

List of selected projects for Discretionary Collaborative Research Project 2019, IFS, Tohoku University

Project Code	Project Title	Applicant	Institution	IFS responsible member or non-IFS responsible member	Institution
J19L016	Theoretical simulation on epitaxial growth of functioning thin film	Satoru Kaneko	KISTEC	Takashi Tokumasu	Institute of Fluid Science, Tohoku University
J19L023	Experimental and Computational Study on Unsteady Aerodynamic Characteristics of Micro Aerial Vehicles	Daisuke Sasaki	Kanazawa Institute of Technology	Koji Shimoyama	Institute of Fluid Science, Tohoku University
J19L025	A study of Eigen-vortical-axis line in hierarchical flow scales in turbulence	Katsuyuki Nakayama	Aichi Institute of Technology	Yuji Hattori	Institute of Fluid Science, Tohoku University
J19L040	Development of Molecular Imaging Technology for Investigation of Projectile Aerodynamics	Daiju Numata	Tokai University	Kiyonobu Ohtani	Institute of Fluid Science, Tohoku University
J19L043	Neutral beam based interface engineering for triboelectric nanogenerators	Dukhyun Choi	Kyung Hee University	Seiji Samukawa	Institute of Fluid Science, Tohoku University
J19L045	Application of nanostructure surfaces to enhance the thermal performance of heat pipe	Zhang Peng	Shanghai Jiao Tong University	Hiroki Nagai	Institute of Fluid Science, Tohoku University
J19L054	Analysis and modeling of the transport properties of the contact line based on the molecular dynamics simulation	Akinori Fukushima	Faculty of Engineering, Fukui University	Takashi Tokumasu	Institute of Fluid Science, Tohoku University
J19L067	Prevention of blast induced traumatic brain injury	Atsuhiko Nakagawa	Clinical Research Innovation and Education Center Tohoku University Hospital	Kiyonobu Ohtani	Institute of Fluid Science, Tohoku University
J19L069	Study on wing development for future small V/STOL with USB and its aerodynamic characteristics	Hirimitsu Kawazoe	Tottori University	Shigeru Obayashi	Institute of Fluid Science, Tohoku University
J19L073	Application of Two-phase thermo-fluid Simulation for Accurate Design of Oscillating Heat Pipe	Shun Takahashi	Tokai University	Hiroki Nagai	Institute of Fluid Science, Tohoku University
J19L083	Molecular dynamics study on formation process and stability of surface nanobubbles	Hori Takuma	Tokyo University of Agriculture and Technology	Gota Kikugawa	Institute of Fluid Science, Tohoku University
J19L085	The quantitative density measurement of unsteady flow around a projectile	Masanori Ota	Chiba University	Hiroki Nagai	Institute of Fluid Science, Tohoku University
J19L092	Development of accurate temperature measurement method by infrared camera	Takuma Kogawa	National Institute of Technology, Hachinohe College	Junnosuke Okajima	Institute of Fluid Science, Tohoku University
J19L093	Development of advanced measurements method for intermediate species in the low temperature oxidation of hydrocarbons using mid-infrared absorption spectroscopy	Kotaro Tanaka	Ibaraki University	Hisashi nakamura	Institute of Fluid Science, Tohoku University
J19L095	Fluid flow analysis of an atmospheric-pressure micro-plasma ejected from a narrow nozzle	Hiroyuki Yoshiki	National Institute of Technology, Tsuruoka College	Takehiko Sato	Institute of Fluid Science, Tohoku University
J19L099	Study on washing effect for textile using the underwater explosion	Kazutaka Kitagawa	Aichi Institute of Technology	Kiyonobu Ohtani	Institute of Fluid Science, Tohoku University
J19L103	Development of sugar chain distribution by glycosylation based on protein subcellular localization	KenjiETCHUYA	Aoyama Gakuin University	Makoto Ohta	Institute of Fluid Science, Tohoku University
J19L105	Surface Pressure Measurement of a Re-Entry Model in Ballistic Range Facility using Motion-Capturing Pressure-Sensitive Paint Method	Hiroataka Sakaue	University of Notre Dame	Hiroki Nagai	Institute of Fluid Science, Tohoku University
J19L107	Establishment of high-accuracy analysis method of spacecraft thermal system using data assimilation	Hiroki Nagai	Institute of Fluid Science, Tohoku University	Takashi Misaka	AIST

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