Time Table

Day 1 (Wed., Dec. 2)

	Room A
15:00-	Registration-Desk Open
17:00 - 18:30	Welcome Reception

Day 2 (Thu., Dec. 3)

	Room A	Room B	Room C	Room D
8:00 -	Registration-Desk Open			
8:30 - 8:45	Welcome Address			
8:45 - 9:35	Plenary Lecture 1			
9:45 - 10:35	Plenary Lecture 2			
10:35 - 10:50	Coffee Break			
10:50 - 11:40	Plenary Lecture 3			
11:40 - 13:00	Lunch			
13:00 - 14:15	Boiling and Multi-Phase Flow 1	Experimental/Computational Fluid Dynamics 1	AI and Machine Learning	Combustion and Reacting Flows 1
14:25 - 15:40	Boiling and Multi-Phase Flow 2	Experimental/Computational Fluid Dynamics 2	Measurement Technique 1	Combustion and Reacting Flows 2
15:40 - 15:55	Coffee Break			
15:55 - 17:10	Boiling and Multi-Phase Flow 3	Experimental/Computational Fluid Dynamics 3	Measurement Technique 2	Combustion and Reacting Flows 3
17:20 - 18:20	Boiling and Multi-Phase Flow 4	Experimental/Computational Fluid Dynamics 4	Measurement Technique 3	Combustion and Reacting Flows 4

Day 3 (Fri. Dec. 4)

	Room A	Room B	Room C	Room D
8:00 -	Registration-Desk Open			
8:30 - 9:00	Keynote Speech 1	Keynote Speech 2	Keynote Speech 3	
9:00 - 10:15	Boiling and Multi-Phase Flow 5	Turbulence and Flow Instabilities 1	Heat and Mass Transfer, Enhancement 1	Sustainable and Renewable Energy 1
10:15 - 10:25	Coffee Break			
10:25 - 11:40	Boiling and Multi-Phase Flow 6	Turbulence and Flow Instabilities 2	Heat and Mass Transfer, Enhancement 2	Sustainable and Renewable Energy 2
11:40 - 13:00	Lunch			
13:00 - 14:15	Electronics Packaging and Thermal Management 1	Turbulence and Flow Instabilities 3	Heat and Mass Transfer, Enhancement 3	Sustainable and Renewable Energy 3
14:25 - 15:40	Electronics Packaging and Thermal Management 2	Experimental/Computational Fluid Dynamics 5	Heat and Mass Transfer, Enhancement 4	Hydrogen, Fuel Cell and Battery Technology 1
15:40 - 15:55	Coffee Break			
15:55 - 17:10	Micro- and Nano-Scale Transport 1	Experimental/Computational Fluid Dynamics 6	Heat and Mass Transfer, Enhancement 5	Hydrogen, Fuel Cell and Battery Technology 2
18:30 - 20:00	Banquet			

Day 4 (Sat., Dec. 5)

	Room A	Room B	Room C	Room D
8:00 -	Registration-Desk Open			
8:30 - 10:00	Micro- and Nano-Scale Transport 2	Experimental/Computational Fluid Dynamics 7	Heat and Mass Transfer, Enhancement 6	Radiation
10:00 - 10:20	Coffee Break			
10:20 - 11:50	Micro- and Nano-Scale Transport 3	Experimental/Computational Fluid Dynamics 8	Heat and Mass Transfer, Enhancement 7	Biomass Energy
11:50	Closing Remarks at Each Room			

Day 1 (Wed., Dec. 2)

Time	Room A
15:00-	Registration-Desk Open
17:00 - 18:30	Welcome Reception

Day 2 (Thu., Dec. 3)

Time	Room A
8:00 -	**Registration-Desk Open**
8:30 - 8:45	**Welcome Address**
8:45 - 9:35	**Plenary Lecture 1** **Chien-Yuh Yang** **National Central University, Taiwan** **"Where is the end of the road to thermal solution for electronic devices?"** Chair: Tomoyuki Hatakeyama (Toyama Prefectural University, Japan)
9:45 - 10:35	**Plenary Lecture 2** **Kyung Chun Kim** **Pusan National University, Busan, Republic of Korea** **"Momentum transport in turbulent bubbly flows: Time-resolved three-dimensional measurements"** Chair: Yasuyuki Yokono (The University of Tokyo, Japan)
10:35 - 10:50	**Coffee Break**
10:50 - 11:40	**Plenary Lecture 3** **Minami Yoda** **Michigan State University, Michigan, USA** **"The challenges of divertor cooling for magnetic fusion energy"** Chair: Kazuhisa Yuki (Tokyo University of Science-Yamaguchi, Japan)
11:40 - 13:00	**Lunch**

