### ISCI 14 1st Day (December 1th, 2018)

	Identification of Pathogen that Cause Bacteria Wilt	Keyboard learning support	The Effect of Hydrogen Peroxide on Hydrogen Production from Melon Fruit			
11:05- 11:20	OA-04	OSE-09	OSE-01			
	*Mechanical Systems Engineering, Sci. and Eng., Ibaraki University	*Magister of Biotechnology, Udayana University, **Faculty of Agriculture, Udayana University	*Intelligent Systems Engineering, Graduate School of Sci. and Eng., Ibaraki University			
	OTakahiro Ishii*, Nobuyuki Umezu**	OI Putu Wirya Suputra*, I Putu Sudiarta**, G.N. Alit Susanta Wirya**	OMisaki Tani*, Nobuyuki Umezu**			
11.05	Fast similarity calculation between images for realtime photomomosaic generation		Development of a smart mirror with life log functions and its evaluation			
10:50- 11:05	OSE-07	OA-03	OSE-08			
	OHeppy Suci Wulanningtyas*, Masakazu Komatsuzaki** *Ibaraki University, Indonesian Agency for Agricultural Research and Development, ** Center for International Field Agriculture Research & Education Ibaraki University	OHiroki Shozu*, Fumiaki Inoue*, Kana Yokoyama*, Mikio Saigusa*, Yasuhisa Oda**, Ryosuke Ikeda**, Koji Takahashi** *College of Engineering, Ibaraki University, Hitachi, Ibaraki 316-8511, Japan, **Quantum and Radiological Science and Technology, Naka, Ibaraki 311-0193, Japan	Alit Susanta Wirya**, I Putu Sudiarta*** *Agricultural Biotechnology, Faculty of Agriculture of Udayana University, **Department of Plant Protection, Faculty of Agriculture, Udayana University, ***Department of Plant Protection, Faculty of Agriculture, Udayana University.			
	Cover crops and no-tillage system for enhancing soil health by increasing soil organic matter in soybean cultivation	Research and Development of Broadband Fast Switching Device of High-Power Millimeter Wave	MOLECULAR IDENTIFICATION OF FUNGI THE CAUSAL AGENT OF STRAWBERRY ( <i>Fragaria</i> spp.) WILT DISEASE IN BALI OI Wayan Diksa Gargita*, GN			
10:35- 10:50	OA-01	OSE-06	OA-02			
11:50	Room 1	Study room on the second floor in Room 2	Room 3			
10:35-		Oral Session 1				
10:20	Lecture Hall Short Break & Preparetion					
10:00-	Opening Session					

	OFelix Department of Microbiology, Faculty of Agriculture, Gadjah Mada University, Yogyakarta, Indonesia	OTaisuke Nemoto*, Nobuyuki Umezu** *Mechanical Systems Engineering, Sci. and Eng., Ibaraki University	OAgung Dian Kharisma*, Sarto**, M. Nur Cahyanto*** *Research Center of Biotechnology, The Graduate School of Gadjah Mada University, **Departement of Chemical Engineering, Faculty of Engineering, Gadjah Mada University, ***Department of Food Technology and FoodCrops, Faculty of Agriculture Technology, Gadjah Mada University	
11:20- 11:35	OSE-10	OSE-02	OSE-11	
	Development of a web-based rating system for slide visibility and its evaluation	Chromate reduction by indigenous bacteria from liquid waste laboratory of UIN Sunan Kalijaga Yogyakarta	Band diagram analysis of arsenic tantalum	
	OGenki Sugawara*, Nobuyuki Umezu**	OAhmad Arsyadi*, Jumailatus Solihah* and Arifah Khusnuryani*	OMasahisa Takizawa and Tomosuke Aono.	
	*Intelligent Systems Engineering, Graduate School of Sci. and Eng., Ibaraki University	*Departement of Science and Technology, State Islamic University of Sunan Kalijaga, Yogyakarta, Indonesia	*College of Engineering. Ibaraki University	
11:35- 11:50	OSE-03	OSE-05		
	Morphological comparison of the salivary glands in the scorpionflies in relation to mating behavior	Fish species composition and diversity variations in Kala Oya river basin, Sri Lanka with relation to environmental factors		
	OHiroki KONNO	OT.A. Hangawatta*, D.D.G.L. Dahanayaka		
	Graduate School of Science and Engineering, Ibaraki University	Department of Zoology, The Open University of Sri Lanka, P.O.Box 21, Nawala, Nugegoda, 10250, Sri Lanka		
		Lunch Time		
13:00- 13:30	<b>Oral Session 2</b> Group Study room on the second floor in Library			
10.00	Room 1	Room 2	Room 3	

