Salika Thilakarathne

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Research Associate

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Education

Ph.D., Yokohama National University, Yokohama, Japan, 2023

M.Sc., B.Sc., University of Moratuwa, Moratuwa, Sri Lanka, 2019, 2017

Scientific career

Research Associate, Institute of Coastal Systems—Analysis and Modelling, Helmholtz-Zentrum Hereon, Germany, May 2024–present.

Postdoc Researcher, Estuarine and Coastal Engineering Laboratory, Yokohama National University, Japan, September 2023–April 2024.

Lecturer, Department of Civil Engineering, University of Moratuwa, Sri Lanka, April 2019–April 2020.

Selected publications

2025 Salika Thilakarathne, Hesamodin Enayatighadikolaei, Md Shofiqul Islam, Takayuki Suzuki, Martin Mäll, and Ralf Weisse, Wave storm dynamics and clustering, and their impacts on beach erosion, *Cambridge Prisms: Coastal Futures*. DOI: 10.1017/cft.2025.10012

2024 Hesamodin Enayatighadikolaei, Takayuki Suzuki, Mohsen Soltanpour, and Salika Thilakarathne, Application of the Bruun rule in evaluating the effect of water level fall on the Caspian Sea profile evolution, *Coastal Engineering Journal*.
DOI: 10.1080/21664250.2024.2422167

2024 Salika Thilakarathne, Takayuki Suzuki, Martin Mäll, and Masayuki Banno, Identifying key morphometrics to post-storm beach recovery through explainable AI, *Scientific Reports*.
DOI: 10.1038/s41598-024-64023-6

2024 Md Shofiqul Islam, Takayuki Suzuki, and Salika Thilakarathne, Physical modeling of sandbar dynamics to correlate wave-induced pore pressure gradient, sediment concentration, and bed-level erosion, *Ocean Engineering*. DOI: 10.1016/j.oceaneng.2024.118161

2024 Salika Thilakarathne, Takayuki Suzuki, and Martin Mäll, Machine learning-driven approach to quantify the beach susceptibility to storm-induced erosion, *Coastal Engineering Journal*. DOI: 10.1080/21664250.2023.2288744

Services

Refereed articles in the following journals: Coastal Engineering Journal, Taylor & Francis. Environmental Monitoring and Assessment, Springer Publishing. Geo-Marine Letters, Springer Publishing. Ocean Engineering, Elsevier.