Time	Room			
	A	B	C	D
13:00 - 14:15	**Boiling and Multi-Phase Flow 1** Chair: Kwon-Yeong Lee (Handong Global Univ.)	**Experimental/ Computational Fluid Dynamics 1** Chair: Katsuhiro Koizumi (Nabtesco Corp.)	**AI and Machine Learning** Chair: Yu Nakamichi (Tokyo Univ. of Science-Yamaguchi)	**Combustion and Reacting Flows 1** Chair: Kenji Yoshida (Hiroshima Institute of Technology)
13:00 - 13:15	Simultaneous measurement of three-dimensional bubble morphology, surrounding velocity field, and pressure field of a wobbling bubble. Jinho Oh, Kyung Chun Kim	The effect of vane-type vortex generators on compressible backward-facing step flow. Kao-Chun Su, Ping-Han Chung, Yi-Xuan Huang, Kung-Ming Chung	Application of the physical-informed neural networks to an Initial risk assessment of Tsunami-induced oil spill. Chiharu Morimoto, Yohei Takagi	Thermal-fluid analysis of autothermal catalytic reactor for ammonia reforming. Eita Takahashi, Takaaki Nagai, Tensho Nakamura, Ryo Yoshiie, Shinji Kambara
13:15 - 13:30	Bouncing of a single bubble on inclined porous walls. Ryo Nagao, Toshiyuki Sanada	Effects of non-uniform upper wall geometry on the aerodynamics of multicopters. Keita Kanazawa, Daichi Hashiba, Koichi Nishibe	Basic framework for a deep learning-based acoustic anomaly detection method: Toward early detection of local boiling. Yoshitaka Ueki, Koya Watanabe, Yuki Honma	Pulsatile combustion phenomena in coke oven during removal of carbon deposits by air injection technique. Yi-Da Chung, Keh-Chin Chang
13:30 - 13:45	Improvement of drag reduction on air lubrication using high void fraction bubble clusters. Hyun Jin Park, Yuji Tasaka	Effects of the blade tip shape on the aerodynamic characteristics of a low-pressure axial fan. Ryuya Kobayashi, Yasumasa Suzuki, Yuya Miki, Chisachi Kato, Naoki Shikazono	Predictability identification in state estimation of turbulent channel flow from wall observations by machine learning. Fan Fei, Ming Liu, Yosuke Hasegawa	Fundamental properties of burning velocities of meso-scale spherical flame and ignition in turbulence for hydrogen mixtures near LFL. Masaya Nakahara, Yuki Matsushita, Yuji Asakawa, Ryohei Komatsu, Ryuki Eguchi, Fumiaki Abe
13:45 - 14:00	Influence of magnetic fields on pool boiling heat transfer and bubble behavior in magnetic nanofluid. Naoto Nozawa, Katsumi Sugimoto, Hitoshi Asano, Hideki Murakawa	Investigation of the characteristics of a compact giromill wind turbine using NACA airfoils. Daiki Higuchi, Kohei Koyama	Prediction of supersonic flow over three-dimensional bumps by using novel dimensional features UNet deep learning. Tzong-Shyng Leu, Bo-Yuan You	Evaluation of flame length of high-pressure hydrogen jet flames using SVD-reconstructed images. Hodaka Mizoguchi, Hayate Ueda, Koki Fukuta, Makoto Asahara, Takeshi Miyasaka, Tei Saburi
14:00 - 14:15	Effect of a surfactant on the motion of single bubbles rising in hydrophobically modified alkali-soluble associative polymer solutions. Kotaro Noguchi, Mitsuhiro Ohta, Shuichi Iwata	Experimental investigation of the effects of inflow turbulence on wingtip vortices and aerodynamic sound. Yasumasa Suzuki, Yuya Miki, Chisachi Kato	WGAN-based scalar source estimation in complex flows from limited sensor data. Linghui Yang, Yosuke Hasegawa	Effect of adhesive film process conditions on the fabrication of selective thermal emitters. Jueun Kim, Jae Hyun Lee, Jin Gu Kang, Hyeukgyu Kim, Hyung Hee Cho, Beom Seok Kim
14:25 - 15:40	**Boiling and Multi-Phase Flow 2** Chair: Hideki Murakawa (Kobe Univ.)	**Experimental/ Computational Fluid Dynamics 2** Chair: Jiri Hvozda (Brno Univ. of Technology)	**Measurement Technique 1** Chair: Hironori Saitoh (Sojo Univ.)	**Combustion and Reacting Flows 2** Chair: Chihiro Kondo (Okayama Univ. of Science)