13:00- 13:15	OSE-13	OA-05	OSE-04		
	Visualization of Hydrogen Behavior in a Duplex Stainless Steel by Hydrogen Microprint Technique Affected by Different Strain Rates	Investigation of possible use of predicting gross energy in Ecofeed and the materials by NIRS	Zoogeographical characteristics of the social wasp fauna of Sulawesi Island, Indonesia		
	OZoha Ghorani*, Afshin Yousefi**, Goroh ITOH** *Graduate School of Science and Engineering, Ibaraki University **Department of Mechanical Engineering, College of Engineering, Ibaraki University	OAyumu Doi*, Eizo Taira*, Yoshimi Imura* *University of the Ryukyus, faculty of agriculture	<ul> <li>Alan Handru*</li> <li>*Graduate School of Science and Engineering, Ibaraki University</li> </ul>		
13:15- 13:30	OSE-14	OSE-12	OSE-15		
	Features suitable for video thumbnails on portable devices	Development of Au- Immobilized Quantum Dots/Silica Core-Shell Nanoparticles for Multimodal Imaging	Development of novel DNA damage monitoring system using PDMS micro fluidic chip		
	OYusuke Yoneda*, Nobuyuki Umezu** *Mechanical Systems Engineering, Sci. and Eng., Ibaraki University	OMayu Tayama*, Kouichi Nakashima*, Keiichiro Hatoyama**, Masayuki Tokunaga**, Takashi Kamei**, Kohsuke Gonda**, Yoshio Kobayashi* * Hitachi Campus, Ibaraki University, ** Graduate School of Medicine, Tohoku University	<ul> <li>Kenta Takahashi*, Takahiro Tamura**, Takaaki Suzuki**, Asako J. Nakamura*,</li> <li>*Department of Biological Sciences, College of Science, Ibaraki University, Mito, Ibaraki, Japan **School of Science and Technology, Gunma University, Kiryu, Gunma, Japan</li> </ul>		
		Short Break			
14:00- 14:50	Poster Session (P-01 ~ P-15)				
	Short Break				
14:55- 15:45	Poster Session (P-16 ~ P-30)				
	Г	Short Break			
15:50- 16:40	Poster Session (P-31 ~ P-35 and WC students)				
	1	Short Break			
17:00- 19:00	Welcome Party University Cafeteria				

#### ISCI 14 1st Day (December 1st, 2018)

#### **Poster Session Program**

#### P-01 Study on Thermo-physical Properties of Several Fatty Acids and Their Mixture for Multi Stage Heat Exchange System

OAsuka Sakamoto\*, Yu Ijima\*, Yanrong Li\*\*, Terumi Inagaki\*\* \*Graduate School of Science and Engineering, Ibaraki University, \*\*College of Engineering, Ibaraki University

#### P-02 Special Needs Education in Japan and Inclusive Education O Sota Sebata\* \*Tokiwa University-High School

#### P-03 Experimental Evaluation of Effect Flowing Conditions on Cavitation Bubble Growing and Collapsing Behaviors

OShunsuke KAWAMURA\*, Takashi NAOE\*\*, Tsubasa IKEDA\*, Nobuatsu TANAKA\*, Masatoshi FUTAKAWA\*\*

\*Graduate School of Science and Engineering, Ibaraki University, Hitachi 316-8511, Japan, \*\* J-PARC Center, Japan Atomic Energy Agency, Tokai 319-1106, Japan

