

Discretionary Collaborative Research Project 2016, IFS, Tohoku University

Project Code	Project Title	Applicant	Institution	IFS responsible member or non-IFS responsible member	Institution
J16L003	Molecular dynamics study on thermal transpiration flow	Yamaguchi Hiroki	Nagoya University	Kikugawa Gota	Tohoku University
J16L004	Characteristic analysis of mucus of crawling locomotion in gastropods and its application to a wall climbing robot	Tsukagoshi Hideyuki	Tokyo Institute of Technology	Nakano Masami	Tohoku University
J16L006	Study of improvement in sterilization effects on marine bacteria using underwater shock waves	Abe Akihisa	Kobe University	Sun Mingyu	Tohoku University
J16L026	Atomizing characteristics of water and liquid nitrogen jets under high pressure environment	Watanabe Rikio	Tokyo City University	Kobayashi Hideaki	Tohoku University
J16L029	Seminar for next generation sensors for super-high temperature environment (phase 2)	Uchimoto Tetsuya	Tohoku University	Yaguchi Hitoshi	Intelligent Cosmos Research Institute
J16L034	Numerical Analysis on Supersonic Flow Control using High Repetitive Laser Pulses	Iwakawa Akira	Nagoya University	Obayashi Shigeru	Tohoku University
J16L039	Inactivation of virus by a plasma flow in a closed small vessel	Sato Takehiko	Tohoku University	Oshitani Hitoshi	Tohoku University
J16L040	Investigation on behavior of particles in MR fluid flows	Ido Yasushi	Nagoya Institute of Technology	Nakano Masami	Tohoku University
J16L041	Numerical simulation for reducing future tsunami damage	Obayashi Shigeru	Tohoku University	Togashi Fumiya	Applied Simulations Inc.
J16L044	Research on the physical and the tribological properties of a soft metal layer originating in Me-DLC on sliding surface	Goto Minoru	UBE National College of Technology	Takagi Toshiyuki	Tohoku University
J16L048	Influence of Biological Tissue by Underwater Expansion Wave Irradiation	Hashimoto Tokitada	Saga University	Ohtani Kiyonobu	Tohoku University
J16L052	Quantitative Visualization of Unsteady High-speed Fluid Phenomena in Nature Environment	Mizukaki Toshiharu	Tokai University	Obayashi Shigeru	Tohoku University
J16L055	Development of Pressure-Sensitive Paint Techniques for Ballistic Range Experiments	Numata Daiju	Tokai University	Ohtani Kiyonobu	Tohoku University
J16L058	P-selectin Printing on PDMS substrates	Shirai Atsushi	Tohoku University	Jean-Paul Rieu	University Claude Bernard Lyon 1
J16L059	Fabrication of strained Ge-on-Insulator and device application	Sawano Kentarou	Tokyo City University	Samukawa Seiji	Tohoku University
J16L061	Study on the high-performance and high-mobility MOS transistor by the neutral beam process	Endo Kazuhiko	National Institute of Advanced Industrial Science and Technology	Samukawa Seiji	Tohoku University
J16L064	Study on Hyperthermia by radiation and heat transfer control in biological tissue	Maruyama Shigenao	Tohoku University	Victoria Timchenko	The University of New South Wales

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J16L070	Constructing CFD model of marrow flow in an ilium	Nakayama Toshio	National Institute of Technology, Tsuruoka College	Ohta Makoto	Tohoku University
J16L074	Development of a smart material with cellulose	Ohta Makoto	Tohoku University	Lundell Fredrik	KTH Royal Institute of Technology
J16L076	Tornado Formation Research with Wind Tunnel	Tao Rongjia	Temple University	Nakano Masami	Tohoku University
J16L079	Application of Data Assimilation to Aviation Safety System	Obayashi Shigeru	Tohoku University	Jeong Shinkyu	Kyunghee University
J16L084	Development of Conservative Kinetic Force Method	Vladimir Saveliev	National Center of Space Researches and Technologies	Yonemura Shigeru	Tohoku University
J16L085	Numerical study of thermal and chemical non-equilibrium effects in near-continuum hypersonic flows	Georgy Shoev	Novosibirsk State University	Yonemura Shigeru	Tohoku University
J16L086	Cavity formation mechanism in a cavitation process	Sato Takehiko	Tohoku University	Mohamed Farhat	Ecole Polytechnique Federale de Lausanne (EPFL)
J16L087	Investigation of nozzle flows at low Reynolds numbers	Yevgeniy Bondar	Siberian Branch of Russian Academy of Science	Maruta Kaoru	Tohoku University
J16L100	Transport phenomena of nanoscale water droplet in a nano pore	Tokumasu Takashi	Tohoku University	Philippe Vergne	INSA-Lyon
J16L103	Shock amplification behind fabrics	Loïc Ehrhardt	French-German research Institute of Saint-Louis	Sun Mingyu	Tohoku University
J16L106	AERODYNAMIC DESIGN AND OPTIMIZATION OF HIGH SPEED TRANSPORT AIRCRAFT	Bura Romie Oktovianus	Bandung Institute of Technology	Obayashi Shigeru	Tohoku University