

OS9: Biomedical Flow Dynamics

November 7, 2019

EX-2

- OS9-1 **Chick Embryo based Microcirculation Platform for Biomedical Applications**
9:00-9:40 *(Invited)*
Tomohiro Kawahara (Kyushu Institute of Technology, Japan)
- OS9-2 **Development of Wearable Device for Blood Pressure Estimation Based on Pulse Rate Measurement: Fundamental Study of Estimation Algorithm**
9:40-10:00 Soshi Kuroe, Toshiyuki Hayase, Suguru Miyauchi, Daisuke Ito (Tohoku University, Japan), Shunkei Pak, Osamu Iwamoto (ELECTEC Co., Ltd., Japan)
- OS9-3 **Computational Simulation of Blood Flow Dynamics to the Patient-Specific Shunt Models.**
10:00-10:20 KM Surabhi (Defence Institute of Advanced Technology, India), Viet Quang Huy Huynh (Tohoku University, Japan), Toshitaka Watanabe (Akashi Medical Center, Japan), Hironobu Sugiyama (Makiminato Central Hospital, Japan), Hiroshi Suito (Tohoku University, Japan), Dasari Srikanth (Defence Institute of Advanced Technology, India)
- OS9-4 **Finite Element Analysis of the Mechanical Performance of a Zinc Alloy Stent with the Tenon-and-Mortise Structure**
10:40-11:10 Sirui Wang, Aike Qiao, Junjie Wang, Kun Peng (Beijing University of Technology, China), Yongliang Mu (Northeastern University, China)
- OS9-5 **Numerical Analysis of the Influence of Aortic Stenosis on Blood Flow Field in the Left Ventricle: Influence of Ejection Fraction**
11:10-11:30 Tsuyoshi Takada, Suguru Miyauchi, Toshiyuki Hayase (Tohoku University, Japan)
- OS9-6 **Impulse-driven Liquid-jet Injector for Pharmaceutical Applications**
13:10-13:40 Ashish Agrawala, Viren Menezes (Indian Institute of Technology Bombay, India)
- OS9-7 **Finite Element Analysis for Flows in a Tumor Microenvironment Considering a Leakage to Interstitium: Applications to Two-dimensional Problems**
13:40-14:00 Tomofumi Takeda, Suguru Miyauchi, Toshiyuki Hayase (Tohoku University, Japan)
- OS9-8 **Fundamental Study of MR-Measurement-Integrated Simulation of Heart-Aorta-System: Wall Shear Stress of Ascending Aorta**
14:00-14:20 Yuki Hori, Toshiyuki Hayase, Suguru Miyauchi, Kosuke Inoue (Tohoku University, Japan), Alain Lalande (University of Burgundy-Franche-Comté, France), Jean-Joseph Christophe (CASIS-CARDiac Simulation & Imaging Software, France)
- OS9-9 **Three-Dimensional Numerical Analysis for an Erythrocyte Behavior near a Wall in a Fluid under an Inclined Centrifugal Force: Finite Element Analysis of an Erythrocyte Membrane**
14:50-15:20 Suguru Miyauchi, Toshiyuki Hayase (Tohoku University, Japan), Arash Alizad Banaei, Jean-Christophe Loiseau, Luca Brandt (KTH, Sweden)

- OS9-10 **Numerical Analysis for the Velocity Distribution of the Outflow of a Left Ventricle**
15:20-15:40 Shuta Kosaka, Suguru Miyauchi, Toshiyuki Hayase (Tohoku University, Japan)
- OS9-11 **Influence of Input Patch Sizes on Results of a Convolutional Neural Network to Detect Cerebral Aneurysms from MRA Images**
15:40-16:00 Kazuhiro Watanabe, Hitomi Anzai (Tohoku University, Japan), Norman Juchler, Sven Hirsch (Zurich University of Applied Sciences, Switzerland), Philippe Bijlenga (Geneva University Hospital, Switzerland), Makoto Ohta (Tohoku University, Japan)
- OS9-12 **In-vitro cell viability studies of gold nanorods/graphene oxide nanocomposites for photothermal and drug delivery application**
16:00-16:20 Thabang Lebepe (Tohoku University, Japan / University of Johannesburg / Centre for Nanomaterials Sciences Research, South Africa), Oluwatobi Oluwafemi (University of Johannesburg / Centre for Nanomaterials Sciences Research, South Africa), Tetsuya Kodama (Tohoku University, Japan)
- OS9-13 **Quantitative Assessment of Aortic Tree Geometry and Flow in Healthy Adult**
16:30-17:00 *(Invited)*
Simon Tupin, Hideki Ota, Makoto Ohta (Tohoku University, Japan)
- OS9-14 **Enhancement of Epirubicin Anticancer Activity by LDDS in Metastatic Lymph Node Mouse Model**
17:00-17:20 Ariunbuyan Sukhbaatar (Tohoku University, Japan), Shiro Mori (Tohoku University / Tohoku University Hospital, Japan), Tetsuya Kodama (Tohoku University, Japan)
- OS9-15 **Enhancement of Transdermal Drug Delivery by Rotational Stimulation Device**
17:20-17:40 Yuki Kurosawa, Kenji Kikuchi, Keiko Numayama-Tsuruta, Takuji Ishikawa (Tohoku University, Japan)
- OS9-16 **Flow Visualization and Lymphatic Vessel Characterization for Lymphatic Drug Delivery System**
17:40-18:00 Radhika Mishra (Tohoku University, Japan / Indian Institute of Science Education and Research Bhopal, India), Ariunbuyan Sukhbaatar (Tohoku University, Japan), Sauhard Shrivastava, Shivam Saurav, Namita Yadav, Kalra Neetu (Indian Institute of Science Education and Research Bhopal, India), Kiyoto Shiga (Iwate Medical University, Japan), Shiro Mori, Tetsuya Kodama (Tohoku University, Japan)