

**OS19: The 20th International Symposium on Advanced Fluid Information  
(AFI-2020)**  
**IFS Collaborative Research Forum**

- CRF-1 Optimization of Blood Mimicking Fluids Optical and Rheological Properties**  
Simon Tupin (Tohoku University, Japan), Karim Mazeau (CERMAV-CNRS and University of Grenoble Alpes, France)
- CRF-2 Development of Averaged Geometries for CFD Benchmarking of Intracranial Aneurysmal Flow**  
Simon Tupin (Tohoku University, Japan), Khalid M. Saqr (Arab Academy for Science, Technology and Maritime Transport, Egypt)
- CRF-3 New Index for the Evaluation of Coupling between Stent Degradation and Vessel Remodeling**  
Aike Qiao, Hanbing Zhang, Sicong Liu (Beijing University of Technology, China), Hongfang Song (Capital Medical University, China), Wenyu Fu (Beijing Union University, China), Hitomi Anzai, Makoto Ohta (Tohoku University, Japan)
- CRF-4 Computational Simulation on Improving Intravascular Treatment Device's Performance**  
Narendra Kurnia Putra, Johanna Muliany, Bonfilio Nainggolan, (Institut Teknologi Bandung, Indonesia), Tomo Kinoshita, Makoto Ohta, Suprijanto (Institut Teknologi Bandung, Indonesia), Hitomi Anzai (Tohoku University, Japan)
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Gaku Tanaka (Chiba University, Japan), Ryuhei Yamaguchi (Tohoku University, Japan), Tomoaki Yamazaki (Chiba University, Japan), Nadia S. Shafii (Universiti Teknologi Malaysia, Malaysia), Hitomi Anzai (Tohoku University, Japan), Kahar Osman (Universiti Teknologi Malaysia, Malaysia), Makoto Ohta (Tohoku University, Japan)
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- CRF-9 **The Role of Signal-anchor Region of Type II Transmembrane Protein in Subcellular Localization**  
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- CRF-12 **Concentration Enhancement of Reactive Chemical Species by Plasma-activated Microbubbles Jet in a Water Recirculation System**  
Mu-Chien Wu (National Chiao Tung University, Taiwan / Tohoku University, Japan), Satoshi Uehara, Tomoki Nakajima, Takehiko Sato (Tohoku University, Japan), Jong-Shinn Wu (National Chiao Tung University, Taiwan)
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Daiju Numata (Tokai University, Japan), Kiyonobu Ohtani (Tohoku University, Japan)
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Shigeru Obayashi (Tohoku University, Japan), Takashi Misaka (National Institute of Advanced Industrial Science and Technology, Japan), Takahiro Ukai (Osaka Institute of Technology, Japan)
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Elvar K. Bjarkason (Tohoku University, Japan), Ruanui Nicholson, Oliver J. Maclarens (University of Auckland, New Zealand), Anna Suzuki (Tohoku University, Japan)

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Junnosuke Okajima (Tohoku University, Japan / Far Eastern Branch of the Russian Academy of Sciences, Russia), Roman Fursenko (Siberian Branch of the Russian Academy of Sciences, Russia), Sergey Mokrin (Far-Eastern Federal University, Russia), Vladimir Gubernov (Lebedev Physical Institute of the Russian Academy of Sciences, Russia), Sergey Minaev (Far Eastern Branch of the Russian Academy of Sciences, Russia)
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Adrian Sescu (Mississippi State University, USA), Mohammed Z. Afsar (University of Strathclyde, United Kingdom), Shanti Bhushan (Mississippi State University, USA), Yuji Hattori, Makoto Hirota (Tohoku University, Japan)
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Brent B. Skabelund (Arizona State University, USA), Hisashi Nakamura, Kaoru Maruta (Tohoku University, Japan), Jeongmin Ahn (Syracuse University, USA), Ryan J. Milcarek (Arizona State University, USA)

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Misa Kawaguchi, Tomohiro Fukui (Kyoto Institute of Technology, Japan), Kenichi Funamoto (Tohoku University, Japan), Miho Tanaka, Mitsuru Tanaka, Shigeru Murata (Kyoto Institute of Technology, Japan), Suguru Miyauchi, Toshiyuki Hayase (Tohoku University, Japan)
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Rei Sumita, Ryoya Tabata (Kyushu Institute of Technology, Japan), Taizo Kobayashi (Kyushu University, Japan), Ki'nya Takahashi (Kyushu Institute of Technology, Japan), Yuji Hattori (Tohoku University, Japan)
- CRF-98 **Analysis of a Vortical Axis based on Local Axis Geometry**  
Katsuyuki Nakayama, Kazuma Doi (Aichi Institute of Technology, Japan), Yuji Hatori (Tohoku University, Japan)
- CRF-99 **Instability and Wave Interactions in Helical Vortices**  
Yuji Hattori (Tohoku University, Japan), Ivan Delbende (LIMSI, France), Maurice Rossi (Universite de Paris VI, France)

CRF-100 **Fluid Dynamics and Energy/scalar Transport in Coexisting Flows of Turbulence and Non-turbulence:Cases of Dual-wake Flow and Plane Jet**  
Yasuhiko Sakai, Yasumasa Ito, Koji Iwano (Nagoya University, Japan),  
Toshiyuki Hayase (Tohoku University, Japan), Yi Zhou (Nanjing University of Science and Technology, China), Kenji Kito (Nagoya University, Japan)