

## POST-DOC POSITION IN URBAN DRAINAGE

### Project context

#### Co-UDlabs project – 2021/2025



We urgently need innovation to tackle challenges posed on Urban Drainage Systems (UDS) by the climate emergency, the continuous urbanization process, the deterioration of existing assets, and the economic sustainability. Knowledge on state and processes of UDS remains insufficient, leading to potential public health threats caused by untreated stormwater releases, emerging pollutants and pathogens. Large-scale laboratory facilities are important to investigate and validate innovations, and to provide confidence in their effectiveness and safety. The H2020 European project CO-UDlabs seeks to integrate 17 key large scale research facilities at a European scale into an exciting program aiming to offer the R&D community, water infrastructure operators and their supply chain access to high quality laboratory and field facilities. Human resources, high level training opportunities and improved data sharing platforms will also be provided through the project.

The Co-UDlabs consortium comprises 4 Universities (University of A Coruña (Spain), University of Sheffield (UK), INSA Lyon (France) and Aalborg University (Denmark), all with world-class urban water research groups, combined with 3 leading national research institutes (Deltares (Netherlands), EAWAG (Switzerland) and IKT (Germany)). The consortium also includes GRAIE, a non-profit organization with proven abilities in creating partnerships between industry, water utilities, policy-makers and the researchers from public institutions, and the specialized multi-sectorial SME EURONOVIA.

Co-UDlabs is funded by the EC Horizon 2020 Research and Innovation Programme (contract No 101008626).

More details on Co-UDlabs at <https://co-udlabs.eu/>

### Job description

#### **Interested in contributing to Co-UDlabs, developing your skills and extending your collaborative network in urban drainage across Europe?**

During the last phase of the Co-UDlabs project (2024-2025), the recruited person will mainly work on three Work Packages:

- WP 6 "Smart sensing and monitoring in urban drainage": in this WP, the main tasks are related to i) the final phase of sensors testing and evaluation (Task 6.1) and ii) the analysis of spatially distributed data (Task 6.3).
- WP 8 "Improving resilience and sustainability in urban drainage solutions": in this WP, the main task will include an experimental work (from design to analysis of results) on a stormwater infiltration soil with pollutants adsorption properties, to evaluate its performances.
- WP 9 "Transnational access": in this WP, the main task will include the preparation and the operation of various experiments on some INSA Lyon research facilities (experimental green roofs, infiltration trench and a swale) in close collaboration with various external partners whose research applications have been evaluated and selected by the Co-UDlabs External Evaluation Panel.

In collaboration with INSA Lyon and Co-UDlabs partners, the recruited person will also coordinate tasks with internal and external groups, organise meetings and contribute to various project outcomes (project deliverables, scientific papers, training courses, dissemination activities, etc.).

### Required diploma

PhD degree, or Master of Science / Engineer diploma with experience, or equivalent work experience.

<b>Expected experience and skills</b>	<ul style="list-style-type: none"> <li>- Experience / interest in metrology and monitoring of urban drainage and stormwater management systems, in particular field experiments.</li> <li>- Experience / interest in uncertainty assessment, data validation, data processing and analysis, time series analysis.</li> <li>- Experience in performance assessment.</li> <li>- Practice of Matlab (or similar language).</li> <li>- Interest in multi-disciplinary work.</li> <li>- Ability to work in collaboration and in a team.</li> <li>- Good written and oral presentation skills.</li> </ul>
<b>Duration</b>	12 months from March 2024 (some flexibility in starting date)
<b>Location</b>	<p>The position will be based at INSA, Lyon, France with visits to other Co-UDlabs partners during the project for meetings and collaborative work.</p> <p>Possibility of teleworking 1 day per week</p>
<b>Salary</b>	Net salary 2000 € per month.
<b>Salary complements</b>	<p>Staff restaurant</p> <p>50% reimbursement public of transport costs</p> <p>Social security coverage (Baloo)</p> <p>Leave: 42 days per year</p> <p>Social, cultural and sport events and activities</p>
<b>Language</b>	Project working language will be English. Skills in French are appreciated as local language at INSA Lyon.
<b>Contact</b>	Prof. Jean-Luc Bertrand-Krajewski ( <a href="mailto:jean-luc.bertrand-krajewski@insa-lyon.fr">jean-luc.bertrand-krajewski@insa-lyon.fr</a> )
<b>Recruitment process</b>	<p>Candidates must provide a CV and a motivation letter, sent to the above contact. After pre-selection based on received documents, interviews will be organised.</p> <p>Deadline for applications: 15 February 2024.</p>