



SCHOOL OF AQUATIC AND FISHERY SCIENCES
UNIVERSITY OF WASHINGTON

2025 Autumn Seminar Series

Thursday, October 9, 2025 at 4:00 pm
Fishery Sciences Building, Room 102

Hidden signals: how marine pollution affects ocean life and how new analytical tools may help us to detect it

Francesco Saliu

Assistant Professor, Environmental Chemistry,
University of Milano-Bicocca

Our oceans are facing growing pressure from pollution, including anthropogenic particles invisible to the naked eye, such as novel microplastics, as well as novel industrial chemicals whose structures remain unknown. How can we detect these entities and understand their effects on marine life? In this seminar, I will present innovative, non-invasive tools to investigate marine pollution and to examine how organisms respond at a molecular level to environmental stress.

I will also highlight how recent advances in data analysis, integrating open-source cooperative chemical databases, are advancing structural elucidation and enabling the identification of early warning signals of ecological risk,

Francesco Saliu leads research on marine pollution, microplastics, and associated contaminants. His work integrates mass spectrometry, IR spectroscopy, and green analytical methodologies to investigate plastic degradation, nanoplastic detection, and ecological impacts on marine ecosystems.

With a PhD from the University of Pisa, Francesco has published extensively on microplastic analysis in environmental and biological matrices. He teaches environmental analytical chemistry and marine chemistry and coordinates international collaborations exploring sustainable and biomimetic solutions to marine pollution.



Accommodation requests related to a disability or health condition should be made by contacting Andy Nutzhorn, adn9@uw.edu.