

# Call for a Postdoctoral Researcher at the Department of Environmental Sciences, Group of Colloid Biology

**Position title:** Research Assistant (PhD) (m/f)

**Field:** Environmental Biotechnology / Microbial Ecology / Bioinformatics / Computational Biology

## **Job description and responsibilities:**

The selected candidate will develop and implement advanced approaches to investigate polymer conversion by microbes and the bioremediation of contaminated environments within the Colloid biology (<https://biocolloid.ijs.si/>) research projects. The work will focus on two key projects: (1) the conversion of plastic polymers by microbial consortia into useful, value-added substances, and (2) the remediation of contaminated river sediments using microbial technologies and nature-based and bio-based solutions.

## **Their key responsibilities will include:**

- Organizing and supervising work in the laboratory or computational unit;
- Planning, managing, and performing experimental work or bioinformatic and computational analyses within the scope of the projects mentioned above;
- Establishing, optimizing, and characterising microbial consortia for efficient plastic polymer degradation and upcycling;
- Developing and implementing biotechnological and nature-based solutions for the remediation of river sediments;
- Processing complex datasets (e.g., metagenomics, transcriptomics, metabolomics, or physical-chemical process modeling);
- Participating in the preparation of research projects, reports, grant application documentation, and publishing scientific-research and research-development works;
- Presentations at international meetings;
- Training abroad;
- Mentoring and providing professional supervision to students, PhD candidates, and technical staff.

## **Required education and qualifications:**

- PhD in bioinformatics, computational biology, biology, biotechnology, physics, or a related field of natural or technical sciences;
- In-depth knowledge and several years of experience working in a laboratory or with bioinformatic data analysis;
- Experience with microbial ecology, polymer conversion technologies, or bioremediation (desirable for experimentalists);

- Experience with next-generation sequencing (NGS) data analysis, programming (Python, R), or bioinformatics tools (desirable for computational biologists and bioinformaticians).

### **Special Conditions**

- Appointment to the title “Assistant with a PhD”;
- Ability to conduct independent research;
- Mentoring abilities.

### **Expected knowledge and competencies:**

- Precision, responsibility, and reliability in work;
- Ability to think critically and solve problems;
- Good command of English (written and spoken);
- Ability to work in a team and collaborate in interdisciplinary environments.

### **We offer:**

- The selected candidate will be employed for a fixed term of 2 years, with the possibility of extension, and with a 3-month probationary period;
- The starting salary grade for the position is grade 31;
- Work in a research-oriented, interdisciplinary environment;
- Opportunities to develop and implement advanced experimental or computational methods;
- Participation in national and international research projects;
- Opportunities for professional and scientific development.

The position is located at the Reactor Centre, Brinje 40, 1262 Dol pri Ljubljani, Slovenia.

Applications should be submitted by email to [ales.lapanje@ijs.si](mailto:ales.lapanje@ijs.si) no later than 31 July 2026. Applicants should include a short curriculum vitae (CV) with proof of meeting the requirements and a motivation letter.