

**The Ninth JSME-KSME Thermal and Fluids
Engineering Conference (TFEC9)
October 27-30, 2017, Okinawa, Japan**

**Tentative Program
(as of September 1, 2017)**

- **Please note that the program is still subjected to change. The final program will be uploaded in the beginning of October, 2017.**
- **Please also note that any request on the change of presentation time cannot be accepted unless there is a serious problem.**

- **This PDF file can be best viewed in “Two Page View” mode.**
- **When you print out this PDF file on both side of paper, it is best printed by omitting this page.**

General Information

Welcome Reception

1. On Friday evening, October 27, 2017, all attendees are invited to the Welcome Reception. The Welcome Reception will be held from 18:00 to 20:00 at Kariyushi Urban Resort Naha, located in the Naha City.
2. After the Welcome Reception, shuttle buses are available for those who wish to return to the hotels near the Okinawa Convention Center (i.e., Laguna Garden Hotel, Moon Ocean Ginowan Hotel & Residence). The shuttle buses are on the first-come-first-served basis. Although we are preparing multiple cars, please forgive us in advance for the possible capacity lack.

Conference Banquet

1. The Conference Banquet will be held from 19:30 to 21:30 on Sunday, October 29, 2017, at Laguna Garden Hotel, which is in walking distance from the Okinawa Convention Center. The General Registration fee includes admission to the Banquet, while tickets have separately been purchased for Student Registration. Please forgive us that it is likely not possible to issue additional tickets on-site, because we are already expecting 500 people to attend the Banquet.
2. After the Banquet, shuttle buses are available for those who wish to return to the Naha city. The shuttle buses are on the first-come-first-served basis. Although we are preparing multiple cars, please forgive us in advance for the possible capacity lack.

Lunch Box

1. For those who have bought the lunch-box tickets, the lunch box will be distributed at **(PLACE to be determined)** during **(TIME to be determined)** every day.
2. You can enjoy lunch anywhere, but please make sure to return the empty lunch box to where it was distributed.

Internet Access

Several free Wifi stations will be set in the Convention Center. The SSID and password will be displayed at the conference registration desk as well as at several places in Conference Buildings A and B.

Shuttle Buses

We are now arranging the shuttle buses between the Naha city to the Okinawa Convention Center every morning and evening. The timetable will be shown when it is fixed.

Instruction for Speakers and Chairs

Instruction for Speakers

1. All the presentations except the Plenary Lectures are allotted for 15 minutes including discussion and change-over (i.e., 12 minutes for presentation, 2 minutes for discussion, plus 1 minute for change-over).
2. Each session room will have a video projector. The projector will be equipped with a connection cable with D-sub mini 15-pin male connector for RGB video input from computers. Note that speakers who use the projector must prepare their own laptop, presentation software, and additional connectors if needed.

Instruction for Chairs

1. Chairs should arrive early to their respective sessions, locate the speakers and explain the timing.
2. Chairs are responsible for introducing the speakers, administrating the question and answer period after each talk, and ensuring that the session proceeds in time.
3. If a speaker fails to appear or if a presentation has been withdrawn, the chair should suspend the session until the next scheduled presentation. If such a no-show happend, please report it to the registration desk after the session.

Program Overview

	Room A1	Room A2	Room B1a	Room B1b	Room B1c	Room B2	Room B3	Room B4	Room B5	Room B6	Room B7
Oct. 27 (Fri)											
18:00-20:00	Welcome Reception / Registration (Kariyushi Urban Resort Naha)										
Oct. 28 (Sat)											
8:30-	Registration (Registration Desk)										
9:30-10:00	Opening (Room A1)										
10:00-10:40	PL1: Prof. Sang Woo Joo, Yeungnam University (KSME-FED) (Room A1)										
10:40-11:20	PL2: Prof. Yasuyuki Takata, Kyushu University (JSME-TED) (Room A1)										
11:20-11:40	Coffee Break										
11:40-12:40	TF01	T05	T10	F03	T02	F01	T17	F07	T18	F05	
12:40-14:10	Lunch										
14:10-15:40	TF01	T05	T10	F03	T02	F01	T17	F07	T14	F05	F13
15:40-16:00	Coffee Break										
16:00-17:15	TF01	T05	T10	F03	T02	F01	T03	F07	T14	F05	F13
Oct. 29 (Sun)											
8:30-	Registration										
9:00-9:40	PL3: Prof. Hyung Hee Cho, Yonsei University (KSME-TED) (Room A1)										
9:40-9:50	Break										
9:50-11:05	TF01	T05	T10	F09	T15	F01	T01	F12	T18	F10	
11:05-11:25	Coffee Break										
11:25-12:40	TF01	T05	T10	F09	T15	F04	T08	F12	T09	F10	F13
12:40-14:10	Lunch										
14:10-15:40	TF01	T05	T12	F09	T15	F04	T08	F12	T09	F10	F13
15:40-16:00	Coffee Break										
16:00-17:30	TF01	T06	T12	F09	T15	F04	T08	F12	T09	F10	F13
17:30-17:40	Break										
17:40-19:00		*1				*2					
19:30-21:30	Banquet (Laguna Garden Hotel)										
Oct. 30 (Mon)											
8:30-	Registration										
9:00-9:40	PL4: Prof. Yu Fukunishi, Tohoku University (JSME-FED) (Room A1)										
9:40-9:50	Break										
9:50-11:05	TF01	T06	T16	F02	T11	F04	T13	F11	T18	F06	F13
11:05-11:25	Coffee Break										
11:25-12:40	TF01	T06	T16	F02	T11	F04	T13	F11	T18	F06	F13
12:40-14:10	Lunch										
14:10-15:40	TF02	T07	T16	F02	T11	F04		F11	T18	F08	
15:40-16:00	Coffee Break										
16:00-17:00	TF02	T07	T04					F11	T18	F08	
17:00-17:10	Break										
17:10-17:30	Closing (Room A1)										
17:30-20:30	Free Discussion										

*1 JSME-TED Award Ceremony (in Japanese)

*2 JSME-FED Award Ceremony (in Japanese)

*3 JSME-TED Committee Meeting

Organized Sessions

TF01. Optimal Design/Control of Thermal Systems and Fluid Flows

TF02. Turbulent Mixing and Diffusion

T01. Advanced Technology in Ground Source Heat Utilization Systems

T02. Advances in Electronics Cooling and Thermal Management

T03. Aerospace Thermal Management

T04. Biotransport and Biothermal Engineering

T05. Combustion Fundamentals for Future Energy Systems

T06. Combustion Research for Industrial Applications

T07. External Heat Engines & Waste Heat Recovery

T08. Fire and Explosion

T09. Fuel Cells and Batteries

T10. Molecular Simulation

T11. Multidisciplinary Approach in Thermal and Fluids Engineering by Leading-edge Measurement Technique

T12. Next Step of Solidification/Crystal Growth and Melting

T13. Plasma Processing

T14. Recent Development of Biomass Conversion Technology

T15. Recent Developments on Boiling, Condensation and Multi-Phase Flow

T16. Thermal Radiation

T17. Thermophysical Properties Measurements

T18. General Session (Thermal Engineering)

F01. Advances in Image-Based Measurement

F02. Advances in Thermo-Fluids Technology in Automobiles and Industrial Machinery

F03. Bio-Fluid Mechanics and Biomimetics

F04. Computational and Experimental Multiphase Flow Research

F05. Fluid Machinery and Systems

F06. Fluid Machinery for Renewable Energy

F07. Functional Fluids and Their Advanced Applications

F08. High-Speed flow

F09. Jets, Wakes and Separated Flows

F10. Micro/Nano Fluids

F11. Non-Newtonian Fluid Mechanics

F12. Wall Turbulence

F13. General Session (Fluids Engineering)

MEMO

Saturday, October 28, 2017

Plenary Lectures

10:00-10:40 (Room A1)

Chairperson: Deog Hee Doh (Korea Maritime & Ocean University, Korea)



TFEC9-PL01:

Prof. Sang Woo Joo (Yeungnam University, Korea)

“A Review on Non-Newtonian Microfluidic Phenomena”

Professor Sang W. Joo works in the School of Mechanical Engineering, Yeungnam University, Korea, and is a member of the Korea Academy of Science and Technology. His research interest includes microfluidics, hydrodynamic instability, interface phenomena, viscoelastic flows, and nano fabrication.

He is a graduate of Seoul National University, and received doctoral degree from the University of Michigan, Ann Arbor, followed by a postdoctoral experience with Professor Stephen H. Davis of Northwestern University. He was a professor in the University of Illinois at Chicago and Wayne State University and a visiting faculty member in Augsburg University, Germany and Cambridge University, England.

He served in the National Commission for Science and Technology of Korea, and is an Expert Member in the National Research Foundation of Korea. During the past decade he published over 300 SCI research articles on thermofluid science and on micro/nanotechnology.

10:40-11:20 (Room A1)

Chairperson: Kaoru Maruta (Tohoku University, Japan)



TFEC9-PL02:

Prof. Yasuyuki Takata (Kyushu University, Japan)

“Wettability Effects in Liquid-Vapor Phase Change”

Yasuyuki Takata is a Professor of thermofluid physics in the Department of Mechanical Engineering and a Lead Principal Investigator at International Institute for Carbon-Neutral Energy Research (WPI-I2CNER), Kyushu University. His research area covers phase change heat transfer, micro JT cooler, micro heat transfer devices, and thermophysical properties of hydrogen, as well as a database of thermophysical properties of fluids.

He graduated from Department of Nuclear Engineering, Kyushu University in 1979 and then received Dr. Eng. in 1984 from the Department of Energy Conversion Engineering, Kyushu University. He has joined as a Lecturer with the Department of Mechanical Engineering in 1984 and then promoted to Associate Professor in 1986 and Professor in 2003.

He received The JSTP Award for Outstanding Achievement in 1995, The JSTP Best Paper Award in 2010 from the Japan Society of Thermophysical Properties (JSTP), Heat Transfer Society Award for Scientific Contribution in 2002 from the Heat Transfer Society of Japan (HTSJ), and JSME Thermal Engineering Achievement Award in 2010 from the JSME Thermal Engineering Division. He is a fellow and executive board director of the JSME in 2014 and 2015, executive board director of international affairs of the HTSJ, President of the JSTP in 2016 and Vice President of Asian Union of Thermal Sciences (AUTSE) since 2015.

Saturday, October 28, 2017

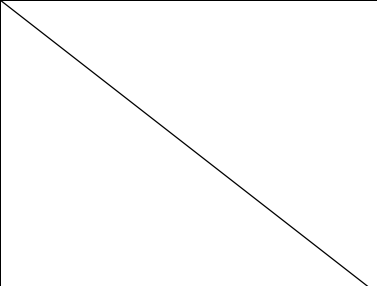
Session	11:40	11:55	12:10
Room A1 TF01. Optimal Design/Control of Thermal Systems and Fluid Flows 1 Chairperson: Yuji Suzuki (The University of Tokyo)	TFEC9-1273: Direct Numerical Simulation on Modification of Streamwise Vortices in Turbulent Flow above Zigzag Riblets, Kie Okabayashi (Osaka Univ.), Kenshi Hirai (Osaka Univ.), Shintaro Takeuchi (Osaka Univ.), Takeo Kajishima (Osaka Univ.)	TFEC9-1370: Effects of the Yawing Angle of Riblets on the Drag and Flow Characteristics, Jonghwan Park (Seoul National Univ.), Haecheon Choi (Seoul National Univ.)	TFEC9-1294: Very Large-Scale Coherent Structures in Highly Drag-Reducing Boundary Layer Flow due to Surfactant Injection, Shinji Tamano (Nagoya Inst. Tech.), Shunsuke Katsuragawa (Nagoya Inst. Tech.), Daiki Yamamoto (Nagoya Inst. Tech.), Toru Yamada (Nagoya Inst. Tech.), Yohei Morinishi (Nagoya Inst. Tech.)
Room A2 T05. Combustion Fundamentals for Future Energy Systems 1 Chairperson: Mamoru Tanahashi (Tokyo Institute of Technology)	TFEC9-1611: Dilution effect of Laminar Burning Velocities and Cellular Instabilities in Methane/Ethylene Air Premixed Spherical Flame, Hee Jun Kim (Pukyong National Univ.), Kyu Ho Van (Pukyong National Univ.), Jeong Park (Pukyong National Univ.), Oh Boong Kwon (Pukyong National Univ.), Dae Keun Lee (KIER), Seung Gon Kim (KIER), Young Tae Ghauk (KIER), Dong Soon Noh (KIER)	TFEC9-1259: Influence of CO2 Addition on the Cellular Structure of H2-O2 Premixed Flame, Toshiyuki Katsumi (Nagaoka Univ. of Technology), Takuya Fukuyama (Nagaoka Univ. of Technology), Gen Takahashi (Nagaoka Univ. of Technology), Thwe Thwe Aung (Nagaoka Univ. of Technology), Satoshi Kadowaki (Nagaoka Univ. of Technology)	TFEC9-1424: Investigation of Low Temperature Oxidation using a Separated Steady Cool flame of n-Heptane/air mixture in a Micro Flow Reactor with a Controlled Temperature Profile, Ryota Tatsumi (Tohoku Univ.), Hisashi Nakamura (Tohoku Univ.), Susumu Hasegawa (Tohoku Univ.), Takuya Tezuka (Tohoku Univ.), Kaoru Maruta (Tohoku Univ. / Far Eastern Federal Univ.)
Room B1a T10. Molecular Simulation 1 Chairperson: Masato Ohnishi (The University of Tokyo)	TFEC9-1145: Prediction of High-Performance Surfactant Molecules by Machine Learning ~Property evaluation by Dissipative Particle Dynamics Simulation~, Takuya Inokuchi (Kindai Univ.), Na Li (TOYOTA MOTOR CORPORATION), Kei Morohoshi (TOYOTA MOTOR CORPORATION), Noriyoshi Arai (Kindai Univ.)	TFEC9-1579: Simulation Study on Chromosomal Formation by a Coarse-Grained Model for the Clarification of Chromosome Dynamics, Hiroaki Ito (Tohoku Univ.), Stephanie Nix (Akita Prefectural Univ.), Yukitaka Ishimoto (Akita Prefectural Univ.)	TFEC9-1191: A Study on Many-Body Dissipative Particle Dynamics Simulations for the Polymer Droplet on Hydrophilic/Hydrophobic-Patterned Solid Wall, Kenshiro Nishiwaki (Kindai Univ.)
Room B1b F03. Bio-Fluid Mechanics and Biomimetics 1 Chairperson: Yoshihiro Kubota (Toyo University)	TFEC9-1316: Aerodynamic Performance of Insect Flapping Wing Driven by Flexible Musculoskeletal System, Kohei Ueyama (Chiba Univ.), Toshiyuki Nakata (Chiba Univ.), Hao Liu (Chiba Univ.)	TFEC9-1335: Study of the Relation Between the Biological Structure and Fluid Dynamical Functions of Dragonfly Wings, Luna Omori (Akita Prefectural Univ.), Yukitaka Ishimoto (Akita Prefectural Univ.)	TFEC9-1365: A Numerical and Theoretical Study on the Aerodynamics of a Rhinoceros Beetle (Trypoxylus Dichotomus) and Optimization of its Wing Kinematics in Hover, Sehyeong Oh (Seoul National Univ.), Boogeon Lee (Seoul National Univ.), Hyungmin Park (Seoul National Univ.), Haecheon Choi (Seoul National Univ.), Sun-Tae Kim (Agency for Defense Development)
Room B1c T02. Advances in Electronics Cooling and Thermal Management 1 Chairperson: TBD	TFEC9-1197: Multi-Physics Analysis of the Thermal Behavior of Inductor by means of Open-Source Software, Mengyi Zheng (Tokyo Inst. of Technology), Byunggi Kim (Tokyo Inst. of Technology), Doan Hong Duc (Univ. of Engineering and Technology, VNU Hanoi), Kazuyoshi Fushinobu (Tokyo Inst. of Technology)	TFEC9-1549: Infrared Thermography Evaluation and Finite Element Analysis of Thermal Transport Properties of Silicone Polymers Containing Thermally Conductive Fillers, Kazuaki Sanada (Toyama Pref. Univ.), Masakazu Hattori (Fuji Polymer Industries Co., LTD.), Yasushi Kajita (Nagoya Municipal Industrial Research Inst.), Kouichiro Kondo (Nagoya Municipal Industrial Research Inst.), Shingo Todo (Fuji Polymer Industries Co., LTD.)	TFEC9-1620: Device Structure Dependence of Thermal Properties of SiC Power MOSFET, Risako Kibushi (Tokyo Univ. of Science, Yamaguchi), Tomoyuki Hatakeyama (Toyama Prefectural Univ.), Noriyuki Unno (Tokyo Univ. of Science, Yamaguchi), Kazuhisa Yuki (Tokyo Univ. of Science, Yamaguchi), Masaru Ishizuka (Toyama Prefectural Univ.)
Room B2 F01. Advances in Image-Based Measurement 1 Chairperson: Masaharu Kameda (Tokyo University of Agriculture and Technology)	TFEC9-1162: Analysis of Asymmetric Droplet Behavior Using Three-Dimensional Reconstruction Method, Han Seo Ko (Sungkyunkwan Univ.), Yeonghyeon Gim (Sungkyunkwan Univ.), Dong Ho Shin (Sungkyunkwan Univ.)	TFEC9-1172: Bounce and Rupture of an Air Bubble on the Solid Surfaces, Shingo Ishihara (Tokyo Univ. of Agriculture and Technology), Yoshiyuki Tagawa (Tokyo Univ. of Agriculture and Technology), Masaharu Kameda (Tokyo Univ. of Agriculture and Technology)	TFEC9-1544: Visualization of Temperature Field for Aqueous Solution in Microscale Using Fluorescent Anisotropy, Yuta Shugyo (Tokyo Univ. of Science), Ken Yamamoto (Tokyo Univ. of Science), Masahiro Motosuke (Tokyo Univ. of Science)

<p>12:25</p> <p>TFEC9-1052: Turbulent Friction Drag Reduction Based on Resolvent Analysis, Aika Kawagoe (Keio Univ.), Satoshi Nakashima (Keio Univ.), Mitul Luhar (Univ. of Southern California), Koji Fukagata (Keio Univ.)</p>			<p><i>Room A1</i></p> <p><i>TF01. Optimal Design/Control of Thermal Systems and Fluid Flows 1</i></p>
<p>TFEC9-1437: Effects of Step-Unit's Thickness on the Flame Propagation Velocity in an Annular Stepwise Diverging Tube, Hun Young Kim (KAIST), Nam Il Kim (KAIST)</p>			<p><i>Room A2</i></p> <p><i>T05. Combustion Fundamentals for Future Energy Systems 1</i></p>
<p>TFEC9-1244: Comparison and Linkage of Static and Dynamic Polymer Properties Between Atomistic Model of Polymers and Bead-Spring Model, Kazuaki Takahashi (National Inst. of Advanced Industrial Science and Technology), Ryuto Nishimura (Keio Univ.), Nobuyoshi Yamato (Keio Univ.), Kenji Yasuoka (Keio Univ.), Yuichi Masubuchi (Nagoya Univ.)</p>			<p><i>Room B1a</i></p> <p><i>T10. Molecular Simulation 1</i></p>
<p>TFEC9-1442: Dynamic Forces Generated by a Flapping Butterfly Wing in a Fixed Condition, Masaki Fuchiwaki (Kyushu Inst. of Technology), Kazuhiro Tanaka (Kyushu Inst. of Technology)</p>			<p><i>Room B1b</i></p> <p><i>F03. Bio-Fluid Mechanics and Biomimetics 1</i></p>
<p>TFEC9-1312: Numerical Simulations of Solder Flow in Dip Soldering Process with Carrier Mask Using OpenFOAM, Tatsuki Nishida (Toyama Prefectural Univ.), Yuki Shiohara (Toyama Prefectural Univ.), Shinji Nakagawa (Toyama Prefectural Univ.), Tomoyuki Hatakeyama (Toyama Prefectural Univ.), Koichi Ishikura (Cocel Co. Ltd.), Katsuhiko Koizumi (Cocel Co. Ltd.), Kazunori Inagaki (Cocel Co. Ltd.)</p>			<p><i>Room B1c</i></p> <p><i>T02. Advances in Electronics Cooling and Thermal Management 1</i></p>
<p>TFEC9-1559: Measurement of Particle Movement in 3D Flows Using Multi-Wavelength Digital Holograms, Naohiro Hayashi (Kyoto Inst. of Technology), Shigeru Murata (Kyoto Inst. of Technology), Yohsuke Tanaka (Kyoto Inst. of Technology)</p>			<p><i>Room B2</i></p> <p><i>F01. Advances in Image-Based Measurement 1</i></p>

Saturday, October 28, 2017

Session	11:40	11:55	12:10
Room B3 T17. Thermophysical Properties Measurements 1 Chairperson: Osamu Nakabeppu (Meiji University)	TFEC9-1383: Development of Micro Fluidic System for High-Speed Diffusion Measurement, Makoto Kamata (Keio Univ.), Kan Yamada (Kyodo International, Inc.), Yoshihiro Taguchi (Keio Univ.), Yuji Nagasaka (Keio Univ.)	TFEC9-1108: Temperature Measurements Using Thermorefectance of AFM Cantilever in Vacuum, Jinsung Rho (Korea Advanced Inst. of Science and Technology), Bong Jae Lee (Korea Advanced Inst. of Science and Technology)	TFEC9-1344: Enhancements of Measurement Performances of CT-TDLAS for Temperature and Concentration Fields of High Temperature Gas, Deog Hee Doh (Korea Maritime & Ocean Univ.), Gyeongrae Cho (Korea Maritime & Ocean Univ.), Doowon Choi (Korea Maritime and Ocean Univ.), Yoshihiro Deguchi (Tokushima Univ.)
Room B4 F07. Functional Fluids and Their Advanced Applications 1 Chairperson: Hidemasa Takana (Tohoku University)	TFEC9-1668: Improvement of Power Generation Performance of a Piezoelectric-Cantilever Device for Artificial Cochlea, Hiroki Yamazaki (Osaka Univ.), Tetsuro Tsuji (Osaka Univ.), Satoyuki Kawano (Osaka Univ.)	TFEC9-1576: Magnetic Field Dependence of Time Series Variation of Thermal Diffusivity of Kerosene-Based Magnetic Fluid, Hikari Ozaki (Shizuoka Univ.), Masaaki Motozawa (Shizuoka Univ.), Mitsuhiro Fukuta (Shizuoka Univ.), Masahiro Motosuke (Tokyo Univ. of Science)	TFEC9-1255: Performance Evaluation of a Thermal Energy Harvester with Heat Transfer Using Temperature Sensitive Magnetic Fluid, Yuta Suzuki (Shibaura Inst. of Technology), Hiroki Nakamura (Shibaura Inst. of Technology), Manabu Tange (Shibaura Inst. of Technology)
Room B5 T18. General Session (Thermal Engineering) 1 Chairperson: Masayasu Shimura (Tokyo Institute of Technology)	TFEC9-1552: Heat Transfer Enhancement Using Uni-directional Porous Copper Pipe, Yoshiaki Sato (Tokyo Univ. Sci., Yamaguchi), Kazuhisa Yuki (Tokyo Univ. Sci., Yamaguchi), Shintaro Nagano (Tokyo Univ. Sci., Yamaguchi), Risako Kibushi (Tokyo Univ. Sci., Yamaguchi), Noriyuki Unno (Tokyo Univ. Sci., Yamaguchi), Kazuyuki Hokamoto (Kumamoto Univ.), Shigeru Tanaka (Kumamoto Univ.), Toshio Tomimura (Kumamoto Univ.)	TFEC9-1039: Vortex Structure behind a Highly Heated Cylinder in Pulsating Flow, Muhammad Aiman bin Mohd Nor (Shibaura Inst. of Technology), Akito Higasa (Shibaura Inst. of Technology), Yuji Yahagi (Shibaura Inst. of Technology)	TFEC9-1418: Seamless Immersed Boundary Method for Energy Equation with Neumann Boundary Conditions, Hidetoshi Nishida (Kyoto Inst. of Technology), Kyohei Tajiri (Kyoto Inst. of Technology), Mitsuru Tanaka (Kyoto Inst. of Technology)
Room B6 F05. Fluid Machinery and Systems 1 Chairperson: Hironori Horiguchi (Osaka University)	TFEC9-1388: Cavitation Performance of Helical Inducer with Reduced-Diameter Suction Conduit, Yohei Tanaka (Kyushu Univ.), Kou Shirakigawa (Kyushu Univ.), Satoshi Watanabe (Kyushu Univ.), Shin-ichi Tsuda (Kyushu Univ.)	TFEC9-1060: Influence of Blade Outlet Angle on Performance and Internal Flow of Centrifugal Pump for Low Viscous Fluid Food, Toru Shigemitsu (Tokushima Univ.), Eito Nakaishi (Tokushima Univ.), Masahiro Sakaguchi (Tokushima Univ.)	TFEC9-1001: Load and Stress Analysis of the Propeller Blade in Cycloidal Drive, Mongkol Thianwiboon (Mahidol Univ.)
Room B7			

Saturday, October 28, 2017

12:25			
TFEC9-1639: Estimation of Interfacial Thermal Resistance of Polymer Materials with Layer Structure by Effective Thermal Conductivity Measurement, Takushi Saito (Tokyo Inst. of Technology), Takaya Banno (Tokyo Inst. of Technology), Tatsuya Kawaguchi (Tokyo Inst. of Technology), Isao Satoh (Tokyo Inst. of Technology)			Room B3 <i>T17. Thermophysical Properties Measurements 1</i>
TFEC9-1187: Behavior of Bubble Detached from Orifice in Magnetic Fluid, Haruhiko Yamasaki (Doshisha Univ.), Makoto Ueta (Doshisha Univ.), Hiroshi Yamaguchi (Doshisha Univ.)			Room B4 <i>F07. Functional Fluids and Their Advanced Applications 1</i>
TFEC9-1271: Data-Driven Turbulence Modeling for Prediction of Film-Cooling Effectiveness, Takashi Misaka (Tohoku Univ.), Norio Asaumi (IHI Corporation), Takeomi Ideta (IHI Corporation), Shigeru Obayashi (Tohoku Univ.)			Room B5 <i>T18. General Session (Thermal Engineering) 1</i>
TFEC9-1190: Three-Position Pneumatic Poppet Valve, Moongeun Hong (Korea Aerospace Research Inst.)			Room B6 <i>F05. Fluid Machinery and Systems 1</i>
			Room B7

