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10:40-12:10 **Short Oral Presentation**
(2.5 min for Short Oral Presentation)

CRF-36 **Mechanism of Blast-Induced Traumatic Brain Injury**
Atsuhiro Nakagawa, Kiyonobu Ohtani (Tohoku University, Japan), Keisuke Goda, Tatsuhiko Arafune (The University of Tokyo, Japan), Toshikatsu Washio (National Institute of Advanced Industrial Science and Technology, Japan), Toshiyuki Hayase and Teiji Tominaga (Tohoku University, Japan)

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CRF-49 **Intelligent Information Processing Circuits Using Nanodisk Array Structure**
Takashi Morie, Takashi Tohara (Kyushu Institute of Technology, Japan), Kazuhiko Endo (National Institute of Advanced Industrial Science and Technology, Japan), Makoto Igarashi and Seiji Samukawa (Tohoku University, Japan)

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CRF-51 **Fabrication of InAs Quantum Dots on Nitrided GaAs (001) Surface**
Toshiyuki Kaizu and Takashi Kita (Kobe University, Japan)

CRF-52 **Fabrication of Advanced CMOS Transistors**
Kazuhiko Endo (National Institute of Advanced Industrial Science and Technology, Japan) and Seiji Samukawa (Tohoku University, Japan)

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Masahiko Shibahara (Osaka University, Japan), Taku Ohara and Gota Kikugawa (Tohoku University, Japan)

CRF-54 **Computational Study of Bubble Behavior in Semiconductor Cleaning**
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Georgy Shoev, Yevgeniy Bondar (Siberian Branch of Russian Academy of Sciences, Russia), Kaoru Maruta (Tohoku University, Japan) and Mikhail Ivanov (Siberian Branch of Russian Academy of Sciences, Russia)

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Juyong Jang, Hidemasa Takana (Tohoku University, Japan), Yasutaka Ando (Ashikaga Institute of Technology, Japan), Oleg P. Solonenko (Siberian Branch of Russian Academy of Sciences, Russia) and Hideya Nishiyama (Tohoku University, Japan)

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Minoru Goto (Ube National College of Technology, Japan), Toshiyuki Takagi (Tohoku University, Japan), Kosuke Ito (Nihon University, Japan), Takanori Takeno and Hiroyuki Miki (Tohoku University, Japan)

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Hiroki Nagashima, Takashi Tokumasu (Tohoku University, Japan), Sin-ichi Tsuda (Shinshu University, Japan), Nobuyuki Tsuboi (Kyushu Institute of Technology, Japan), Mitsuo Koshi (Yokohama National University, Japan) and A. Koichi Hayashi (Aoyama Gakuin University, Japan)

CRF-65 **Quantum Molecular Analysis for the Deposition Process of SiC Substrate**
Rieko Sudo, Kenichi Kanna (Sagamihara Incubation Center, Japan) and Takashi Tokumasu (Tohoku University, Japan)

CRF-66 **Numerical Study of High-Speed Condensable Vapor Flow with LDI Erosion**
Jun Ishimoto (Tohoku University, Japan), Guanghao Wu (SoftFlow Co., Ltd., Japan) and Kazuo Matsuura (Ehime University, Japan)

CRF-67 **Ultra-High Heat Flux Cooling Characteristics of Cryogenic Micro-Solid Nitrogen Particles**
Jun Ishimoto, Naoya Ochiai (Tohoku University, Japan) and Kozo Saito (University of Kentucky, USA)

CRF-B1 **Frontier Science of Next Generation Reactive Fluid**
Jun Ishimoto, Kaoru Maruta and Takehiko Sato (Tohoku University, Japan)

12:10-13:10 **Lunch and Poster Session**

Chair: Shigeru Yonemura (Tohoku University, Japan)

15:40-16:20 **Short Oral Presentation**
(2.5 min for Short Oral Presentation)

CRF-68 **Transport Phenomena of Substances in Electrolyte of Solid Oxide Fuel Cell**
Takashi Tokumasu (Tohoku University, Japan) and Jeongmin Ahn (Syracuse University, Japan)

CRF-69 **Momentun Transport Characteristics in a Water Liquid Bridge between Si Surfaces**
Takashi Tokumasu (Tohoku University, Japan), Marie-Helene Meurisse, Nicolas Fillot and Philippe Vergne (INSA de Lyon, France)

CRF-70 **Development and Micro-Channel Flow Evaluation of Electro-Rheological Nano-Suspensions**
Katsufumi Tanaka, Seiya Robson, Wataru Nakano, Haruki Kobayashi, Ryuichi Akiyama (Kyoto Institute of Technology, Japan), Masami Nakano and Atsushi Totsuka (Tohoku University, Japan)