#### P-04 **Recalling neuronal ensembles by astrocyte network via synchronization** of local ambient GABA levels

OTaira Kobayashi, Osamu Hoshino Department of Intelligent Systems Engineering, Ibaraki University, 4-12-1, Nakanarusawa, Hitachi, Ibaraki, 316-8511, Japan

#### P-05 Development of Methods for Synthesizing Metallic Ni Nanoparticles and Silica-Coating of Them

OAiri Tago, Yoshio Kobayashi Hitachi Campus, Ibaraki University

#### P-06 Effect of Maximum Particle Size of Crushed Shell Particles on Triaxial Compression Behavior at Constant Relative Density ORyota Morizaki\*, Kaoru Kobayashi\*\*, Tadao Enomoto\*\*\*, Kazuya Yasuhara\*\*\*\* Ibaraki University

P-07 A Study on the Declining Birthrate and Aging in the Northern Part of Ibaraki Prefecture Kana Okada, Haruka Sano, Ayaka Watahiki *Tokiwa University-High School* 

# P-08 Mapping abandoned agricultural land using satellite remote sensing Yoshihiko Kobayashi \*, Tsuguki Kinoshita \*\* \* \*\*College of Agriculture, Ibaraki University, Chuo, Ami, Inashiki, Ibaraki 300-0393

#### P-09 Development of Resin Ball Grinding Wheel using PELID

OHiroki SAITO\*, Nobuhide ITOH\*, Katsufumi INAZAWA\*, Hitoshi OHMORI\*\*and Shinjiro UMEZU\*\*\* \*Ibaraki University, \*\*Institute of Physical and Chemical Research, \*\*\*Waseda University

- P-10 **How many people know Fair trade?** Marina Ishigami , Sae Yoshihara *Seishin Gakuen High School*
- P-11 What is necessary to raise the gender equality ratio Momoka Namaizawa,Tamao Inoie Seishin Gakuen high school

#### P-12 **The actual of fast fashion** Yuki Iida, Taichi Miyazawa Seishin Gakuen High School

- P-13 **How to offer a good education to everyone** Miyu Azuma, Moka Kurihara *Seishin gakuen high school*
- P-14 **To protect the world's sea from plastic waste** Mizuki Isaka, Yura Ohara, Miho Moribe *Seishin Gakuen High School*
- P-15 **If people all over the world live the same life** as people in Ibaraki prefecture, will the earth be enough? Rin Nemoto Seishin Gakuen High School

#### P-16 Fabrication and Evaluation of Grinding Wheel with Special Internal Flow Channel Using 3D Printer and PELID

•Naoki Mori\*, Nobuhide Itoh, Yuki Mashiko, Toui Yano, Katuhumi Inazawa and Hitoshi Ohmori\*\*

\* Ibaraki University, \*\* Institute of Physical and Chemical Research, Wako, Saitama

#### P-17 Animal-like Walking and Running by a Simulated Quadruped Model

○Takahiro Fukui\*, Keigo Nakamura\*\*, Yasushi Habu\*, Yasuhiro Fukuoka\*\*\*

\*Graduate School of Science and Engineering, Ibaraki University, 4-12-1 Nakanarusawa, Hitachi, Ibaraki 316-8511, Japan, \*\*Tokyo Electric Power Company Holdings, Inc.12 Kobamasaku, Namikura, Futaba, Fukushima 979-0695, Japan, \*\*\*Department of Intelligent engineering, College of Engineering, Ibaraki University, 4-12-1 Nakanarusawa, Hitachi, Ibaraki 316-8511, Japan

#### P-18 Effect of Impurity Hydrogen on Fatigue Properties in an Al-10%Zn-2.5%Mg-1.6%Cu-0.2%Cr Alloy

OKai Kizawa\*, Ryuichi Yamada\*\*, Goroh Itoh\*\*\*, Masashi Nakamura\*\*\* \*Graduate School, Ibaraki University, \*\* Yamanashi University, \*\*\* Ibaraki University