Saturday, October 28, 2017

Session	14:10	14:25	14:40
Room A1 TF01. Optimal Design/Control of Thermal Systems and Fluid Flows 2 Chairperson: Haecheon Choi (Seoul National University)	TFEC9-1113: A Numerical Study on the Topology Optimization of a Heat Sink Model for High Reynolds Number Flow, Jun Seok Lee (Pusan National Univ.), Man Yeong Ha (Pusan National Univ.), June Kee Min (Pusan National Univ.)	TFEC9-1407: Meshless Analysis-Based Shape Optimization in Conjugate Heat Transfer Problems, Hidneori Kinoshita (The Univ. of Tokyo), Yuji Suzuki (The Univ. of Tokyo), Kenichi Morimoto (The Univ. of Tokyo)	TFEC9-1561: Numerical Analysis on the Thermal Performance of Louvered Heat Exchanger with Rounding Flow Control, Myung Keun Gong (The Univ. of Seoul), Gwang Hoon Rhee (The Univ. of Seoul)
Room A2 T05. Combustion Fundamentals for Future Energy Systems 2 Chairperson: Chang Kook Ryu (Sungkyunkwan University)	TFEC9-1008: The Unstable Behavior of Non-adiabatic Cellular Premixed Flames in Large Space: Fractal Analysis of Flame Fronts, Satoshi Kadowaki (Nagaoka Univ. of Technology), Yusuke Morita (Nagaoka Univ. of Technology), Thwe Thwe Aung (Nagaoka Univ. of Technology), Toshiyuki Katsumi (Nagaoka Univ. of Technology), Hideaki Kobayashi (Tohoku Univ.)	TFEC9-1596: Propagation Speed, Markstein Length, and Cellular Instability of Outwardly Expanding Methane/ethylene-air Spherical Premixed Flames, Kyu Ho Van (Pukyong Nat.Univ.), Hee June Kim (Pukyong Nat. Univ.), Jeong Park (Puyong Nat. Univ.), Dae Keum Lee (KIER), Seong Gon Kim (KIER), Young Tae Guahk (KIER), Dong Soon Noh (KIER), Suk Ho Chung (KAUST)	TFEC9-1438: Propagation of Methane/Air Premixed Flames in a Disk Burner of Various Mesoscale Gaps, Hyejin Jang (KAIST), Nam Il Kim (KAIST)
Room B1a T10. Molecular Simulation 2 Chairperson: Kunio Fujiwara (Osaka University)	TFEC9-1333: Replica Exchange Monte Carlo Simulations of Frustrated Chiral Liquid-Crystal Phases, Takuma Nozawa (Keio Univ.), Paul E Brumby (Keio Univ.), Kenji Yasuoka (Keio Univ.)	TFEC9-1327: Phase Diagram of Janus Nanoparticle into Various Self-Assembled Crystals Using Molecular Simulation, Yusei Kobayashi (Kindai Univ.), Kentaro Nomura (RIKEN), Noriyoshi Arai (Kindai Univ.)	TFEC9-1349: A Discussion on the Effect of Quantum Nature of Liquid Hydrogen on its Bubble Nucleation Using Density Functional Theory, Daiki Yasui (Kyushu Univ.), Hiroki Nagashima (Univ. of the Ryukyus), Takashi Tokumasu (Tohoku Univ.), Satoshi Watanabe (Kyushu Univ.), Shin-ichi Tsuda (Kyushu Univ.)
Room B1b F03. Bio-Fluid Mechanics and Biomimetics 2 Chairperson: Gaku Tanaka (Chiba University)	TFEC9-1185: Effect of Deformation to Flow Characteristics of Patient-Specific Aneurysm Model in Middle Cerebral Artery, Taihei Kotani (Chiba Univ.), Gaku Tanaka (Chiba Univ.), Hau Liu (Chiba Univ.), Ryuhei Yamaguchi (Chiba Univ.)	TFEC9-1309: A Coarse-grained Model and Simulation Study for a Monolayer Lipid Membrane, Hirona Miura (Akita Prefectural Univ.), Stephanie Evelyn Nix (Akita Prefectural Univ.), Yukitaka Ishimoto (Akita Prefectural Univ.)	TFEC9-1366: Realisation of Viscoelastic Epithelial Tissues in the Bubbly Vertex Dynamics, Yukitaka Ishimoto (Akita Prefectural Univ.)
Room B1c T02. Advances in Electronics Cooling and Thermal Management 2 Chairperson: Tomoyuki Hatakeyama (Toyama Prefectural University)	TFEC9-1270: Thermal Performance of a Heat Pipe with Unequally Distributed Multiple Heat Sources: An Experimental Study, Joon Hong Boo (Korea Aerospace Univ.), Hyun Gon Kim (Korea Aerospace Univ.), Jang Hyun Bae (Korea Aerospace Univ.)	TFEC9-1038: Evaluation of Cooling Performance and Reliability of Low-Height Type Aluminum Thermosyphon under High Temperature Environment, Takayuki Fujimoto (Hitachi,Ltd.), Yoshihiro Kondo (Hitachi,Ltd.), Shinya Hamagishi (Hitachi,Ltd.), Shigemasa Sato (Hitachi,Ltd.)	TFEC9-1577: Effect of the Wettability of a Heating Surface in Subcooled Pool Boiling, Noriyuki Unno (Tokyo Univ. of Science, Yamaguchi), Kazuhisa Yuki (Tokyo Univ. of Science, Yamaguchi), Risako Kibushi (Tokyo Univ. of Science, Yamaguchi), Shin-ichi Satake (Tokyo Univ. of Science), Koichi Suzuki (Tokyo Univ. of Science)
Room B2 F01. Advances in Image-Based Measurement 2 Chairperson: Satoshi Someya (AIST)	TFEC9-1445: Lifetime-based PSP Measurement for Unsteady Pressure Field, Masaki Wakahara (Tokyo Univ. of Agriculture and Technology), Masaharu Kameda (Tokyo Univ. of Agriculture and Technology), Kazuyuki Nakakita (Japan Aerospace Exploration Agency)	TFEC9-1564: Rapid Printing of Two-Color PSP and TSP Using Commercial Inkjet Printer, Masato Ide (Nagoya Univ.), Yu Matsuda (Nagoya Univ.), Yuki Yoshida (Nagoya Univ.), Tomohiro Kameya (National Inst. of Technology, Toba College), Yasuhiro Egami (Aichi Inst. of Technology), Hiroki Yamaguchi (Nagoya Univ.), Tomohide Niimi (Nagoya Univ.)	TFEC9-1604: Study of Aerodynamic Heating Measurement using Temperature-Sensitive Paint with Light-Shielding Layer, Hiroki Nagai (Tohoku Univ.), Takehiro Nagayama (Tohoku Univ.), Tatsuya Tonai (Tohoku Univ.)

14:55	15:10	15:25	
TFEC9-1222: Self-Sustaining Mechanism of Wall Turbulence and the Optimal Design of Local Body Force for Flow Separation Control, Aiko Yakeno (Japan Agency for Marine-Earth Science and Technology), Yoshiaki Abe (Imperial College London), Soshi Kawai (Tohoku Univ.), Taku Nonomura (Tohoku Univ.), Kozo Fujii (Tokyo Univ. of Science)	TFEC9-1095: Passively Adaptive Control of Flow Over a Sphere for Drag Reduction at High Reynolds Numbers, Seokbong Chae (Ulsan National Inst. of Science and Technology), Jooha Kim (Ulsan National Inst. of Science and Technology), Jae Hwa Lee (Ulsan National Inst. of Science and Technology)	TFEC9-1045: Bayesian Optimization of Traveling Wave-Like Wall Deformation for Turbulent Drag Reduction, Yusuke Nabae (Keio Univ.), Ken Kawai (Keio Univ.), Koji Fukagata (Keio Univ.)	Room A1 <i>TF01. Optimal Design/Control of Thermal Systems and Fluid Flows 2</i>
TFEC9-1174: Effects of Pressure on Combustion Characteristics of Ammonia/Air Premixed Turbulent Flames in Swirling Flows, Akihiro Hayakawa (Tohoku Univ.), Yoshiyuki Arakawa (Tohoku Univ.), K.D. Kunkuma A. Somaratne (Tohoku Univ.), Taku Kudo (Tohoku Univ.), Hideaki Kobayashi (Tohoku Univ.)	TFEC9-1403: A Fractal Dynamic SGS Combustion Model for LES of Turbulent Premixed Flames under a Pressure Rising Condition, Rie Yamada (Tokyo Inst. Tech.), Yuzuru Nada (Tokushima Univ.), Basmil Yenerdag (Tokyo Inst. Tech.), Yuki Minamoto (Tokyo Inst. Tech.), Masayasu Shimura (Tokyo Inst. Tech.), Mamoru Tanahashi (Tokyo Inst. Tech.)	TFEC9-1400: OH-CH2O PLIF Measurements in Lean Turbulent Premixed Flames, Tsugumi Maeda (Tokyo Inst. of Technology), Masayasu Shimura (Tokyo Inst. of Technology), Yuki Minamoto (Tokyo Inst. of Technology), Mamoru Tanahashi (Tokyo Inst. of Technology)	Room A2 <i>T05. Combustion Fundamentals for Future Energy Systems 2</i>
TFEC9-1390: Molecular Dynamics Simulation on Thermal Fluctuation of Seed Particle Heterogeneous Bubble Nucleation, Donguk Suh (Keio Univ.), Kenji Yasuoka (Keio Univ.)	TFEC9-1422: Validation of Classical Mixing Rule Coupled with a Cubic Equation of State for the Thermodynamic Properties in Oxygen-Hydrogen Mixture System, Ryuji Takahashi (Kyushu Inst. of Technology), Nobuyuki Tsuboi (Kyushu Inst. of Technology), Takashi Tokumasu (Tohoku Univ.), Shin-ichi Tsuda (Kyushu Univ.)	/	Room B1a <i>T10. Molecular Simulation 2</i>
TFEC9-1405: Numerical Study on Hemodynamics and Vascular Remodeling of Pancreaticoduodenal Arcade in the Presence of Celiac Artery Stenosis, Changyoung Yuhn (Univ. Tokyo), Yuji Suzuki (Univ. Tokyo), Masaharu Kobayashi (Univ. Tokyo), Kazuhiro Miyahara (Univ. Tokyo Hosp.), Katsuyuki Hoshina (Univ. Tokyo Hosp.), Marie Oshima (Univ. Tokyo)	TFEC9-1583: A Numerical Study of Oxygen Diffusion Near a Deforming Red Blood Cell, Stephanie Nix (Akita Prefectural Univ.), Wataru Fujiwara (Akita Prefectural Univ.), Yukitaka Ishimoto (Akita Prefectural Univ.)	TFEC9-1647: Fluid Dynamics for Hepatocyte Transplantation, Hiromichi Obara (Tokyo Metropolitan Univ.), Sandi Sufiandi (Tokyo Metropolitan Univ.), Tomoki Morikawa (Tokyo Metropolitan Univ.), Shin Enosawa (National Center for Child Health and Development)	Room B1b <i>F03. Bio-Fluid Mechanics and Biomimetics 2</i>
TFEC9-1380: Study on the Dual-Height Plate Fin Heat Sink Subject to Natural Convection, Chan Byon (Ulsan National Inst. of Science and Technology), Daechan Jeon (Ulsan National Inst. of Science and Technology)	TFEC9-1307: Flow Behavior and Heat Transfer Characteristics of Jet Cooling between Outer and Slotted Inner Cylinders in an Electrical Rotating Machine, Tomohisa Yuasa (Univ. of Tsukuba), Yuto Honma (Meidensha Corporation), Mitsuyoshi Ejiri (Meidensha Corporation), Akiko Kaneko (Univ. of Tsukuba), Yutaka Abe (Univ. of Tsukuba)	/	Room B1c <i>T02. Advances in Electronics Cooling and Thermal Management 2</i>
TFEC9-1654: Phosphorescence Lifetime Measurement for O2 Concentration Imaging Inside a Single Cell, Toshiaki Kamachi (Tokyo Inst. of Technology), Hidehiro Ito (Tokyo Inst. of Technology)	TFEC9-1042: Lifetime-Based Method of Dual-Layer PSP/TSP for Simultaneous Measurement of Pressure and Temperature Using a Single Camera, Kil-Ju Moon (Kyushu Univ.), Hideo Mori (Kyushu Univ.)	TFEC9-1446: Luminescent Self-Assembled Monolayer for Surface Temperature Imaging in Microscale Flows, Koya Kato (Toyama Prefectural Univ.), Yoshitaka Sakamura (Toyama Prefectural Univ.), Motohiro Oshima (Toyama Prefectural Univ.), Shigeki Kawabata (Toyama Prefectural Univ.), Masaya Mitsuishi (Tohoku Univ.)	Room B2 <i>F01. Advances in Image-Based Measurement 2</i>

Saturday, October 28, 2017

Session	14:10	14:25	14:40
Room B3 T17. Thermophysical Properties Measurements 2 Chairperson: Takushi Saito (Tokyo Institute of Technology) Tentative	TFEC9-1054: Estimation Method of Thermal Conductivity by Short Time Heating, Yusuke Nakamura (Nat. Inst. Tech., Wakayama College), Naoya Tsuchiyama (Nat. Inst. Tech., Wakayama College), Ikuma Takewa (Nat. Inst. Tech., Wakayama College), Yukihiro Goto (EKO INSTRUMENTS Co., LTD), Toshiaki Yazaki (EKO INSTRUMENTS Co., LTD), Takahiro Ohmura (Nat. Inst. Tech., Wakayama College)	TFEC9-1499: How liquid impregnation affects thermal transport in individual CNF, Alexandros Askounis (International Inst. for Carbon Neutral Energy Research), Yutaka Yamada (Okayama Univ.), Koji Takahashi (Kyushu Univ.), Yasuyuki Takata (Kyushu Univ.), Khellil Sefiane (Edinburgh Univ.)	TFEC9-1419: Thermal Resistance Measurement of Nanoparticle-Layer-Deposited Solid-Liquid Interface, Yoshitaka Ueki (Osaka Univ.), Kosei Kurata (Osaka Univ.), Tomoya Oyabu (Osaka Univ.), Masahiko Shibahara (Osaka Univ.)
Room B4 F07. Functional Fluids and Their Advanced Applications 2 Chairperson: Kentaro Doi (Osaka University)	TFEC9-1234: Alignment of Piezoelectric Fibers Using Electrostatic Lenses, Sangyeon Hwang (Sungkyunkwan Univ.), Doyoung Byun (Sungkyunkwan Univ.)	TFEC9-1428: Experimental Analysis on Fluid Dynamical Characteristics of Ionic Liquid Electrospray, Hidemasa Takana (Tohoku Univ.), Koyo Saegusa (Tohoku Univ.)	TFEC9-1521: Numerical Simulation on Droplet Ejection in Ionic Liquid Electrospray, Koji Kawatani (Tohoku Univ.), Hidemasa Takana (Tohoku Univ.)
Room B5 T14. Recent Development of Biomass Conversion Technology 1 Chairperson: Hang Seok Choi (Yonsei University) Tentative	TFEC9-1093: Influence of Air Flow Rate on the End Face Combustion Behavior of Highly Densified Cylindrical Biomass Briquette, Hiroyuki Ito (Kanagawa Univ.), Atsuki Sekiguchi (Kanagawa Univ.), Masaya Wakebe (Kanagawa Univ.)	TFEC9-1177: Thermal Conversion of Waste Sludge and Biomass by Oxy-fuel Combustion using Circulating Fluidized Bed, Ha-Na Jang (Yonsei Univ.)	TFEC9-1593: Study on Generation of Clinker in Bamboo Combustion Process, Shohei Okubo (Yamaguchi Univ.), Kentarou Hikasa (Yamaguchi Univ.), Ken-ichirou Tanoue (Yamaguchi Univ.), Tatsuo Nishimura (Yamaguchi Univ.), Miki Taniguchi (ChugaiRo Co.ltd), Ken-ichi Sasauchi (ChugaiRo Co.ltd)
Room B6 F05. Fluid Machinery and Systems 2 Chairperson: Satoshi Watanabe (Kyushu University)	TFEC9-1303: Effect of Diffuser Vane Number on Noise and Pressure Fluctuation in Diffuser of Compact Centrifugal Blower, Takeshi Honda (Hitachi, Ltd.), Seiji Sakagami (Hitachi, Ltd.), Kohei Kyoya (Hitachi, Ltd.), Ken-ichi Funazaki (Iwate Univ.)	TFEC9-1582: Effects of Blade Tip Clearance on Hub-Corner Separation in a Stator Cascade of a Multi-Stage Transonic Axial Compressor, Seishiro Saito (Kyushu Univ.), Masato Furukawa (Kyushu Univ.), Kazutoyo Yamada (Kyushu Univ.), Yuki Tamura (Kyushu Univ.), Akinori Matsuoka (Kawasaki Heavy Industries, Ltd.), Naoyuki Niwa (Kawasaki Heavy Industries, Ltd.)	TFEC9-1503: The Generation Mechanism of the Rotordynamic Fluid Force due to an Axial Clearance Flow on a Whirling Columnar Rotor, Haruka Nishimura (Osaka Univ.), Hironori Horiguchi (Osaka Univ.), Hajime Koyama (Toshiba Corporation), Kazuyasu Sugiyama (Osaka Univ.), Yoshinobu Tsujimoto (Osaka Univ.)
Room B7 F13. General Session (Fluids Engineering) 1 Chairperson: Koji Fukudome (Ritsumeikan University)	TFEC9-1239: New Workflow for Investigating Aerodynamics of Upper Structures of Ships, Kiichiro Mukose (National Institute of Technology, Toyama College)	TFEC9-1263: Study on High-Performance of a Ship Propulsion Device by Using the Weis-Fogh Mechanism, Masahiko Sakamoto (National Institute of Technology, Nara College), Michihisa Tsutahara (Kobe Univ.)	TFEC9-1288: Computational Study of Lake Biwa, Takahiro Ide (Ritsumeikan Univ.), Koji Fukudome (Ritsumeikan Univ.), Yoshifumi Ogami (Ritsumeikan Univ.)

14:55	15:10	15:25	
TFEC9-1430: Thermophysical Properties of Dielectric Nanofluids with Low Viscosity, Joongbae Kim (Korea Advanced Inst. of Science and Technology), Mungoung Jeong (Korea Advanced Inst. of Science and Technology), Bong Jae Lee (Korea Advanced Inst. of Science and Technology)			Room B3 T17. Thermophysical Properties Measurements 2
TFEC9-1589: Development of Particle Filtration Technique in a Microfluidic Device Using Local Heating, Tetsuro Tsuji (Osaka Univ.), Sho Saita (Osaka Univ.), Yuki Matsumoto (Osaka Univ.), Koki Sakamoto (Osaka Univ.), Satoyuki Kawano (Osaka Univ.)	TFEC9-1637: Measurements of Non-Faradaic Current in Microgaps Using Truncated Conical Electrodes, Takashi Fukuda (Osaka Univ.), Kentaro Doi (Osaka Univ.), Satoyuki Kawano (Osaka Univ.)		Room B4 F07. Functional Fluids and Their Advanced Applications 2
TFEC9-1010: Effect of Gasifying Agents on the Gasification Rate of Biomass-Derived Char, Yukihiro Okumura (National Inst. of Technology, Maizuru college), Shuhei Ohtani (National Inst. of Technology, Maizuru college)	TFEC9-1456: Total Behavior of Phosphorus in Supercritical Water Gasification of Deoxyribonucleic Acid, Soshi Hashimoto (Hiroshima Univ.), Yukihiro Matsumura (Hiroshima Univ.)	TFEC9-1457: Gasification of Glucose and Guaiacol Mixture in Supercritical Water: Effect of Heating Rate, Obie Farobie (Hiroshima Univ.), Shuhei Inoue (Hiroshima Univ.), Takahito Inoue (Fukken Co., Ltd.), Yoshifumi Kawai (Chuden Plant Co., Ltd.), Takashi Noguchi (Toyo Koatsu Co., Ltd.), Hiroaki Tanigawa (The Chugoku Electric Power Co., Inc.), Yukihiro Matsumura (Hiroshima Univ.)	Room B5 T14. Recent Development of Biomass Conversion Technology 1
TFEC9-1671: Fluid Moments and Forces Caused by an Axial Clearance Flow on a Precessing Columnar Rotor, Kenta Sakimoto (Osaka Univ.), Haruka Nishimura (Osaka Univ.), Hironori Horiguchi (Osaka Univ.), Hajime Koyama (Toshiba Corporation), Kazuyasu Sugiyama (Osaka Univ.), Yoshinobu Tsujimoto (Osaka Univ. (Retired))	TFEC9-1280: Development of Wireless Tomography System to Measure Solid-Liquid Flow in Rotating Body, Yuya Atagi (Chiba Univ.), Yuya Akimoto (Chiba Univ.), Fumiya Nagae (Chiba Univ.), Masahiro Takei (Chiba Univ.), yoshiyuki Iso (IHI), Ryosuke Ikeda (IHI), Yuuki Matsumi (IHI)		Room B6 F05. Fluid Machinery and Systems 2
TFEC9-1221: Effect of Anti-agglomerant on the Transporting Characteristics of Carbon Dioxide Hydrate Slurry, Benedict Prah (Hanbat National Univ.), Rin Yun (Hanbat National Univ.)	TFEC9-1023: Effects of Production Strategy and Operation Parameters on Reservoir Scale Methane Hydrate Dissociation Flows, Lin Chen (Tohoku Univ.), Junnosuke Okajima (Tohoku Univ.), Komiya Atsuki (Tohoku Univ.), Shigenao Maruyama (Tohoku Univ.)	TFEC9-1501: Numerical Analysis of Diffusion Characteristics of Hazard and Noxious Substance (HNS) Spilled in Seawater, Seong Hyuk Lee (Chung-Ang Univ.), Chan Ho Jeong (Chung-Ang Univ.), Moonjin Lee (Korea Research Institute of Ships & Ocean Engineering), Jung-Yeul Jung (Korea Research Institute of Ships & Ocean Engineering)	Room B7 F13. General Session (Fluids Engineering) 1

Saturday, October 28, 2017

Session	16:00	16:15	16:30
Room A1 TF01. Optimal Design/Control of Thermal Systems and Fluid Flows 3 Chairperson: Kaoru Iwamoto (Tokyo University of Agriculture and Technology)	TFEC9-1299: Shape Optimization of Three-Dimensional Solid-Fluid Interface for Conjugate Heat Transfer, Yukinori Kametani (Inst. of Industrial Science, The Univ. of Tokyo), Yosuke Hasegawa (Inst. of Industrial Science, The Univ. of Tokyo)	TFEC9-1543: The Effect of Space Ratio on a Cross-Cut Flow Control in Wavy Fin Heat Exchangers, Gun Woo Kim (The Univ. of Seoul), Gwang Hoon Rhee (The Univ. of Seoul)	TFEC9-1618: RANS-Based Adjoint Analysis for Shape Optimization of High-Performance Turbulent Heat Exchangers, Kenichi Morimoto (The Univ. of Tokyo), Yuki Goto (The Univ. of Tokyo), Yuji Suzuki (The Univ. of Tokyo)
Room A2 T05. Combustion Fundamentals for Future Energy Systems 3 Chairperson: Nam Il Kim (KAIST)	TFEC9-1375: Study on Ignition Characteristics of CH₂F₂/Air Flame in a Micro Flow Reactor with a Controlled Temperature Profile, Shintaro Takahashi (Tohoku Univ.), Hisashi Nakamura (Tohoku Univ.), Takuya Tezuka (Tohoku Univ.), Susumu Hasegawa (Tohoku Univ.), Kaoru Maruta (Tohoku Univ. /Far Eastern Federal Univ.)	TFEC9-1550: Effects of Electrical Discharge Characteristics on Spark Ignition for Lean Propane-Air Mixtures Diluted with N₂, Taichi Kobayashi (The Univ. of Tokyo), Yoshinari Kobayashi (The Univ. of Tokyo), Shingo Iseki (The Univ. of Tokyo), Shinji Nakaya (The Univ. of Tokyo), Mitsuhiro Tsue (The Univ. of Tokyo)	TFEC9-1556: Characteristics of In-Cylinder Reformate and Ignition Properties of Reformate Gases, Yuki Murakami (Tohoku Univ.), Hisashi Nakamura (Tohoku Univ.), Susumu Hasegawa (Tohoku Univ.), Takuya Tezuka (Tohoku Univ.), Go Asai (Yanmar Co., Ltd.), Kaoru Maruta (Tohoku Univ. / Far Eastern Federal Univ.)
Room B1a T10. Molecular Simulation 3 Chairperson: Noriyoshi Arai (Kindai University)	TFEC9-1119: Effects of Surface Energy and Liquid Density in a Nano-Channel Using Multi-Scale Hybrid Method, Youngjin Kim (Pusan National Univ.), Myunggeun Jeong (Pusan National Univ.), Wenjing Zhou (Xi'an Jiaotong Univ.), Wen Quan Tao (Xi'an Jiaotong Univ.), Matthew Stanley Ambrosia (Catholic Univ. of Pusan), Man Yeong Ha (Pusan National Univ.)	TFEC9-1473: Channel Size Dependence of the Friction Force Around the Contact Line Region, Akinori Fukushima (Univ. of Fukui), Takashi Tokumasu (Tohoku Univ.)	TFEC9-1602: Modulation of Thermoelectric Properties of Carbon Nanotubes Using Defects and Strain, Masato Ohnishi (The Univ. of Tokyo), Takashi Kodama (The Univ. of Tokyo), Takuma Shiga (The Univ. of Tokyo), Junichiro Shiomi (The Univ. of Tokyo)
Room B1b F03. Bio-Fluid Mechanics and Biomimetics 3 Chairperson: Masaki Fuchiwaki (Kyushu Institute of Technology)	TFEC9-1016: Control of Flow and Acoustic Radiation around an Oscillating Plate in a Uniform Freestream by Plasma Actuators, Saya Sato (Toyohashi Univ. of Technology), Hiroshi Yokoyama (Toyohashi Univ. of Technology), Akiyoahi Iida (Toyohashi Univ. of Technology)	TFEC9-1032: Biological Sound by Blowing from Lips, Yoshihiro Kubota (Toyo Univ.), Kazuki Sugiyama (Toyo Univ.), Masaki Sekine (Graduate School of Toyo Univ.), Osamu Mochizuki (Toyo Univ.)	TFEC9-1111: Physical Limits to Embolism Resistance in Flowering Plants, Jin Woo Choi (Seoul National Univ.), Ho-Young Kim (Seoul National Univ.)
Room B1c T02. Advances in Electronics Cooling and Thermal Management 3 Chairperson: TBD	TFEC9-1117: Performance Evaluation of Flow and Heat Transfer in Wavy Microchannel Heat Sinks, Ganbat Davaa (National Inst. of Technology, Yuge College), Odgerel Jambal (National Inst. of Technology, Yuge College)	TFEC9-1551: On the onset of Microbubble Emission Boiling in Minichannels, Tian Yu Ma (Tokyo Univ. of Science, Yamaguchi), Kazuhisa Yuki (Tokyo Univ. of Science, Yamaguchi), Risako Kibushi (Tokyo Univ. of Science, Yamaguchi), Noriyuki Unno (Tokyo Univ. of Science, Yamaguchi), Koichi Suzuki (Tokyo Univ. of Science, Yamaguchi), Hitosi Yoshimura (Denso)	TFEC9-1310: Numerical Simulation of Fundamental Liquid Cooling Heat Sink for Electronics Using OpenFOAM, Ryohei Hirose (Toyama Prefectural Univ.), Shinji Nakagawa (Toyama Prefectural Univ.), Tomoyuki Hatakeyama (Toyama Prefectural Univ.)
Room B2 F01. Advances in Image-Based Measurement 3 Chairperson: Han Seo Ko (Sungkyunkwan University)	TFEC9-1397: A Development of Two-Color Thermometry with PIV Using BAMG Phosphor, Satoshi Someya (National Inst. of Advanced Industrial Science and Technology), Tetsuo Munakata (National Inst. of Advanced Industrial Science and Technology), Hiroshi Ito (National Inst. of Advanced Industrial Science and Technology)	TFEC9-1398: A Phase Change Behavior of Eutectic of Fatty Acids Using a Visible DSC, Satoshi Someya (National Inst. of Advanced Industrial Science and Technology), Tetsuo Munakata (National Inst. of Advanced Industrial Science and Technology), Hiroshi Ito (National Inst. of Advanced Industrial Science and Technology), Yukiko Iwakura (National Inst. of Advanced Industrial Science and Technology)	TFEC9-1525: Visualization Study on Dissolution Behavior of Liquid CO₂ with Hydrate under High Pressure Condition, Rintaro Fujikawa (Univ. of Tsukuba), Xiao Ma (Univ. of Tsukuba), Shuhei Fujimoto (National Maritime Research Inst.), Akiko Kaneko (Univ. of Tsukuba), Yutaka Abe (Univ. of Tsukuba)

