

## GS1: General Session

November 11, 2022

EX-3-A

- GS1-1      **Effect of Media Permeability of Plane Couette Flow in Superposed Fluid-Porous System for Heavy Oil**  
10:40-11:00      Nandita Barman, Premananda Bera (Indian Institute of Technology Roorkee, India)
- GS1-2      **Investigation of Collision and Forcing Schemes in Lattice-Boltzmann Method for Multiphase Flows**  
11:00-11:20      Juan Restrepo-Cano, Francisco E. Hernández Pérez (King Abdullah University of Science and Technology (KAUST), Saudi Arabia), Timan Lei, Kai H. Luo (University College London, UK), Hong G. Im (King Abdullah University of Science and Technology (KAUST), Saudi Arabia)
- GS1-3      **Validation of Special Relativistic Magnetohydrodynamics Models by Scale Analysis**  
11:20-11:40      Shuntaro Yoshino, Makoto Hirota, Yuji Hattori (Tohoku University, Japan)
- GS1-4      **Wall Heat Flux Estimation using the Cartesian Cut-Cell Method**  
11:40-12:00      Yuki Takeda, Naoki Baba, Kazuyuki Ueno (Iwate University, Japan)
- GS1-5      **Numerical Analysis for Performance Prediction of Urea SCR System Using PIV Measurement and Discrete Droplet Model**  
13:10-13:30      Shotaro Nara, Rina Osada, Naoki Sugiyama, Yuki Kawamoto, Shun Takahashi, Masayuki Ochiai, Tetsuo Nohara (Tokai University, Japan), Kazuo Osumi, Naoya Ishikawa (ISUZU Advanced Engineering Center, Ltd., Japan)
- GS1-6      **Mode Switching in Compressible Cavity Flow**  
13:30-13:50      Yi-Xuan Huang, Kung-Ming Chung (National Cheng Kung University, Taiwan)
- GS1-7      **Ground Effect Acting on the Insect-like Wing**  
13:50-14:10      Szu-I Yeh, Yi-Hsien Lee (National Cheng Kung University, Taiwan)
- GS1-8      **Experimental Investigation on the Initiation of Low Speed Liquid Droplet Impingement Erosion**  
14:10-14:30      Kei Fujisawa (Nagaoka University of Technology, Japan)
- GS1-9      **Numerical Study on Aerodynamic Characteristics of Base Shape for Vertical Landing Rocket**  
14:50-15:10      Ren Tanaka, Nobuyoshi Fujimatsu (Toyo University, Japan)
- GS1-10      **A Study of Surface Pressure Variation Induced by Planar Shock Wave Impinging on a Circular Cylinder from Various Angles**  
15:10-15:30      Shun Takahashi (Tokai University, Japan), Shintaro Tamakuma, Tsubasa Ikami, Hiroki Nagai (Tohoku University, Japan)

- GS1-11      **Study on Visualization Method for Axisymmetric Shock Reflection in Supersonic Flow**  
 15:30-15:50      Yoshitaka Higa, Yasumasa Watanabe, Taro Handa (Toyota Technological Institute, Japan), Masanobu Matsunaga, Chihiro Fujio, Hideaki Ogawa (Kyushu University, Japan), Kiyonobu Ohtani (Tohoku University, Japan)
- GS1-12      **Shock-Bubble Interaction in Boiling Droplets**  
 15:50-16:10      Paolo Guida, William L. Roberts (King Abdullah University of Science and Technology, Saudi Arabia)
- GS1-13      **Optimization in Autonomous Underwater Vehicle (AUV) Group Formation by Computational Model**  
 16:30-16:50      Gen Li (Japan Agency for Marine-Earth Science and Technology (JAMSTEC), Japan), Dmitry Kolomenskiy (Skolkovo Institute of Science and Technology, Russia), Lei Duan (Shanghai Jiao Tong University, China), Ramiro Godoy-Diana, Benjamin Thiria (ESPCI Paris, France)
- GS1-14      **POD Analysis of Front Wheelhouse Wake by Onboard PIV Measurement**  
 16:50-17:10      Naoshi Kuratani (Honda R&D Co., Ltd, Japan), Tetsuhiro Kawamura, Kei Ambo (Honda Motor Co., Ltd, Japan), Nucera Fortunato (Honda R&D Co., Ltd, Japan)
- GS1-15      **One-way FSI Analysis of Industrial Gas Turbine Compressor under Start-up Condition**  
 17:10-17:30      Hironori Miyazawa, Takashi Furusawa, Satoru Yamamoto (Tohoku University, Japan)
- GS1-16      Cancelled
- GS1-17      **Impact on the Heat Transfer and Flow Behavior of Fin Geometry in a Rectangular Channel**  
 17:30-17:50      Mehmet Gürdal (Kastamonu University, Turkey), Hayati Kadir Pazarlıoğlu (Aselsan Inc., Turkey), Kamil Arslan (Karabuk University, Turkey)

**November 11, 2022**  
**EX-4-A**

- GS1-18      **Thermal Convection of Poiseuille Flow in a Fluid Overlying an Anisotropic and Highly Porous Domain**  
 14:50-15:10      Anjali, Premananda Bera (Indian Institute of Technology Roorkee, India)
- GS1-19      **Experimental Investigation of a Loop Heat Pipe in Multiple Orientations with two Different Evaporator Designs**  
 15:10-15:30      Shawn Somers-Neal, Hosei Nagano (Nagoya University, Japan)

- GS1-20      **Design Study of Loop Heat Pipe for kW-class Heat Transfer Applications**  
 15:30-15:50    Xinyu Chang (Tohoku University, Japan), Takuya Tada (Hitachi Astemo, Ltd., Japan), Hiroki Nagai (Tohoku University, Japan)
- GS1-21      **Experimental Verification of Loop Heat Pipe for High Heat Flux (Effects of Vapor Groove Geometry and Micro-Groove Processing)**  
 15:50-16:10    Yuta Shimada, Yoshihisa Nakatsugawa, Ai Ueno, Hosei Nagano (Nagoya University, Japan)
- GS1-22      **Optimization of a Concentrating Photovoltaic Thermal System (CPVT) by Considering Design and Operating Parameters**  
 16:30-16:50    Abid Ustaoglu, Bilal Kursuncu (Bartın University, Turkey), Junnosuke Okajima (Tohoku University, Japan), Volkan Akgül (Bartın University, Turkey)
- GS1-23      **Experimental Evaluation of Concentrating Photovoltaic Thermal System (CPVT) for Different Reflectance Characteristics**  
 16:50-17:10    Abid Ustaoglu, Hakan Buyukpatpat, Huseyin Kaya (Bartın University, Turkey), Junnosuke Okajima (Tohoku University, Japan), Bilal Kursuncu (Bartın University, Turkey)
- GS1-24      **Effect of Ammonia Enriched Gaseous Co-flow On Soot Formation In Droplet Combustion**  
 17:10-17:30    Atul Kumar, Shouyin Yang (National Formosa University, Taiwan)