14:25 - 14:40	Wetting dynamics of dilute PEO solution droplets impacting onto a solid substrate. Eiji Miyazawa, Koji Hasegawa	Wake oscillation characteristics of a circular cylinder with multiple tangential blowing slots. Yuya Higashi, Kotaro Sato, Koichi Nishibe	Estimation of apparent blood viscosity using optical coherence tomography angiography and machine-learning-based regression model. Shinya Oda, Yu Nakamichi	Can hydrogen stabilize a confined non-premixed ammonia/hydrogen swirl flame?. Hanyoung Kim, Sechul Oh, Kyung Chun Kim
14:40 - 14:55	Growth of two-dimensional interfacial wave immediately after the coalescence of two droplets on a vertical plat plate. Takuma Osakabe, Takahiro Ito, Yoshiyuki Tsuji	Experimental and numerical investigation of unsteady thrust generation by a free synthetic jet. Chizuru Nakadate, Akihito Kiyama, Koichi Nishibe, Kotaro Sato, Donghyuk Kang	Development of robust algorithms for accurate void fraction measurement by optical fiber probe in industrial applications. Akitsugu Yamada, Yuki Mizushima	Effect of fuel injection angle in solid fueled scramjet engine. Prathamesh Rajesh Chine, Kishore M, Ramakrishna PA, Lazar Chitilappilly
14:55 - 15:10	Filament formation during impact of polymer droplets on heated solid surface. Kosuke Tsuzuki, Koji Hasegawa	Evolution of vortex pairs in plane synthetic jets. Chihiro Nishikata, Rion Yokota, Daik Iwaya, Koichi Nishibe, Donghyuk Kang, Kotaro Sato	Development of new fiber-optic sensor for distributed local void fraction measurement. Takehiro Watanabe, Yuki Mizushima	Analytical studies on the relationship between pressure waves and ignition timing in the autoignition process of inhomogeneous premixed gas. Haruto Murakami, Kenji Yoshida
15:10 - 15:25	Numerical study of wettability effects on droplet ejection from a rotating disk. Yuji Kawaguchi, Akira Ishimaru, Tomohiro Nimura, Masakazu Muto, Takeshi Matsuda, Kensuke Shinohara, Norimasa Matsui, Shinji Tamano	Two jets with different flow characteristics flowing over the cavity. Ryuta Amemiya , Kotaro Sato	Integrated visualization of reacting-flow dynamics using multiple-ion probes, high-speed imaging, and pressure measurement. Tomoaki Yatsufusa, Soya Inoue , Kyudo Sakai	Characterization of wall temperature and flame structure in gas-fueled high-velocity flame jets. Kousuke Imori, Hayate Ueda, Makoto Asahara, Takeshi Miyasaka
15:25 - 15:40	Effect of polymer additives on droplet dynamics over a high-temperature surface. Hiroto Takaki, Hayato Masuda, HIroyuki Iyota	Jet flow direction control using a cross-flow fan. Manabu Wada, Yuya Higashi, Koichi Nishibe, Donghyuk Kang, Kotaro Sato	Experimental evaluation for shear stress fields of blood analog fluid in circular channel using flow birefringence. Ryo Umezawa, Masakazu Muto, Shinji Tamano	Effects of air-flow-rate ratio on flame structure and temperature fields in methane-air dual-swirl partially premixed flames. Masayasu Shimura, Sibo Huang, Kazuki Tanimoto, Teruki Saida, Mamoru Tanahashi
15:40 - 15:55	**Coffee Break**			
15:55 - 17:10	**Boiling and Multi-Phase Flow 3** Chair: Chao Luo (Tokyo Metropolitan Univ.)	**Experimental/ Computational Fluid Dynamics 3** Chair: Kung-Ming Chung (National Cheng Kung Univ.)	**Measurement Technique 2** Chair: Tomoaki Yatsufusa (Hiroshima Institute of Technology)	**Combustion and Reacting Flows 3** Chair: Yi-Da Chung (National Cheng Kung Univ.)
15:55 - 16:10	Evaluation of apparent dynamic contact angle in droplet impact on solid surfaces with different wettabilities considering observation scale. Tomohiro Nimura, Masakazu Muto, Takeshi Mastuda, Norimasa Matsui, Shinji Tamano	Active control of an annular jet by independently exciting the inner and outer shear layers using dielectric barrier discharge plasma actuators. Keigo Suzuki, Hiroyuki Tsunoda, Koji Toriyama, Yusaku Tsukamoto	Dynamic performance evaluation of air conditioners as a heat-transport and delay-compensation problem. Yoichi Miyaoka, Niccolo Giannetti, Chitose Tanaka, Kiyoshi Saito	Hydrogen-assisted low-temperature non-catalytic NOx reduction in pulverized coal combustion. Chiho Nomura, Tensho Nakamura, Ryo Yoshiie, Shinji Kambara
16:10 - 16:25	Evaporation-induced self-emulsification of multicomponent droplets under acoustic levitation. Takahiro Ohashi, Koji Hasegawa	A reduced-order phase change model for vapor chamber simulation. Ramin Jalali, Seyed Mohammadreza Haghighi, Chi-Chuan Wang	A study on the method for quantitative evaluation of heat transfer characteristics of the flat plate installed in a pulsating duct flow. Hironori Saitoh	Investigation of flame spread characteristics of combustible solids using OpenCV. Hirofumi Hara, Takashi Tsuruda, Tadafumi Daitoku
