

Theme: An Invitation to Fluid Science

Professors in charge:

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Number of people enrolled: 15 people at maximum

Implementation period: 3rd quarter

Schedule of the first lecture: October 1, 2024 (Tue.) from 16:40

Meeting place of the first lecture: Meeting Room, 2F of the Bldg. 1, Institute of Fluid Science, Katahira Campus (As for the meeting places of the second and subsequent lectures, please follow the instructions by each professor.)

Outlines: Our surroundings are filled with "flows," but these flows are more complex and diverse than we imagine. In this training course, we will cover a wide range of fluid phenomena, including new water-use society by high-speed nanodroplets, mixing flow, flame flow, seeing the invisible by using light, flow in aircraft and spacecraft, semiconductor and information flow, manipulation of cell functions in fluid science, flow inside next-generation batteries, phase change flow, combustion science for carbon neutrality, aircraft flow and airframe design, blood vessels and blood flow, flow responding to electric and magnetic fields and its functionality, designing for the coexistence of people and nature -from the development of geothermal technology to the creation of cultural areas-, and non-destructive testing of new materials. By observing actual research sites, students will be able to learn how to understand the wonders of fluid flow.