

Call for a PhD Student / Candidate at the Department of Environmental Sciences, Group of Colloid Biology

Position title: Assistant / PhD Student (m/f) – job code: H017001

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

Job description and responsibilities:

The selected PhD candidate will be integrated into the department's research projects in environmental biotechnology, developing their skills under the mentorship of experienced researchers. The work will be tied to the fields of microbial conversion of plastic polymers into value-added substances, and the development of biological and nature-based solutions for the remediation of contaminated river sediments using microbial technologies. Depending on their profile (experimental or computational), the candidate will focus on laboratory work or computational/physical systems biology analysis.

Their key responsibilities will include:

- Conducting research work towards the preparation of a PhD dissertation under the guidance of a mentor;
- Participating in setting up experiments for microbial plastic degradation or sediment remediation (for experimentalists);
- Performing bioinformatic analyses, statistical data processing, or physical modeling of biological processes (for bioinformaticians, computational biologists, and physicists);
- Reviewing scientific literature and integrating findings into their own research work;
- Participating in writing scientific papers, reports, and presenting results at national and international conferences;
- Regular fulfillment of academic requirements within the PhD doctoral program;
- Assisting with the day-to-day work in the laboratory or computational unit.

Required education and qualifications:

- A university degree (Master's degree / 2nd Bologna cycle) in biology, bioinformatics, computational biology, physics, biotechnology, or other related fields of natural sciences;
- An average grade point average across undergraduate and postgraduate studies meeting the national criteria for junior researchers/PhD students (preferably above 8.0/10);
- Basic experience with laboratory work (for the experimental profile) or basic knowledge of programming (e.g., R, Python) and statistics (for the bioinformatic/computational/physics profile).

Special Conditions

- Enrollment or eligibility for enrollment in a 3rd cycle PhD program for the academic year 2026/2027;

- High motivation for scientific-research work and obtaining a PhD degree;
- Election to the title of Assistant.

Expected knowledge and competencies:

- Precision, curiosity, self-initiative, and responsibility;
- Strong analytical thinking skills;
- Good command of English (written and spoken);
- Ability to work effectively within an interdisciplinary team.

We offer:

- Fixed-term employment (4 years), with the possibility of extension, including a 3-month probationary period;
- Funding for PhD tuition fees and a regular monthly salary;
- Work on current, environmentally critical projects with high societal impact;
- A top-tier research environment with access to modern computational and laboratory infrastructure;
- Opportunities for international exchanges and networking within the global scientific community.

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 no later than 30 June 2026. Applicants should include a short curriculum vitae (CV), a motivation letter, and a transcript of records with their GPA.