16:25 - 16:40	Numerical simulation of the cleaning process in food processing equipment. Yudai Tanaka, Yuta Tobari, Madoka Kon, Shinji Kono, Norihiko Watanabe	Performance characteristics of axial-flow fan with circular-hole obstacle on the exhaust-side. Yuma Osawa, Rion Yokota, Koichi Nishibe, Donghyuk Kang, Kotaro Sato	Exploration of the congruent concentration during TBAB hydrate formation based on visualization of the concentration field. Masataka Nakagawa, Tadafumi Daitoku, Takashi Tsuruda	Influence of steam generated by ammonia oxidation on ammonia cracking. Natsuki Matsumoto, Tensho Nakamura, Ryo Yoshiie, Shinji Kambara
16:40 - 16:55	Experimental study on fast-charging electric vehicle charger cable cooling using subcooled boiling of TMC-49. Jungwoo Kim, Seungwan Lee	Numerical analysis of viscoelastic effects on Taylor-Couette flow dynamics. Hayato Masuda, Tomislav Marić, Dieter Bothe	Study on simultaneous measurement method of particle size and velocity in solid-liquid two-phase flow using pulsed ultrasound. Kyota Sakamoto, Naruki Shoji, Koji Teramoto, Hideki Kawai	Thermodynamic simulation of NH3 utilization into an IGCC gasifier for methane production. Naoki Takayama, Tensho Nakamura, Ryo Yoshiie, Shinji Kambara
16:55 - 17:10	Experimental study of spacer-induced liquid film behavior in vertical annular flow. Huacheng Zhang, Yutaro Umehara, Atsuroh Etoh, Shoji Mori	Experimental and numerical investigation on flow characteristics and thermal performance of additively manufactured lattice air-cooled heat sinks. Tatsuki Saito, Takumi Kaneko, Yuto Kikuchi, Kuniharu Ushijima, Kentaro Yaji, Kazuhisa Yuki, Junji Kato	Fundamental study on temperature distribution measurement around pulse laser-induced bubbles using the laser-Induced fluorescence (LIF) technique. Kotaro Takashima, Yasuhiro Sugimoto	Impact of centerbody geometry on the combustion performance of a ramjet-assisted kinetic energy projectile. Kishore Manoharan, Prathamesh Rajesh Chine, Ramakrishna PA, Rajesh Gopalapillai
17:20 - 18:20	**Boiling and Multi-Phase Flow 4** Chair: Park Hyun Jin (Hokkaido Univ.)	**Experimental/ Computational Fluid Dynamics 4** Chair: Hiroya Mamori (The Univ. of Electro-Commun.)	**Measurement Technique 3** Chair: Yoshitaka Ueki (Tokyo Univ. of Science)	**Combustion and Reacting Flows 4** Chair: Makoto Asahara (Gifu Univ.)
17:20 - 17:35	Flow boiling heat transfer of refrigerants R-245fa and R-1233zd(E) in aluminum microchannel cold plate. Pin-Tsai Chen, Min-Chun Hsieh, Chien-Yuh Yang	Effect of relative distance on the behavior of a vortex pair near a solid wall. Chihiro Izawa, Daiki Iwaya, Donghyuk Kang, Koichi Nishibe, Kotaro Sato	Pressure-based leak position identification in a blower-driven air pipe using reduced-order modeling and machine learning. Panisara Kaewsarsaen, Yukiho Tani, Hinata Koshikawa, Takahisa Yamamoto, Yemin Oo, Tsuyoshi Yamamoto	Estimation of burning velocity in powder-gas "hybrid" combustion. Atsuto Kamiya, Yuyang Jiang, Daiki Matsugi, Yuji Nakamura
17:35 - 17:50	Role of TPMS-structured heated surfaces in bubble dynamics and flow boiling heat transfer. Chao Luo, Toshio Tagawa	Flow simulation and analysis around a baseball using CFD. Masato Tanaka, Keiko Ishii, Kazuhiro Yokota	Enhancement of chemical reactivity by ultrafine bubbles in alkaline aqueous solutions. Shinfuku Nomura, Ryoya Shiraishi, Jyunichi Nakajima, Kei Kirihara, Takayuki Nuruyu	Time constant of inexpensive two-color inorganic fluorescent particles used to determine unburned gas temperatures in engines. Yuuki Sugano, Chihiro Kondo
17:50 - 18:05	Numerical investigation of haines jump induced local viscous dissipation and its link to global dissipation in immiscible two-phase flow through porous media. Zhengyi Yuan, Shintaro Matsushita, Tetsuya Suekane	Aerodynamic significance of the spatial structure of dandelion pappus. Toshiaki Urakata, Hiroaki Hasegawa, Kenichi Nakagawa, Naoto Kato	Visualization of the spatial distribution of thermal diffusivity in Cu/Diamond composites using undersampling-applied lock-in thermography. Maki Yokoyama, Yudai Kaneko, Takuya Ishizaki, Ryohei Fujita, Housei Nagano	The effect of initial ambient conditions in a constant-volume chamber on the temperature and characteristics of the diffusion flame of a fuel film. Keiki Kubo, Daichi Iwamoto, Fujio Akagi
18:05 - 18:20	High-resolution spatiotemporal investigation of flow boiling heat transfer mechanisms in a square minichannel. Hajime Nakamura, Masaki Yoshida, Yuki Funami, Shunsuke Yamada	Self-propulsion analysis of backward locomotion in rudarius ercodes: Effects of spreading and folding of caudal fin. Keizo Kato, Hiroaki Sumikawa, Takashi Fukue, Naoya Hirata, Yoshihiro Kimori, Masafumi Kato	Development of a highly sensitive optical measurement system for single nanoparticles. Yuri Yoshida, Koki Wakita, Misa Ishimura, Masahiro Motosuke	The effect of initial ambient conditions in a constant-volume chamber on the flame characteristics of spray-injected NH3. Daichi Iwamoto, Keiki Kubo, Fujio Akagi