## P-19 Strange behavior of the wave propagations on an electric transmission line

ODan Watanabe, Tatsuaki Wada Ibaraki University

#### P-20 Validation of heartbeat related signals extracted from functional nearinfrared spectroscopy

 OEriko Ouchi\*, Hitoshi Usuniwa\*\*, Kiyotaka Nemoto\*\*\*, Terumi Inagaki\*\*\*\*
 \*Graduate School of Science and Engineering, Ibaraki University, \*\*Ibaraki Prefectural Medical Center of Psychiatry,
 \*\*\*Department of Neuropsychiatry, Division of Clinical medicine, Faculty of Medicine, University of Tsukuba,
 \*\*\*\*College of Engineering, Ibaraki University

#### P-21 Suppression of Grain Boundary Cracking of Al - Zn - Mg Alloy by Strain-Induced Boundary Migration

OMichihisa Nakajima \*, Goroh Itoh \*\*, Shigeru Kuramoto \*\*\*, Junya Kobayashi \*\*\*\* \*Graduate Student, Ibaraki University, \*\*Ibaraki University, \*\*\*Ibaraki University, \*\*\*\*Ibaraki University

#### P-22 Effects of Fine Bubble Coolant on Grinding Characteristics Effects of Intake Air Volume of Fine Bubble

○Katsufumi Inazawa\*, Atsushi Ezura\*\*, Katsunori Kato\*\*\*, Naoya Shinohara\*\*\*, Hitoshi Ohmori\*\*\*\*, Nobuhide Itoh\*
\*Ibaraki Univercity, \*\*Industrial Technology Center of Tochigi Prefecture,
\*\*\*Taiseikogyo Co.,Ltd., \*\*\*\*Institute of Physical and Chemical Research

#### P-23 Attempts in Fabricating Composite Abrasives Using Twin Nozzle PELID

○Toui Yano, Nobuhide Itoh, Katuhumi Inazawa ,Yoshio Kobayashi¾ and Hitoshi Ohmori¾¾ ※Ibaraki University, ¾¾Institute of Physical and Chemical Research

# P-24 Resistance to Humid Gas Stress Corrosion Cracking of MIG Weld of a 5083 Aluminum Alloy

 $\bigcirc$ Alireza GHORANI\*, Tomoya KIUCHI\*\*, Tomoyuki OHBUCHI\*, Goroh ITOH\*\*\*

\*Graduate Student, Graduate School of Science and Engineering, Ibaraki University, \*\*Undergraduate Student, College of Engineering, Ibaraki University, \*\*\*Department of Mechanical Engineering, Graduate School of Science and Engineering, Ibaraki University

#### P-25 What will happen next to SDGs

Keita Matsuzaki, Hiroki Iijima Seishin Gakuen High School

- P-26 About SDGs Tokito Nakagawa, Hiromu Watanabe Seishin Gakuen High School
- P-27 When are people going to achieve peace and fairness? Naho Ishige Seishin Gakuen High School
- P-28 **What do we need to do so everyone can receive a high quality education ?** Chisato Kuroda, Runa Nakahara *Seishingakuen high school*
- P-29 What will it be that we must do first for the world? Mana Noguchi Seishin Gakuen High School
- P-30 **Things to know when you make 100 citizens** Ichika Kunie, Kana Yokoyama *Seishin Gakuen High School*
- P-31 **Current state of primary education in the world** Nana Kurata *Seishin Gakuen High School*
- P-32 **Relationship Between GDP And Degree Of Happiness** Kana Takahashi, Yui Sato, Mirai Tanimitu *Seishin Gakuen High School*

#### P-33 ENTERPRISES AND SDGs Youhei Asabe, Keto Minowa, Kazuma Nukaga Seishin Gakuen High School

- P-34 Let's recycle used facial gauze at a beauty parlor Manato Nemoto Seishin Gakuen high school
- P-35 **The relationship between disaster and place name in Japan** Haruya Emmando *Seishin Gakuen high school*
- P-36- Winter Course Students