16:45	17:00		
TFEC9-1443: Numerical Investigation of the Flow Characteristics and Thermal Performance of the Perforated Fins in the Fin-Tube Heat Exchangers, Hyung Ju Lee (Chung-Ang Univ.), Ji Min Park (Chung-Ang Univ.), Seong Hyuk Lee (Chung-Ang Univ.), Jaiyoung Ryu (Chung-Ang Univ.)	TFEC9-1652: Heat Transfer Enhancement by Flexible Flags Clamped Vertically in a Poiseuille Channel Flow, Sung Goon Park (Korea Advanced Inst. of Science and Technology), Jae Bok Lee (Korea Advanced Inst. of Science and Technology), Hyung Jin Sung (Korea Advanced Inst. of Science and Technology)		Room A1 <i>TF01. Optimal Design/Control of Thermal Systems and Fluid Flows 3</i>
TFEC9-1098: A DNS Study of Ignition Characteristics of Syngas Mixture Under HCCI Conditions, Rudra Narayan Roy (Kyoto Univ.), Masaya Muto (Kyoto Univ.), Ryoichi Kurose (Kyoto Univ.)	TFEC9-1540: Construction of Numerical Measurement Using DNS Data of Turbulent Premixed Flames, Kazuya Tsuboi (Okayama Univ.), Takahiro Tomeda (Okayama Univ.), Eiji Tomita (Okayama Univ.), Tatsuya Hasegawa (Nagoya Univ.)		Room A2 <i>T05. Combustion Fundamentals for Future Energy Systems 3</i>
TFEC9-1440: Translation-Rotation Decoupling of Glass-Forming Liquids and Two-Dimensional Fluids, Yoonjae Park (Sogang Univ.), Jeongmin Kim (Sogang Univ.), Bong June Sung (Sogang Univ.)	/		Room B1a <i>T10. Molecular Simulation 3</i>
TFEC9-1453: Transitional Flow in the Nasal Cavity, Takashi Sakamoto (Chiba Univ.), Shinya Kimura (Chiba Univ.), Toshihiro Sera (Kyushu Univ.), Hideo Yokota (RIKEN Center for Advanced Photonics), Kenji Ono (Kyushu Univ.), Gaku Tanaka (Chiba Univ.)	TFEC9-1541: Measurement of Three-dimensional Flow Field and Walls Shear Stress for Wall-deformable Cerebral Aneurysm Model Under Pulsatile Flow, Takumi Kawakami (Tokyo Univ. Sci.), Ichikawa Chihiro (Tokyo Univ. Sci.), Kamiya Kaoru (Tokyo Univ. Sci.), Ryosuke Fujita (Tokyo Univ. Sci.), Hiroyuki Takao (Jikei Univ. Sci.), Yuichi Murayama (Jikei Univ. Sci.), Ken Yamamoto (Tokyo Univ. Sci.), Masahiro Motosuke (Tokyo Univ. Sci.)		Room B1b <i>F03. Bio-Fluid Mechanics and Biomimetics 3</i>
TFEC9-1022: Numerical Study of the Influence of the Nozzle Exit Velocity Profile on the Heat Transfer of a Confined Turbulent Impinging Jet, Kil Young Lee (Korea Advanced Inst. of Science and Technology), Sung Jin Kim (Korea Advanced Inst. of Science and Technology)	/		Room B1c <i>T02. Advances in Electronics Cooling and Thermal Management 3</i>
TFEC9-1199: Direct Measurement of Falling Water Film Velocity on Vertical Flat Walls and Roller Shutters, Yuta Sato (Shibaura Inst. of Technology), Takumi Date (Shibaura Inst. of Technology), Satoshi Hayashi (Tokyo Univ. of Science), Manabu Tange (Shibaura Inst. of Technology), Yoshifumi Omiya (Tokyo Univ. of Science)	TFEC9-1494: Beam Overlapped 3D Scanning PIV Method and its application to the Calorimetry of Air Conditioning System, Shumpei Funatani (Univ. of Yamanashi), Shinya Amano (Univ. of Yamanashi), Tetsuaki Takeda (Univ. of Yamanashi)		Room B2 <i>F01. Advances in Image-Based Measurement 3</i>

Saturday, October 28, 2017

Session	16:00	16:15	16:30
Room B3 T03. Aerospace Thermal Management Chairperson: Hosei Nagano (Nagoya University)	TFEC9-1681: Improving Wettability of Porous Stainless Steel via Chemical Surface Modification for Development of Loop Heat Pipe, Chiemi Oka (Nagoya Univ.), Kimihide Odagiri (Nagoya Univ.), Hosei Nagano (Nagoya Univ.)	TFEC9-1427: Transient Modeling of Loop Heat Pipes for Startup Behavior, Takuya Adachi (Tohoku Univ.), Hiroki Nagai (Tohoku Univ.)	TFEC9-1683: On-orbit Test Plan of Loop Heat Pipes for Space Use and the Test Results of Ground Test, Atsushi Okamoto (Japan Aerospace Exploration Agency), Takeshi Miyakita (Japan Aerospace Exploration Agency), Ryuta Hatakenaka (Japan Aerospace Exploration Agency), Hiroyuki Sugita (Japan Aerospace Exploration Agency), Koki Sato (Nagoya Univ.), Hosei Nagano (Nagoya Univ.)
Room B4 F07. Functional Fluids and Their Advanced Applications 3 Chairperson: Masaaki Motozawa (Shizuoka University)	TFEC9-1630: Theoretical and Numerical Study of Liquid Flows Driven by Diffusion and Electrophoresis of Ions in a Square Duct, Kentaro Doi (Osaka Univ.), Ayako Yano (Osaka Univ.), Ryo Nagura (Osaka Univ.), Fumika Nito (Osaka Univ.), Satoyuki Kawano (Osaka Univ.)	TFEC9-1635: Optical and Electrical Measurements of Electrohydrodynamic Flows in Polarized Aqueous Solutions, Ryo Nagura (Osaka Univ.), Kentaro Doi (Osaka Univ.), Satoyuki Kawano (Osaka Univ.)	TFEC9-1636: Velocity Field Measurements of Electrohydrodynamic Flows in K⁺-Rich Aqueous Solution, Fumika Nito (Osaka Univ.), Kentaro Doi (Osaka Univ.), Satoyuki Kawano (Osaka Univ.)
Room B5 T14. Recent Development of Biomass Conversion Technology 2 Chairperson: Yukihiko Matsumura (Hiroshima University)	TFEC9-1634: Application of a Molten Metal on Thermochemical Conversions of Renewable Fuels, Ji Won Hwang (Korea Inst. of Industrial Technology), Soo Hwa Jeong (Korea Inst. of Industrial Technology), Young Doo Kim (Korea Inst. of Industrial Technology), Byung Ryeul Bang (Korea Inst. of Industrial Technology), Ji Hong Moon (Korea Inst. of Energy Research), Won Yang (Korea Inst. of Industrial Technology), Uen Do Lee (Korea Inst. of Industrial Technology)	TFEC9-1482: Production of Bio-Crude Oil by Fast Pyrolysis from Palm Kernel Shell (PKS), Soyoung Han (Korea Inst. of Machinery and Materials), Yeon-Seok Choi (Korea Inst. of Machinery and Materials), Sang-Kyu Choi (Korea Inst. of Machinery and Materials), Seock-Joon Kim (Korea Inst. of Machinery and Materials), Tawsif Rahman (University of Science and Technology)	TFEC9-1571: Heat Transfer and Chemical Reactions During Pyrolysis of Major Components of Woody Biomass, Kenichiro Tanoue (Yamaguchi Univ.), Tatsuo Nishimura (Yamaguchi Univ.), Yoshimitsu Uemura (Universiti Teknologi PETRONAS), Miki Taniguchi (Chugai Ro Co. Ltd.), Kenichi Sasauchi (Chugai Ro Co. Ltd.)
Room B6 F05. Fluid Machinery and Systems 3 Chairperson: Kazutoyo Yamada (Kyushu University)	TFEC9-1517: Large Eddy Simulation for the Pulsation Prediction in a High-Pressure Tank, R V Reji (Fluid Machinery Technology & Research Centre, Daejoo Machinery), S Y Kim (Fluid Machinery Technology & Research Centre, Daejoo Machinery), S W Son (Daejoo Machinery), A Suryan (College of Engineering Trivandrum), Heuy Dong Kim (Andong National Univ.)	TFEC9-1664: Numerical Analysis of Oil Flow Inside a Differential Gear System, Byungjoon Ham (Sogang Univ.), Nahmkeon Hur (Sogang Univ.), Jongrak Choi (LS Mtron)	TFEC9-1092: Numerical Simulation of Three-dimensional Internal flows of Transcritical Fluid with Cartesian Mesh Method, Takashi Furusawa (Tohoku Univ.), Kenji Kagaya (Tohoku Univ.), Satoru Yamamoto (Tohoku Univ.)
Room B7 F13. General Session (Fluids Engineering) 2 Chairperson: Masanori Ota (Chiba University)	TFEC9-1467: Measurement of Shock Wave Propagation Direction Using Rosette Analysis of Thin Circular Plate, Eijiro Inamura (Tokyo Metropolitan College of Industrial Technology), Masaki Endo (Tokyo Denki Univ.)	TFEC9-1496: Influence of the False Detection on Flowrate Measurement Using Ultrasonic Time-domain Correlation Method, Sanehiro Wada (National Institute of Advanced Industrial Science and Technology), Noriyuki Furuichi (Advance Industrial Science and Technology), Takashi Shimada (Advance Industrial Science and Technology)	TFEC9-1508: The Flow Characteristics of the Reflected Shock Waves in a Shock Tube, Dong Wook Kim (Department of Mechanical Engineering, Andong National Univ.), Heuy Dong Kim (Department of Mechanical Engineering, Andong National Univ.)

Saturday, October 28, 2017

16:45	17:00		
TFEC9-1682: Experimental Investigation on Ultra Thin Loop Heat Pipe with New Evaporator Structure, Ai Ueno (Nagoya Univ.), Shuto Tomita (Nagoya Univ.), Hosei Nagano (Nagoya Univ.)	/		Room B3 T03. Aerospace Thermal Management
TFEC9-1631: Measurements of Steady Electrohydrodynamic Flows in CuSO₄ Aqueous Solution, Ayako Yano (Osaka Univ.), Terutaka Noguchi (Osaka Univ.), Kentaro Doi (Osaka Univ.), Satoyuki Kawano (Osaka Univ.)	TFEC9-1389: Electric Characteristics of a 1 kW class Non-transferred Plasma Spray using Ar N₂ Gas Mixture, Takayasu Fujino (Univ. of Tsukuba), Kei Maeshima (Univ. of Tsukuba)		Room B4 F07. Functional Fluids and Their Advanced Applications 3
TFEC9-1175: A Study on the Fast Pyrolysis Characteristics of Biomass in a Circulating Fluidized Bed Pyrolyzer, Jae Gyu Hwang (Yonsei Univ.), Hang Seok Choi (Yonsei Univ.), Myung Kyu Choi (Yonsei Univ.)	TFEC9-1260: Kinetics of Fast Pyrolysis of Biomass in a Micro Spouted Bed, Hoon Chae Park (Yonsei Univ.), Hang Seok Choi (Yonsei Univ.)		Room B5 T14. Recent Development of Biomass Conversion Technology 2
TFEC9-1642: FDS Simulation of Fire Spread and Smoke Motion Around a Car in a Long Tunnel, Zhe Feng (Pusan National Univ.), Siyeol Lee (Pusan National Univ.), HeeChang Lim (Pusan National Univ.)	/		Room B6 F05. Fluid Machinery and Systems 3
TFEC9-1509: Numerical Study on the Hysteretic Behaviors of Shock Waves in a Supersonic Wind Tunnel, Ik In Lee (Department of Mechanical Engineering, Andong National Univ.), Heuy Dong Kim (Department of Mechanical Engineering, Andong National Univ.)	TFEC9-1565: Numerical Prediction of Aerodynamic Sound Radiated from Vortical Fluid, Based on Compact Green's Function, Shigeru Ogawa (National Institute of Technology, Kure College), Masanori Hashiguchi (Keisoku Engineering System Co., Ltd.), Keita Yano (National Institute of Technology, Kure College)		Room B7 F13. General Session (Fluids Engineering) 2

MEMO

Sunday, October 29, 2017

Plenary Lecture

9:00-9:40 (Room A1)

Chairperson: Man Yeong Ha (Pusan National University, Korea)



TFEC9-PL03:

Prof. Hyung Hee Cho (Yonsei University, Korea)

**“Design of New Cooling Technology to Enhance Thermal Efficiency
in Gas Turbine”**

Hyung Hee Cho is a Professor at the Department of Mechanical Engineering, Yonsei University, Seoul, Korea. His research interests include heat transfer and fluid flow to solve thermal problems for various macro to micro devices, such as gas turbines, rocket nozzles, nano/micro heat transfer.

Prof. Cho received Ph.D degree in Mechanical Engineering from the University of Minnesota, Minneapolis, in 1992. Since 1995, he has been with the Department of Mechanical Engineering, Yonsei University, Seoul, Korea, where he is currently a full professor and a Yonsei underwood distinguished professor.

Prof. Cho is a Fellow of the American Society of Mechanical Engineers, a scientific council member of the International Centre for Heat and Mass Transfer, a senior member of the National Academy of Engineering of Korea. He is also a vice president for Research Affairs at Yonsei University and a vice president of Korean Society of Mechanical Engineers.

Sunday, October 29, 2017

Session	9:50	10:05	10:20
Room A1 TF01. Optimal Design/Control of Thermal Systems and Fluid Flows 4 Chairperson: Takehiko Segawa (AIST)	TFEC9-1554: Flow Control on a NACA 0021 Airfoil Using a Dielectric-Barrier-Discharge Counter-Rotating Vortex Generator, Yuji Okita (National Inst. of Technology, Anan College), Takashi Araki (National Inst. of Technology, Anan College)	TFEC9-1166: Investigation on Performance Characteristics of Dielectric Barrier Discharge Plasma Actuator Using Pulsed-DC Waveform, Shun Nakai (Tokyo Univ. Agri. Tech.), Hiroyuki Nishida (Tokyo Univ. Agri. Tech.), Yuya Oshio (Tokyo Univ. Agri. Tech.), Kosuke Ota (Tokyo Univ. Agri. Tech.)	TFEC9-1336: Adapting High Resolution PIV to Shear Layer on Flow Controlled by Plasma Actuator, Yuma Miyakawa (Kogakuin Univ.), Satoshi Sekimoto (Tokyo Univ. of Science), Makoto Sato (ISAS JAXA), Taku Nonomura (Tohoku Univ.), Akira Oyama (Inst. of Space and Aeronautical Science, JAXA), Shinichiro Ito (Kogakuin Univ.)
Room A2 T05. Combustion Fundamentals for Future Energy Systems 4 Chairperson: Kaoru Maruta (Tohoku University)	TFEC9-1429: Study of the Lifted Flame Characteristics in Non-Premixed Jet Flames, Narayan Pandurang Sapkal (Pukyong National Univ.), Kyu Ho Van (Pukyong National Univ.), Jeong Park (Pukyong National Univ.), Oh Boong Kwon (Pukyong National Univ.), Byeong Jun Lee (Yeungnam Univ.), Suk Ho Chung (King Abdullah Univ. of Science and Technology)	TFEC9-1140: Response of Stretched Cylindrical Diffusion Flame to Sinusoidal Oscillation of Air Flow Velocity, Yosuke Suenaga (Iwate Univ.), Hideki Yanaoka (Iwate Univ.), Mamoru Kikuchi (Iwate Univ.), Shun Sasaki (Mazda Motor Corporation)	TFEC9-1607: Flame Behaviors near Extinction Limit in Laminar-lifted Propane Coflow Jet Flames Diluted with Nitrogen and Helium, Su Hyeon Oh (Pukyong National Univ.), Kyu Ho Van (Pukyong National Univ.), Jeong Park (Pukyong National Univ.), Oh Boong Kwon (Pukyong National Univ.), Jin Han Yoon (Korea Inst. of Machinery and Material), Sang In Keel (Korea Inst. of Machinery and Material)
Room B1a T10. Molecular Simulation 4 Chairperson: Kazuaki Takahashi (National Inst. of Advanced Industrial Science and Technology)	TFEC9-1680: Structural Optimization of Graphene Nanoribbons for Thermoelectric Applications Using Bayesian Optimization, Masaki Yamawaki (The Univ. of Tokyo), Shenghong Ju (The Univ. of Tokyo), Masato Ohnishi (The Univ. of Tokyo), Junichiro Shiomi (The Univ. of Tokyo)	TFEC9-1601: Structural Order of Water Molecules on Modified Surfaces, Naoko Imai (Keio Univ.), Donguk Suh (Keio Univ.), Kenji Yasuoka (Keio Univ.)	TFEC9-1025: Hydrophobicity of Surfaces with Dual-structured Pillar at the Nano-scale, Tae Woo Kwon (Pusan National Univ.), Matthew Stanley Ambrosia (Catholic Univ. of Pusan), Man Yeong Ha (Pusan National Univ.)
Room B1b F09. Jets, Wakes and Separated Flows 1 Chairperson: Tomomi Uchiyama (Nagoya University)	TFEC9-1210: Intermittent Control in Multiple Jets Using DNS, Kango Kitahara (Mie Univ.), Koichi Tsujimoto (Mie Univ.), Toshihiko Shakouchi (Mie Univ.), Toshitake Ando (Mie Univ.)	TFEC9-1225: DNS of Intermittently Controlled Impinging Jets, Keita Jinno (Mie Univ.), Koichi Tsujimoto (Mie Univ.), Toshihiko Shakouchi (Mie Univ.), Toshitake Ando (Mie Univ.)	TFEC9-1510: Computational Study on Fluidic Thrust Vector Control Using Co-and-Counter Flow Concept, Kexin Wu (Andong National Univ.), Jin Yingzi (Zhejiang Sci-Tech Univ.), Heuy Dong Kim (Andong National Univ.)
Room B1c T15. Recent Developments on Boiling, Condensation and Multi-Phase Flow 1 Chairperson: Niro Nagai (University of Fukui)	TFEC9-1328: Pool Boiling Heat Transfer around a Horizontal Low Thermal Conductivity Tube with Thermal Spray Coating with Isothermal Heating, Shigeo Hironaka (Kobe Univ.), Takeru Miyazaki (Kobe Univ.), Katsumi Sugimoto (Kobe Univ.), Hideki Murakawa (Kobe Univ.), Hitoshi Asano (Kobe Univ.)	TFEC9-1141: Study on the Heat Transfer Mechanism in Saturated Pool Boiling of Water, Min Chang Kim (Korea Advanced Inst. of Science and Technology), Sung Jin Kim (Korea Advanced Inst. of Science and Technology)	TFEC9-1497: Phase-Field Modeling of Bubble Growth on a Surface with Mixed Wettability, Biao Shen (Kyushu Univ.), Jiwei Liu (Royal Inst. of Technology), Junichiro Shiomi (Univ. of Tokyo), Gustav Amberg (Royal Inst. Tech.), Mihn Do-Quang (Royal Inst. Tech.), Masayuki Yamada (Kyushu Univ.), Masamichi Kohno (Kyushu Univ.), Takeshi Takahashi (Kyushu Univ.), Yasuyuki Takata (Kyushu Univ.)
Room B2 F01. Advances in Image-Based Measurement 4 Chairperson: Hiroki Nagai (Tohoku University)	TFEC9-1463: Combined Fast-framing Schlieren Imaging and Stereo PIV Measurements in a Supersonic Boundary-Layer, Mayu Mizoguchi (Okayama Univ.), Kazuki Yamauchi (Okayama Univ.), Toshinori Kouchi (Okayama Univ.), Yasunori Nagata (Okayama Univ.), Shinichirou Yanase (Okayama Univ.)	TFEC9-1591: Measurement of Number Density in Supersonic Microduct Flows Using LIF Method, Taro Handa (Toyota Technological Inst.), Keiichiro Kitahara (Toyota Technological Inst.), Akira Urita (Toyota Technological Inst.), Bing Han (Toyota Technological Inst.), Yu Matsuda (Nagoya Univ.), Yasuhiro Egami (Aichi Inst. Tech.)	TFEC9-1276: Noninvasive Imaging of Temperature Distribution for Melting Polyethylene by Using Electrical Capacitance Tomography, Yusuke Hirose (Chiba Univ.), Hiroyuki Oshima (Chiba Univ.), Masahiro Takei (Chiba Univ.)

