

OFFER	PhD Scholarship in Food and Environmental Analytical Chemistry
DURATION	3 years, with a possible 1-year extension
PERIOD	October 1, 2024 – September 30, 2027
APPLICATION DEADLINE	July 10, 2024

WORKPLACE

The PhD project will be conducted at Jožef Stefan Institute (JSI) in collaboration with the French Agency for Food, Environmental and Occupational Health & Safety (ANSES), including an 18-month external research stay at ANSES.

- Jožef Stefan Institute (JSI), Jamova 39, Ljubljana, Slovenia; location Reactor Centre, Brinje 40. October 1, 2024 - March 31, 2026.
- French Agency for Food, Environmental and Occupational Health & Safety (ANSES), 14 Pierre & Marie Curie street, F-94701 Maisons-Alfort, France. March 31, 2026 - September 30, 2027.

The candidate will be registered at the Jožef Stefan International Postgraduate School (<https://www.mps.si/en/>), located in Ljubljana, Slovenia.

JSI BRIEF DESCRIPTION

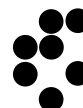
The Jožef Stefan Institute is a leading scientific research institute specializing in a wide range of basic and applied research. With a staff of approximately 1,050, the institute covers natural sciences, life sciences, and engineering.

The Department of Environmental Sciences (O-2) focuses on the interplay of physical, chemical, and biological processes shaping the environment. Research areas include environmental analytical chemistry, biogeochemical cycles, microbial ecology, environmental health, environmental technologies, risk assessment, and environmental monitoring. Laboratories specialize in inorganic and organic analytical chemistry, radiochemistry, and isotope ratio analysis. Services include strategic environmental assessment, consulting, and project assistance in environmental analysis, natural resource management, ecotechnologies, food safety, quality and authenticity, and public health.

ANSES BRIEF DESCRIPTION

The National Agency for Food, Environmental and Occupational Health & Safety (ANSES) carries out monitoring, expertise, research and reference missions covering human health, health and animal welfare, and plant health. Its assessments are based on scientific expert appraisal work undertaken by independent expert committees and based on the most recent global knowledge. The Agency also ensures that the human, economic and social sciences are incorporated into its expert appraisals.

The Laboratory for Food Safety (Maisons-Alfort site) deals primarily with the biological and chemical hazards that can affect food safety and quality. The laboratory's scientific activities aim to enrich knowledge on the types of contaminants or "hazards" found in food, understand



their mechanisms of action and effects on health, and help improve policies for protecting consumer health.

BRIEF DESCRIPTION OF THE DOCTORAL PROJECT

The PhD project aims to assess the impacts of external stress on bee colonies, focusing on investigating pesticide residues and potential organic contaminants (> 1,000 contaminants by targeted approach and more by suspected/non-targeted approach) in honey bees and their products (pollen, beeswax, beebread, honey). Objectives include using bee colonies as indicators of environmental pollution and understanding the fate of contaminants from the environment to bees and hive products through innovative sampling techniques and advanced screening methods with low and high-resolution mass spectrometry. This research supports PARC 4.3, which aims to establish honey bees as biomonitoring tools and sentinel species for environmental pollution, ultimately developing an early warning system for environmental hazards.

QUALIFICATION AND SKILLS

- A master's degree in analytical chemistry, instrumental methods of (chemical) analysis, pharmacy, or a similar field with an academic level equivalent to a master's degree.
- Preference for candidates with experience in analytical chemistry, especially trace-level determination of organic compounds.
- Strong relational and teamwork skills.
- Ability to analyze and synthesize information from analytical data.
- Excellent English proficiency, particularly in report writing.

SALARY AND APPOINTMENT TERMS

The salary and appointment terms are consistent with current rules for PhD students in Slovenia and France. The employment period is three years, with a possible one-year extension for promising candidates.

FURTHER INFORMATION

For more information, please contact:

Tina Kosjek (JSI): tina.kosjek@ijs.si

Julien Parinet (ANSES): julien.parinet@anses.fr

APPLICATION

Submit your application by July 10, 2024, via email to tina.kosjek@ijs.si. Applications should include a motivation letter, Curriculum Vitae, and proof of relevant academic degrees.