

E-2462 — ENGINEER IN NOVEL TECHNOLOGIES AND APPROACHES FOR BIODIVERSITY MONITORING

Temporary contract | 24 months | Belvaux

Are you passionate about research? So are we! Come and join us

The Luxembourg Institute of Science and Technology (LIST) is a Research and Technology Organization (RTO) active in the fields of materials, environment and IT. By transforming scientific knowledge into technologies, smart data and tools, LIST empowers citizens in their choices, public authorities in their decisions and businesses in their strategies.

Do you want to know more about LIST? Check our website: https://www.list.lu/

Discover our Environmental Research and Innovation department: ERIN Department

You will join ERIN's Observatory for Climate, Environment and Biodiversity (OCEB). The OCEB is a multidisciplinary platform including researchers and engineers who push the state of the art in environmental and ecological monitoring and assessment. With its cutting-edge technological infrastructures and monitoring networks, the OCEB platform offers a wide range of services and leverages expertise and knowledge to produce scientific evidence for supporting policy-making processes and research applications focusing on sustainable and informed management of natural resources.

Within the OCEB, the Biodiversity Monitoring and Assessment (BIODIV) team focusses on innovating the way data is sampled in the field to evaluate the spatial and temporal dynamics of living organisms. As a national hub at the interface between the scientific community and decision/policy makers in Luxembourg, the BIODIV team makes use and develops technologies to strengthen knowledge and competences on biodiversity monitoring and assessment in terrestrial and freshwater ecosystems across the country.

How will you contribute?

You have strong experience in the development and use of novel technologies and approaches for biodiversity monitoring and assessment.

You will contribute to the development of the team and regularly communicate on your work progress during both technical and scientific meetings.

Your main missions will include:

- · Coordinating field sampling and data collection across RDI projects on freshwater biodiversity monitoring and assessment
- Leading the definition of proofs of concepts and the development of prototypes for automated wildlife image acquisition (camera traps)
- · Developing and improving standards for storing and sharing data and metadata of wildlife images and sound recordings
- Coordinating workflows and pipelines across RDI projects that use artificial intelligence for wildlife recognition to facilitate exchange, integration and exploitation of data and algorithms.
- Coordinating the maintenance and development of state-of-the-art laboratory/field facilities and equipment to support RDI activities (including the development and application of workflows for bulk processing of samples)
- Participating in the drafting of scientific articles and patent applications
- Generating and protecting IP in the context of your activities (e.g., patents, licences)

Is Your profile described below? Are you our future colleague? Apply now!

Education

The Luxembourg Institute of Science and Technology (LIST) is a mission-driven Research and Technology Organisation (RTO) that develops advanced technologies and delivers innovative products and services to industry and society. Located at the heart of Luxembourg's vibrant Research and Innovation Campus in Esch-Belval, LIST can ideally connect its over 500 specialists in materials, the environment and IT with virtually all of Luxembourg's other main research players such as the University of Luxembourg, LIH, LISER, Technoport, Luxinnovation and the National Research Fund. **LIST.lu**



MSc degree (or BSc degree with at least ten years of professional experience) in a relevant discipline such as environmental or ecological monitoring and assessment.

Experience and skills

Strong experience with field data collection and sampling methods and tools in freshwater and terrestrial ecosystems

Expertise in the development and use of automated biodiversity data acquisition devices (e.g. camera traps, sound recorders)

Experience with the processing and/or analysis of data collected by such devices (e.g. state-of-the-art tools that use machine learning for automatic species detection and recognition)

Pronounced sense of organization and ability to prioritize multiple tasks

Ability to work both independently and in a team setting

Experience with the coordination of field and/or lab activities within a team and across RDI projects

Driving license valid in Luxembourg and ease of use of vehicles in the field

Excellent interpersonal skills, including communication, team spirit and collaboration mindset

Language skills

Good level both written and spoken English. French and/or Luxembourgish would be an asset.

Your LIST benefits

- An organization with a passion for impact and strong RDI partnerships in Luxembourg and Europe that works on responsible and independent research projects
- Sustainable by design, empowering our belief that we play an essential role in paving the way to a green society
- Innovative infrastructures and exceptional labs occupying more than 5,000 square metres, including innovations in all that we
- An environment encouraging curiosity, innovation and entrepreneurship in all areas
- Personalized learning programme to foster our staff's soft and technical skills
- Multicultural and international work environment with more than 50 nationalities represented in our workforce
- Diverse and inclusive work environment empowering our people to fulfil their personal and professional ambitions
- · Gender-friendly environment with multiple actions to attract, develop and retain women in science
- 32 days' paid annual leave, 11 public holidays, 13-month salary, statutory health insurance
- Flexible working hours, home working policy and access to lunch vouchers

Apply online

https://www.list.lu/en/jobs/environment/

Your application must include:

- A motivation letter oriented towards the position and detailing your experience
- Contact details of 2 references

Application procedure and conditions

We kindly request applicants to provide their nationality for statistical purposes only, as part of our commitment to promoting diversity and ensuring equal opportunities in our workforce. This information will be kept confidential and will not be used for any discriminatory purposes.

LIST is dedicated to maintaining an inclusive work environment and is an equal opportunity employer. We are committed to attracting, hiring, and retaining a diverse workforce. All applicants will be considered for employment without discrimination based on national origin, race, color, gender, sexual orientation, gender identity, marital status, religion, age, or disability.

Applications will be continuously reviewed until the position is filled. An assessment committee will thoroughly evaluate applications, adhering to guidelines designed to ensure equal opportunities. The primary criteria for selection will be the alignment of the applicant's

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existing skills and expertise with the requirements mentioned above.

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