10:35	10:50		
TFEC9-1379: Measurement of Flow Induced by a Ceramic Plate Plasma Actuator, Yusuke Izawa (Keio Univ.), Koji Fukagata (Keio Univ.)	TFEC9-1304: High-resolution Particle Image Velocimetry Measurement of Flow around Leading Edge of an Airfoil Controlled by NSDBD-PA, Sagar Bhandari (Tohoku Univ.)		Room A1 <i>TF01. Optimal Design/Control of Thermal Systems and Fluid Flows 4</i>
TFEC9-1114: Experimental Verification of the Flame Stabilization Mechanism of Ammonia Jet Diffusion Flame, Yohei Ishikawa (Osaka Univ.), Jun Hayashi (Osaka Univ.), Hiroyuki Takeishi (Osaka Univ.), Takahiro Okanami (Osaka Univ.), Kimio Iino (Taiyo Nippon Sanso Corporation), Yasuyuki Yamamoto (Taiyo Nippon Sanso Corporation), Fumiteru Akamatsu (Osaka Univ.)	TFEC9-1488: Numerical Simulation with Flamelet Approach for Transcritical Combustion, Kenichiro Takenaka (Kyoto Univ.), Akihiro Kishimoto (Kyoto Univ.), Reo Kai (Kyoto Univ.), Ryoichi Kurose (Kyoto Univ.)		Room A2 <i>T05. Combustion Fundamentals for Future Energy Systems 4</i>
TFEC9-1622: Guest-Host Interaction and Stability of TBAB Semiclathrate Hydrates by ab initio Calculations, Masaki Hiratsuka (Kogakuin Univ.), Ryo Ohmura (Keio Univ.), Kenji Yasuoka (Keio Univ.)	TFEC9-1012: Elucidation of Molecular Diffusion Behavior in a CO2 Clathrate Hydrate Film Based on Molecular Dynamics Simulations, Xiao Ma (Univ. of Tsukuba), Norifumi Yamamoto (Chiba Inst. of Technology), Yutaka Abe (Univ. of Tsukuba)		Room B1a <i>T10. Molecular Simulation 4</i>
TFEC9-1408: A Passive Control of Flow over a Circular Cylinder Using an Attached Splitter Plate, Hyunsik Kim (Seoul National Univ.), Haechon Choi (Seoul National Univ.)	TFEC9-1597: Study of Diffusion Control of Jet Using Coaxial Type plasma Actuator -The Influence of the Jet Diffusion by the Plasma Induced Flow Instability as Duty Ratio Changing-, Norimasa Miyagi (Nihon Univ.), Motoaki Kimura (Nihon Univ.)		Room B1b <i>F09. Jets, Wakes and Separated Flows 1</i>
TFEC9-1291: Liquid Temperature Distribution Around Boiling Bubbles in a Confined Space Measured by Two-Color Laser-Induced Fluorescence, Kei Kobayashi (Shibaura Inst. of Technology), Makoto Ito (Shibaura Inst. of Technology), Tatsuya Kowa (Shibaura Inst. of Technology), Manabu Tange (Shibaura Inst. of Technology)	TFEC9-1274: The Relation Between Temperature Distribution and Bubble Behavior of Flow Boiling in a Microgap Heat Sink, Yuya Suzuki (Shibaura Inst. of Technology), Ryo Ueki (Shibaura Inst. of Technology), Manabu Tange (Shibaura Inst. of Technology)		Room B1c <i>T15. Recent Developments on Boiling, Condensation and Multi-Phase Flow 1</i>
TFEC9-1528: Schlieren CT Measurement of 3D Density Distributions of Perfectly and Imperfectly Expanded Supersonic Micro-jets from Circular and Rectangular Micro Nozzles, Ahmad Zaid Nazari (Nagoya Inst. Tech.), Yojiro Ishino (Nagoya Inst. Tech.), Yuta Ishiko (Nagoya Inst. Tech.), Takanori Motohiro (Nagoya Inst. Tech.), Ryoya Yamada (Nagoya Inst. Tech.), Yu Saiki (Nagoya Inst. Tech.), Yoshiaki Miyazato (Univ. Kitakyushu), Shinichiro Nakao (Univ. Kitakyushu)	/		Room B2 <i>F01. Advances in Image-Based Measurement 4</i>

Sunday, October 29, 2017

Session	9:50	10:05	10:20
Room B3 T01. Advanced Technology in Ground Source Heat Utilization Systems Chairperson: Tetsuaki Takeda (University of Yamanashi)	TFEC9-1241: Performance Evaluation of Ground Source Heat Pump Using Direct Expansion Method - In case of Hot Water Supply System - , Masatoshi Tsuchiya (Univ. of Yamanashi), Shuhei Ishiguro (Univ. of Yamanashi), Shumpei Funatani (Univ. of Yamanashi), Tetsuaki Takeda (Univ. of Yamanashi)	TFEC9-1243: Thermal Performance of Ground Source Heat Pump Using Direct Expansion Method - Thermal Performance of Ground Source Heat Exchanger - , Norihiko Muramatsu (Univ. of Yamanashi), Tetsuaki Takeda (Univ. of Yamanashi), Shumpei Funatani (Univ. of Yamanashi), Shuhei Ishiguro (Univ. of Yamanashi)	TFEC9-1246: Performance Evaluation of Ground Source Heat Pump Using Foundation Pile for House , Yuichi Murata (Univ. of Yamanashi), Tetsuaki Takeda (Univ. of Yamanashi), Shumpei Funatani (Univ. of Yamanashi), Osamu Yoda (Fujishima Co. Ltd.), Hiroji Okubo (Fujishima Co. Ltd.)
Room B4 F12. Wall Turbulence 1 Chairperson: Takahiro Tsukahara (Tokyo University of Science)	TFEC9-1089: Numerical Investigation of Stably Stratified Turbulent Channel Flow using Large-Eddy Simulation , Sung Jin Won (Yonsei Univ.), Chang Hoon Lee (Yonsei Univ.)	TFEC9-1372: Two-dimensionally Localized Turbulence in Plane Channel Flow , Takahiro Kanazawa (Osaka Univ.), Masaki Shimizu (Osaka Univ.), Genta Kawahara (Osaka Univ.)	TFEC9-1373: Assessment of Kurganov-Tadmor High-resolution Central Difference Scheme in Direct Numerical Simulation of Incompressible Flow , Daisuke Hiruma (Keio Univ.), Shota Mukumoto (Keio Univ.), Koji Fukagata (Keio Univ.)
Room B5 T18. General Session (Thermal Engineering) 2 Chairperson: Yosuke Hasegawa (The University of Tokyo)	TFEC9-1096: Convective Heat Transfer Characteristics of Open-Cell Porous Metal Fins , Sung-Ho Park (Pusan National Univ.), Ji Hwan Jeong (Pusan National Univ.)	TFEC9-1644: Experimental Study on Heat Transfer Characteristics of Fin with Built-in Self-oscillating Heat Pipe , Hajime Onishi (Kanazawa Univ.), Tatsuya Yoshibata (Komatsu Ltd.), Yukio Tada (Kanazawa Univ.)	TFEC9-1616: Measurement of Natural Convection Heat Transfer with Thermographic Particle Image Velocimetry , Shinichiro Uesawa (Japan Atomic Energy Agency), Susumu Yamashita (Japan Atomic Energy Agency), Mitsuhiro Shibata (Japan Atomic Energy Agency), Hiroyuki Yoshida (Japan Atomic Energy Agency)
Room B6 F10. Micro/Nano Fluids 1 Chairperson: Toshiyuki Sanada (Shizuoka University)	TFEC9-1129: Ultrasound-Induced Dynamics of Gas Bubbles Attached at Gelatin Gel Surfaces , Sosuke Fukui (Keio Univ.), Keita Ando (Keio Univ.)	TFEC9-1131: Effects of Nonlinear Elasticity on the Rayleigh Collapse of Bubbles in Elastic Media , Nobuyuki Nakamura (Keio Univ.), Keita Ando (Keio Univ.)	TFEC9-1568: Laser-Induced Nucleation of Gas Bubbles in Oxygen-Supersaturated Water , Tatsuya Yamashita (Keio Univ.), Keita Ando (Keio Univ.)
Room B7			

Sunday, October 29, 2017

10:35	10:50		
TFEC9-1224: System Dynamics of Ground Source Heat Pump System by Numerical Simulation: Basic Calculation Algorithm of Simulation, Takashi Sato (Nihon Univ.), Makoto Ikuta (Nihon Univ.), Takao Kakizaki (Nihon Univ.), Masahito Oguma (Nihon Univ.)	TFEC9-1486: Heat Exchange Performance of Water Cooled Type Ground Source Heat Pump Using an Existing Well, Shuhei Ishiguro (Univ. of Yamanashi), Takuya Endo (Univ. of Yamanashi), Tetsuaki Takeda (Univ. of Yamanashi)		Room B3 <i>T01. Advanced Technology in Ground Source Heat Utilization Systems</i>
TFEC9-1493: Onset of Sustained Turbulence in Plane Couette Flow, Masaki Shimizu (Osaka Univ.), Genta Kawahara (Osaka Univ.), Paul Manneville (Ecole Polytechnique)	TFEC9-1319: Modification of Large-scale Motions in a Turbulent Pipe Flow, Kohei Senshu (Meiji Univ.), Yuya Shimizu (Meiji Univ.), Masaaki Kuroha (Meiji Univ.), Jun Sakakibara (Meiji Univ.)		Room B4 <i>F12. Wall Turbulence 1</i>
TFEC9-1685: Effect of Filling Ratio and Length Ratio on Heat Transfer Performance of Two Phase Closed Thermosyphon, Sang Hyun Oh (Korea Inst. of Energy Research), Jong Won Choi (Korea Inst. of Energy Research), Sung Il Kim (Korea Inst. of Energy Research), Hyung Hee Cho (Yonsei Univ.)	TFEC9-1479: Effect of a Magnetic Field on the Natural Convection of a Paramagnetic Fluid from a Vertical Plate, Hiroaki Fujiwara (Osaka Prefecture Univ.), Masayuki Kaneda (Osaka Prefecture Univ.), Kazuhiko Suga (Osaka Prefecture Univ.)		Room B5 <i>T18. General Session (Thermal Engineering) 2</i>
TFEC9-1142: Gas-Supersaturated Water Aided Ultrasonic Cleaning at Different Driving Frequencies: Role of Cavitation Bubbles in Particle Removal, Risa Yamauchi (Keio Univ.), Tatsuya Yamashita (Keio Univ.), Keita Ando (Keio Univ.)	TFEC9-1322: Effect of Pressure Wave on Direction of Cavitation Bubble Microjets, Takahito Akimura (Tohoku Univ.), Tomoya Minami (Tohoku Univ.), Tomoki Nakajima (Tohoku Univ.), Kiyonobu Ohtani (Tohoku Univ.), Toshiro Kaneko (Tohoku Univ.), Outi Supponen (Swiss Federal Inst. of Technology at Lausanne), Mohamed Farhat (Swiss Federal Inst. of Technology at Lausanne), Takehiko Sato (Tohoku Univ.)		Room B6 <i>F10. Micro/Nano Fluids 1</i>
/	/		Room B7

Sunday, October 29, 2017

Session	11:25	11:40	11:55
Room A1 TF01. Optimal Design/Control of Thermal Systems and Fluid Flows 5 Chairperson: Hyun Sik Yoon (Pusan National University)	TFEC9-1075: Experimental Observation of Micro Particle Assembly inside Evaporating Water-Ethanol Sessile Droplet, Kengo Takagi (Tokyo Univ. of Science), Takahiro Tsukahara (Tokyo Univ. of Science), Takayuki Osawa (The Univ. of Tokyo), Yosuke Hasegawa (The Univ. of Tokyo)	TFEC9-1148: Collision Behavior of a Water Drop against the Solid Surface, Daiki Kato (Uts), Nao Ninomiya (Utsunomiya Univ.)	TFEC9-1396: Numerical Analysis for Performance of a Self-priming Venturi Scrubber, Won Seok Kim (BHI), Jin Soo Kim (ChangWon National Univ.), Hoon Ki Choi (Changwon National Univ.)
Room A2 T05. Combustion Fundamentals for Future Energy Systems 5 Chairperson: Jeong Park (Pukyong National University)	TFEC9-1553: Study on Effects of Carbon Dioxide in Slow Ambient Flows on Droplet Burning Rate, Toshiaki Myoga (Osaka Prefecture Univ.), Hidefumi Katoka (Osaka Prefecture Univ.), Mitsuhiro Segawa (Osaka Prefecture Univ.), Shinji Nakaya (Univ. of Tokyo), Mitsuhiro Tsue (Univ. of Tokyo)	TFEC9-1502: Large-Eddy Simulation of Combustion Instability of Spray Combustion: Effect of Fuel Injection Condition, Ryo Awane (Kyoto Univ.), Keisuke Kaneko (Kyoto Univ.), Ryoichi Kurose (Kyoto Univ.)	TFEC9-1542: Gas Dynamics of Mode Transitions in a Scramjet Engine, Jeong Ho Ha (Andong National Univ.), Ladeinde Foluso (The State Univ. of New York), Rajarshi Das (Andong National Univ.), Heuy Dong Kim (Andong National Univ.)
Room B1a T10. Molecular Simulation 5 Chairperson: Donguk Suh (The University of Tokyo)	TFEC9-1686: Evaporative-Heat-Transfer Details at the Contact Line by Using Multiscale Simulation Schemes, Minsub Han (Incheon National Univ.)	TFEC9-1435: Local Energy Transport in Evaporation Processes of the Liquid in a Slit Pore Based on the Molecular Dynamics Method, Kunio Fujiwara (Osaka Univ.), Masahiko Shibahara (Osaka Univ.)	TFEC9-1492: Molecular Dynamics Simulation of the Role of the Wettability in the Droplet Impact on a High-Temperature Wall, Hirofumi Tabe (Hokkaido Univ.), Kazumichi Kobayashi (Hokkaido Univ.), Hisao Yaguchi (National Inst. of Technology, Gunma College), Hiroyuki Fujii (Hokkaido Univ.), Masao Watanabe (Hokkaido Univ.)
Room B1b F09. Jets, Wakes and Separated Flows 2 Chairperson: Takahiro Kiwata (Kanazawa University)	TFEC9-1323: Experimental Study on Excited Circular Jets Arrayed in a Line, Riho Hiramoto (Hokkaido Univ. of Science), Kuniaki Toyoda (Hokkaido Univ. of Science), Hiroaki Kawai (Hokkaido Univ. of Science), Hideo Otake (Hokkaido Univ. of Science)	TFEC9-1425: Turbulence Generated by Small Objects Suspended from Grid, Tatsuo Ushijima (Nagoya Inst. of Technology), Kousuke Hirobe (Nagoya Inst. of Technology), Yutaka Hasegawa (Nagoya Inst. of Technology)	TFEC9-1477: Flow Characteristics of 3D Curved Wall Jets on A Circular Cylinder, Mirae Kim (Pusan National Univ.), Hyun Dong Kim (Pusan National Univ.), Kyung Chun Kim (Pusan National Univ.)
Room B1c T15. Recent Developments on Boiling, Condensation and Multi-Phase Flow 2 Chairperson: Yasuo Koizumi (JAEA)	TFEC9-1377: Heat Transfer Analysis of Subcooled Jet Impingement Boiling on Hot Steel Plate: Experiment and Visualization, Jungho Lee (Korea Inst. of Machinery and Materials), Sang Gun Lee (Seoul National Univ.), Jin Sub Kim (Korea Inst. of Machinery and Materials), Massoud Kaviani (Univ. of Michigan)	TFEC9-1439: Boiling Heat Transfer Characteristics of Single Impinging Water Jet on Hot Steel Surfaces: Numerical Simulation and Experiment, Seong Hyuk Lee (Chung-Ang Univ.), Soyeong Lee (Chung-Ang Univ.), Joo Hyun Moon (Chung-Ang Univ.), Jungho Lee (Korea Inst. of Machinery and Materials), JInsub Kim (Korea Inst. of Machinery and Materials)	TFEC9-1402: Effect of Fluid Properties on Single Droplet Impact into Liquid Pool and Heated Solid Surface, Tomonobu Nara (Kogakuin Univ.), Koji Hasegawa (Kogakuin Univ.)
Room B2 F04. Computational and Experimental Multiphase Flow Research 1 Chairperson: Yuichi Murai (Hokkaido University)	TFEC9-1182: A Study of Anti-Erosion Mechanism of a Grooved Surface, Sohyun Jung (Seoul National Univ.), Eunjin Yang (Seoul National Univ.), Wonjong Jung (Seoul National Univ.), Ho-Young Kim (Seoul National Univ.)	TFEC9-1329: An Experimental Study of an Influence of a Slit on Cavitation Characteristics in a Single Hydrofoil, Hiroki Kobayashi (Tohoku Univ.), Satoshi Kawasaki (Japan Aerospace Exploration Agency), Yuka Iga (Inst. of Fluid Science, Tohoku Univ.)	TFEC9-1471: A Thermodynamic Effect in a Tip Leakage Vortex Cavitation Around a Hydrofoil in Hot Water, Donghyuk Kang (Aoyama Gakuin Univ.), Daichi Nakai (Tohoku Univ.), Yuka Iga (Tohoku Univ.)

12:10	12:25		
TFEC9-1081: A Novel Application of Atomization Technology - Calorific Value Adjustment System for City Gas Production - , Kanetoshi Hayashi (JFE Engineering Corporation), Keiji Yarimizu (JFE Engineering Corporation), Kazuo Ito (Toho Gas Company Limited), Yoshikazu Iwase (Toho Gas Company Limited)	/		Room A1 TF01. Optimal Design/Control of Thermal Systems and Fluid Flows 5
TFEC9-1034: LES/Flamelet Modeling of a Piloted Partially Premixed Acetone Spray Flame, Yong Hu (Kyoto Univ.), Ryoichi Kurose (Kyoto Univ.)	TFEC9-1118: Co-combustion Behavior of Pulverized Coal Particles with Ammonia Stabilized by Hydrogen/Air Diffusion Flame in the Laminar Counterflow Field, Junpei Fukui (Osaka Univ.), Noriaki Nakatsuka (Osaka Univ.), Kazuki Tainaka (Central Research Inst. of Electric Power Industry), Hidetaka Higashino (Osaka Univ.), Jun Hayashi (Osaka Univ.), Fumiteru Akamatsu (Osaka Univ.)		Room A2 T05. Combustion Fundamentals for Future Energy Systems 5
TFEC9-1240: Molecular Dynamics Simulation of Liquid-Vapor Coexistence of Dilute 1-Butanol Aqueous Solution, Yuki Sakaguchi (Tokyo Univ. of Science), Toshihiro Kaneko (Tokyo Univ. of Science), Ichiro Ueno (Tokyo Univ. of Science)	/		Room B1a T10. Molecular Simulation 5
TFEC9-1311: Effect of Initial Velocity Gradient on Side-Jets Formation in a Round Jet with Constant Density, Yushi Kato (Nihon Univ.), Akinori Muramatsu (Nihon Univ.)	TFEC9-1406: Numerical Study on Side Jet Formation in an Axisymmetric Jet Flow, Yuichi Itoh (National Inst. of Technology, Kisarazu College), Shogo Asanuma (National Inst. of Technology, Kisarazu College)		Room B1b F09. Jets, Wakes and Separated Flows 2
TFEC9-1575: Initiation Process of Localized Wetting during Spray Cooling near MHF Point, Niro Nagai (Univ. of Fukui), Shunsuke Hashimoto (Univ. of Fukui)	TFEC9-1393: Effects of a Honeycomb Porous Plate and a Nanoparticle-deposited Surface on the Rapid Cooling of a High-temperature Stainless Steel Block, Shoji Mori (Yokohama National Univ.), Fumihisa Yokomatsu (Yokohama National Univ.), Mikako Tanaka (Yokohama National Univ.), Kunito Okuyama (Yokohama National Univ.)		Room B1c T15. Recent Developments on Boiling, Condensation and Multi-Phase Flow 2
TFEC9-1522: Viscosity Effect on the Water Column Deformation and Breakup Induced by Shock Wave, Tomohiro Kamiya (Gifu Univ. Graduate School of Engineering), Makoto Asahara (Gifu Univ. Department of Engineering), Takeshi Miyasaka (Gifu Univ. Department of Engineering)	TFEC9-1011: Theoretical Study on a Fast Propagation of Pressure Waves in Bubbly Liquids, Tetsuya Kanagawa (Univ. of Tsukuba)		Room B2 F04. Computational and Experimental Multiphase Flow Research 1

Sunday, October 29, 2017

Session	11:25	11:40	11:55
Room B3 T08. Fire and Explosion 1 Chairperson: Kazunori Kuwana (Yamagata University)	TFEC9-1679: Numerical Investigation on the Effect of Particle Collisions in the Process of Dust Lifting, Kei Shimura (Keio Univ.), Akiko Matsuo (Keio Univ.)	TFEC9-1047: Numerical Simulation of the Mitigation Mechanism of a Blast Wave from a Straight Tube Using Water, Yuta Sugiyama (Nat. Inst. Adv. Ind. Sci. Tech.), Tomotaka Homae (Nat. Inst. Tech., Toyama College), Kunihiko Wakabayashi (Nat. Inst. Adv. Ind. Sci. Tech.), Tomoharu Matsumura (Nat. Inst. Adv. Ind. Sci. Tech.), Yoshio Nakayama (Nat. Inst. Adv. Ind. Sci. Tech.)	TFEC9-1073: Visualization of the Blast Wave Generated by Laser Induced Plasma, Shinsuke Udagawa (Tokyo Metropolitan College of Industrial Technology), Tatsuro Inage (Shonan Inst. of Technology), Masanori Ota (Chiba Univ.)
Room B4 F12. Wall Turbulence 2 Chairperson: Changhoon Lee (Yonsei University)	TFEC9-1154: DNS of Turbulent Heat Transfer of Combined-Convection Wall Jet, Hirofumu Hattori (Nagoya Inst. of Technology), Masahiro Kuroki (Nagoya Inst. of Technology), Tomoya Houra (Nagoya Inst. of Technology), Masato Tagawa (Nagoya Inst. of Technology)	TFEC9-1520: Heat Transfer and Flow Structure of the Turbulent Stripes in Plane Couette Flows for Transitional Region, Koji Fukudome (Ritsumeikan Univ.), Takahiro Tsukahara (Tokyo Univ. of Science), Yoshifumi Ogami (Ritsumeikan Univ.)	TFEC9-1615: Dissimilarity Between Momentum and Heat Transfers in Turbulent Channel Flow at High Reynolds Numbers, Motohiro Miyawaki (Osaka Univ.), Shingo Motoki (Osaka Univ.), Masaki Shimizu (Osaka Univ.), Genta Kawahara (Osaka Univ.)
Room B5 T09. Fuel Cells and Batteries 1 Chairperson: Takuto Araki (Yokohama National University)	TFEC9-1070: Study on Development an Independent Island Fuel Cell Microgrid with Hydrogen Storage System, Ainii Siti Khodijah (Kitami Inst. of Technology), Shin'ya Obara (Kitami Inst. of Technology)	TFEC9-1470: Charge-Discharge and Photovoltaic Power Generation Characteristics of Photochromic Thin Film, Shuehi Inoue (Hiroshima Univ.), Toshiki Matsui (Hiroshima Univ.), Yuna Yamamoto (Hiroshima Univ.), Hidetaka Takaki (Hiroshima Univ.), Yukihiko Matsumura (Hiroshima Univ.)	TFEC9-1560: Optical Measurement of Oxygen Concentration in the Porous Cathode of Lithium Air Battery, Shogo Fujimoto (Tokyo Inst. of Technology), Suguru Uemura (Tokyo Inst. of Technology), Nobuyuki Imanishi (Mie Univ.), Shuichiro Hirai (Tokyo Inst. of Technology)
Room B6 F10. Micro/Nano Fluids 2 Chairperson: Kazumichi Kobayashi (Hokkaido University)	TFEC9-1106: Numerical Study of Weak Evaporation and Condensation at a Vapor-liquid Interface, Takeru Yano (Osaka Univ.)	TFEC9-1256: Molecular Gas Dynamics on Unsteady Evaporation and Condensation Induced by Oscillation of Planar Interface, Taro Murase (Osaka Univ.), Masashi Inaba (Osaka Univ.), Takeru Yano (Osaka Univ.)	TFEC9-1308: Determination of the Evaporation Coefficient of Water by Sound Resonance Experiment, Shigeto Nakamura (National Inst. of Technology, Nara College), Takeru Yano (Osaka Univ.)
Room B7 F13. General Session (Fluids Engineering) 3 Chairperson: Kie Okabayashi (Osaka University)	TFEC9-1048: The Relationship Between Noise Reduction and Fan Characteristics on Bi-Directional Radial Fan, Taihei Koyama (Toshiba Corporation)	TFEC9-1053: Experimental Study of Polygonal Vortex around Rotating Disk with Changing Axial Gap, Hiroyuki Furukawa (Meijo Univ.), Akihiro Wada (Meijo Univ.)	TFEC9-1382: Numerical Simulation of Induction Heating in Rotating Fluid, Seigo Nabeshima (Osaka Univ.), Kazuyasu Sugiyama (Osaka Univ.), Tomoaki Watamura (Osaka Univ.), Mitsuho Furuse (National Institute of Advanced Industrial Science and Technology), Fumio Takemura (National Institute of Advanced Industrial Science and Technology)

Sunday, October 29, 2017

12:10	12:25		
TFEC9-1083: Experimental Study on Laser-induced Spark Ignition Behaviors for DME-Air Mixtures under Microgravity, Yoshinari Kobayashi (Univ. of Tokyo), Shinji Nakaya (Univ. of Tokyo), Mitsuhiro Tsue (Univ. of Tokyo)	TFEC9-1360: Influence of the Fuel Depth of Pool Flame for the Flame Extinction by CO₂ Hydrate, Hiroki Takahara (Keio Univ.), Akito Sugahara (Keio Univ.), Takeshi Yokomori (Keio Univ.), Ryo Ohmura (Keio Univ.), Toshihisa Ueda (Keio Univ.)		Room B3 T08. Fire and Explosion 1
TFEC9-1557: Large Eddy Simulation of Buoyant Flow with Natural Convection Boundary Layer Above Horizontal Heated Round Plate, Yasuo Hattori (CRIEPI), Hitoshi Suto (CRIEPI), Keisuke Nakao (CRIEPI), Shuji Ishihara (Denryoku Computing Center), Yuzuru Eguchi (CRIEPI), Hiromaru Hirakuchi (CRIEPI)	TFEC9-1672: Dissimilar Heat Transfer Enhancement by Vortex Introduction in Plane Couette Flow, Akira Kubo (Osaka Univ.), Genta Kawahara (Osaka Univ.), Masaki Shimizu (Osaka Univ.)		Room B4 F12. Wall Turbulence 2
TFEC9-1287: Effects of Oxygen Functional Groups and Ash on Polarization at Anode in Direct Carbon Fuel Cell, Seong Yong Eom (Pusan National Univ.), Gyung Min Choi (Pusan National Univ.), Duck Jool Kim (Pusan National Univ.)	TFEC9-1670: Investigation of Enzyme Immobilization Method and Porous Electrode Structure for Lactate Biofuel Cell, Shodai Sunami (Kyoto Inst. of Technology), Kosuke Nishida (Kyoto Inst. of Technology)		Room B5 T09. Fuel Cells and Batteries 1
TFEC9-1229: Scattering Behaviors of Gas Molecules on Water Adsorbed Surfaces, Naoya Uene (National Inst. of Technology, Yonago College), Hideki Takeuchi (Nat. Inst. Tech., Kochi College), Yasutaka Hayamizu (Nat. Inst. Tech., Yonago College), Takeshi Gonda (Nat. Inst. Tech., Yonago College), Shinichi Morita (Nat. Inst. Tech., Yonago College), Shigeru Ohtsuka (Nat. Inst. Tech., Yonago College), Kyoji Yamamoto (Okayama Univ.)	/		Room B6 F10. Micro/Nano Fluids 2
TFEC9-1033: Effects of the Injection Angle of Coolant on the Performance of Gas Turbine Blade Film-Cooling, Yeon-Ho Lee (Sungkyunkwan Univ.), Sun-Seok Byeon (Sungkyunkwan Univ.), Sang-Youb Lee (Korea Institute of Science and Technology), Youn-Jea Kim (Sungkyunkwan Univ.)	TFEC9-1306: Numerical Simulation of Axisymmetric Laminar Flow in Rotor-Stator Cavity, Yuki Kodera (Osaka Univ.), Takeo Kajishima (Osaka Univ.), Shintaro Takeuchi (Osaka Univ.), Kie Okabayashi (Osaka Univ.)		Room B7 F13. General Session (Fluids Engineering) 3