CRF-71 **Development of a Micro-Motor for MEMS Utilizing Novel Electroactive Polymer Fabricated by Pholithography**
Miklós Zrínyi (Semmelweis University, Hungary), Rita Bauer, Loránd Kelemen (Hungarian Academy of Sciences, Hungary) and Masami Nakano (Tohoku University, Japan)

CRF-72 **On Hydrogen Generation by the Collapse of Cavitation Bubbles**
Takehiko Sato (Tohoku University, Japan), Marc Tinguely (Swiss Federal Institute of Technology Lausanne, Switzerland), Masanobu Oizumi (Tohoku University, Japan) and Mohamed Farhat (Swiss Federal Institute of Technology Lausanne, Switzerland)

CRF-73 **Analysis of Plasma-Generated Bubbles by Electron Microscope**
Takehiko Sato (Tohoku University, Japan), Takashi Miyahara (Sizuoka University, Japan) and Tatsuyuki Nakatani (Toyo Advanced Technologies Co., Ltd., Japan)

CRF-74 **The Continuous Spectrum in the Moore-Saffman-Tsai-Windnall Instability**
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CRF-77 **Researches on the Suppression Control of Hole Tone Phenomena**
Kazuo Matsuura (Ehime University, Japan) and Masami Nakano (Tohoku University, Japan)

CRF-78 **Generation Mechanism of Rising Film Flow along the Rotating Conical Outer Surface and the Subsequent Atomization Chracteristics**
Keisuke Matsuda, Takahiro Adachi (Akita University, Japan), Junnosuke Okajima (Tohoku University, Japan) and Takeshi Akinaga (Aston University, GBR)

CRF-79 **A View on Kinetic Force Method from Two-Particle Kinetic Equation**
Vladimir Saveliev (National Center of Space Researches and Technologies, Kazakhstan), Svetlana Filko (Zhetysu State University, Kazakhstan) and Shigeru Yonemura (Tohoku University, Japan)

CRF-80 **Numerical and Experimental Research on Active Control of Self-Sustained Flow Oscillations with Sound Interaction**
Mikael A. Langthjem (Yamagata University, Japan) and Masami Nakano (Tohoku University, Japan)

CRF-81 **Study on Flow-Induced Vibration of Soft Fins**
Akira Rinoshika (Yamagata University, Japan) and Masami Nakano (Tohoku University, Japan)

CRF-82 **Modeling of Heat Flow and Entropy Change at Martensitic Transformations in the Framework of Landau Theory**
Anna Kosogor (Institute of Magnetism, Ukraine), Vladimir Khovaylo (National University of Science and Technology "MIS&S", Russia), Hiroyuki Miki and Toshiyuki Takagi (Tohoku University, Japan)

CRF-83 **Stability Analysis of Vortices with Axial Flow based on Energetics and its Application**
Yasuhide Fukumoto (Kyushu University, Japan) and Yuji Hattori (Tohoku University, Japan)

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Chair: Kenichi Funamoto (Tohoku University, Japan)
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(2.5 min for Short Oral Presentation)

CRF-84 **Oscillating Flow of Magnetic Fluid between Two Parallel Plates**
Masahide Ito, Seiichi Sudo (Akita Prefectural University, Japan) and Hideya Nishiyama (Tohoku University, Japan)

CRF-85 **Viscoelastic Properties of MR Shear Thickening Fluids**
Weihua Li (University of Wollongong, Australia) and Masami Nakano (Tohoku University, Japan)

CRF-86 **Particle Structural Formations of Colloidal MR Fluid and Their Influences on Magnetic Rheological Response**
Hiroya Abe (Osaka University, Japan) and Masami Nakano (Tohoku University, Japan)

CRF-R1 **Supercomputing and Scale Modeling of Flotsam Mixed Tsunami**
Jun Ishimoto (Tohoku University, Japan) and Kozo Saito (University of Kentucky, USA)

CRF-R2 **Flammability Limits of Low-Lewis-Number Premixed Flames**
Sergey Minaev (Far Eastern Federal University, Russia), Kaoru Maruta (Tohoku University, Japan), Roman Fursenko (Siberian Branch of Russian Academy of Sciences, Russia), Sudarshan Kumar (Indian Institute of Technology, India) and Boris Mazurok (Siberian Branch of Russian Academy of Sciences, Russia)

CRF-R3 **Electrical Conductivity and Defect Evaluation of Multilayer CFRP Laminates by Eddy Current Testing**
Jun Cheng, Jinhao Qiu, Hongli Ji (Nanjing University of Aeronautics and Astronautics, China), Toshiyuki Takagi, Tetsuya Uchimoto (Tohoku University, Japan) and Ning Hu (Chiba University, Japan)

16:50-18:00 **Poster Session**