>Graduate School of Medicine, Mie University

#### 3) 10:45-11:00

A Study on Classification Method for Automatic Lung Image Annotation

Shu Isaka<sup>1</sup>, Hiroharu Kawanaka<sup>1</sup>, V. B. Surya Prasath<sup>2</sup>, Bruce J. Aronow<sup>2</sup>, and Shinji Tsuruoka<sup>1</sup>

<sup>1</sup>Graduate School of Engineering, Mie University

<sup>2</sup>Dep. of Biomedical Informatics, Cincinnati Children's Hospital Medical Center, USA

4) 11:00-11:15

Aggregation structure of cellulose microfibrils 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 Tanigawa<sup>1</sup>, Kanako Shojiki<sup>2</sup>, Yusuke Hayashi<sup>1</sup> and Hideto Miyake<sup>1,2</sup>

<sup>1</sup>Graduate School of Regional Innovation Studies, Mie University

<sup>2</sup>Graduate 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 Katoh<sup>1</sup>, Yoshihisa Fujii<sup>2</sup> and Naoya Torikai<sup>2</sup>

<sup>1</sup>Graduate School of Regional Innovation Studies, Mie University

<sup>2</sup>Graduate 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 Fukuta<sup>1</sup>, Kanako Shojiki<sup>1</sup>, Jiang Nan<sup>1</sup>, Kenjiro Uesugi<sup>2</sup>, Yusuke Hayashi<sup>3</sup>, Xiao Shiyu<sup>3</sup>, Hideto Miyake<sup>1,3</sup>

<sup>1</sup>Graduate School of Engineering, Mie University

<sup>2</sup>Strategic Planning Office for Regional Revitalization, Mie University

<sup>3</sup>Graduate School of Regional Innovation Studies, Mie University

8) 12:15-12:30

Quantitative evaluation of strain-relaxation in annealed sputter-deposited AlN film

Shuichi Tanaka<sup>1</sup>, Kanako Shojiki<sup>1</sup>, Kenjiro Uesugi<sup>2</sup> and Hideto Miyake<sup>1,3</sup>

<sup>1</sup>Graduate School of Engineering, Mie University

<sup>2</sup>Organization for the Promotion of Regional Innovation, Mie University

<sup>3</sup>Graduate 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 AlGaIn-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 Miyazaki<sup>1</sup>, Hiroshi Ehara<sup>2</sup>, Yukio Toyoda<sup>3</sup>, Hitoshi Naito<sup>4</sup>, Akemi Itaya<sup>5</sup>,  
Tomohiro Uchiyama<sup>6</sup>, and Takashi Mishima<sup>7\*</sup>

<sup>1</sup>Graduate School of Regional Innovation Studies, Mie University

<sup>2</sup>Applied Social System Institute of Asia, Nagoya University

<sup>3</sup>College of Tourism, Rikkyo University

<sup>4</sup>Kurashiki University of Science and the Arts

<sup>5</sup>Graduate School of Bioresources, Mie University

<sup>6</sup>Faculty of International Agriculture and Food Studies, Tokyo University of Agriculture

<sup>7</sup>Graduate School of Bioresources, Mie University

10) 16:00-16:15

The utilization of waste from citrus fruit ‘Yamato-Tachibana’ as functional food material

Yuka Yamada<sup>1</sup>, Hiroko Nakayama<sup>1,2</sup>, Yasuhito Shimada<sup>2,3</sup>, and Takashi Mishima<sup>4</sup>

<sup>1</sup>Graduate school of Regional Innovation Studies, Mie University

<sup>2</sup>Mie University Zebrafish Drug Screening Center

<sup>3</sup>Graduate school of Medicine, Mie University

<sup>4</sup>Graduate school of Bioresources, Mie University

11) 16:15-16:30

Possibility of conferring stress resistance to rice by artificial orientation of epigenetic mutation

Ryo Namba<sup>1</sup>, Yuhko Kobayashi<sup>2</sup>, Issei Kobayashi<sup>1,2</sup>

<sup>1</sup>Graduate School of Regional Innovation Studies, Mie University

<sup>2</sup>Center 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 Murata<sup>1</sup>, Yuhko Kobayashi<sup>2</sup>, Issei Kobayashi<sup>1,2</sup>

<sup>1</sup>Graduate School of Regional Innovation Studies, Mie University

<sup>2</sup>Center 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 Facinet<sup>1</sup>, Hitoshi Susono<sup>2</sup>, Hye-Sook Park<sup>1</sup>

<sup>1</sup>Graduate School of Regional Innovation Studies, Mie University

<sup>2</sup>Center 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 Nakagawa<sup>1</sup> and Hisanori Yagami<sup>2</sup>

<sup>1</sup>Intellectual Property Center, Ehime University

<sup>2</sup>Graduate 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 Hayashishita<sup>1</sup>, Haruhiko Takase<sup>1</sup>, Hiroharu Kawanaka<sup>1</sup>, Hisanori Yagami<sup>2</sup>, and Shinji Tsuruoka<sup>1</sup>

<sup>1</sup>Graduate School of Engineering, Mie University

<sup>2</sup>Graduate 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 Yilmaz

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 Ko<sup>1</sup>, Wei-Chun Tai<sup>2</sup> and Chun-Jia Fang<sup>1</sup>

<sup>1</sup>Department of Leisure, Recreation, and Tourism Management, Southern Taiwan University of Science and Technology, Taiwan

<sup>2</sup>Department 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 Huang<sup>1</sup>, Tony Chieh-Tse Hou<sup>2</sup> and ○Tzuen-Yau Wu<sup>1</sup>

<sup>1</sup>Department of Economics, Aletheia University, Taiwan

<sup>2</sup>Department 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 Ryou<sup>1</sup> and Jeongin Kim<sup>2</sup>

<sup>1</sup>Research & Business Foundation, Chung-Ang University, Korea

<sup>2</sup>Department of Economics, Chung-Ang University, Korea

16:15-16:20 **Closing**

Hideto Miyake (Dean of Graduate School of Regional Innovation Studies, Mie University)