Sunday, October 29, 2017

Session	14:10	14:25	14:40
Room A1 TF01. Optimal Design/Control of Thermal Systems and Fluid Flows 6 Chairperson: Yosuke Hasegawa (The University of Tokyo)	TFEC9-1315: Thermal-Based Separation Control of Flow over an Airfoil and its Resolvent Analysis, Chi-An Yeh (Florida State Univ.), Yiyang Sun (Florida State Univ.), Kunihiko Taira (Florida State Univ.)	TFEC9-1179: Analysis of Separation Control around a Pitching Airfoil with Dielectric Barrier Discharge Plasma Actuator, Satoshi Sekimoto (Tokyo Univ. Sci.), Yuma Miyakawa (Kogakuin Univ.), Satoshi Shimomura (Tokyo Univ. Agri. Tech.), Hiroaki Fukumoto (Univ. Tokyo), Masayuki Anyoji (Kyushu Univ.), Taku Nonomura (Tohoku Univ.), Akira Oyama (ISAS), Kozo Fujii (Tokyo Univ. Sci.), Shinichiro Ito (Kogakuin Univ.), Hiroyuki Nishida (Tokyo Univ. of Agri. Tech.)	TFEC9-1461: Flow Control Effect of Separated Flow by Changing Position of a DBD Plasma Actuator on a NACA0012 Airfoil, Fumiya Hojo (Graduate School of Science and Technology, Nihon Univ.), Kohei Usami (College of Science and Technology, Nihon Univ.), Tomohisa Ohtake (College of Science and Technology, Nihon Univ.)
Room A2 T05. Combustion Fundamentals for Future Energy Systems 6 Chairperson: Takeshi Yokomori (Keio University)	TFEC9-1603: Reactivity Evaluation of Weak-Combustibility Fluids in Micro Flow Reactor with Streamwise Temperature Gradient, Junghwan Ro (The Univ. of Tokyo), Yong Fan (The Univ. of Tokyo), Kenichi Morimoto (The Univ. of Tokyo), Yuji Suzuki (The Univ. of Tokyo)	TFEC9-1362: Study on the effects of Lewis number on the combustion limits of stretched premixed flames and the formation of ball-like flames under microgravity, Tomoya Okuno (Tohoku Univ.), Hisashi Nakamura (Tohoku Univ.), Takuya Tezuka (Tohoku Univ.), Susumu Hasegawa (Tohoku Univ.), Masao Kikuchi (JAXA), Kaoru Maruta (Tohoku Univ. / Far Eastern Federal Univ.)	TFEC9-1326: Characteristics of Clustered Microflames Established on Seven Fuel Jets, Takashi Araki (Chubu Univ.), Taro Hirasawa (Chubu Univ.)
Room B1a T12. Next Step of Solidification/Crystal Growth and Melting 1 Chairpersons: Tatsunori Asaoka (Shinshu University) Koji Matsumoto (Chuo University)	TFEC9-1296: Natural Convection Heat Transfer Characteristics of Phase Change Emulsion in a Rectangular Vessel, Takashi Morimoto (Aoyama Gakuin Univ.), Yakumo Hayashi (Aoyama Gakuin Univ.), Hiroyuki Kumano (Aoyama Gakuin Univ.)	TFEC9-1371: Flow and Heat Transfer Characteristics of Phase Change Emulsion in Microchannel, Toshiki Ikeda (Aoyama Gakuin Univ.), Yuto Tanaka (Aoyama Gakuin Univ.), Takashi Morimoto (Aoyama Gakuin Univ.), Hiroyuki Kumano (Aoyama Gakuin Univ.)	TFEC9-1354: Flow Characteristics and Rheological Properties of Propane Hydrate Slurry Produced by Stirring Method, Ryosuke Uchida (Aoyama Gakuin Univ.), Yasuhisa Gonda (Aoyama Gakuin Univ.), Hiroyuki Kumano (Aoyama Gakuin Univ.)
Room B1b F09. Jets, Wakes and Separated Flows 3 Chairperson: Tatsuo Ushijima (Nagoya Inst. of Technology)	TFEC9-1084: Study on the Influence of the Rear-Part Shape of a Car Body on Flow Structures and Aerodynamic Performance, Oki Yoshida (Kyushu Univ.), Hisashi Kihara (Kyushu Univ.), Ken-ichi Abe (Kyushu Univ.)	TFEC9-1121: Effect of Orifice Shape of Synthetic Jets on Delaying Stall of a NACA0012 Airfoil, Kenta Kudo (Akita Univ.), Hiroaki Hasegawa (Utsunomiya Univ.), Obayashi Shigeru (Tohoku Univ.), Masahide Nakamura (Akita Univ.)	TFEC9-1158: PIV Study on Flow Around Leading-Edge Slat of 30P30N Airfoil, Ryosuke Ando (Meiji Univ.), Hiroataka Suda (Meiji Univ.), Jun Sakakibara (Meiji Univ.)
Room B1c T15. Recent Developments on Boiling, Condensation and Multi-Phase Flow 3 Chairperson: Shoji Mori (Yokohama National Univ.)	TFEC9-1537: Enhancement of Flow Boiling Heat Transfer in Minichannel by Preventing Dewetting of Thin Liquid Film Using Superhydrophilic Surface, Tomohide Yabuki (Kyushu Inst. of Technology), Sota Kuroki (Kyushu Inst. of Technology), Shodai Fujii (Kyushu Inst. of Technology), Koji Miyazaki (Kyushu Inst. of Technology)	TFEC9-1504: Simultaneous Dropwise and Filmwise Condensation on Hydrophilic Microstructured Surfaces, Daniel Orejon (Kyushu Univ.), Orest Shardt (Univ. of Limerick), Naga Siva Kumar Gunda (York Univ.), Tatsuya Ikuta (Kyushu Univ.), Koji Takahashi (Kyushu Univ.), Sushanta K Mitra (York Univ.), Yasuyuki Takata (I2CNER, Kyushu Univ.)	TFEC9-1107: Effect of Wettability Gradient on Condensation Heat Transfer Coefficient, Atushi Tokunaga (National Inst. of Technology, Ube College), Satoru Ishibashi (Kyushu Inst. of Technology), Takaharu Tsuruta (Kyushu Inst. of Technology)
Room B2 F04. Computational and Experimental Multiphase Flow Research 2 Chairperson: Yuka Iga (Tohoku University)	TFEC9-1518: An Experimental Study on Flow Structure of Ejector Induced Bubbly Flow, Hyunduk Seo (Pusan National Univ.), Aliyu M. Aliyu (Pusan National Univ.), Kyung Chun Kim (Pusan National Univ.)	TFEC9-1057: Bouncing of a Pair of Clean Bubbles Rising Side by Side, Eri Yamaguchi (Shizuoka Univ.), Toshiyuki Sanada (Shizuoka Univ.)	TFEC9-1104: Relative Motion of a Pair of Slightly Different Size Bubbles Rising in Line, Hiroya Yamamoto (Shizuoka Univ.), Toshiyuki Sanada (Shizuoka Univ.)

14:55	15:10	15:25	
TFEC9-1538: Separation Flow Control for an Airfoil with a Flap by DBD Plasma Actuators, Kazunori Mitsuo (Japan Aerospace Exploration Agency), Yoshihisa Aoki (Japan Aerospace Exploration Agency)	TFEC9-1100: Active Separation Control by Curved Type Micro Plasma Actuator, Shota Yamakawa (Tokyo Univ. of Science), Kou Iwamura (Tokyo Univ. of Science), Hikaru Aono (Tokyo Univ. of Science), Shinji Honami (Tokyo Univ. of Science), Hitoshi Ishikawa (Tokyo Univ. of Science)	TFEC9-1109: Numerical Study on Flow Field Produced by Burst Mode Actuation of DBD Plasma Actuator, Daichi Hasegawa (Tokyo Univ. of Agriculture and Technology), Hiroyuki Nishida (Tokyo Univ. of Agriculture and Technology), Asa Nakano (Tokyo Univ. of Agriculture and Technology), Kumi Nakai (Tokyo Univ. of Agriculture and Technology)	Room A1 <i>TF01. Optimal Design/Control of Thermal Systems and Fluid Flows 6</i>
TFEC9-1269: Numerical Analysis of Combustor for Ultra Micro Gus Turbine, Yuri Hosokawa (Ritsumeikan Univ.), Yoshifumi Ogami (Ritsumeikan Univ.), Koji Fukudome (Ritsumeikan Univ.), Toshiyuki Toriyama (Ritsumeikan Univ.)	TFEC9-1606: Effects of Applied Electric Fields on Behavior of Laminar Lifted Nitrogen-diluted Methane Coflow-Jet Flames, Jeong Park (PuKyong Nat. Univ.), Bohyeon Seo (Pukyong Nat. Univ.), Kyuho Van (Pukyong Nat. Univ.), Gyeongteak Kim (Pukyong Nat. Univ.), Seawon Kim (Korea Inst. Ind. Tech.), Sukho Chung (KAUST), SangIn Keel (Korea Inst. Machinery and Materials), Jinhan Yun (Korea Inst. Machinery and Materials)	TFEC9-1321: Three-Dimensional Flame Structure and Characteristics of Heating Particles in Methane Clustered Microflames on Six Fuel and One Air Jets, Yuichi Kato (Chubu Univ.), Taro Hirasawa (Chubu Univ.), Zhaojin Diao (Univ. of Kentucky), Michael Winter (Univ. of Kentucky), Yojiro Ishino (Nagoya Inst. of Technology)	Room A2 <i>T05. Combustion Fundamentals for Future Energy Systems 6</i>
TFEC9-1450: Solid-Solid Phase Change and Crystal generation characteristics of TBAB/CO₂ Double Hydrate, Tomohiro Senda (Kobe Univ.), Hiroshi Suzuki (Kobe Univ.), Ruri Hidema (Kobe Univ.), Yoshiyuki Komoda (Kobe Univ.), Takahiro Kusabe (DAIKIN Applied Systems, Co. Ltd.), Hiroteru Tobayama (DAIKIN Applied Systems, Co. Ltd.), Teturo Iwata (DAIKIN Applied Systems, Co. Ltd.)	TFEC9-1478: Heat Release in Heating Process from a Heat Storage Material with Solid-Solid Phase Transition, Ryohei Gotoh (Hokkaido Univ.), Tuyoshi Totani (Hokkaido Univ.), Masashi Wakita (Hokkaido Univ.), Harunori Nagata (Hokkaido Univ.)	TFEC9-1462: Photoluminescence Property of Low-Dimensional Zinc Oxide, Hidetaka Takaki (Hiroshima Univ.), Shuehi Inoue (Hiroshima Univ.), Yukihiko Matsumura (Hiroshima Univ.)	Room B1a <i>T12. Next Step of Solidification/Crystal Growth and Melting 1</i>
TFEC9-1195: Propulsive Force Estimated form Vortex Wake Structure of a Monofin, Toshihiro Hanui (Kitami Inst. of Technology), Hiroaki Hasegawa (Utsunomiya Univ.)	TFEC9-1213: Transverse Galloping Vibration Characteristics of Two Cantilevered D-Section Prisms in a Side-by-Side Arrangement for Energy Harvesting, Shunichi Mizukami (Kanazawa Univ.), Takahiro Kiwata (Kanazawa Univ.), Ahmad Barata (Kanazawa Univ.), Takaaki Kono (Kanazawa Univ.), Toshiyuki Ueno (Kanazawa Univ.)	TFEC9-1031: Relation of Surface Pattern to Friction, Yoshihiro Kubota (Toyo Univ.), Manami Kosuda (Toyo Univ.), Osamu Mochizuki (Toyo Univ.)	Room B1b <i>F09. Jets, Wakes and Separated Flows 3</i>
TFEC9-1594: Condensation Heat Transfer and Pressure Drop Characteristics of R-1233zd(E) in Plate Heat Exchanger, Oh Jin Kwon (Korea Univ.), Byung Hoon Shon (Korea Univ.), Yong Tae Kang (Korea Univ.)	TFEC9-1469: An Experimental Study on Evaporation Flow Characteristics of R-1233zd(E) in a Plate Heat Exchanger, DongChan Lee (Korea Univ.), Dongwoo Kim (Korea Univ.), Junyub Lim (Korea Univ.), Yong Tae Kang (Korea Univ.), Yongchan Kim (Korea Univ.)		Room B1c <i>T15. Recent Developments on Boiling, Condensation and Multi-Phase Flow 3</i>
TFEC9-1159: Spatial Development of A Bubble Swarm Injected into A Horizontal Channel Flow, Hyun Jin Park (Hokkaido Univ.), Yuji Tasaka (Hokkaido Univ.), Yuichi Murai (Hokkaido Univ.)	TFEC9-1460: Experimental Investigation of the Growth and Collapse of a Laser-Induced Bubble Between Two Free Surfaces, Seisuke Ito (Osaka Prefecture Univ.), Toshiyuki Ogasawara (Osaka Prefecture Univ.), Hiroyuki Takahira (Osaka Prefecture Univ.)	TFEC9-1264: Measurement of Sound Speed of Bubbly Flows with a High Void Fraction in a Venturi Tube, Keita Fujii (Univ. of Tsukuba), Testuya Kanagawa (Univ. Tsukuba), Shinichiro Uesawa (JAEA), Akiko Kaneko (Univ. Tsukuba), Yutaka Kaneko (Univ. Tsukuba)	Room B2 <i>F04. Computational and Experimental Multiphase Flow Research 2</i>

Sunday, October 29, 2017

Session	14:10	14:25	14:40
Room B3 T08. Fire and Explosion 2 Chairperson: Cheolhong Hwang (Daejeon University)	TFEC9-1194: Limiting Oxygen Concentration of Thin Flame Resistant Materials in Microgravity, Shuhei Takahashi (Gifu Univ.), Keisuke Maruta (Gifu Univ.), Muhammad Arif Fahmi (Gifu Univ.), Kaoru Terashima (Gifu Univ.)	TFEC9-1160: Evaluation of the Engineering Parameters of the Spectral Radiative Transport Equation for Fire Protection, Woo Jun You (Dongyang Univ.), Hong Sun Ryou (CAU)	TFEC9-1200: Numerical Investigation of Transient Process to Form Asymmetrically Arranged Spreading Flame in Narrow Channel, Tsuneyoshi Matsuoka (Toyohashi Univ. Tech.), Satoshi Murakami (Toyohashi Univ. Tech.), Takuya Yamazaki (Toyohashi Univ. Tech.), Yuji Nakamura (Toyohashi Univ. Tech.)
Room B4 F12. Wall Turbulence 3 Chairperson: Masaki Shimizu (Osaka University)	TFEC9-1413: Effect of Surface Roughness on Flat-plate Boundary Layer Transition, Heechan Jeong (Seoul National Univ.), Seung Jin Song (Seoul National Univ.)	TFEC9-1640: Laminar-Turbulent Pattern in Plane Couette Flow with One Roughened Wall, Takahiro Tsukahara (Tokyo Univ. of Science), Takahiro Ishida (Tokyo Univ. of Science), Geert Brethouwer (KTH), Yohann Duguet (Universite Paris-Saclay)	TFEC9-1447: Roughness Effect in Couette Flow with a Rod-roughened Wall, Young Mo Lee (Ulsan National Inst. of Science and Technology), Jae Hwa Lee (Ulsan National Inst. of Science and Technology)
Room B5 T09. Fuel Cells and Batteries 2 Chairperson: Suk Won Cha (Seoul National University)	TFEC9-1653: Molecular Dynamics Study of Ionomer Dispersions in Water/Alcohol Mixtures, Takuya Mabuchi (Tohoku Univ.), Takashi Tokumasu (Tohoku Univ.)	TFEC9-1015: Trial of Applying Monolayer Graphene for Proton Exchange Membrane and Catalyst Layer in PEM Fuel Cells, Abhay Kumar (Hokkaido Univ.), Yutaka Tabe (Hokkaido Univ.), Takemi Chikahisa (Hokkaido Univ.)	TFEC9-1678: Fabrication of Micro-Grooved Catalyst Layers in Polymer Electrolyte Fuel Cells by Inkjet Printing, Shohji Tsushima (Osaka Univ.), Masataka Ikawa (Osaka Univ.), Takamasa Koyama (Osaka Univ.), Takahiro Suzuki (Osaka Univ.)
Room B6 F10. Micro/Nano Fluids 3 Chairperson: Keita Ando (Keio University)	TFEC9-1432: Numerical and Experimental Investigations on Electrohydrodynamics of Compound Droplet Under Strong Electric Fields, Salman Abbasi Muhammad (Sungkyunkwan Univ.), Ryun-geun Song (Sungkyunkwan Univ.), Jinkee Lee (Sungkyunkwan Univ.)	TFEC9-1173: Micro-Droplets Generation Induced by Interactions Between Focused Ultrasound and a Liquid Surface, Kazuya Seko (Hokkaido Univ.), Kazumichi Kobayashi (Hokkaido Univ.), Hiroyuki Fujii (Hokkaido Univ.), Masao Watanabe (Hokkaido Univ.)	TFEC9-1485: Observation of Splash Generated Immediately After the Impact of a High-Speed Droplet in Reduced-Pressure, Taku Ashida (Hokkaido Univ.), Masao Watanabe (Hokkaido Univ.), Kazumichi Kobayashi (Hokkaido Univ.), Hiroyuki Fujii (Hokkaido Univ.), Toshiyuki Sanada (Shizuoka Univ.)
Room B7 F13. General Session (Fluids Engineering) 4 Chairperson: Tetsuya Kanagawa (University of Tsukuba)	TFEC9-1068: Development of High-Accuracy Scheme for Advection Transport with the Characteristics Curve Method, Koichi Tsubogo (The Open Univ. of Japan)	TFEC9-1161: CPU-GPU Heterogeneous Parallel Implementation of Schedule Relaxation Jacobi Method, Mehdi Badri Ghomizad (Keio Univ.), Hosnieh Kor (Keio Univ.), Koji Fukagata (Keio Univ.)	TFEC9-1416: The Effect of Second Viscosity on Calculation of Compressible Flow by Density-Based Method, Taishi Matsura (Univ. of Tsukuba), Yuta Takahashi (Univ. of Tsukuba), Tetsuya Kanagawa (Univ. of Tsukuba), Kyosuke Yamamoto (Univ. of Tsukuba)

14:55	15:10	15:25	
TFEC9-1236: Numerical Study on the Smoldering Combustion of a Thin Solid Considering the Effects of Heat Loss and Oxidizer Velocity, Mayumi Yuza (Yamagata Univ.), Kazunori Kuwana (Yamagata Univ.), Genichiro Kushida (Aichi Inst. of Technology)	TFEC9-1204: Estimation Method of Limiting Oxygen Concentration for Spreading Flame over Electric Wires Insulation under Microgravity, Yusuke Konno (Hokkaido Univ.), Katsuya Tsuzuki (Hokkaido Univ.), Kyosuke Miyamoto (Hokkaido Univ.), Ken Mizutani (Hokkaido Univ.), Nozomu Hashimoto (Hokkaido Univ.), Osamu Fujita (Hokkaido Univ.)	TFEC9-1249: Effects of Methane Hydrate Temperature and Methane Concentration near Surface on Methane Hydrate Combustion, Shoma Shimizu (Aichi Inst. of Technology), Kenta Mizukuchi (Aichi Inst. of Technology), Genichiro Kushida (Aichi Inst. of Technology)	Room B3 T08. Fire and Explosion 2
TFEC9-1021: Local Wall Shear Stress Measurement with a Rectangular Plate Submerged in the Sublayer, Dan Hua (Yamaguchi Univ.), Shinsuke Mochizuki (Yamaguchi Univ.), Hiroki Suzuki (Yamaguchi Univ.)	TFEC9-1674: On the Droplet Deformation due to the Turbulence Interaction in Shear Flow, Jiawen Zhang (Nagoya Univ.), Takahiro Ito (Nagoya Univ.), Yoshiyuki Tsuji (Nagoya Univ.), Takaya Ssato (Densotechno CO. Ltd), Takeshi Ooyama (Densotechno CO. Ltd), Keiji Koumura (Densotechno CO. Ltd.)	/	Room B4 F12. Wall Turbulence 3
TFEC9-1192: Numerical and Experimental Investigation of Gaseous Species Transport Characteristics in a PEFC Membrane, Nguyen The Truc (Tokyo Inst. of Technology), Shun Ito (Tokyo Inst. of Technology), Kazuyoshi Fushinobu (Tokyo Inst. of Technology)	TFEC9-1330: Measurement of Water Vapor Concentration in Narrow Channel of PEFC Based on Laser Absorption Spectroscopy with Fiber-Optic Probe, Ryoga Nakauchi (Kyoto Inst. of Technology), Yuya Maeda (Kyoto Inst. of Technology), Kosuke Nishida (Kyoto Inst. of Technology), Toyofumi Umekawa (Plumtec, Inc.), Masahiro Kawasaki (Nagoya Univ.)	TFEC9-1228: Numerical Calculation of Water Transport in PEM Fuel Cell by OpenFOAM, Eru Kurihara (Oita Univ.), Ryota Shimori (Oita Univ.), Hiromitsu Hamakawa (Oita Univ.), Guanghao Wu (Softflow Co., Ltd), Nobuyuki Oshima (Hokkaido Univ.)	Room B5 T09. Fuel Cells and Batteries 2
TFEC9-1334: Does Chemical Properties of Solid Surface Cause Liquid Film Flow Instability at Droplet Impact?", Shota Tanimoto (Hokkaido Univ.), Yohei Yamaguchi (Toyo Engineering), Masao Watanabe (Hokkaido Univ.), Kazumichi Kobayashi (Hokkaido Univ.), Hiroyuki Fujii (Hokkaido Univ.), Toshiyuki Sanada (Shizuoka Univ.)	TFEC9-1491: Numerical and Experimental Analysis of Droplet Impact in Vapor Environment, Sae Sawai (Hokkaido Univ.), Toshihisa Isono (Hokkaido Univ.), Hiroyuki Fujii (Hokkaido Univ.), Kazumichi Kobayashi (Hokkaido Univ.), Masao Watanabe (Hokkaido Univ.), Toshiyuki Sanada (Shizuoka Univ.)	TFEC9-1056: Impingement of a Droplet Train Enhance the Liquid Infiltration into Closed-End Holes, Shunsuke Muraki (Shizuoka Univ.), Toshiyuki Sanada (Shizuoka Univ.)	Room B6 F10. Micro/Nano Fluids 3
TFEC9-1257: Immersed Boundary Method for Finite-Sized Particle-Laden Channel Flow with Heat Transfer, Ju Won Jang (Yonsei Univ.), Chang hoon Lee (Yonsei Univ.)	TFEC9-1667: A Numerical Simulation of a Dust Collection Performance of an Air Purifier, Seonho Choi (Sogang Univ.), Nahmkeon Hur (Sogang Univ.), Wonjung Kim (Sogang Univ.), Jeongtaek Park (LG Electronics)	TFEC9-1286: Numerical Analyses on Liquid-Metal Magnetohydrodynamic Flow in Sudden Channel Contraction, Hiroshige Kumamaru (Univ. of Hyogo)	Room B7 F13. General Session (Fluids Engineering) 4

Sunday, October 29, 2017

Session	16:00	16:15	16:30
Room A1 TF01. Optimal Design/Control of Thermal Systems and Fluid Flows 7 Chairperson: Jooha Kim (Ulsan National Institute of Science and Technology)	TFEC9-1178: Optimization of Sensor's Trajectory for Monitoring a Point Scalar Source in Turbulent Environment, Constantinos Panagiotou (The Univ. of Tokyo), Tamer A. Zaki (Johns Hopkins Univ.), Yosuke Hasegawa (The Univ. of Tokyo)	TFEC9-1345: Wind-Tunnel Experiment of a Friction Drag Reduction on a Clark-Y Airfoil Using Uniform Blowing, Kaoruko Eto (Keio Univ.), Yusuke Kondo (Keio Univ.), Koji Fukagata (Keio Univ.), Naoko Tokugawa (Japan Aerospace Exploration Agency)	TFEC9-1205: Drag Reduction Effect of Microbubble Generated by Orifice and Venturi, Yuya Sasaki (Tokai Univ.), Yuki Nakajima (Tokai Univ.), Hiroo Okanaga (Tokai Univ.)
Room A2 T06. Combustion Research for industrial applications 1 Chairperson: Ryoich Kurose (Kyoto University)	TFEC9-1146: An Investigation of Particle Dispersion and Combustion Characteristics on Pulverized Coal Jet Flame using LES, Seongyool Ahn (Kyushu Univ.), Kenji Tanno (Central Research Inst. of Electric Power Industry), Hiroaki Watanabe (Kyushu Univ.)	TFEC9-1293: Tube Vortex Flame Characteristics of Coal-Firing in Methane-Assisted Dual Swirl Combustor, Min Sung Choi (Pusan National Univ.), Xin Zhuo Li (Pusan National Univ.), Ki Beom Kim (Pusan National Univ.), Yon Mo Sung (Hyundai Steel Company), Gyung Min Choi (Pusan National Univ.), Duck Jool Kim (Pusan National Univ.)	TFEC9-1350: CFD Evaluation of Ash Slagging Tendency Depending on Burner Levels in Large-Scale Coal-Fired Boilers, Kie Seop Kang (Sungkyunkwan Univ.), Changkook Ryu (Sungkyunkwan Univ.)
Room B1a T12. Next Step of Solidification/Crystal Growth and Melting 2 Chairpersons: Hiroyuki Kumano (Aoyama Gakuin University) Hiroshi Suzuki (Kobe University)	TFEC9-1086: Effect of Crystal Shape on Flow Characteristics of Erythritol Slurry as Latent Heat Storage Material for Medium/Low Temperature Applications, Shunsuke Abe (Shinshu Univ.), Tatsunori Asaoka (Shinshu Univ.), kensuke Kuboki (Shinshu Univ.)	TFEC9-1359: Active Control of Supercooling Degree Using Two Kinds of Surfactant with Different Molecules Sizes, Jun Ueda (Chuo Univ.), Koji Matsumoto (Chuo Univ.), Junki Sakamoto (Chuo Univ.), Kohei Ehara (Chuo Univ.)	TFEC9-1369: Active Control of Ice Adhesion Force to Copper Surface by Addition of Surfactant (Influence of Copper Surface Temperature), Junki Sakamoto (Chuo Univ.), Koji Matsumoto (Chuo Univ.), Kohei Ehara (Chuo Univ.), Jun Ueda (Chuo Univ.), Seiichi Yamanaka (Chuo Univ.)
Room B1b F09. Jets, Wakes and Separated Flows 4 Chairperson: Koichi Tsujimoto (Mie University)	TFEC9-1507: PIV Measurement to Identify Transient Relationship Between Fluid Flow and Frost Formation on an Upright Plain Fin, Dong Kim (Pusan National Univ.), Sang Youl Yoon (Pusan National Univ.), Kyung Chun Kim (Pusan National Univ.)	TFEC9-1028: Effect of Cavitation Number on Aggressive Intensity of a Cavitating Jet Considering Residual Bubbles after Cavitation Collapses, Hitoshi Soyama (Tohoku Univ.)	TFEC9-1007: Numerical Study on Heat Transfer of Impinging Jet Interfering with Couette Flow, Jumpei Kitayama (Meijo Univ.), Takashi Kubo (Meijo Univ.)
Room B1c T15. Recent Developments on Boiling, Condensation and Multi-Phase Flow 4 Chairperson: Jungho Lee (Korea Inst. of Machinery and Materials)	TFEC9-1090: Evaporation Heat Transfer Coefficient and Pressure Drop of R-446A, Minsoo Kim (Sungkyunkwan Univ.), Keumnam Cho (Sungkyunkwan Univ.)	TFEC9-1284: Decompression Boiling in a Supersonic Two-phase Flow Nozzle with the Refrigerant HFO-1234yf, Yuma Hirano (Toyohashi Univ. Tech.), Masafumi Nakagawa (Toyohashi Univ. Tech.), Yosuke Kawamura (Toyohashi Univ. Tech.)	TFEC9-1071: Numerical Analysis for Liquid-Film Evaporation of Slug Flow in Microchannel with Volume of Fluid Method, Kazuya Matsuda (Hitachi), Kazuhiro Endoh (Hitachi)
Room B2 F04. Computational and Experimental Multiphase Flow Research 3 Chairperson: Toshiyuki Sanada (Shizuoka University)	TFEC9-1238: Bubbly Flow Around a Circular Cylinder: Modeling of Two-phase Flow Turbulence, Jubeom Lee (Seoul National Univ.), Hyungmin Park (Seoul National Univ.)	TFEC9-1298: Atomization of Coagulant and Turbid Water Treatment by Microbubble Generator with a Venturi Tube, Yuzo Inoue (Univ. of Tsukuba), Akiko Kaneko (Univ. of Tsukuba), Fumio Takemura (National Inst. of Advanced Industrial Science and Technology), Masatoshi Ike (Apptex LLC), Yutaka Abe (Univ. of Tsukuba)	TFEC9-1410: Study on Frictional Drag of Rotating Disk in Micro-Bubble Flow, Masaaki Ishikawa (Univ. of the Ryukyus)

