

List of selected projects for Discretionary Collaborative Research Project 2026, IFS, Tohoku University (as 1st April, 2026)

Project Code	Project Title	Applicant	Institution	IFS responsible member or non-IFS responsible member	Institution
J26L044	Development of Technology to Generate Quasi-Atmospheric Winds by Injecting Multiple Shear Forces	Kotaro Takamure	Akita University	Ippei Oshima	Institute of Fluid Science
J26L052	Experiment and Molecular Dynamics Simulation for Plasma-Dependent Interface	Siwei Liu	Institute of Fluid Science	Kosuke Tachibana	Oita University
J26L057	Numerical Analysis of Transfer Phenomena in Ultra-Low Fill Rate Heat Pipe	Asami Hatamoto	Aoyama Gakuin University	Hiroki Nagai	Institute of Fluid Science
J26L064	Exploring the Effects of Shear Stress Magnitude and Variation on Endothelial Injury: From Current Evidence to in Vitro Experiment of Cellular Responses	Mingzi Zhang	Torrens University Australia	Makoto Ohta	Institute of Fluid Science
J26L072	Fundamental Study of Weak Radiation behind Air Shock Waves	Masato Funatsu	Gunma University	Kiyonobu Ohtani	Institute of Fluid Science
J26L077	Study on the Injection Control of Carbon-Free Fuels	Noritsune Kawaharada	National Traffic Safety and Environment Laboratory	Ippei Oshima	Institute of Fluid Science
J26L078	Blood Flow Analysis of Aorta-Left Ventricle System with Aortic Valve	Suguru Miyauchi	University of Miyazaki	Kenichi Funamoto	Institute of Fluid Science
J26L087	Precise Measurement of the Effect of Deceleration on the Drag Coefficient	Takamasa Kikuchi	Nihon University	Kiyonobu Ohtani	Institute of Fluid Science
J26L100	Innovative Strategies for Glaucoma Management Through CFD Modeling of Aqueous Humor Flow	Muhamed Albadawi	Alexandria University (Egypt) / Egypt-Japan university of science and technology	Makoto Ohta	Institute of Fluid Science
J26L113	Strategic Deployment of Aerosol Sensors in Confined Spaces for Enhanced Respiratory Virus Detection: An Optimisation Study Based on Computational Fluid Dynamics Simulations	Yujie Li	Torrens University Australia	Makoto Ohta	Institute of Fluid Science
J26L114	Relationship between Micro-Structure of Nano-Fiber and Rheological Property in Cellulose Nano-Fiber Dispersion	Masaaki Motozawa	Shizuoka University	Hidemasa Takana	Institute of Fluid Science
J26L119	Experiment and Simulation of a Hollow Cylinder	Katsuya Hirata	Doshisha University	Jun Ishimoto	Institute of Fluid Science
J26L122	Research on Power Generation Technology using Flow-Induced Vibration	Naoto Kato	Utsunomiya University	Hiroki Nagai	Institute of Fluid Science

13 selected projects