



## **Job Offer**

# Research and Technical Specialist in Optics/ Microfluidic Technologies

We are offering employment for the position of Research and Technical Specialist at the Department of Molecular Biology, Institute of Biochemistry, Faculty of Biology, University of Warsaw. The position is part of the project no. TEAM NET FENG.02.03-IP.05-0113/24, funded by the Foundation for Polish Science, titled: "Development of an innovative, high-throughput platform for functional screening of human pancreatic endocrine cells."

Project website: <a href="https://teamnet.web.amu.edu.pl/en/team-feng-net-en/">https://teamnet.web.amu.edu.pl/en/team-feng-net-en/</a>

Lab website: <a href="https://microfluidics.biol.uw.edu.pl/">https://microfluidics.biol.uw.edu.pl/</a>

Project Leader: Dr. Tomasz Kamiński.

**Description of the programme/project/initiative**: The development of an innovative, high-throughput platform for functional screening of human pancreatic endocrine cells is the subject of the project. Diabetes is a chronic metabolic disease with a steadily increasing global incidence. The project proposes the use of a novel high-throughput flow system for culturing differentiating pancreatic cells on a microscale, enabling advanced preclinical studies, in vitro diabetes modeling, and more efficient drug testing.

The platform developed as part of the project will accelerate, standardize, and increase the precision of research, thereby reducing the costs of developing new therapies for patients with diabetes. The project will be carried out by a consortium formed by Adam Mickiewicz University in Poznań (leader), the University of Warsaw, and the Jagiellonian University in Kraków. The research teams are led by Prof. Małgorzata Borowiak (AMU), Prof. Józef Dulak (JU), and Dr. Tomasz Kamiński (UW).

#### Requirements

- Hold a minimum of a Master degree in engineering, physics or related fields
- Very good command of English
- Good organization skills
- Strong communication skills and ability to work in a team

- Proven track record of scientific publications or hands-on experience with techniques critical to the project's success, particularly in the development of optical and optofluidic systems, automation of measurement setups, and image analysis.
- Practical experience in the design, construction, and operation of optoelectronic systems, as well as proficiency in laboratory automation software such as LabVIEW.
- Additional expertise in microfabrication and photolithography, with familiarity in design tools such as AutoCAD considered an asset.

### Responsibilities

- Development of hardware and software for signal analysis, with a focus on high-speed multicolor fluorescence and image-based measurements in microbioreactor systems. Representative publications:
  - o Nature Protocols (2022) <a href="https://www.nature.com/articles/s41596-022-00796-2">https://www.nature.com/articles/s41596-022-00796-2</a>
  - o Nature Comm (2023) https://www.nature.com/articles/s41467-023-40322-w
  - Advanced Materials Technologies (2021)
    <a href="https://advanced.onlinelibrary.wiley.com/doi/full/10.1002/admt.202101053">https://advanced.onlinelibrary.wiley.com/doi/full/10.1002/admt.202101053</a>
- Execution of high-throughput experiments and improvement of software for assay automation and control.
- Design and microfabrication of microfluidic systems, including modification and optimization of their design.
- Conducting experiments and analyzing data.
- Preparing publications and patent applications.

## **Employment Conditions**

- Fixed-term employment contract as a research and technical specialist
- Base gross salary: approximately 10 500 –13 600 PLN (depending on experience), plus seniority allowance if applicable.
- Estimated net monthly salary: Approximately 7 800–10 500 PLN (equivalent to  $\sim$ 1 800–2 500 EUR), plus annual bonus of 8.5%
- Contract starting on September 1, 2025, for a period of up to 31 months with a possible extending for additional 5 months.
- Opportunities for training, professional development, and participation in scientific conferences
- Co-authorship on publications and patent applications

### Recruitment

Application deadline: July 20, 2025, at 11:59 PM.

### **Required Documents**

- Copy of diploma(s) for completed studies and (optionally) PhD degree
- CV
- Cover letter
- Contact details of at least two referees (email, and optionally phone number)
- Consent for the processing of personal data. The personal data processing information form should be downloaded from the University of Warsaw website.

### **Application Submission**

By email to <u>k.sienkiewicz@uw.edu.pl</u> with the subject: "TEAM\_NET\_FENG\_specialist\_optics&microfluidics". Candidates will receive an email confirmation of document submission. If no confirmation is received, please contact <u>k.sienkiewicz@uw.edu.pl</u>.

For questions regarding the scientific aspects of the project, requirements, or scope of responsibilities, please contact <u>ts.kaminski2@uw.edu.pl.</u>

We reserve the right to contact only selected candidates. Recruitment results will be communicated via email to the address provided in the application documents.

### **Equal Opportunities**

The constitutional principle of equal treatment of all members of the University community is a cornerstone of its operations. The University promotes diversity and opposes discrimination. It upholds the highest ethical standards, safeguards scientific integrity, and adheres to the principles of the European Charter for Researchers.