

PFAS EXPERTISE & PARTNERSHIP OFFER

HORIZON-NATURE-2027-01-01

Understanding the nature and the extent of the effects of PFAS on biodiversity and ecosystem services

PARTNER LOOKING FOR CONSORTIUM

National Research and Development Institute for Industrial Ecology - ECOIND, Romania

INCD ECOIND is seeking to join a Horizon Europe consortium as a research partner, bringing integrated expertise in PFAS analysis, environmental monitoring, ecotoxicology, environmental risk assessment and field-based studies.

VALIDATED PFAS LC-MS/MS

In-house developed and validated LC-MS/MS method for PFAS determination in environmental matrices.

ECOTOXICOLOGY

Biotests Laboratory expertise supports biological-effects assessment and integration with chemical monitoring data.

ENVIRONMENTAL FATE & EXPOSURE

Occurrence, distribution, transfer, bioaccumulation, trophic exposure and environmental risk assessment.

FIELD & CASE STUDIES

Freshwater, wastewater treatment systems and Black Sea coastal environments, including water-sediment-biota studies.

CONTRIBUTION TO A CONSORTIUM

- Targeted PFAS analysis using the validated LC-MS/MS method.
- Environmental sampling and monitoring strategies with QA/QC and traceable analytical data.
- PFAS occurrence and transfer across water-sediment-biota systems.
- Bioaccumulation, environmental exposure and trophic-transfer assessment.
- Ecotoxicological testing and biological-effects assessment through the Biotests Laboratory.
- Integration of chemical monitoring results with ecotoxicological endpoints.
- Environmental risk assessment, data interpretation and field-based case studies.
- Participation as research partner and/or work-package/task partner in multidisciplinary activities.

MATRICES & STUDY SYSTEMS

Surface water | Wastewater | Marine water | Sediments | Sludge | Biota | WWTPs | Black Sea coastal environment

COMPLEMENTARY EXPERTISE SOUGHT

Biodiversity and ecology; food-web dynamics; ecosystem functioning and ecosystem services; environmental modelling; remediation; socio-economic assessment; policy uptake; and experienced Horizon Europe coordinators.

SELECTED PFAS PUBLICATIONS

1. Chiriac F.L. et al. (2023). Perfluoroalkyl substances in Romanian wastewater treatment plants: Transfer to surface waters, environmental and human risk assessment. *Science of the Total Environment* 892, 164576. <https://doi.org/10.1016/j.scitotenv.2023.164576>
2. Chiriac F.L. et al. (2026). Perfluoroalkyl acids and perfluorooctane sulfonate in the Romanian Black Sea: Occurrence and risk assessment. *Microchemical Journal* 224, 117767. <https://doi.org/10.1016/j.microc.2026.117767>
3. Petre V.A. et al. (2023). Tissue Bioconcentration Pattern and Biotransformation of Per-Fluorooctanoic Acid (PFOA) in *Cyprinus carpio* (European Carp) - An Extensive In Vivo Study. *Foods* 12, 1423. <https://doi.org/10.3390/foods12071423>

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