Day 3 (Fri., Dec. 4)

Time	Room			
	A	B	C	D
8:00 -	Registration-Desk Open			
8:30 - 9:00	**Keynote Speech 1** Noriyuki Unno, Tokyo University of Science, Japan "Toward the Control of Microbubble Emission Boiling (MEB)"	**Keynote Speech 2** Yasumasa Suzuki, Nihon University, Japan "Experimental Measurement Techniques Supporting Aeroacoustic Research: Practical Notes"	**Keynote Speech 3** Moghtada Mobedi, Shizuoka University, Japan "The Necessity of Novel Dimensionless Parameters with Artificial Intelligence for Digital Correlations"	
9:00 - 10:15	**Boiling and Multi-Phase Flow 5** Chair: Shoji Mori (Kyushu Univ.)	**Turbulence and Flow Instabilities 1** Chair: Masahiro Motosuke (Tokyo Univ. of Science)	**Heat and Mass Transfer, Enhancement 1** Chair: Yasushi Koito (Kumamoto Univ.)	**Sustainable and Renewable Energy 1** Chair: Smith Eiamsa-ard (Mahanakorn Univ. of Technology)
9:00 - 9:15	Effects of micro-channels aspect ratio in flow boiling heat transfer for R1234ze(E). Liang-Han Chien, Shen-Kai Wen, Wei-Che Hsu	Large-scale control using buoyancy forces for skin-friction drag reduction in turbulent vertical channel flow. Menglei Wang, Takahiro Hayashi, Hiroya Mamori, Takeshi Miyazaki	Optimum design of a microchannel-lid cold plate for immersion cooling applications using design of experiments and response surface methodology. Ren-Chun Chang, Wei-Lun Tsai, Chi-Hung Chuang, Dong-Han Wu, Chi-Chuan Wang	Study on performance of a binary power generation unit with a steam heat exchanger. Yu Kishikawa, Taisuke Kameishi, Soichi Sasaki
9:15 - 9:30	Experimental study of flow orientation on convective boiling heat transfer of R-1234yf. Liang-Han Chien, Hao-Li Yang, Jyun-Yan Ou	Wall-normal variations of small-scale shear layers in turbulent boundary layers. Yonggi Park, Tomoaki Watanabe, Koji Nagata	Local magnetic stimulation of natural convection in a paramagnetic fluid along a heated wall. Shiyu Inoue, Shugo Ito, Masayuki Kaneda	Study on adaptive control of a binary power generation unit by a Low-GWP refrigerant based on Bayesian optimization. Taisuke Kameishi, Yu Kishikawa, Soichi Sasaki
9:30 - 9:45	Experimental study on dynamic contact angle correlations and slug-loss critical conditions in hydrophobic mini- and microchannels via synchrotron X-ray imaging. Hyeri Lee, Dong In Yu	Interscale energy transfer analysis in compressible transitional flat-plate boundary layer flow. Takaaki Katsube, David James Lusher, Takuya Kawata	Basic study on heat transfer enhancement by intermittent impinging jet in narrow flow passage. Takashi Fukue, Shoryu Kobayashi, Daiki Kobayashi, Jumpei Hatakeyama, Hidemi Shirakawa	Study on prediction methodology of broadband noise generated from a vertical axis wind turbine based on blade element momentum theory. Soichi Sasaki, Kotaro Sakamoto, Yoshiaki Ogino
9:45 - 10:00	Three-dimensional numerical simulation of bubble dynamics and heat transfer in pool boiling under horizontal forced vibration. Shuta Hashimoto, Koichi Tsujimoto, Toshitake Ando, Mamoru Takahashi	Instantaneous and conditional evaluation of transport terms for the second invariant of the velocity-gradient tensor in vortical regions of turbulent channel flow. Shohta Hosouchi, Akihiko Mitsuishi, Hiroya Mamori, Akira Murata, Kaoru Iwamoto	Numerical investigation of axial conduction and thermal spreading in variable cross-section multi-microchannel heat sinks under high heat flux conditions. Asit Kumar Meher, Amit Agrawal, Sandip Kumar Saha	Analysis of dynamic behavior of output from thermo-electric modules for exhaust waste heat recovery in engines. Sora Takada, Chihiro Kondo, Hiroyuki Asahara
10:00 - 10:15	Boiling bubble behavior at the onset of microbubble emission boiling. Kenya Takasu, Noriyuki Unno, Kazuhisa Yuki, Shin-ichi Satake, Koichi Suzuki	Mode decomposition of transient turbulent structure in a boundary layer flow with turbulence stimulator. Youhei Takagi	Plasma-flow coupling simulation of forced convection heat transfer enhancement by periodic actuation of plasma actuator. Akinori Nishizawa, Asami Hatamoto, Shūji Ō tomo, Hiroyuki Nishida	Mechanical buckling-induced 3D droplet electricity multigenerators. Dongik Kam, Hyeonyeong Choi, Girak Gwon, Sunmin Jang, Soban Ali Shah, Donghyeon Yoo, Dongwhi Choi
10:15 - 10:25	Coffee Break			
10:25 - 11:40	**Boiling and Multi-Phase Flow 6** Chair: Hajime Nakamura (National Defense Academy of Japan)	**Turbulence and Flow Instabilities 2** Chair: Youhei Takagi (Yokohama National Univ.)	**Heat and Mass Transfer, Enhancement 2** Chair: Erik Bartuli (Brno Univ. of Technology)	**Sustainable and Renewable Energy 2** Chair: Donghyeon Yoo (Kyushu Univ.)
10:25 - 10:40	Analysis of boiling heat transfer characterisistic on pin-fin for two-phase immersion cooling. Yong-Hyeon Kim, Jaehyeong Kim, Sang Bin Han, Hyung Hee Cho	Numerical study of a flow control method using side fins for meandering turbulence developing in an underbody gap. Haruki Terada, Takumi Abe, Hiroya Mamori, Menglei Wang, Takeshi Miyazaki	Multiscale topology optimization of heat sinks under transient thermal loads. Yuto Kikuchi, Kentaro Yaji, Kikuo Fujita	Microgap dielectric barrier discharge plasma reactor employing an electrodeposited catalyst for CO2 decomposition. Tensho Nakamura, Ryo Yoshii , Shinji Kambara
10:40 - 10:55	Effect of filling ratio on the frozen startup of a horizontal water-charged thermosyphon and comparison with a water-methanol mixture. Seyed Mohammadreza Haghighi, Ramin Jalali, Tzu-Hui Yu, Jong-Shinn Wu, Ho-Chun Yang, Chi-Chuan Wang	Effect of traveling wave-like heating and cooling on friction drag reduction in turbulent pipe flow. Yu Mizushima, Shuichi Tamura, Hiroya Mamori, Menglei Wang, Takeshi Miyazaki	Adjoint-based shape optimization for dissimilar heat transfer enhancement in turbulent heat transfer over square ribs. Ming Liu, Yosuke Hasegawa	Effect of honeycomb geometry and pore structure on ammonia adsorption performance. Hirokazu Igarashi, Ryoken Saiki, Kotaro Aoki, Masahiro Sakamoto, Tensho Nakamura, Ryo Yoshiie, Shinji Kambara
10:55 - 11:10	Pore size and pool depth effects on pool boiling of R-1233zd(E) on additively manufactured gyroid surfaces. Mohsen Khandan Bakavoli, Yi-Chia Hsu, Shu-Wei Wu, Chi-Chuan Wang	Interscale energy transfers and turbulent diffusions in a two-dimensional jet. Yukito Mori, Hiroya Mamori, Takuya Kawata	Investigation of heat transfer enhancement in a heat exchanger tube fitted with helically twisted tapes. Smith Eiamsa-ard, Narong Na Puengbun, Pichit Kaewkosum, Paphop Ruenroeng, Khwanchit Woncharee, Chinaruk Thainpong	Effects of structure and composition on trace ammonia adsorption. Ryoken Saiki, Hirokazu Igarashi, Tensho Nakamura, Ryo Yoshiie, Shinji Kambara
11:10 - 11:25	Surrounding liquid motion and near-wall liquid-vapor distribution in microbubble emission boiling. Chikaze Yasuda, Hirotoshi Machigaki, Akira Otake, Gyandeep, Bhagavatula Dinesh, Hiroto Sakashita, Ichiro Ueno	Numerical analysis of diffusion inhibition control of a coaxial jet with pulsation. Shoma Watanabe, Fujio Akagi	Investigation of thermal performance in a heat exchanger tube with multiple-wings twisted tapes. Prachaya Samruaisin, Sarach Chaiyasat, Monsak Pimsarn, Smith Eiamsa-ard	A study on improving the heating performance of an R744 heat pump for electric vehicle. Sehoon Kim, Seungyeon Lee, Jaegyun Jang, Manhee Park, Hoyoung Jeong, Min Soo Kim
11:25 - 11:40	Structured illumination visualizations of pool boiling. Issa Azab, Andrew Yee, Minami Yoda	Numerical analysis of internal flow in a fan under inflow vortex conditions. Shunya Uda, Yasumasa Suzuki, Yuya Miki, Chisachi Kato	Heat transfer enhancement in a tube installed with V-shaped alternate axis twisted baffle. Prasan Sathitruangsak, Parinya Na Chiangmai, Varesa Chuwattanakul, Smith Eiamsa-ard	Enhanced flow-induced vibration energy harvesting using an optimized asymmetric tandem bluff body. Amirreza Shahsavari, Aref Afsharfard, Kyung Chun Kim

