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港湾空港技術研究所
PARI Port and Airport Research Institute

FLOWRA

Tokyo, 28th November 2025

Visit to the Port and Airport Research Institute

Strengthening Collaboration with a Leading Institution in Maritime and Coastal Infrastructure Research

On Friday, 17 November, a FLOWRA delegation team led by the Chairperson of FLOWRA visited Port and Airport Research Institute, National Institute of Maritime, Port and Aviation Technology (PARI) in Yokosuka City. The FLOWRA delegation was given a guided tour of the research facilities, followed by a round-table discussion with PARI representatives. As FLOWRA has been working to address common technical challenges and foster international collaboration in floating offshore wind, we have been looking for this official visit to PARI who is a highly valuable potential partner,.

PARI has long been serving as a principal national research institute in Japan for the development of technologies related to port facilities and offshore structures, havingworld-class testing facilities, including a large-scale 184 meters long wave-ground interaction flume (tsunami and wave reproduction) and a three-dimensional underwater vibration table (earthquake reproduction), and conducts comprehensive research in disaster prevention, environmental protection, decarbonization and seismic design. And its achievements are highly regarded internationally.

Photo caption: Large wave-ground interaction flume

Comment by Mr. Masakatsu TERAZAKI, Chairperson of the Board, FLOWRA

"We are deeply grateful for the warm hospitality extended by President Kawai and all members of PARI, who kindly provided us with the opportunity to make tour of their facilities and to engage in insightful discussions with the research team. During the tour, we were guided through the experimental water tank equipped with a wave generator, including the Large wave-ground interaction flume capable of producing 3.5-metre waves, allowing for visualisation of structural behaviour under tsunamis and high waves, all of them were quite impressive for us.

In particular, the centrifuge modelling facility - Hydro-Geotechnical Centrifuge Mark II-R is among the world's most advanced for faithfully reproducing and analysing ground and structural behaviour under conditions close to reality. Its capability to accurately predict ground deformation and structural failure behaviour holds significant value not only for seismic design of infrastructure but also for scientific validation of design standards and the introduction of new technologies in floating offshore wind.

Through this visit, we witnessed cutting-edge and comprehensive research spanning disaster resilience, materials and environmental technologies, and could gain a deeper understanding of how such research underpins evidence-based policymaking, technical standards and regulations. Above all, we recognised the crucial role that these continuous efforts play in ensuring the reliability of essential public infrastructure such as ports and airports.

Collaboration with PARI will be highly meaningful for FLOWRA's work to advance fundamental technologies for floating offshore wind, and we look forward to strengthening this partnership and to the promising outcomes that it will bring".

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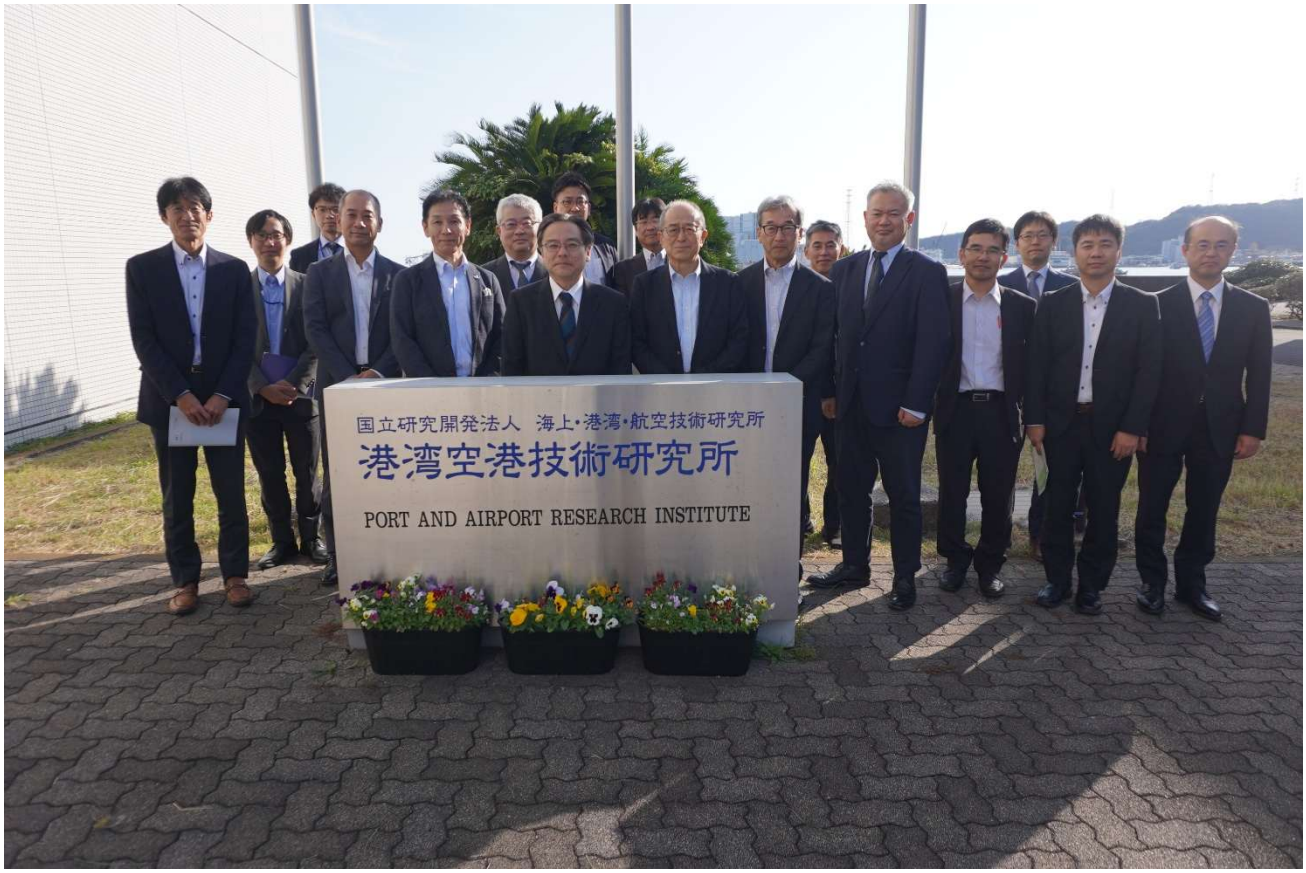
FLOWRA will continue to reinforce collaboration with PARI and other domestic and international partners across industry, academia and government, contributing to the early realisation of a carbon-neutral society and to strengthening Japan's industrial competitiveness.



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