Sunday, October 29, 2017

16:45	17:00	17:15	
TFEC9-1268: Added Mass Moment of Inertia of a Rotationally Oscillating Surface-Piercing Circular Cylinder in Still Water, Hamid Arionfard (Yokohama National Univ.), Yoshiki Nishi (Yokohama National Univ.)	TFEC9-1218: Proportional Control of Turbulent Flow over a Circular Cylinder, Jungil Lee (Ajou Univ.), Jinhyuk Yun (Ajou Univ.), Donggun Son (Korea Atomic Energy Research Inst.)	TFEC9-1115: Flow Control of the Wake Behind a Circular Cylinder Using Plasma Actuators, Yudai Sasaki (Meiji Univ.), Jun Sakakibara (Meiji Univ.)	Room A1 <i>TF01. Optimal Design/Control of Thermal Systems and Fluid Flows 7</i>
TFEC9-1480: Prediction of Soot Formation in 4 kW Coal Jet Flame by Large Eddy Simulation Employing the TDP Model, Hiroyasu Takahashi (Hokkaido Univ.), Nozomu Hashimoto (Hokkaido Univ.), Hiroaki Watanabe (Kyushu Univ.), Ryoichi Kurose (Kyoto Univ.), Osamu Fujita (Hokkaido Univ.)	TFEC9-1468: X-ray CT Visualization of Intra-Particle Structure of Woody Chars and its Role on Gasification, Hirotatsu Watanabe (Tokyo Inst. of Technology)		Room A2 <i>T06. Combustion Research for industrial applications 1</i>
TFEC9-1533: Storage of CO2 Hydrate Coexisting With/Without Sugars Under Freezer Conditions, Hironori D. Nagashima (Keio Univ.), Ryo Ohmura (Keio Univ.)	TFEC9-1535: Crystal Growth of Clathrate Hydrate Formed with Methane and Water Soluble Large Molecule Guest Compound, Takao Shibata (Keio Univ.), Shun Oya (Keio Univ.), Ryo Ohmura (Keio Univ.)		Room B1a <i>T12. Next Step of Solidification/Crystal Growth and Melting 2</i>
TFEC9-1076: Numerical Simulation of the Interaction Between a Vortex Ring and Bubble Plume by Vortex in Cell Method, Luc Van Nguyen (Nagoya Univ.), Tomohiro Degawa (Nagoya Univ.), Tomomi Uchiyama (Nagoya Univ.)	TFEC9-1151: Numerical Simulation of Mixing by a Vortex Ring Launched Vertically Upward into Two-Layer Density-Stratified Fluid, Tomohiro Degawa (Nagoya Univ.), Takenori Ito (Nagoya Univ.), Tomomi Uchiyama (Nagoya Univ.)		Room B1b <i>F09. Jets, Wakes and Separated Flows 4</i>
TFEC9-1237: Study of the Operating Characteristics of an Ultra-Micro Steam Injector, Akihiro Futsuta (Univ. Tsukuba), Yutaka Abe (Univ. Tsukuba), Akiko Kaneko (Univ. Tsukuba), Yutaka Suzuki (WELCON Inc.)	TFEC9-1305: Experimental Study on the Pressure Fluctuation Due to a Two-Phase Flow Shockwave in an Ejector, Kazuyoshi Sadamura (Toyohashi Univ. Tech.), Haruyuki Nishijima (Toyohashi Univ. Tech.), Ken Moriyama (Toyohashi Univ. Tech.), Yosuke Kawamura (Toyohashi Univ. Tech.), Masafumi Nakagawa (Toyohashi Univ. Tech.)		Room B1c <i>T15. Recent Developments on Boiling, Condensation and Multi-Phase Flow 4</i>
TFEC9-1251: Fluid/Material Coupled Numerical Analysis of Relationship between Behavior of Bubble Collapse and Distribution of Stress in Material, Hiroto Sasaki (Tohoku Univ.), Susumu Endo (Tohoku Univ.), Yuka Iga (Tohoku Univ.)	TFEC9-1621: Flow Behavior Around Ventilated Impellers for Aeration, Ichiro Kumagai (Meisei Univ.), Takuya Nohara (Meisei Univ.), Takahiro Tsukahara (Meisei Univ.)	TFEC9-1454: Cavitation Cloud Formation by the Backscattering of Focused Ultrasound from a Laser-Induced Bubble, Taisuke Sano (Osaka Prefecture Univ.), Taisei Horiba (Osaka Prefecture Univ.), Toshiyuki Ogasawara (Osaka Prefecture Univ.), Hiroyuki Takahira (Osaka Prefecture Univ.)	Room B2 <i>F04. Computational and Experimental Multiphase Flow Research 3</i>

Sunday, October 29, 2017

Session	16:00	16:15	16:30
Room B3 T08. Fire and Explosion 3 Chairperson: Tsuneyoshi Matsuoka (Toyohashi University of Technology)	TFEC9-1325: Characteristics of Flow Field of Fire Whirl Established on Micro-Burners Surrounded by Four Walls with Four Slits, Hisao Adachi (Chubu Univ.), Taro Hirasawa (Chubu Univ.), Manabu Fuchihata (Kindai Univ.), Ahmad Salaimeh (Univ. of Kentucky), Koza Saito (Univ. of Kentucky)	TFEC9-1079: Fire Whirl Generated behind an L-shaped Wall under the Presence of a Crosswind, Tomomi Sasaki (Yamagata Univ.), Tatsuya Suzaki (Yamagata Univ.), Masayasu Shiozawa (Yamagata Univ.), Kazunori Kuwana (Yamagata Univ.)	TFEC9-1536: Behavior of Fire Whirl on Small Wood Cribs, Kensuke Saruya (The Univ. of Tokyo), Toshio Mogi (The Univ. of Tokyo), Ritsu Dobashi (the Univ. of Tokyo)
Room B4 F12. Wall Turbulence 4 Chairperson: Seung Jin Song (Seoul National University)	TFEC9-1515: Static Pressure Measurement Error for Fully Developed Flow at High Reynolds Number, Noriyuki Furuichi (Nat. Inst. Advanced Industrial Science and Technology), Takashi Shimada (Nat. Inst. Advanced Industrial Science and Technology)	TFEC9-1423: Two-Point Measurement of Intermittency in Low Reynolds Number Poiseuille Flow, Tatsuo Ushijima (Nagoya Inst. Tech.), Kiyonori Mizuno (Nagoya Inst. Tech.), Yutaka Hasegawa (Nagoya Inst. Tech.)	TFEC9-1531: Effect of Different Initial Conditions on a Turbulent Planer Wall Jet, Koji Iwano (Nagoya Univ.), Kai Komatsubara (Nagoya Univ.), Yasuhiko Sakai (Nagoya Univ.), Yasumasa Ito (Nagoya Univ.)
Room B5 T09. Fuel Cells and Batteries 3 Chairperson: Kosuke Nishida (Kyoto Institute of Technology)	TFEC9-1530: Performance Evaluation of Anion Exchange Membrane Electrolyzer, Natsuki Kawaguchi (The Univ. of Tokyo), Naoki Miyazaki (Tsukuba Univ.), Hiroshi Ito (AIST), Satoshi Someya AIST), Tetsuo Munakata (AIST), Masayoshi Ishida (Tsukuba Univ.)	TFEC9-1563: Numerical Simulation of Ion Transport and Reaction on Water Electrolysis, Daisuke Umehara (Tokyo Inst. of Technology), Shuichiro Hirai (Tokyo Inst. of Technology)	TFEC9-1676: Analysis of Ion Transport Phenomena in Electrolyte by MRI Tagging, Shozo Yoshimura (Tokyo Inst. of technology), Toshihiko Yoshida (Tokyo Inst. of technology), Suguru Uemura (Tokyo Inst. of technology), Norio Iriguchi (Tokyo Inst. of technology), Yuki Kameya (Tokyo Inst. of technology), Shuichiro Hirai (Tokyo Inst. of technology)
Room B6 F10. Micro/Nano Fluids 4 Chairperson: Masao Watanabe (Hokkaido University)	TFEC9-1037: Zeta-Potential Measurements of Negatively and Positively Charged Particles and Microchannels by the Closed Electrokinetic Cell Technique and the Current Monitoring Technique, Kaede Hiratsuka (Sophia Univ.), Takashi Suzuki (Sophia Univ.), Mitsuhisa Ichiyanagi (Sophia Univ.)	TFEC9-1580: Study of Asphaltene Deposition around a Square Obstacle inside a Transparent Microchannel, Vishnu Bhadran (Khalifa Univ. Sci. Tech.), Afshin Goharzadeh Khalifa Univ. Sci. Tech.), Yu-Jiun Lin (Rice Univ.), Yap Yit Yap (Khalifa Univ. Sci. Tech.), John C. Chai (Univ. Huddersfield), Nevin Mathew (Khalifa Univ. Sci. Tech.), Francisco Vargas (Rice Univ.), Sibani Lisa Biswal (Rice Univ.)	TFEC9-1105: Experimental Investigation of Necessary Conditions of Marangoni Convection in a Microscale Swimming Engine, Shun Takizawa (Shibaura Inst. Tech.), Manabu Tange (Shibaura Inst. Tech.)
Room B7 F13. General Session (Fluids Engineering) 5 Chairperson: Koji Fukudome (Ritsumeikan University)	TFEC9-1097: Effectiveness of Flexible Wing in a Flapping Flight, Tadateru Ishide (National Institute of Technology, Kisarazu College), Kodai Nakano (National Institute of Technology, Kisarazu College), Mao Itazawa (National Institute of Technology, Kisarazu College)	TFEC9-1155: Effects of Membrane Deformation on Flexible-Membrane Wing Aerodynamics at Low Reynolds Number, Kenta Uechi (Tohoku Univ.), Kakeru Kurane (Tohoku Univ.), Koichi Takahashi (Tohoku Univ.), Hiroki Nagai (Tohoku Univ.)	TFEC9-1444: Simulation of a Flapping Flexible Vertical Flag in a Uniform Flow by the Immersed Boundary Method, Min Je Kim (Ulsan National Institute of Science and Technology), Jae Hwa Lee (Ulsan National Institute of Science and Technology)

16:45	17:00	17:15	
TFEC9-1183: Investigation of the Dynamic Characteristics of Small-Scale Fire Whirls using Numerical Simulations, Koki Okamoto (Sophia Univ.), Mariko Watanabe (Sophia Univ.), Tetsuhiro Tsukiji (Sophia Univ.)	TFEC9-1169: Comparison of Thermocouple Temperature Measurements in Simulated Thermal Environments of Fire, Ho-Sik Han (Daejeon Univ.), Hong-Seok Yun (Daejeon Univ.), Cheol-Hong Hwang (Daejeon Univ.), Sung-Chan Kim (Kyungil Univ.)	TFEC9-1189: Experimental Study on Thermal Flow Field Induced by n-Heptane Pool Fire in a Long Compartment, Sung Chan Kim (Kyungil Univ.), Su Kyeong Min (Kyungil Univ.), Cheol Hong Hwang (Daejeon Univ.), Dong Gun Nam (Korea Fire Inst.)	Room B3 T08. Fire and Explosion 3
TFEC9-1091: Turbulence in Transitional Pipe Flows, Rory Thomas Cerbus (Okinawa Inst. Sci. Tech.), Chien-Chia Liu (Max Planck Inst. for Dynamics and Self-organization), Gustavo Gioia (Okinawa Inst. Sci. Tech.), Pinaki Chakraborty (Okinawa Inst. Sci. Tech.)	TFEC9-1586: Modification of the Spatial Scaling for Turbulent Flow of Viscoelastic Fluids, Takashi Ohta (Univ. Fukui), Daiki Eguchi (Univ. Fukui)	/	Room B4 F12. Wall Turbulence 4
TFEC9-1523: Characterization of Yttria Molar Concentration of Ultrathin PEALD YSZ Coating Layer on Pt Cathode for Thin Film Solid Oxide Fuel Cell, Yusung Kim (Seoul National Univ.), Suk Won Cha (Seoul National Univ.), Ikwhang Chang (Georgia Inst. of Technology), Wonjong Yu (Seoul National Univ.), Yeageun Lee (Seoul National Univ.), Sanghoon Lee (Seoul National Univ.), Noo Li Jeon (Seoul National Univ.)	TFEC9-1072: Quenching of Chemical Species Transport in SOFC by He Impinging Jet for Visualization of Oxide Ion Path in Composite Electrodes, Tsuyoshi Nagasawa (Tokyo Inst. of Technology), Katsunori Hanamura (Tokyo Inst. of Technology)	TFEC9-1209: In-Situ Temperature Measurement of a Planar Solid Oxide Fuel Cell Accompanied with Power Generation and Steam-Methane Reforming Reactions, Shinichi Sugihara (Kyoto Univ.), Youhei Kinoshita (Kyoto Univ.), Hiroshi Iwai (Kyoto Univ.)	Room B5 T09. Fuel Cells and Batteries 3
TFEC9-1355: Liquid-Liquid Flow in a Micro-helical Channel, Miah Md Ashrafal Alam (Nat. Inst. Tech., Matsue College), Genki Okamoto (Seeks Corporation), Keita Matsuura (Nat. Inst. Tech., Matsue College), Manabu Takao (Nat. Inst. Tech., Matsue College)	TFEC9-1006: Simulation of Partition Effect in Sudden Expansion Channel Using Upwind Compact Scheme, A. Nouri (Sharif Univ. Tech.)	/	Room B6 F10. Micro/Nano Fluids 4
TFEC9-1511: Effects of Heaving and Pitching Motions on Under-Floor Aerodynamics of a Sedan-Type Road Vehicle, Ryuichi Maruyama (Tohoku Univ.), Tomohiro Suzuki (Tohoku Univ.), Hayato Nagaike (Tohoku Univ.), Taku Nonomura (Tohoku Univ.), Keisuke Asai (Tohoku Univ.)	TFEC9-1167: Numerical Analysis of Shark Movement Using the Three-dimensional Panel Method, Ryuji Takahashi (Ritsumeikan Univ.), Koji Fukudome (Ritsumeikan Univ.), Yoshifumi Ogami (Ritsumeikan Univ.)	TFEC9-1203: Aerodynamic Characteristics of Shuttlecocks: Effect of Structure and Rotation, Ryota Katayama (Tokai Univ.), Hiroo Okanaga (Tokai Univ.)	Room B7 F13. General Session (Fluids Engineering) 5

MEMO

Monday, October 30, 2017

Plenary Lecture

9:00-9:40 (Room A1)

Chairperson: Masahiro Takei (Chiba University, Japan)



TFEC9-PL04:

Prof. Yu Fukunishi (Tohoku University, Japan)

“How Turbulence Begins in a Transitional Flat-Plate Boundary Layer”

Yu Fukunishi is a professor at Department of Mechanical Systems Engineering, Tohoku University, Japan. His research focuses on turbulence, transition and flow control.

Fukunishi completed his PhD in 1982 at the University of Tokyo, Japan. He worked as a NRC Research Associate at Fluid Mechanics Lab. of NASA Ames Research Center from 1984 to 1986 and as a Research Associate at Tokyo Institute of Technology from 1986 to 1989. He moved to Tohoku University in 1989, and has served as a full professor at Tohoku University since 2000.

Fukunishi is a Fellow of JSME. He served as a chairman of “Fluids Engineering Division of JSME” in 2013. He served JSME as an “Executive Board Director in charge of Finance”, 2014-2015. He was also the president of “the Japan Society of Fluid Mechanics” in 2015. He received awards including “JSME Medal for Outstanding Papers” in 2003, and “JSME Fluids Engineering Division Award” in 2015.

Monday, October 30, 2017

Session	9:50	10:05	10:20
Room A1 TF01. Optimal Design/Control of Thermal Systems and Fluid Flows 8 Chairperson: Sang Woo Joo (Yeungnam University)	TFEC9-1201: The Heat and Flow Characteristics of Water in a Polyethylene Tube with Air Injection for Metal Rods with Various Pitch Lengths and Tube Widths, Takuya Kobayashi (Univ. of Yamanashi), Koji Toriyama (Univ. of Yamanashi)	TFEC9-1176: Analysis of Adiabatic Effect by Control of Thermal Radiation in Semiconductor Fabrication System, Seung-Hwan Kang (Sungkyunkwan Univ.), Jae Won Lee (Sungkyunkwan Univ.), Han Seo Ko (Sungkyunkwan Univ.)	TFEC9-1600: Conceptual Thermal Design and Heat Transfer Analysis of Lithium Ion Battery Pack for Electric Vehicles, Min Soo Kim (Seoul National Univ.), Gwi Taek Kim (Seoul National Univ.), Yoong Jung (Seoul National Univ.), Sun Jin Kim (Seoul National Univ.), Jin Woo Yoo (Seoul National Univ.)
Room A2 T06. Combustion Research for Industrial Applications 2 Chairperson: Masayasu Shimura (Tokyo Institute of Technology)	TFEC9-1605: Effect of Wire Diameter in Electrical Wire Flames with Applied AC Electric Fields, Sun Ho Park (Pukyong National Univ.), Seung Jae Lim (Korea Inst. of Energy Research), Jeong Park (Pukyong National Univ.), Osamu Fujita (Hokkaido Univ.), Suk Ho Chung (King Abdullah Univ. of Science and Technology)	TFEC9-1613: Study on Relationship Between the Spatial Temperature Distribution and the Size of SiO₂ Nanoparticles Generated in the Combustion, Naoya Inada (Yamaguchi Univ.)	TFEC9-1367: A Feasibility Study of Membrane Filter Made of Alumina Fine Particles for Soot Trapping with High Filtration Efficiency and Low Pressure Drop, Yuji Kitagawa (Tokyo Inst. of Technology), Katsunori Hanamura (Tokyo Inst. of Technology)
Room B1a T16. Thermal Radiation 1 Chairperson: Koji Miyazaki (Kyushu Institute of Technology)	TFEC9-1059: Measurement of Scattering Phase Function for Nano Fiber, Hiroki Gonome (Shibaura Inst. of Technology), Takahiro Kono (Shibaura Inst. of Technology), Jun Yamada (Shibaura Inst. of Technology)	TFEC9-1227: Numerical Analysis for Evaluation of Lighting by Using Optical Fiber, Kazuya Watanabe (Shibaura Inst. of Technology), Hiroki Gonome (Shibaura Inst. of Technology), Takahiro Kono (Shibaura Inst. of Technology), Jun Yamada (Shibaura Inst. of Technology)	TFEC9-1614: Numerical Analysis and Experiments for Measurement Amount of Exhaust Heat from a Single Liquid Droplet Stream, Tomohiro Takanashi (Hokkaido Univ.), Taizo Shimada (Hokkaido Univ.), Kento Ryomon (Hokkaido Univ.), Tsuyoshi Totani (Hokkaido Univ.), Harunori Nagata (Hokkaido Univ.), Masashi Wakita (Hokkaido Univ.)
Room B1b F02. Advances in Thermo-Fluids Technology in Automobiles and Industrial Machinery 1 Chairperson: Chisachi Kato (University of Tokyo)	TFEC9-1127: Immersed Boundary Method for Practical Vehicle Aerodynamic Analysis Using Hierarchical Cartesian Grid, Keiji Onishi (RIKEN), Makoto Tsubokura (Kobe Univ.)	TFEC9-1124: A Stencil Penalty Approach for Improving Accuracy of Constraint Immersed Boundary Method, Rahul Bale (RIKEN Advanced Inst. for Computational Science), Niclas Jansson (Royal Inst. of Technology), Keiji Onishi (RIKEN Advanced Inst. for Computational Science), Makoto Tsubokura (RIKEN Advanced Inst. for Computational Science, Kobe Univ.), Neelesh Patankar (Northwestern Univ.)	TFEC9-1235: Active Flow Control for Longitudinal Vortices Around the Simplified Road Vehicle Using Dielectric Barrier Discharge Plasma Actuator, Tatsuki Nakano (Kobe Univ.), Jun Ikeda (Kobe Univ.), Makoto Tsubokura (Kobe Univ. / AICS), Takuji Nakashima (Hiroshima Univ.), Keigo Shimizu (Hiroshima Univ. / MAZDA)
Room B1c T11. Multidisciplinary Approach in Thermal and Fluids Engineering by Leading-edge Measurement Technique 1 Chairperson: Kazuya Tatsumi (Kyoto University)	TFEC9-1661: Characteristics of Sessile Droplet Evaporation on Heated Anodized Aluminum Surfaces, Seong Hyuk Lee (Chung-Ang Univ.), Joo Hyun Moon (Chung-Ang Univ.), Sang Min Lee (Chung-Ang Univ.)	TFEC9-1673: Measurement Technique for Heat Diffusion Across Metal / Liquid Interface Using Pulsed Light Heating Thermoreflectance Method, Takashi Yagi (National Inst. of Advanced Industrial Science and Technology)	TFEC9-1529: Thermal Boundary Conductance and Energy Transfer Modes over the Interfaces of Various Self-Assembled Monolayers and Solvents: A Molecular Dynamics Study, Gota Kikugawa (Tohoku Univ.), Mitsuru Nemoto (Tohoku Univ.), Taku Ohara (Tohoku Univ.)
Room B2 F04. Computational and Experimental Multiphase Flow Research 4 Chairperson: Hyun Jin Park (Hokkaido University)	TFEC9-1245: Numerical and Experimental Studies on the Separation and Recovery of Oil from Oil-Water Mixture Flows, Linfeng Piao (Seoul National Univ.), Nayoung Kim (Seoul National Univ.), Hyungmin Park (Seoul National Univ.)	TFEC9-1050: Numerical Simulation of a Parallel Plate Particle Separator for Measurement of Charging State of PM_{2.5}, Takuto Yonemichi (Keio Univ.), Koji Fukagata (Keio Univ.), Kentaro Fujioka (Keio Univ.), Tomoaki Okuda (Keio Univ.)	TFEC9-1265: Real Time Measurement of Particle Distribution Inside the Centrifuge by WERD, Yuya Akimoto (Chiba Univ.), Fumiya Nagae (Chiba Univ.), Yuya Atagi (Chiba Univ.), Kazuya Okawa (Chiba Univ.), Yoshiyuki Iso (IHI Corporation), Ryoussuke Ikeda (IHI Corporation), Masahiro Takei (Chiba Univ.)