11:40 - 13:00	Lunch			
13:00 - 14:15	**Electronics Packaging and Thermal Management 1** Chair: Hsin-Yi Shih (Chang Gung Univ.)	**Turbulence and Flow Instabilities 3** Chair: Menglei Wang (The Univ. of Electro-Commun.)	**Heat and Mass Transfer, Enhancement 3** Chair: Manabu Tanaka (The Univ. of Osaka)	**Sustainable and Renewable Energy 3** Chair: Prachaya Samruaisin (Mahanakorn Univ. of Technology)
13:00 - 13:15	Surrogate-based optimization of Z-type manifold microchannel heat sinks using an artificial neural network (ANN) for high heat flux electronics. Seungjoo Ahn	POD analysis of wake structures behind a finite wall-mounted square cylinder in turbulent boundary layer of viscoelastic fluids. Ryuga Sumi, Tomohiro Nimura, Masakazu Muto, Shinji Tamano	Effect of oval-shaped baffles on heat transfer enhancement in a channel. Arnut Phila, Supanat Lupkittaro, Naoki Maruyama, Thiri Shoon Wai, Masafumi Hirota, Paisarn Naphon, Smith Eiamsa-ard	Experimental evaluation of acoustic field characteristics in a stepped thermoacoustic prime mover with an alternator boundary. Shin-ichi Sakamoto, Toshiki Nakazawa, Satoshi Hirayama
13:15 - 13:30	Flow boiling heat transfer of refrigerant R-245fa in aluminum microchannel cold plates with different channel widths. Min-Chun Hsieh, Pin-Tsai Chen, Chien-Yuh Yang	Visualization of the onset of interfacial mixing in density-stratified two-layer flow in a millichannel. Tsugumasa Iiyama, Takahiro Arai, Masahiro Furuya, Riichiro Okawa	Direct numerical simulation of turbulent channel flow controlled using spanwise traveling wave-like wall-surface heating and cooling. Yusuke Nabae, Hiroya Mamori, Koji Fukagata, Satoshi Ogata	Characteristics of vibration-induced circulating flow in a flexible tube for environmentally-friendly power generation. Shuya Kinoshita, Keitaro Tojo, Kohei Kurokawa, Pouria Kono, Satoshi Muto, Hiromichi Obara
13:30 - 13:45	Transient boiling heat transfer during the transition to microbubble emission boiling under reduced pressure. Kenta Sakano, Noriyuki Unno, Kazuhisa Yuki, Koichi Suzuki	Operator-adjoint analysis of subcritical bifurcation in a traveling-wave thermoacoustic engine. Shu-Han Hsu, Chuan-Heng Lai	DNS of triple free jets under intermittent control with frequency modulation. Ren Furutani, Tsubasa Tanoue, Koichi Tsujimoto, Toshitake Ando, Mamoru Takahashi	Combustion characteristic of DME-ammonia fuel for SI engine. Yusei Takano, Junya Tanaka
13:45 - 14:00	Experiment and analysis of a manifold microchannel liquid cooling plate (MMLCP) for chip cooling. Yuhao Luo, Ruitian Zhou, Shuangfeng Wang	An investigation of characteristics of vortical core region and bundle of vortical axis lines. Katsuyuki Nakayama	Non-equilibrium wall modelling for large eddy simulation of turbulent heat transfer in impinging jet flows. Yusuke Kuwata, Riku Sawada, Takuma Ishino, Rinnosuke Yao, Kazuhiko Suga	Reaction of ammonia-derived hydrogen utilization for CO2 methanation over a ruthenium catalyst. Adinda Ratu Permata, Muhammad Miftahur Rahman, Tensho Nakamura, Ryo Yoshiie, Kambara Shinji
14:00 - 14:15	Experimental evaluation of a two-phase immersion cooling system for 2 kW-class AI accelerator packages. Jeongin Kim	Active control of the subsonic jet flow by array of radial blowing minijets. Oleg Ivanov, Linar Gareev, Vladimir Trifonov, Vasily Vedeneev	Mechanisms generating heat and momentum transport dissimilarity in growing turbulent spots in thermally stratified plane couette flow. Daiki Nozawa, Koji Fukudome, Masanori Fujimoto	
14:25 - 15:40	**Electronics Packaging and Thermal Management 2** Chair: Koji Nishi (Ashikaga Univ.)	**Experimental/ Computational Fluid Dynamics 5** Chair: Toshiyuki Sanada (Shizuoka Univ.)	**Heat and Mass Transfer, Enhancement 4** Chair: Takahiro Okabe (Hirosaki Univ.)	**Hydrogen, Fuel Cell and Battery Technology 1** Chair: Masayasu Shimura (Institute of Science Tokyo)
14:25 - 14:40	Effect of condensation intensity on internal flow and heat transfer performance of oscillating heat pipe. Takahiro Ito, Katsumi Sugimoto, Naoyuki Yoshida, Hideki Murakawa, Hitoshi Asano, Isao Harayama, Keisuke Kurita	Numerical investigation of the influence of wheel rim geometric features on vehicle aerodynamic performance. Kan Zhou , Feiyi Chen, Shohei Imagawa, Takuji Nakashima , Hidemi Mutsuda	Investigation of the performance of two heat exchangers for local heating of greenhouse crop farming. Thiri Shoon Wai, Naoki Maruyama, Napassawan Wongmongkol, Chatchawan Chaichana, Smith Eiamsa-ard, Masafumi Hirota	Protocol aware machine learning for measurement free prediction and selection of flooding recovery strategies in open cathode PEM fuel cells. Joonyoung Park
14:40 - 14:55	Effect of multi-turn configuration on the heat transport performance of a three-dimensional oscillating heat pipe under small temperature differences. Hajime Onishi	Numerical simulation of turbulent channel flow with a porous wall. Eru Kurihara, Taich Kose, Farid Afandi, Hiromitsu Hamakawa	Design considerations of polymeric hollow fiber heat exchangers for automotive radiator applications. Honoka Shibata, Jiri Hvozda, Erik Bartuli, Yoshiaki Kawajiri, Frantisek Miksik	CFD-based thermal propagation modeling of lithium-ion battery packs for insulation material screening. Reo Yasuda, Tensho Nakamura, Ryo Yoshiie, Shinji Kambara
14:55 - 15:10	Two-phase cooling loop with a jet explosion stream technology for ultra-high heat-generating devices. Ryosuke Ogi, Kaoru Sato, Kanade Horinouchi, Koki Hiroshima, Yuki Koga, Yasushi Koito	Effects of asymmetric traveling wave control on skin-friction drag in turbulent channel flow. Takuto Nozaki, Hiroya Mamori, Menglei Wang, Takeshi Miyazaki	Toward manufacturable polymeric hollow fiber heat exchangers. Erik Bartuli, Jiri Hvozda, Miroslav Raudensky, Zdenek Horak, Petr Hubatka, Kyaw Thu, Frantisek Miksik, Maksim Menshikh	Transport phenomena of reactive species in mesoporous carbon-supported PEM fuel cells. Yuji Oishi, Toru Uenishi, Daichi Hayashi
15:10 - 15:25	Thermal resistance decomposition in the heat transfer path of power MOSFETs utilizing pseudo-thermal impedance distribution. Koji Nishi	Elucidation of the mechanism of increased pressure loss due to pulsating flow in an automotive muffler. Shigeru Ogawa, Masato Fukuda, Takahiro Nomura, Yuji Yamada	Optimizing wall-mounted polymeric hollow-fiber heat exchangers through convective regime evaluation. Jaroslav Longauer, Janos Kurcz, Erik Bartuli, Frantisek Miksik, Kyaw Thu, Jan Ponican	Influence of pretreatment conditions on ionic transport phenomena in anion exchange membrane-based polymer electrolyte steam electrolysis cells. Toru Uenishi
15:25 - 15:40	Modeling and heat transfer analysis of RRAM devices in nanostructures. Aldo Marcelino, Hsin-Yi Shih	Streamwise vortices induced by an inserted arm in a rotating flow driven by co-rotating disks in a shrouded enclosure. Stefan Thomas Bockamp, Ren Nakamoto, Shuto Mishina, Ibrahim Abubakar Masud, Naoto Kato, Katsuaki Shirai	Heat soakage analysis for a gas turbine jet engine. Latif Buğra Atilla, Eda Nur Telik, Simay Uyar, Sıla Yılmaz, Cem Tahsin Yücer	Electron and ion transport phenomena governed by electrode configuration in electric field-assisted catalysis. Junsho Tsunoda, Toru Uenishi, Koki Fujiwara
15:40 - 15:55	**Coffee Break**			
15:55 - 17:10	**Micro- and Nano-Scale Transport 1** Chair: Kentaro Doi (Toyohashi Univ. of Technology)	**Experimental/ Computational Fluid Dynamics 6** Chair: Donghyuk Kang (Saitama Univ.)	**Heat and Mass Transfer, Enhancement 5** Chair: Takashi Fukue (Kanazawa Institute of Technology)	**Hydrogen, Fuel Cell and Battery Technology 2** Chair: Toru Uenishi (Kitami Institute of Technology)
15:55 - 16:10	Local interfacial thermal resistance at hydroxylated alpha-quartz silica-water interfaces: Competing effects of crystal facet and nanostructure geometry. Han Gao, Kunio Fujiwara, Masahiko Shibahara	Numerical investigation of particle transport during oral breathing using a 3D airway model. Nonoka Ikenaga, Masashi Yamakawa, Takahiro Ikeda Minsuok Kim	Thermal loss characteristics of bladed CSP receivers under varying geometrical configurations. Pedram Alamdari, Mehdi Khatamifar, Wenxian Lin	DFT-based molecular dynamics analysis of interfacial transport at Ni catalyst surface/QPAF-4 ionomer interfaces in anion exchange membrane water electrolysis. Ryusei Ono, Hiroto Suzuki, Kenji Miyatake, Takashi Tokumasu
16:10 - 16:25	Molecular dynamics study on the effects of nanostructure morphology of platinum surfaces on ice nucleation and characteristics. Akane Watanabe, Kunio Fujiwara, Ryosuke Matsumoto, Masahiko Shibahara	Flow pattern transitions of frictional fluids in unconsolidated granular media for negative-buoyancy CO2 geological sequestration. Hongyu Wang, Ahmadi Ammar, Shintaro Matsushita, Tetsuya Suekane	Experimental and numerical evaluation of heat transfer enhancement by a plasma actuator. Takumi Kumagai, Koji Fumoto, Hiroyuki Nishida, Asami Hatamoto	Molecular analysis of Li-ion transport in the cathode active materials of all-solid-state lithium-ion batteries using machine learning force fields. Haruka Susa, Chiho Horiuchi, Sheng-Feng Huang, Takashi Tokumasu

