

GS – General Topics

Organizers: Junnosuke Okajima, Yusuke Katayama

This session is intended to provide a flexible and inclusive forum for high-quality contributions that do not fall neatly within the scope of the other specialized sessions of ISROMAC19. Rotating machinery research often spans multiple disciplines and evolves beyond traditional classifications, giving rise to innovative ideas, emerging methodologies, and cross-cutting topics. The General Topics session aims to accommodate such contributions and to encourage the presentation of novel concepts that may not yet be fully established within existing thematic frameworks.

Papers addressing experimental, numerical, and theoretical studies related to transport phenomena, fluid dynamics, thermal processes, structural interactions, and system-level analyses in rotating machinery are all welcome. Contributions that bridge different research areas, propose new perspectives, or explore unconventional applications are particularly encouraged. Preliminary studies with strong physical insights, as well as interdisciplinary works connecting academia and industry, are also within the scope of this session.

By offering a broad platform for diverse research themes, this session seeks to foster open discussion, stimulate intellectual exchange, and support the continued expansion of the ISROMAC community.

Organizers



Junnosuke Okajima is working as an Associate Professor in the Institute of Fluid Science, Tohoku University, Sendai. He earned his B.S., M.S., and Ph.D. in Engineering from Tohoku University. His research focuses on thermal multiphase flow, especially boiling and cavitation. His interests include the thermodynamic suppression of cavitating flows, boiling phenomena in liquid hydrogen, and cooling systems for electric motors.

Yusuke Katayama is an Assistant Professor in the Department of Applied Mechanics and Aerospace Engineering at Waseda University, Tokyo. He earned his B.S., M.S., and Ph.D. in Engineering from Shinshu University. His research focuses on fluid machinery, small-scale hydropower, and renewable energy systems. He specializes in the experimental and numerical investigation and analysis of unsteady flow phenomena and energy conversion processes within these systems.



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