Monday, October 30, 2017

10:35	10:50		
TFEC9-1150: A Study on Heat Transfer Characteristics by Impinging Jet with in, a Few Amount of Mist, Seydou Nourou Diop (Univ. of the Ryukyus), Izuru Senaha (Univ. of the Ryukyus), Keita Yasuda (Univ. of the Ryukyus), Shoichi Matsuda (Univ. of the Ryukyus)	/		Room A1 <i>TF01. Optimal Design/Control of Thermal Systems and Fluid Flows 8</i>
TFEC9-1374: Construction of Simple Reaction Mechanisms Considering Flame Propagation and Ignition of CH₄/C₂H₄/air Mixtures, Yuta Sasaki (Tohoku Univ.), Hisashi Nakamura (Tohoku Univ.), Masatoshi Kodera (JAXA), Sadatake Tomioka (JAXA / Tohoku Univ.), Kaoru Maruta (Tohoku Univ. / Far Eastern Federal Univ.)	TFEC9-1657: Measurement of Cold-Flow Transfer Function in a Partially Premixed Model Gas Turbine Combustor, Seong Heon Kim (Seoul National Univ.), Seong Pil Joo (Seoul National Univ.), Young Bin Yoon (Seoul National Univ.)		Room A2 <i>T06. Combustion Research for Industrial Applications 2</i>
TFEC9-1452: Radiative Transfer of Pigment Films for Transmission Control, Hani Alkitabi Aldaftari (Tohoku Univ.), Junnosuke Okajima (Tohoku Univ.), Atsuki Komiya (Tohoku Univ.), Hiroki Gonome (Shibaura Inst. of Technology), Shigenao Maruyama (Tohoku Univ.)	TFEC9-1646: Optimization of the Spectral Absorption Coefficient for a Volumetric Solar Collector, Caiyan Qin (Korea Advanced Inst. of Science and Technology), Ikjin Lee (Korea Advanced Inst. of Science and Technology), Bong Jae Lee (Korea Advanced Inst. of Science and Technology)		Room B1a <i>T16. Thermal Radiation 1</i>
TFEC9-1433: Enhancement of Defogging on Windshield by Vortex Generators, Dohyung Kim (Sungkyunkwan Univ.), Ryun-geun Song (Sungkyunkwan Univ.), Yeonghyeon Gim (Sungkyunkwan Univ.), Jae won Lee (Sungkyunkwan Univ.), Hyuckyoung Kwon (Hyundai Motor Company), Han Seo Ko (Sungkyunkwan Univ.), Jinkee Lee (Sungkyunkwan Univ.)	/		Room B1b <i>F02. Advances in Thermo-Fluids Technology in Automobiles and Industrial Machinery 1</i>
TFEC9-1632: Evaluation of Hydrophilic/Hydrophobic Influence on Molecular Concentration in the Vicinity of Liquid-solid Interface Using Total Internal Reflection Raman Imaging, Haruki Kinoshita (Keio Univ.), Masaharu Kinoshita (Keio Univ.), Yohei Sato (Keio Univ.)	TFEC9-1347: Experimental Investigation of Electrokinetic Mobility of Colloidal Particles in the Vicinity of a Solid Wall using Evanescent Waves, Shoichiro Kaji (Kobe Univ.), Katsuaki Shirai (Shibaura Inst. of Technology), Tsuyoshi Kawanami (Meiji Univ.), Shigeki Hirasawa (Kobe Univ.)		Room B1c <i>T11. Multidisciplinary Approach in Thermal and Fluids Engineering by Leading-edge Measurement Technique 1</i>
TFEC9-1475: Mist Transport Promoted by Turbulent Slugs in a Long Gaseous Pipeline System, Yuichi Murai (Hokkaido Univ.), Yuji Tasaka (Hokkaido Univ.), Hyun Jin Park (Hokkaido Univ.)	TFEC9-1624: Evaporation of Droplet in Single-Axis Acoustic Levitator, Koji Hasegawa (Kogakuin Univ.), Kengo Kono (Kogakuin Univ.), Yuki Niimura (Kogakuin Univ.), Yutaka Abe (Univ. of Tsukuba)		Room B2 <i>F04. Computational and Experimental Multiphase Flow Research 4</i>

Monday, October 30, 2017

Session	9:50	10:05	10:20
Room B3 T13. Plasma Processing 1 Chairperson: Tomohiro Nozaki (Tokyo Institute of Technology)	TFEC9-1275: Estimation of Cathodic Arc Spot Size in a Non-Transferred Arc Plasma Torch by Comparing Numerical Analysis and Experimental Result, Byeong Il Min (Jeju National Univ.), Sooseok Choi (Jeju National Univ.)	TFEC9-1277: High-Speed Visualization of Fluctuation Phenomena in Multiphase AC Arc, Manabu Tanaka (Kyushu Univ.), Tomoyuki Imatsuji (Kyushu Univ.), Taro Hashizume (Kyushu Univ.), Takayuki Watanabe (Kyushu Univ.), Hisao Nagai (Panasonic Corp.), Takeshi Koiwasaki (Panasonic Corp.), Takafumi Okuma (Panasonic Corp.)	TFEC9-1279: Numerical Analysis of a Thermal Plasma Scrubber for Waste Gas from Semiconductor Manufacturing, Ju Young Ko (Jeju National Univ.), Dong Wha Park (Inha Univ.), Sooseok Choi (Jeju National Univ.)
Room B4 F11. Non-Newtonian Fluid Mechanics 1 Chairperson: Tsutomu Takahashi (Nagaoka University of Technology)	TFEC9-1214: Flow Properties of Surfactant Solutions Passing through Small-Sized Slits, Taisuke Sato (Niigata Univ.), Akiomi Ushida (Niigata Univ.), Takatsune Narumi (Niigata Univ.)	TFEC9-1247: Flow-Induced Fiber Orientation in Cellulose Nanofiber Suspension Flow through a Channel with Complex Geometry, Kazunori Yasuda (Ehime Univ.), Katsuhiko Ando (Ehime Univ.), Yukiharu Iwamoto (Ehime Univ.), Motosuke Sogo (Ehime Univ.)	TFEC9-1547: Macroscopic Electric Polarization of Liquid Crystals Under Shear Flows, Yugo Tamura (Graduate School of Kochi Univ. of Technology), Tomohiro Tsuji (Kochi Univ. of Technology), Shigeomi Chono (Kochi Univ. of Technology)
Room B5 T18. General Session (Thermal Engineering) 3 Chairperson: Masahiro Motosuke (Tokyo University of Science)	TFEC9-1585: Heat Transfer Enhancement on Compact Heat Exchanger for an Automobile with Vortex Generators, Shigeru Ogawa (National Inst. of Technology, Kure College), Ikumi Akaishi (National Inst. of Technology, Kure College), Souma Usui (National Inst. of Technology, Kure College)	TFEC9-1126: Numerical Simulation of Micro Gas Turbine for Improvement and Redesign, Keisuke Arai (Ritsumeikan Univ.), Yoshifumi Ogami (Ritsumeikan Univ.), Toshiyuki Toriyama (Ritsumeikan Univ.), Koji Fukudome (Ritsumeikan Univ.)	TFEC9-1364: Safety Investigation of Hydrogen Charging Platform Package with CFD Simulation, Uk Min Han (Korea Univ.), Ho Seong Lee (Korea Univ.)
Room B6 F06. Fluid Machinery for Renewable Energy 1 Chairperson: Qing'an Li (Mie University)	TFEC9-1067: Influence of Tip Clearance on Performance and Internal Flow of Contra-Rotating Small Hydroturbine, Toru Shigemitsu (Tokushima Univ.), Tomofumi Ikebuchi (Tokushima Univ.)	TFEC9-1314: Fundamental Study on Air-Water Multiphase Flow in Tub-Type Water Wheel Vessel (Experiment and Simulation using OpenFOAM), Kosuke Ametani (Toyama Prefectural Univ.), Takaaki Shimizu (Toyama Prefectural Univ.), Shinji Nakagawa (Toyama Prefectural Univ.), Hiroyuki Uesaka (Toyama Univ. of International Studies), Hiroki Sato (Kawabata), Muneyasu Ito (Kawabata)	TFEC9-1233: A Straight-Bladed Vertical Axis Turbine for Wave Energy Conversion: Effect of Guide Vane Solidity on the Performance, Masaki Sakaguchi (Nat. Inst. Tech., Yonago College), Yasutaka Hayamizu (Nat. Inst. Tech., Yonago College), Takeshi Gonda (Nat. Inst. Tech., Yonago College), Shinichi Morita (Nat. Inst. Tech., Yonago College), Manabu Takao (Nat. Inst. Tech., Matsue College), Yoichi Kinoue (Saga Univ.), Toshiaki Setoguchi (Saga Univ.)
Room B7 F13. General Session (Fluids Engineering) 6 Chairperson: Yosuke Hasegawa (The University of Tokyo)	TFEC9-1207: The Flow Simulation in the Pipe on the Sphere with Expand and Contract, Aya Saito (Ochanomizu Univ.), Tetuya Kawamura (Ochanomizu Univ.)	TFEC9-1101: DNS Study of Viscoelastic Flow Past a Confined Cylinder, Yuya Yamada (Tokyo Univ. of Science), Takahiro Tsukahara (Tokyo Univ. of Science), Yosuke Hasegawa (The Univ. of Tokyo)	TFEC9-1112: PIV Measurement of Viscoelastic Fluid Flow Behind a Cylinder in a Rectangular Duct, Yuki Akechi (Tokyo Univ. of Science), Yuya Yamada (Tokyo Univ. of Science), Takayuki Osawa (The Univ. of Tokyo), Takahiro Tsukahara (Tokyo Univ. of Science), Yosuke Hasegawa (The Univ. of Tokyo)

Monday, October 30, 2017

10:35	10:50		
TFEC9-1414: Dynamics of Arc Plasmas Generated by Pulsed Discharge in Water, Kyoung-Jae Chung (Seoul National Univ.)	/		Room B3 T13. Plasma Processing 1
TFEC9-1394: A Novel Study of Bubbles Rising in a Hydrophobically Modified Alkali-Soluble Emulsion Polymer Solution, Shohei Yamamoto (Tokushima Univ.), Shugo Fujimoto (Tokushima Univ.), Mitsuhiro Ohta (Tokushima Univ.), Shuichi Iwata (Nagoya Inst. of Technology)	TFEC9-1376: Development of Amorphous Actuators Driven by Liquid Crystal Flows, Rinko Matsuda (Kochi Univ. of Technology), Tomohiro Tuji (Kochi Univ. of Technology), Shigeomi Chono (Kochi Univ. of Technology)		Room B4 F11. Non-Newtonian Fluid Mechanics 1
TFEC9-1643: A Study on New Performance Diagnostic Logic for Gas Turbines Considering Over-Firing, Jae Hong Lee (Inha Univ.), Tong Seop Kim (Inha Univ.)	TFEC9-1220: The Effective Use of Energy Generated by Photovoltaic Power and Comparison, Takumi Hirose (Okayama Prefecture Univ.), Tsuguhiko Nakagawa (Okayama Prefecture Univ.)		Room B5 T18. General Session (Thermal Engineering) 3
TFEC9-1212: Counter-rotating Impulse Turbine for Bi-directional Flow, Kohei Yamada (Nat. Inst. Tech., Matsue College), Manabu Takao (Nat. Inst. Tech., Matsue College), Ashrafal Alam (Nat. Inst. Tech., Matsue College), Shinya Okuhara (Nat. Inst. Tech., Matsue College), Yoichi Kinoue (Saga Univ.)	TFEC9-1215: Combined Turbine System for Wave Energy Conversion, Manabu Takao (Nat. Inst. Tech., Matsue College), Seisuke Fukuma (Nat. Inst. Tech.), Ashrafal Alam (Nat. Inst. Tech., Matsue College), Shinya Okuhara (Nat. Inst. Tech., Matsue College), Yoichi Kinoue (Saga Univ.)		Room B6 F06. Fluid Machinery for Renewable Energy 1
TFEC9-1253: Aerodynamics Characteristics of a Stepped Square Cylinder in Three-Dimensional Flow, Manami Sakata (Tokai Univ.), Hiroo Okanaga (Tokai Univ.)	TFEC9-1392: Numerical Analysis of Channel Flows Around a Square Cylinder and Development of Correction Method for Drag Coefficient, Daiki Iwasa (Keio Univ.), Koji Fukagata (Keio Univ.)		Room B7 F13. General Session (Fluids Engineering) 6

Monday, October 30, 2017

Session	11:25	11:40	11:55
Room A1 TF01. Optimal Design/Control of Thermal Systems and Fluid Flows 9 Chairperson: Kenichi Morimoto (The University of Tokyo)	TFEC9-1208: Numerical Study of Influences of the Unsteady Marangoni Number on the Azimuthal Wave Number in a Liquid Bridge, Hisashi Minakuchi (Univ. of the Ryukyus), Yasunori Okano (Osaka Univ.), Sadik Dost (Univ. of Victoria)	TFEC9-1545: Heat Transfer Enhancement of Turbulent Flow in a Pipe by a Rectangular-Wave Pulsation, Hajime Nakamura (National Defense Academy), Naoki Shiibara (National Defense Academy), Shunsuke Yamada (National Defense Academy)	TFEC9-1361: Thermal Analysis of Electric Heating Furnace for Hot Stamping Process Application, Jinwoo Oh (Korea Univ.), Hoseong Lee (Korea Univ.)
Room A2 T06. Combustion Research for industrial applications 3 Chairperson: Hidefumi Kataoka (Osaka Prefecture University)	TFEC9-1658: Effects of the Fueling Strategies on Combustion Characteristics of Dual Fuel Engine, Seung Pil Lee (Hanyang Univ.), Seok Hwon Lee (Hanyang Univ.), Sungwook Park (Hanyang Univ.)	TFEC9-1065: Effects of Operating Parameters on Soot and Particulate Number Emissions of GDI Engines at Cold Start, Qian Xiong (Chiba Univ.), Tatsuya Kuboyama (Chiba Univ.), Yasuo Moriyoshi (Chiba Univ.)	TFEC9-1649: Effects of the Swirl Intensity on the Combustion Characteristics with Different Injector Hole Numbers, Sungjun Yoon (Hanyang Univ.), Minhu Choi (Hanyang Univ.), Sungwook Park (Hanyang Univ.)
Room B1a T16. Thermal Radiation 2 Chairperson: Katsunori Hanamura (Tokyo Tech.)	TFEC9-1687: Development of Energy-Saving Glass Using Tailored Radiative Properties of Nano-Structures, Yu-Bin Chen (National Tsing Hua Univ.), Ming-Tsang Lee (National Chung Hsing Univ.)	TFEC9-1348: Flexible Solar Absorber Based on Optical Metamaterial, Mingeon Kim (Korea Advanced Inst. of Science and Technology), Jongin Choi (Korea Advanced Inst. of Science and Technology), Bong Jae Lee (Korea Advanced Inst. of Science and Technology)	TFEC9-1285: Normal Emittance of Metal Coated Silica Spheres Array, Tsubasa Matsuo (Kyushu Inst. of Technology), Tomohide Yabuki (Kyushu Inst. of Technology), Laurent Tranchant (Kyushu Inst. of Technology), Koji Miyazaki (Kyushu Inst. of Technology)
Room B1b F02. Advances in Thermo-Fluids Technology in Automobiles and Industrial Machinery 2 Chairperson: Akiyoshi Iida (Toyohashi University of Technology)	TFEC9-1116: Effects of Blowing Ratio on the Film Cooling from the Leading Edge near the Endwall, Joon Ahn (Kookmin Univ.), Taeho Eom (Seoul National Univ.), Joon Sik Lee (Seoul National Univ.)	TFEC9-1206: Effect of Jet Injection for Blade Rim Cooling with Multi-Cavity Ribs, Minjae Park (Yonsei Univ.)	TFEC9-1232: Thermal Performance and Flow of Partition Structure in The Matrix Cooling Channel, Seung Yun Kim (Yonsei Univ.), HyungHee Cho (Yonsei Univ.)
Room B1c T11. Multidisciplinary Approach in Thermal and Fluids Engineering by Leading-edge Measurement Technique 2 Chairperson: Seung Hwan Ko (Seoul National University)	TFEC9-1660: Local Evaporation of Supercooled Liquid Droplet and Evolution of Sub-micron Frost Layer in Freezing Process, Seong Hyuk Lee (Chung-Ang Univ.), Chan Ho Jeong (Chung-Ang Univ.), Dong Hwan Shin (Korea Inst. of Mechanical & Materials), Vinaykumar Konduru (Michigan Technological Univ.), Chang Kyoung Choi (Michigan Technological Univ.)	TFEC9-1283: X-ray Visualization of Water Adsorption and Desorption in Silica Gel, Suguru Uemura (Tokyo Inst. of Technology), Keisuke Yasuda (Tokyo Inst. of Technology), Mutsuhiro Ito (Fuji Silysia Chemical Ltd.), Shuichiro Hirai (Tokyo Inst. of Technology)	TFEC9-1684: Experimental and Numerical Study of Effects of the Presence of Red Blood Cells on Platelet Adhesion Under Blood Flow Condition, Kazuya Shimizu (The Univ. of Tokyo), Noriko Tamura (Tokai Univ.), Kazuyasu Sugiyama (Osaka Univ.), Shu Takagi (The Univ. of Tokyo), Shinya Goto (Tokai Univ.)
Room B2 F04. Computational and Experimental Multiphase Flow Research 5 Chairperson: Ichiro Kumagai (Meisei University)	TFEC9-1272: Improvement of the Separation Efficiency of the FWKO Vessel Using Multi-Cyclone Inlet Device, Ji Yun Kang (Sungkyunkwan Univ.), Chang Ki Hong (Sungkyunkwan Univ.), In Ju Hwang (Korea Inst. of Civil Engineering and Building Technology), Youn Jea Kim (Sungkyunkwan Univ.)	TFEC9-1451: Behavior of Bubbles Sliding Along Horizontal Flat Plates with Different Surface Wettability, Yosuke Yamada (Kyoto Inst. of Technology), Shusaku Kawakami (Kyoto Inst. of Technology), Atsuhide Kitagawa (Kyoto Inst. of Technology), Yuichi Murai (Hokkaido Univ.)	TFEC9-1320: Development of an Ultrasonic Technique for Measuring Phase Velocities in Liquid-Metal Two-Phase Flow, Ei Muramatsu (Kobe Univ.), Hideki Murakawa (Kobe Univ.), Hitoshi Asano (Kobe Univ.), Sven Eckert (Helmholtz-Zentrum Dresden-Rossendorf)

Monday, October 30, 2017

12:10	12:25		
TFEC9-1171: Design of Fuel Assembly Simulators for Reactor Flow Distribution Test Facility for Prototype Gen-IV Sodium Cooled Fast Reactor, Woo Shik Kim (KAERI), Seung Hyun Hong (KAERI), Hyo Sung Seol (KAERI), Jung Un Kim (KAERI), Hae Seub Choi (KAERI), In-Chul Chu (KAERI), Seok-Kyu Chang (KAERI), Dong-Jin Euh (KAERI)			Room A1 <i>TF01. Optimal Design/Control of Thermal Systems and Fluid Flows 9</i>
TFEC9-1062: Heat Flux Vector Measurement of Engine Inner Wall with MEMS Sensor, Osamu Nakabeppu (Meiji Univ.), Kazuhito Dejima (Meiji Univ.), Yuto Nakamura (Meiji Univ.), Tomohiro Tsuchiya (Meiji Univ.)	TFEC9-1343: Wall Heat Flux Measurement in Internal Combustion Engines with MEMS Sensor (Measurement of Diesel Spray Combustion and Effect of Oil Coats), Kazuhito Dejima (Meiji Univ.), Osamu Nakabeppu (Meiji Univ.), Takahiro Senshu (Meiji Univ.), Yuto Nakamura (Meiji Univ.), Tomohiro Tsuchiya (Meiji Univ.), Hayao Kimura (Meiji Univ.), Tetsuya Aizawa (Meiji Univ.)		Room A2 <i>T06. Combustion Research for industrial applications 3</i>
TFEC9-1431: Wavelength-Selective Absorber and Emitter Based on a Magnetic Polariton, Atsushi Sakurai (Niigata Univ.), Yuki Matsuno (Niigata Univ.)			Room B1a <i>T16. Thermal Radiation 2</i>
TFEC9-1242: Advanced Impingement/Effusion Cooling with Guide-Pin Structures for Combustor Liner, Seon Ho Kim (Yonsei Univ.), Minho Bang (Yonsei Univ.), JeongJu Kim (Yonsei Univ.), Hyung Hee Cho (Yonsei Univ.), Sangjae Kim (Yonsei Univ.)			Room B1b <i>F02. Advances in Thermo-Fluids Technology in Automobiles and Industrial Machinery 2</i>
TFEC9-1476: Development of Precise Blood Perfusion Sensor Using Confocal LDF with Optical Tracking, Masaaki Hashimoto (Keio Univ.), Yoshihiro Taguchi (Keio Univ.)	TFEC9-1665: Enhanced Mechanical Stability by Using Groove Type Electrode in Thermoelectric Module, Kyo Min Kim (Yonsei Univ.), Hoon Kim (Yonsei Univ.), Woo Chul Kim (Yonsei Univ.)		Room B1c <i>T11. Multidisciplinary Approach in Thermal and Fluids Engineering by Leading-edge Measurement Technique 2</i>
TFEC9-1066: Thermal and Mechanical Coupling of Convection Driven in Three-Layer Density Stratification, Shu Satoh (Hokkaido Univ.), Hyun Jin Park (Hokkaido Univ.), Yuji Tasaka (Hokkaido Univ.), Yuichi Murai (Hokkaido Univ.)	TFEC9-1391: On the Topological Effect of Dispersed Phase Interface on the Modification of Skin Frictional Drag, Tomoaki Watamura (Osaka Univ.), Kazuyasu Sugiyama (Osaka Univ.), Yutaka Hirayama (Osaka Univ.)		Room B2 <i>F04. Computational and Experimental Multiphase Flow Research 5</i>

Monday, October 30, 2017

Session	11:25	11:40	11:55
Room B3 T13. Plasma Processing 2 Chairperson: Sooseok Choi (Jeju National University)	TFEC9-1356: Synthesis of Spinel Li-Mn-Fe Oxide Nanoparticles by Induction Thermal Plasmas, Shuhei Yoshida (Kyushu Univ.), Takuya Kageyama (Kyushu Univ.), Hiroataka Sone (Kyushu Univ.), Manabu Tanaka (Kyushu Univ.), Takayuki Watanabe (Kyushu Univ.)	TFEC9-1196: RF Thermal Plasma Synthesis of Metal Boride Nanoparticles for Nuclear Radiation Shielding, Jeong Hwan Oh (Jeju National Univ.), Moon Kyoung Kang (Jeju National Univ.), Sooseok Choi (Jeju National Univ.)	TFEC9-1063: Controlled Phonon Transport by Silicon Nanocrystals and Polystyrene Hybrid Thin Films, Firman B Juangsa, (Tokyo Inst. of Technology), Yoshiki Muroya (Tokyo Inst. of Technology), Yuma Tanabe (Tokyo Inst. of Technology), Tomohiro Nozaki (Tokyo Inst. of Technology)
Room B4 F11. Non-Newtonian Fluid Mechanics 2 Chairperson: Ruri Hidema (Kobe University)	TFEC9-1069: Evaluation of Planar Elongation Viscosity Using Disk Shaped Bob, Yukinobu Sugihara (Nagaoka Univ. of Technology), Tsutomu Takahashi (Nagaoka Univ. of Technology)	TFEC9-1490: Observation of Shear-Thinning Droplet Impact Simulating Marine Paint Coating Process, Shuhei Fujimoto (National Maritime Research Inst.)	TFEC9-1562: A Study on Yield Behavior of Clay Dispersing Colloidal Gels, Ippei Homma (Nagaoka Univ. of Technology), Tsutomu Takahashi (Nagaoka Univ. of Technology), Atsushi Sogabe (Shiseido Global Innobation Center)
Room B5 T18. General Session (Thermal Engineering) 4 Chairperson: Takashi Tokumasu (Tohoku University)	TFEC9-1381: High Sensitive MEMS Thermopile Sensor for Biocalorimetry, Akane Katayama (Meiji Univ.), Osamu Nakabeppu (Meiji Univ.)	TFEC9-1088: Study on the Optimal Equipment Capacity and Operation Method of an Independent Microgrid with the Interconnection of Photovoltaics and a SOFC Triple Combined Cycle, Wataru Miyazaki (Kitami Inst. of Technology), Shin'ya Obara (Kitami Inst. of Technology)	TFEC9-1638: Development of a Thermal Storage Type Hybrid Heat Pump System, Youn Cheol Park (Jeju National Univ.), Kihyun Jo (Jeju National Univ.), Jong-Phil Won (Korea Automotive Technology Inst.), Hoseong Lee (Korea Automotive Technology Inst.), Taek_Kyu Lim (Korea Automotive Technology Inst.)
Room B6 F06. Fluid Machinery for Renewable Energy 2 Chairperson: M. M. Ashraful ALAM (National Institute of Technology, Matsue College)	TFEC9-1123: Measurement of Velocity Field around Rotor Blade of Horizontal Axis Wind Turbine by Laser Doppler Velocimetry, Shumpei Ito (Mie Univ.), Yasunari Kamada (Mie Univ.), Takao Maeda (Mie Univ.)	TFEC9-1421: Enhancement of Efficiency of a New Horizontal Type Turbine Driven by Longitudinal Vortex, Kasumi Sakamoto (Nagaoka Univ. of Technology), Withun Hemuswan (Nagaoka Univ. of Technology), Tsutomu Takahashi (Nagaoka Univ. of Technology)	TFEC9-1122: Load Control Acting on Rotor Blades of Two-bladed Horizontal Axis Wind Turbine using Cyclic Pitch Change, Kensei Shimamoto (Mie Univ.), Yasunari Kamada (Mie Univ.), Takao Maeda (Mie Univ.), Yuta Okumura (Mie Univ.)
Room B7 F13. General Session (Fluids Engineering) 7 Chairperson: Katsuya Hirata (Doshisha University) Tentative	TFEC9-1512: Measurement of Vortical Structures and Surface Pressures Effect on Airfoil Tip Flow Noise, Yasumasa Suzuki (Nihon Univ.), Chisachi Kato (The Univ. of Tokyo)	TFEC9-1061: Field Observation and Flow Analysis of a Rotating Pipe in Flight, Kouhei Miyahara (Doshisha Univ.), Tatsuya Inoue (Doshisha Univ.), Hirochika Tanigawa (Maizuru National Collage of Technology), Masami Nakano (Tohoku Univ.), Katsuya Hirata (Doshisha Univ.)	TFEC9-1074: Effects of Propeller Slipstream on Wing with Aileron at Low Reynolds Number, Kakeru Kurane (Tohoku Univ.), Kenta Uechi (Tohoku Univ.), Koichi Takahashi (Tohoku Univ.), Hiroki Nagai (Tohoku Universty)

