

List of selected projects for Discretionary Collaborative Research Project 2021, IFS, Tohoku University (as 19th May, 2021)

Project Code	Project Title	Applicant	Institution	IFS responsible member or non-IFS responsible member	Institution
J21L012	Study on improvement of washing effect for textile using the underwater explosion	Kazutaka Kitagawa	Aichi Institute of Technology	Kiyonobu Ohtani	Tohoku University
J21L018	Molecular dynamics simulations on non-condensable gas at solid-liquid interface	Takuma Hori	Tokyo University of Agriculture and Technology	Gota Kikugawa	Tohoku University
J21L021	Improvement of Aerodynamic Performance of Flying Object Clothed with Fabrics of Air Permeability	Hiroaki Hasegawa	Utsunomiya University	Shigeru Obayashi	Tohoku University
J21L022	Study of hydrothermal behaviors of impinging droplets on a heated wall	Takahiro Okabe	Hirosaki University	Junnosuke Okajima	Tohoku University
J21L033	Experimental and Computational Study on Unsteady Aerodynamic Characteristics at Very Low Reynolds Number Flows	Daisuke Sasaki	Kanagawa Institute of Technology	Koji Shimoyama	Tohoku University
J21L034	Quantum molecular dynamics analysis of bubble inception in cryogenic liquid hydrogen	Shin-ichi Tsuda	Kyushu University	Takashi Tokumasu	Tohoku University
J21L040	Experiment and Simulation of a Rotating Hollow Cylinder in Flight	Katsuya Hirata	Doshisha University	Jun Ishimoto	Tohoku University
J21L042	Mechanism of high speed propagation of underwater streamer	Takehiko Sato	Tohoku University	Seiji Kanazawa	Oita University
J21L053	Qualitative density measurement of wake region behind re-entry capsule	Masanori Ota	Chiba University	Hiroki Nagai	Tohoku University
J21L058	Influence of the back shape of the Hayabusa type capsule on the wake flow	Gouji Yamada	Tokai University	Kiyonobu Ohtani	Tohoku University
J21L060	Prediction method of protein GPI modification using protein amino acids	Kenji Etchuya	Aoyama Gakuin University	Makoto Ohta	Tohoku University
J21L069	Large-scale simulation of mass transfer with solid-gas reaction in porous material with actual structure	Yohsuke Matsushita	Tohoku University	Atsuki Komiya	Tohoku University
J21L070	Scattering properties of gas molecules on interfaces of nanostructures using molecular dynamics analysis	Takashi Tokumasu	Tohoku University	Hideki Takeuchi	National Institute of Technology, Kochi College
J21L084	Development and application of numerical method for various particulate flows	Shun Takahashi	Tokai University	Shigeru Obayashi	Tohoku University
J21L085	Development and application for Accurate Design of Oscillating Heat Pipe	Shun Takahashi	Tokai University	Hiroki Nagai	Tohoku University
J21L087	Integrated analysis of an aircraft body and an operating engine	Kazuhiisa Chiba	The University of Electro-Communications	Shigeru Obayashi	Tohoku University
J21L097	Modeling of the contact line and contact angle dynamics based on the molecular dynamics simulation	Akinori Fukushima	University of Fukui	Takashi Tokumasu	Tohoku University

17 selected projects