

October 1, 2025  
Grenoble, France

ENSE<sup>3</sup> - Graduate School of  
Sustainable Engineering for  
Energy, Water and Environment  
Polygon Scientifique, Grenoble

# EURO PASSAGE

Ethohydraulics & Fish Passage  
Mini-Symposium

## Man-made Structures

Despite many improvements, downstream fish migration through pumping stations, hydropower plants, and other hydraulic structures continues to pose a serious **threat to biodiversity**.

## European Regulations

The **European Water Framework Directive** calls for an improved ecological status of waters and highlights the importance of **connectivity in aquatic ecosystems**. However, differences in national implementation have created a patchwork of local regulations and interpretations. Common standards are missing – especially when it comes to structure, methodology, and animal-free assessment methods.

## Mini-Symposium

We are creating a European forum that unites **science, industry, operators, and regulatory authorities** to develop definitions and methods tailored to **Europe's specific characteristics and needs**.

## Free Attendance

**ENSE<sup>3</sup> - GreEn-Er Amphi Bergès**  
Wednesday, October 1, 2025  
9:00 am - 5:15 pm

**Please register via mail:**  
[stefan.hoerner@univ-grenoble-alpes.fr](mailto:stefan.hoerner@univ-grenoble-alpes.fr)



Politecnico  
di Torino



TECHNISCHE  
UNIVERSITÄT  
DARMSTADT



UNIVERSIDADE  
DE LISBOA



OTTO VON GUERICKE  
UNIVERSITÄT  
MAGDEBURG

Sponsored by



unite!

University Network for Innovation,  
Technology and Engineering



# PROGRAM

9h00 - 9h30

Welcome Coffee

9h30 - 10h00

Welcome & Opening Remarks  
*Stefan Hoerner, Grenoble-INP, France*  
*Delphine Riu, Grenoble-INP, France*  
*Jeffrey A. Tuhtan, TalTech, Estonia*

10h00 - 10h45

Downstream Fish Passage Solutions: From Lab to the Field  
*Ana T. Silva, NINA, Norway*

10h45 - 11h00

Coffee Break

11h00 - 11h30

From Field to Lab and Back: Ethohydraulics as a Method and  
Transdiscipline in Need of Standardization  
*Katharina Bensing, TU Darmstadt, Germany*

11h30 - 12h00

Ethohydraulics in the Lab:  
Balancing Experimentation, Ethics, and Innovation  
*Isabel Boavida, CERIS, University of Lisbon, Portugal*

12h00 - 13h00

Lunch Break

13h00 - 13h45

The Industry's Current Understanding of and Emerging Topics  
related to Turbine Passage Survival of Fish  
*Pedro Romero-Gomez, Andritz, Austria*

13h45 - 14h30

Unusual Development of a Fish Saving Replacement Pump in the  
Context of Uncertain Legal Frameworks  
*Roland Schumacher, KSB, Germany*

14h30 - 14h45

Coffee Break

14h45 - 15h30

Live Fish Tests for Pumps: Lessons Learned from  
Six Case Studies on Eight Pump Types  
*Ine Pauwels, INBO, Belgium*

15h30 - 16h15

Downstream Fish Passage Solutions: Even trying would be a  
waste of time (!)  
*Olle Calles, Karlstad University, Sweden*

16h15 - 16h30

Coffee Break

16h30 - 17h15

Four Steps to 'Fish-Friendly' (?) – The Environment Agency  
Applying Evidence-Led Regulation  
*Andy Don, UK Environment Agency, United Kingdom*