



Research Assistant with PhD opportunity in River Morphodynamics

Description

The Laboratory for River and Sediment Dynamics group (<https://rised.grad.hr/en/>) at the Faculty of Civil Engineering Zagreb (Croatia) is recruiting an PhD student to work within a 6-years research project on the hydraulics of sediment transport.

We invite applications for a PhD position focused on sediment transport dynamics, with a particular emphasis on data processing and analysis. The successful candidate will work on advanced data acquisition and processing techniques, including Acoustic Doppler Velocimeter (ADV) data acquiring and processing, Acoustic Doppler Current Profiler (ADCP) data processing and video Particle Tracking Velocimetry (PTV). The research interests are closely related to the iNNO SED project activities (<https://innosed.eu/>).

This PhD project aims to explore how sediment transport influences river morphodynamics in complex setting, such as river confluence. Research will provide value to the river management stakeholders through a combination of data analytics, modelling, and scenario analysis techniques to provide support for strategic decision-making and inform policy. The candidate will identify the existing data gaps related to sediment quantity monitoring and modelling and explore best practices for data processing over the range of spatial and temporal scales.

Research on this project will be laboratory-based and will require programming skills. It will suit those who are creative and open to new ideas. Frequent laboratory experiments are planned, as well as occasional field work campaigns. Other research duties to support the work of the principal investigators may be required, and co-supervision of undergraduate and graduate students within the scope of their final theses.

The contract shall start 01/01/2026 and may last until 01/01/2032 if the probatory period is successfully evaluated. Starting salary: 1500 €/month.

Requirements

The candidate must hold an Engineering Degree to meet the conditions for enrolment in doctoral studies. Background in open-channel hydraulics will be significantly considered, as well as computer programming skills.

Primary supervisor

Professor Gordon Gilja, University of Zagreb Faculty of Civil Engineering.

Webpage: <https://www.grad.unizg.hr/en/gordon.gilja>

E-mail: gordon.gilja@grad.unizg.hr

Application

Official application: <https://euraxess.ec.europa.eu/jobs/374189>

To apply, submit these documents via e-mail to pisarnica@grad.unizg.hr (subject "Assistant (f/m) - project iNNO SED"):

- CV
- Motivation letter (outlining your academic interests, prior research experience and reasons for wishing to undertake the project), maximum one page in length.
- Copies of BSc/MSc degrees
- Diploma supplement or transcript(s) of record for subjects studied
- If you are not a national of a majority English-speaking country you will need to submit evidence of your proficiency in English

Applicants from outside the European Union must convey additional legal and procedure requirements. All info will be sent by e-mail to the applicants interested in the job offer.

Key dates:

- Application deadline: 17/10/2025
- Online Interviews successful applicants: -20-24/10/2025
- Notification of selection: 05/11/2025