Monday, October 30, 2017

12:10	12:25		
TFEC9-1449: Reaction Mechanism of Ammonia Decomposition by Atmospheric Plasma, Yukino Goto (Gifu Univ.), Yukio Hayakawa (Gifu Univ.), Shinji Kambara (Gifu Univ.)	TFEC9-1498: Hydrogen Production Characteristics from Ammonia by Plasma Membrane Reactor, Yukio Hayakawa (Gifu Univ.), Shinji Kambara (Gifu Univ.), Tomonori Miura (SAWAFUJI ELECTRIC CO., LTD.)		Room B3 T13. Plasma Processing 2
TFEC9-1566: Mixing Performance of Large Paddle Impellers in Shear-Thinning Fluid, Haruki Furukawa (Nagoya Inst. of Technology), Norihisa Nakamura (Nagoya Inst. of Technology), Yoshihito Kato (Nagoya Inst. of Technology)	TFEC9-1417: A Study on Influence of Cell Surface Roughness Yield Stress in α gels, Yasunori Sato (Nagaoka Univ. of Technology), Ippei Homma (Nagaoka Univ. of Technology), Tsutomu Takahashi (Nagaoka Univ. of Technology)		Room B4 F11. Non-Newtonian Fluid Mechanics 2
TFEC9-1617: MEMS Gas Sensor Using Parylene E and High-Aspect-Ratio Electrode Structure for High-Sensitivity VOC Detection, Cheng-Han Yeh (Univ. of Tokyo), Yuji Suzuki (Univ. of Tokyo), Kenichi Morimoto (Univ. of Tokyo)	/		Room B5 T18. General Session (Thermal Engineering) 4
TFEC9-1125: Load Control of Wind Turbine Supported by Inflow Measurement, Kota Morimoto (Mie Univ.), Yasunari Kamada (Mie Univ.), Takao Maeda (Mie Univ.), Yuki Sakurai (Mie Univ.)	TFEC9-1102: An Investigated on the CO2 Flow in the Thermally Driven Pump of Supercritical CO2 Solar Rankine Cycle System, Chayadit Pumaneratkul (Doshisha Univ.), Takashi Horino (Doshisha Univ.), Haruhiko Yamasaki (Doshisha Univ.), Hiroshi Yamaguchi (Doshisha Univ.)		Room B6 F06. Fluid Machinery for Renewable Energy 2
TFEC9-1080: Numerical Simulation of the Flow around a Delta Wing with Combination of Leading Edge Flaps, Tadateru Ishide (National Institute of Technology, Kisarazu College), Mao Itazawa (National Institute of Technology, Kisarazu College), Kodai Nakano (National Institute of Technology, Kisarazu College)	TFEC9-1085: Design and Evaluation of Rotor Blades Using Optimized Airfoil, Kensuke Kanou (Tohoku Univ.), Takashi Misaka (Tohoku Univ.), Hiroki Nagai (Tohoku Univ.), Yoshikatu Nakano (Tohoku Univ.), Shigeru Obayashi (Tohoku Univ.), Misturu Ishikawa (Ishikawa Energy Research Co. Ltd), Hidetaka Kayanuma (Ishikawa Energy Research Co. ,Ltd.)		Room B7 F13. General Session (Fluids Engineering) 7

Monday, October 30, 2017

Session	14:10	14:25	14:40
Room A1 TF02. Turbulent Mixing and Diffusion 1 Chairpersons: Masayasu Shimura (Tokyo Univ. of Technology), Jung-il Choi (Yonsei Univ.)	TFEC9-1064: Observations on Atomization of A Pulsating Liquid Jet in A Crossflow, Naohisa Takagaki (Univ. of Hyogo), Masahiro Adachi (Univ. of Hyogo), Ryoichi Kurose (Kyoto Univ.), Naoya Suzuki (kindai Univ.), Takenobu Michioka (kindai Univ.), Satoru Komori (Doshisha Univ.), Hiroshige Kumamaru (Univ. of Hyogo)	TFEC9-1505: Development of Water Treatment Reactors using TiO₂-Coated Fluoropolymer Beads, Arata Myoga (Tokyo Univ. Sci.), Ryutaro Iwashita (Tokyo Univ. Sci.), Masataka Kuniyasu (Tokyo Univ. Sci.), Noriyuki Unno (Tokyo Univ. Sci., Yamaguchi), Shin-ichi Satake (Tokyo Univ. Sci.), Kazuhisa Yuki (Tokyo Univ. Sci., Yamaguchi), Yohji Seki (Nat. Inst. Quantum and Radiological Sci. Tech.), Jun Taniguchi (Tokyo Univ. Sci.)	TFEC9-1595: Numerical Study of Chemotactic Bio-Convection, Soomin Chun (Yonsei Univ.), Xiaomin Pan (Yonsei Univ.), Jung-Il Choi (Yonsei Univ.)
Room A2 T07. External Heat Engines & Waste Heat Recovery 1 Chairperson: Haramura Yoshihiko (Kanagawa University)	TFEC9-1401: Cycle Analyses of Trilateral and Partial Evaporation Steam Cycles for Exergy Recovery From Low Temperature Waste Heat, Naoki Shikazono (The Univ. of Tokyo), Toshihiko Fukushima (The Univ. of Tokyo), Hirokatsu Kosokabe (The Univ. of Tokyo), Isao Hayase (The Univ. of Tokyo)	TFEC9-1087: The Subcooled Liquid Flash Boiling Cycle: Theory and in Practice, Dhaminda Nadeesha Hewavitarane (The Univ. of Kitakyushu), Sadami Yoshiyama (The Univ. of Kitakyushu)	TFEC9-1570: Investigation of optimal working fluid for low-temperature driven organic Rankine cycles, Dai Yamane (Kyushu Univ.), Takahiko Miyazaki (Kyushu Univ.), Shigeru Koyama (Kyushu Univ.), Norito Uchiyama (TAKUMA Co. Ltd.), Yasuyuki Fujita (TAKUMA Co., Ltd.), Hiroataka Dohi (TAKUMA Co., Ltd.)
Room B1a T16. Thermal Radiation 3 Chairperson: Bong Jae Lee (KAIST)	TFEC9-1217: Near-Field Thermal Radiation between Hyperbolic Metamaterials, Jaeman Song (KAIST), Mikyung Lim (KAIST), Seung S. Lee (KAIST), Bong Jae Lee (KAIST)	TFEC9-1434: Application of a Wavelength-Selective Infrared Emitter with Metamaterials for Drying Furnaces, Tsuyoshi Totani (Hokkaido Univ.), Atsushi Sakurai (Niigata Univ.), Thang Duy Dao (Nat. for Materials Science), Takahiro Yokoyama (Nat. Inst. for Materials Science), Tadaaki Nagao (Nat. Inst. for Materials Science), Yoshio Kondo (NGK INSULATORS, LTD.)	TFEC9-1474: A Feasibility Study of Thermophotovoltaic Generation System Using Near-Field Radiation, Naphatsorn Vongsoasup (Tokyo Inst. of Technology), Wataru Sugimoto (Tokyo Inst. of Technology), Kazuma Isoe (Tokyo Inst. of Technology), Katsunori Hanamura (Tokyo Inst. of Technology)
Room B1b F02. Advances in Thermo-Fluids Technology in Automobiles and Industrial Machinery 3 Chairperson: Makoto Tsubokura (Kobe University)	TFEC9-1186: Numerical Simulation of Solidification Phenomena of Molten Droplet at Different Impact Angles to Substrate, Shinichiro Kondo (Tokyo Univ. of Science), Hiroya Mamori (Tokyo Univ. of Science), Naoya Fukushima (Tokyo Univ. of Science), Makoto Yamamoto (Tokyo Univ. of Science)	TFEC9-1572: Effect of Initial Melting Ratio on Ice Crystal Icing Simulation of 2D Compressor Stator Blade, Mikiko Iwago (Tokyo Univ. of Science), Hiroya Mamori (Tokyo Univ. of Science), Naoya Fukushima (Tokyo Univ. of Science), Makoto Yamamoto (Tokyo Univ. of Science)	TFEC9-1248: Characteristic of Heat Transfer on Double Shell and Tube Heat Exchanger with PCM by Using Waste Heat, Geun Myeon Jeong (Chonbuk Nat. Univ.), Donghyun Kim (Chonbuk Nat. Univ.), Dong Gyu Lee (Korea Inst. Ind. Tech.), Dong Yeol Chung (Korea Inst. Ind. Tech.), Jong Hyeon Peck (Korea Inst. Ind. Tech.), Chaedong Kang (Chonbuk Nat. Univ.)
Room B1c T11. Multidisciplinary Approach in Thermal and Fluids Engineering by Leading-edge Measurement Technique 3 Chairperson: Gota Kikugawa (Tohoku University)	TFEC9-1420: Fluid Viscosity Measurement in Microchannels Using Fluorescence Polarization Imaging, Reiko Kuriyama (Kyoto Univ.), Tomotaka Nakagawa (Kyoto Univ.), Kazuya Tatsumi (Kyoto Univ.), Kazuyoshi Nakabe (Kyoto Univ.)	TFEC9-1026: Optical Temperature Measurement by Using Thermographic Phosphors, Naohiro Ishiwada (Keio Univ.), Eri Fujii (Keio Univ.), Takeshi Yokomori (Keio Univ.)	TFEC9-1633: Concentration and Zeta-potential Measurements for Gold Nanoparticles Using Built-in Device for Evanescent Wave Illumination, Takahiro Miyajima (Keio Univ.), Shohei Watanabe (Keio Univ.), Yohei Sato (Keio Univ.)
Room B2 F04. Computational and Experimental Multiphase Flow Research 6 Chairperson: Tomoaki Watamura (Osaka University)	TFEC9-1628: Development of Flow Indexes Based on an Eulerian Multiphase Model, Youngmoon Cho (Sogang Univ.), Seongwon Kang (Sogang Univ.)	TFEC9-1282: Calculation of Powder Velocity Distribution by Using Dual Plane Electrical Capacitance Tomography, Hiroyuki Oshima (Chiba Univ.), Hamzah Ahmad Azahari (Chiba Univ.), Yusuke Hirose (Chiba Univ.), Masahiro Takei (Chiba Univ.)	TFEC9-1143: Experiment and High-Speed Computation on Added-Mass and Viscous-Damping Force Acting on Various Oscillating 3D Objects, Yusuke Yamaoka (Doshisha Univ.), Masaya Nitta (Doshisha Univ.), Hideki Shimohara (Doshisha International High School), Tsuyoshi Maeda (Doshisha Univ.), Hirochika Tanigawa (NIT, Maizuru Colledge), Katsuya Hirata (Doshisha Univ.)

14:55	15:10	15:25	
TFEC9-1223: Mass Transport Mechanism in a Spatially Developing Free Shear Mixing Layer, Kotaro Takamura (Nagoya Univ.), Yasumasa Ito (Nagoya Univ.), Yasuhiko Sakai (Nagoya Univ.), Koji Iwano (Nagoya Univ.), Toshiyuki Hayase (Tohoku Univ.)	TFEC9-1144: Spectrum Analysis on Turbulent Diffusion Processes of Ethylene in a Wake Flow of a Two-Dimensional Hill Model, Tomoya Houra (Nagoya Inst. of Technology), Masato Tagawa (Nagoya Inst. of Technology)	TFEC9-1534: Numerical Study on the Effect of Different Initial Concentrations on a Turbulent Planer Jet with Chemical Reaction, Soma Nagaya (Nagoya Univ.), Koji Iwano (Nagoya Univ.), Yasuhiko Sakai (Nagoya Univ.), Yasumasa Ito (Nagoya Univ.)	Room A1 <i>TF02. Turbulent Mixing and Diffusion 1</i>
TFEC9-1441: Design of Dynamic Model and Model-based Controller for a Steam Generation Plant with Waste Incinerator, Jaeyoung Cho (Seoul National Univ.), Yongtae Kim (Seoul National Univ.), Jeongwoo Song (Seoul National Univ.), Tae Kyung Lee (Seoul National Univ.), Han Ho Song (Seoul National Univ.)	TFEC9-1527: Numerical Calculation of a Quarter-Wavelength Mode Thermoacoustic Engine with a Variable Acoustic Load in a Looped Tube, Mariko Senga (Tokai Univ.), Shinya Hasegawa (Tokai Univ.)	/	Room A2 <i>T07. External Heat Engines & Waste Heat Recovery 1</i>
/	/	/	Room B1a <i>T16. Thermal Radiation 3</i>
TFEC9-1578: Bubble Behavior Driven by a Rotating Gear in a Highly Viscous Fluid, Yudai Nakamura (Univ. of Tsukuba), Tomohisa Yuasa (Univ. of Tsukuba), Shimpei Saito (Univ. of Tsukuba), Naoki Horiguchi (Univ. of Tsukuba), Akiko Kaneko (Univ. of Tsukuba), Yutaka Abe (Univ. of Tsukuba)	TFEC9-1516: K-K EOS for Numerical Predictions of a Supercritical CO2 Compressor, Senthil Kumar Raman (Andong National Univ.), Heuy Dong Kim (Andong National Univ.)	/	Room B1b <i>F02. Advances in Thermo-Fluids Technology in Automobiles and Industrial Machinery 3</i>
TFEC9-1009: Laser Induced Nanoparticle Melting: Measurement and Simulation, Seung Hwan Ko (Seoul National Univ.)	TFEC9-1610: Imaging of Evaporation-Induced Particle Patterning Process by Infrared Microscopy, Takahiro Suzuki (Osaka Univ.), Tomoya Watanabe (Osaka Univ.), Shohji Tsushima (Osaka Univ.)	/	Room B1c <i>T11. Multidisciplinary Approach in Thermal and Fluids Engineering by Leading-edge Measurement Technique 3</i>
TFEC9-1266: Dispersion Evaluation of Carbon Black in slurry by EIS Measurement, Yusei Kishikawa (Chiba Univ.), Zhilong Wang (Chiba Univ.), Tong Zhao (Chiba Univ.), Masahiro TAKEI (Chiba Univ.)	TFEC9-1295: Development of Gas-Solid Two Phase Flow Washing Technology with Ice Formation in a Venturi Tube, Takaya Yokoyama (Tsukuba Univ.), Yuzo Inoue (Tsukuba Univ.), Akiko Kaneko (Tsukuba Univ.), Yutaka Abe (Tsukuba Univ.)	TFEC9-1292: Agitation Effects on Electrochemical Characterizations of Lithium-Ion Battery (LIB) Slurry by Electrochemical Impedance Spectroscopy (EIS) Method, Zhilong Wang (Chiba Univ.), Tong Zhao (Xi'an Univ. of Technology & Chiba Univ.), Yusei Kishikawa (Chiba Univ.), Masahiro Takei (Chiba Univ.)	Room B2 <i>F04. Computational and Experimental Multiphase Flow Research 6</i>

Monday, October 30, 2017

Session	14:10	14:25	14:40
Room B3 (Reserved for JSME-TED Committee Meeting)			
Room B4 F11. Non-Newtonian Fluid Mechanics 3 Chairperson: Shuichi Iwata (Nagoya Institute of Technology)		TFEC9-1332: Computational Model for Microorganism Suspensions Based on Multi-Particle Collision Dynamics, Takehiro Yamamoto (Osaka Electro-Communication Univ.), Kunpei Isami (Osaka Univ.)	TFEC9-1077: Effect of Viscoelastic Mach Numbers on Propulsive Forces of a Model Helical Flagellum in a Viscoelastic Fluid, Kazuya Tajima (Chiba Univ.), Fumihiko Mikami (Chiba Univ.)
Room B5 T18. General Session (Thermal Engineering) 5 Chairperson: Takashi Tokumasu (Tohoku University)	TFEC9-1340: Effect of Thermal Treatment on Hard-templated Mesoporous Photocatalysts for CO₂ Conversion, Han Sol Jung (Korea Univ.), Jin Whan Joo (Korea Univ.), Jungjoon Park (Korea Univ.), Kwang Yeol Lee (Korea Univ.), Yong Tae Kang (Korea Univ.)	TFEC9-1484: Effects of the Type of TLCs for Measureable Temperature Range of Temperature Distribution Measurement Method Using Ratio of Scattered Light Intensities, Koji Toriyama (Univ. of Yamanashi), Shigeru Tada (National Defense Academy), Koichi Ichimiya (Univ. of Yamanashi), Shumpei Funatani (Univ. of Yamanashi), Keisuke Asano (Univ. of Yamanashi)	TFEC9-1043: In-Tube Heat Transfer Coefficient and Pressure Drop for CO with Impurities Under Pipeline Transportation Conditions, Wonjun Lee (Hanbat National Univ.), Wonkeun Baik (Hanbat National Univ.), Rin Yun (Hanbat National Univ.)
Room B6 F08. High-Speed flow 1 Chairperson: Toshiharu Mizukaki (Tokai University)	TFEC9-1040: Spectroscopic Temperature Measurement for the Modeling of the DC Discharged Field, Kenji Okada (Graduate school, Meijo Univ.), Shinji Koizumi (DENSO TECHNO CO., LTD.), Atsushi Matsuda (Meijo Univ.), Takuhiro Kito (Meijo Univ.), Kohei Suwata (Meijo Univ.)	TFEC9-1132: Temperature Measurement Technique by Using the Correlation Between the Shock Wave Velocity and the Temperature, Takuhiro Kito (Meijo Univ.), Hideto Owaki (Meijo Univ.), Kenji Okada (Meijo Univ.), Atsushi Matsuda (Meijo Univ.)	TFEC9-1629: Quantitative Image Measurement for Lateral Jet / Cross Flow Interaction Field by Colored-Grid Background Oriented Schlieren (CGBOS) Technique, Ken Kurihara (Chiba Univ.), Kiichi Shida (Chiba Univ.), Kazuki Ishikawa (Chiba Univ.), Shinsuke Udagawa (Tokyo Metropolitan College of Aeronautical Engineering), Tatsuro Inage (Salesian Polytechnic), Masanori Ota (Chiba Univ.), Kazuo Maeno (National Inst. of Technology, Kisarazu College)
Room B7			

Monday, October 30, 2017

14:55	15:10	15:25	
			Room B3 (Reserved for JSME-TED Committee Meeting)
TFEC9-1198: Flow Behavior of Viscoelastic Fluid in Sudden Expansion and Sudden Contraction Channel, Takuya Tazawa (Doshisha Univ.), Haruhiko Yamasaki (Doshisha Univ.), Hiroshi Yamaguchi (Doshisha Univ.)	TFEC9-1558: Flow Characteristics of Viscoelastic Fluids with Abrupt Contraction Channels, Ruri Hidema (Kobe Univ.), Yuki Tanino (Kobe Univ.), Hiroshi Suzuki (Kobe Univ.), Yoshiyuki Komoda (Kobe Univ.), Kosuke Suzuki (Kobe Univ.)	TFEC9-1487: Flow Resistance in Axial Annular Flow of Concentrated Particle Suspensions, Takashi Koshiba (National Inst. of Technology, Nara College), Takehiro Yamamoto (Osaka Electro-Communication Univ.)	Room B4 F11. Non-Newtonian Fluid Mechanics 3
TFEC9-1466: Dynamic Response of Carbon Nanotube Film Gas Sensor, Yoshihiro Tomita (Hiroshima Univ.), Shuehi Inoue (Hiroshima Univ.), Yukihiro Matsumura (Hiroshima Univ.)	TFEC9-1609: Reconstruction of Temperature Distribution in Multiple Tissues by Ultrasonic CT using POCS Method, Tohru Yamashita (National Inst. of Technology, Kumamoto College), Kaoru Furushima (National Inst. of Technology, Kumamoto College)		Room B5 T18. General Session (Thermal Engineering) 5
TFEC9-1666: Experimental Study for Visualization of Supersonic Flow Using Acetone LIF Method, Kazuki Ishikawa (Chiba Univ.), Masanori Ota (Chiba Univ.), Kazuo Maeno (Kisarazu National College of Technology)	TFEC9-1399: Prediction of Electromagnetic Waves Around an Inflatable Reentry Vehicle in an Atmospheric Reentry Mission, Naoya Enoki (Hokkaido Univ.), Manabu Matsunaga (Hokkaido Univ.), Yusuke Takahashi (Hokkaido Univ.), Hiroshi Terashima (Hokkaido Univ.), Nobuyuki Oshima (Hokkaido Univ.), kazuhiko Yamada (JAXA), Kojiro Suzuki (Tokyo Univ.)	TFEC9-1650: An Improved Supersonic Combustion Analysis Procedure for Scramjets, Foluso Ladeinde (SUNY Korea), Zhipeng Lou (Stony Brook Univ.), Heuy-Dong Kim (Andong National Univ.)	Room B6 F08. High-Speed flow 1
			Room B7

Monday, October 30, 2017

Session	16:00	16:15	16:30
Room A1 TF02. Turbulent Mixing and Diffusion 2 Chairpersons: Yasumasa Ito (Nagoya University), Yasuhiko Sakai (Nagoya University)	TFEC9-1216: An Efficient Monolithic Projection Method for Rayleigh-Benard Convection, Xiaomin Pan (Yonsei Univ.), Kyoungyoun Kim (Hanbat National Univ.), Changhoon Lee (Yonsei Univ.), Jung-Il Choi (Yonsei Univ.)	TFEC9-1409: Experimental Determination of Batchelor Constant in Oscillating-Grid Turbulence, Tatsuo Ushijima (Nagoya Inst. of Technology), Takahiro Nakamoto (Kawasaki Heavy Industries, Ltd.), Yutaka Hasegawa (Nagoya Inst. of Technology)	TFEC9-1289: Simulation of a Hydrothermal Flow with a Large Temperature Difference at a Supercritical Pressure, Satoko Komurasaki (Nihon Univ.)
Room A2 T07. External Heat Engines & Waste Heat Recovery 2 Chairperson: Naoki Shikazono (The University of Tokyo)	TFEC9-1017: Experimental Study of Temperature Rise near the Floor in Lecture Room with Air-Conditioner and Fan Operation, Masako Minari (Nagoya Univ.), Takashi Watanabe (Nagoya Univ.)	TFEC9-1044: Effect of Unsteady Wake on the Film Cooling Effectiveness of Endwall Surface, Jun Su Park (Korea National Univ. of Transportation)	TFEC9-1384: Heat Transfer on the Wall of the Expansion Space in a Stirling Engine, Yoshihiko Haramura (Kanagawa Univ.), Kazuki Yabe (Kanagawa Univ.)
Room B1a T04. Biotransport and Biothermal Engineering Chairperson: Kosaku Kurata (Kyushu University)	TFEC9-1120: A Study on Damage Estimation of Plant Leaf under Low Temperature Stress, Kyohei Yamashita (Graduate Student, Kanagawa Inst. of Technology), Akira Narumi (Kanagawa Inst. of Technology), Tadashi Konishi (Oita National College of Technology)	TFEC9-1526: Numerical Investigation of Light and Pressure Propagation in Biological Tissue for Model-Based Photoacoustic Tomography, Kousuke Tabayashi (Hokkaido Univ.), Hiroyuki Fujii (Hokkaido Univ.), Kazumichi Kobayashi (Hokkaido Univ.), Masao Watanabe (Hokkaido Univ.)	TFEC9-1532: Modeling of Fermentation Heat Generated by Yeast, Machi Kanna (Hiroshima Univ.), Haruya Nakata (Hiroshima Univ.), Yukihiko Matsumura (Hiroshima Univ.)
Room B1b			
Room B1c			
Room B2			

Monday, October 30, 2017

16:45			
TFEC9-1567: Effects of Wall Heat Loss on Near Wall Flame Behaviors in a Confined Turbulent Premixed Flame, Basmil Yenerdag (Tokyo Inst. of Technology), Yuzuru Nada (Tokushima Univ.), Yuki Minamoto (Tokyo Inst. of Technology), Masayasu Shimura (Tokyo Inst. of Technology), Mamoru Tanahashi (Tokyo Inst. of Technology)			Room A1 <i>TF02. Turbulent Mixing and Diffusion 2</i>
/			Room A2 <i>T07. External Heat Engines & Waste Heat Recovery 2</i>
TFEC9-1448: Non-Contact Visualization of the Thermal Transport Properties of Biological Tissue, Taichi Sato (Kyushu Univ.), Hai Dong Wang (Kyushu Univ.), Kosaku Kurata (Kyushu Univ.), Hiroshi Takamatsu (Kyushu Univ.)			Room B1a <i>T04. Biotransport and Biothermal Engineering</i>
/			Room B1b
/			Room B1c
/			Room B2

Monday, October 30, 2017

Session	16:00	16:15	16:30
Room B3			
Room B4 F11. Non-Newtonian Fluid Mechanics 4 Chairperson: Takehiro Yamamoto (Osaka Electro-Communication University)	TFEC9-1524: Injection Characteristics of Viscoelastic Fluids from a Nozzle, Daichi Okada (Kobe Univ.), Kento Nakatani (Kobe Univ.), Ruri Hidema (Kobe Univ.), Hiroshi Suzuki (Koe Univ.), Yoshiyuki Komoda (Kobe Univ.), Kosuke Szuki (Kobe Univ.)	TFEC9-1584: Experimental Study of Physical Absorption Rate by Pressure-Oscillation, Keita Yamamoto (Nagoya Inst. of Technology), Shuichi Iwata (Nagoya Inst. of Technology), Ryo Nagumo (Nagoya Inst. of Technology), Hideki Mori (Nagoya Inst. of Technology), Tsutomu Takahashi (Nagaoka Univ. of Technology)	
Room B5 T18. General Session (Thermal Engineering) 6 Chairperson: Kaoru Maruta (Tohoku University)	TFEC9-1513: Heat Transfer Performance of Low-GWP Refrigerants in a Small-Scale Binary-Cycle System, Ryo Matsushita (The Univ. of Tokyo), Yong Fan (The Univ. of Tokyo), Kenichi Morimoto (The Univ. of Tokyo), Yuji Suzuki (The Univ. of Tokyo)	TFEC9-1202: Optimization of Flow Distribution in Header of Heat Exchangers, Nguyen Ba Chien (Chonnam National Univ.), Jong Taek Oh (Chonnam National Univ.)	TFEC9-1078: Implementation of High Order Ghost-Cell Method to the Heat Equation, Hosnieh Kor (Keio Univ.), Mehdi Badri Ghomizad (Keio Univ.), Koji Fukagata (Keio Univ.)
Room B6 F08. High-Speed flow 2 Chairperson: Masanori Ota (Chiba University)	TFEC9-1519: Study of Shock Train Oscillations in a Constant Area Internal flow, Jintu K James (Andong National Univ.), Heuy Dong Kim (Andong National Univ.)	TFEC9-1539: Aerodynamic Instability of Flare-type Membrane Inflatable Vehicle in Suborbital Reentry Demonstration, Tatsushi Ohashi (Hokkaido Univ.), Manabu Matsunaga (Hokkaido Univ.), Yusuke Takahashi (Hokkaido Univ.), Hiroshi Terashima (Hokkaido Univ.), Nobuyuki Oshima (Hokkaido Univ.)	TFEC9-1363: Characteristics of Heat Generation due to Thermoacoustic Resonance, Jong Yeol Bae (Hanbat National Univ.), Seonghyeon Seo (Hanbat National Univ.)
Room B7			

16:45			<i>Room B3</i>
			<i>Room B4</i> <i>F11. Non-Newtonian Fluid Mechanics 4</i>
			<i>Room B5</i> <i>T18. General Session (Thermal Engineering) 6</i>
			<i>Room B6</i> <i>F08. High-Speed flow 2</i>
			<i>Room B7</i>

TFEC9-1599:
Characteristics of Self-Sustained-Shock Oscillation around a Forward-Facng Concave with Spike,
 Toshiharu Mizukaki (Tokai Univ.),
 Kazuhiko Yamada (Inst. of Space and Astronautics Science, Japan Aerospace Exploration Agency)