16:25 - 16:40	Force field optimization for molecular dynamics simulation of silicon nanocrystal growth. Genta Tamura, Kazuhiro Gotoh, Noritaka Usami, Takashi Tokumasu	Experimental investigation of particle dispersion patterns in particle-laden Taylor-Couette flow. Daichi Fujimoto, Hayato Masuda, Hiroyuki Iyota	Evaluation of heat transfer characteristics in an active magnetic regenerator cycle using infrared temperature measurement. Masahiro Takeda, Ken-ichi Uchida, Hosei Nagano	Optimization of catalyst ink formulation for enhanced PEFC performance under variable temperature and humidity conditions. Zeku Matsuoka, Tensho Nakamura, Ryo Yoshiie, Shinji Kambara
16:40 - 16:55	Molecular dynamics analysis of the driving mechanism underlying nanoscale focused jet generation. Shoki Toyoda, Hiroki Kusudo, Yoshiyuki Tagawa, Gota Kikugawa	Ventilation design of tour buses for suppressing airborne transmission and highly efficient virus elimination in post COVID-19 period. Takeru Kitagawa, Yoshiki Makihira, Yukihiko Okmura	Thermo-hydraulic characteristics of a rectangular solar air heater duct equipped with notched baffles. Warin Keaitnukul, Nattanan Keannakham, Naoki Maruyama, Thiri Shoon Wai, Masafumi Hirota, Arnut Phila, Smith Eiamsa-ard	A novel technology on CCUS with low-cost hydrogen production. Atsunori Hagiwara, Yoshihiko Sano, Fujio Kuwahara
16:55 - 17:10	Graph neural network-based prediction of phonon mean free path in polycrystalline nanostructures generated by spatial tessellation. Yu Hirama, Takuma Hori	Ball behaviors and flow characteristics of a ball mill. Masaki Fuchiwaki, Peerawatt Nunthavarawong, Torsak Boonthai	Thermal dynamics of core temperature rise leading to heat stroke. Koki Kitamura, Ryuto Yokoyama, Takuma Kogawa, Hiroki Gonome	Multilayer catalyst structures with Pt-free carbon layers for reduced platinum loading in polymer electrolyte fuel cells. Daigo Yukawa, Yushi Tamaki, Kimihiko Sugiura
18:30 - 20:00	**Banquet**			

Day 4 (Sat., Dec. 5)

Time	Room			
	A	B	C	D
8:00 -	Registration-Desk Open			
8:30 - 10:00	**Micro- and Nano-Scale Transport 2** Chair: Kuan-Ting Chen (National Central Univ.)	**Experimental/ Computational Fluid Dynamics 7** Chair: Koji Toriyama (Univ. of Yamanashi)	**Heat and Mass Transfer, Enhancement 6** Chair: Yusuke Nabae (Tokyo Metropolitan Univ.)	**Radiation** Chair: Kazuhisa Yuki (Tokyo Univ. of Science-Yamaguchi)
8:30 - 8:45	Simultaneous thermal and mechanical optimization of nanopore arrangements in thin films using deep reinforcement learning. Ken Toko, Takuma Hori	Influence of particle deposition on the drag-reduction performance with oblique riblets in turbulent channel flow. Soushi Yamamoto, Hiroya Mamori, Menglei Wang, Takeshi Miyazaki	Optimization of process conditions for NH3 decomposition over Ru-based and Ni-based catalysts. Takaaki Nagai, Makoto Inomata, Yuji Sano, Airi Ide, Hisashi Okeya, Yoh Mori, Shinji Kambara	Control of near-field radiative heat transfer using a Si spacer layer in hBN/graphene multilayer structures. Jinsei Minaki, Kanta Umezu, Masashi Ono, Atsushi Sakurai
8:45 - 9:00	Molecular gas transport simulations in phase-field-generated porous media. Hikaru Tanaka, Eisuke Miyoshi, Takuma Hori	Morphological asymmetry and energy-dependent overlap in granular doublet craters formed by two-sphere impacts. Haruto Kitagawa, Ririha Obara, Yu Matsuda	Design of hollow fiber membrane contactors for CO2 capture. Jiří Lindovský, Ondřej Krištof, Erik Bartuli, Miroslav Raudenský, Kateřina Mayerová, Mirko Dohnal	The effect of ultrafine bubbles on the photomolecular effect. Nobuya Sugai, Atsushi Sakurai
9:00 - 9:15	Identification of ion species using electrodiffusioosmosis in nanochannels. Kentaro Doi	Development and kinematic control of a robotic model simulating undulatory fin motions of rudarius ercodes. Yusuke Nakamura, Takashi Fukue, Keizo Kato, Yasuhiro Sugimoto, Keiichi Sato	Elucidation of meandering bead formation mechanism in gas metal arc welding using dynamic 3D imaging spectroscopy. Hisaya Komen, Saki Shigematsu, Manabu Tanaka, Kazufumi Nomura	Estimation of infrared optical properties of spray-pyrolyzed SnO2 thin films using an effective medium approximation and numerical optimization. Kosuke Kikuchi, Atsushi Sakurai
9:15 - 9:30	Full-field rheo-optical measurement technique for flow-induced microstructural transport in micellar fluids under uniaxial extensional flow. Masakazu Muto, Naoki Kako, Shinji Tamano	Experimental investigation of a polymeric BTMS for cylindrical Li-ion 18650 cells. Katerina Mayerova, Jiri Hvozda, David Pac, Marek Petrla, Jan Kral	Effects of bends on the acoustic field formation within a looped-tube thermoacoustic engine. Kenichi P Kobayashi, Sora Hayakawa	Far-field perovskite-based thermophotonic power generation system for low-grade waste heat recovery. Akifumi Honna, Kota Ono, Shunsuke Ito, Koji Miyazaki, Atsushi Sakurai
9:30 - 9:45	Capillary-driven mixing in thin liquid film induced by meniscus formation around a single or multiple micropillars. Kazuma Ego, Yuta Kobayashi, Shin Noguchi, Masahiro Motosuke, Georg F Dietze, Harunori N Yoshikawa, Farzam Zoueshtiagh, Ichiro Ueno	Optimization of greenhouse heating equipment operation. Miru Kobayashi, Hideharu Takahashi	Effect of root canal curvature on irrigant flow characteristics using multi-hole irrigation needles. Lilong Sun, Ji Min Park, Jaeyong Sung, Dong Hoon Lee	
9:45 - 10:00	Humidity-dependent spreading of water precursor films on hydrophilic surfaces. Haruyuki Ozawa, Hideaki Teshima, Masumi Misaka, Koji Takahashi	Experimental validation of a numerically designed compensating foil for thermal management. Jiri Hvozda, Jan Bohacek, David Pac, Alexander Vakhrushev, Ebrahim Karimi-Sibaki	Evaluation of freezing radius and freezing time during the condensation droplet growth stage in frost formation. Haruka Agui, Niccolo Giannetti, Hayato Takigawa, Kiyoshi Saito	
10:00 - 10:20	Coffee Break			
10:20 - 11:50	**Micro- and Nano-Scale Transport 3** Chair: Hiroki Kusudo (The Univ. of Osaka)	**Experimental/ Computational Fluid Dynamics 8** Chair: Kohei Yuki (Tokyo Univ. of Science-Yamaguchi)	**Heat and Mass Transfer, Enhancement 7** Chair: Thiri Shoon Wai (Mie Univ.)	**Biomass Energy** Chair: Machi Kanna (Tokyo Univ. of Science-Yamaguchi)
10:20 - 10:35	Filling dynamics and flow characteristics of particle-laden flows in lattice-structured microchannels. Masayuki Tanoue, Takafumi Konishi, Kazuya Tatsumi	Experimental evaluation of cross-sectional particle distribution in solid-liquid two-phase pipe flow of a pseudoplastic fluid. Yuki Toda, Koshi Okuno, Shun Yoshida, Kazuya Yanase, Tetsuo Nohara, Yuki Kawamoto, Katsuhito Ogura, Hisato Iga, Naoya Fukushima	Experimental study investigations of thermal characteristics in Two-phase closed thermosyphon filled with hydrofluoroolefin (HFO) fluids. Seungho Ga, Kyoungje Cho	Combustion characteristics and flame behavior of low-calorific syngas in a swirl-throttle burner. Zhifeng Xiao, Hiroki Fujita, Yukihiko Okumura
10:35 - 10:50	Experimental considerations on the effects of bubble size and sampling height in foam fractionation. Ryota Tanioka, Shimpei Saito, Yuki Mizushima, Kohei Sato	Experimental observation of two-dimensional cavitation bubble dynamics in a vortex pair. Shu Ueda , Kan Zeniya, Akihito Kiyama, Donghyuk Kang, Koichi Nishibe, Kotaro Sato	Experimental analysis of local heat transfer distribution and correlation development for low GWP refrigerant in a plate heat exchanger. Saide Diaw, Sayeed Anowar	Evaluation of the cooling performance of a microalgae cultivation system capable of low-cost temperature control. Tomoki Sugiyama, Koji Toriyama, Tadashi Tohyama, Yusaku Tsukamoto
10:50 - 11:05	Graphene enhanced nanochannels for high heat flux electronic cooling. Kuan-Ting Chen, Jing-Kai Huang	Effects of microbubble foot bathing on fatigue recovery. Akihiro Kasai, Hiroto Narita, Hiroaki Hasegawa	Pool boiling enhancement of HFE-7100 using metal 3D-printed structures and Cu(OH)2 nanostructured surfaces for data center immersion cooling. Jaejun Lee, Seong-Hyeok Park, Yong-Hyeon Kim, Hyung Hee Cho	Evaluation of paper-based substrates for low-cost CO2 selective facilitated transport membranes in biogas upgrading applications. Kimihiko Sugiura, Kaori Miyahara, Hiroshi Kitahara, Takahito Uemura
11:05 - 11:20	Spatial evolution of the sidewall cell-free layer in dilute erythrocyte suspensions downstream of an abrupt geometric expansion in a confined microchannel. Yi Li, Osawa Takayuki, Kuriu Satoru, Marie Shinohara, Soo Hyeon Kim, Yukiko Matsunaga, Yosuke Hasegawa	Performance of an airlift pump system and its flow visualization in a riser pipe. Ukyo Mizuuchi, Takahiro Kiwata, Taichi Morii, Takuma Ohashi	Effect of surface wettability on sub-millisecond interfacial heat transfer during drop impact on heated surfaces. Yuzuna Kudo, Taku Sakurai, Takahiro Okabe	Optimization of soil conditions and electrode materials for high-performance microbial fuel cells. Yuta Kageyama, Daisuke Mochizuki, Machi Kanna, Hiroshi Morita
11:20 - 11:35	Effects of junction resistance variability on sheet resistance and current paths in silver nanowire networks. Bowen Gu, Yuki Wakamatsu, Takuma Kikuchi, Reiko Kuriyama, Kazuya Tatsumi	Evaluation of bubble rising oscillation in a gallium alloy under a horizontal magnetic field using ultrasonic measurements. Hideki Murakawa, Kota Uemura, Katsumi Sugimoto	Interfacial liquid film dynamics and condensation heat transfer in electrically actuated confined space. Ichiro Kano, Cao Yang	Influence of microbial activity on the thermal properties of compost. Genjiro Tamura, Kazuhisa Yuki, Machi Kanna
11:35 - 11:50	X-ray CT visualization and numerical analysis of the influence of cooling surface temperature on frost microstructure. Kyohei Katsunaga, Keita Hirayama, Ryota Maehara, Takuto Araki, Ryosuke Matsumoto, Hidetoshi Ohkubo	Experimental study on water entry motion of spheres with different material properties. Chika Yamada, Keii Sato, Youhei Takagi	Investigation of internal two-phase flow behaviors and heat transport characteristics of a pulsating heat pipe at low filling ratios. Kanji Suzuki, Keiko Ishii	Improving carbon conversion efficiency in CO2 gasification of woody biomass. Kimiko Kaga, Gentaro Suzuki, Tensho Nakamura, Shinji Kambara, Ryo Yoshiie

12:40	**Closing Remarks at Each Room**