

POSITION: EXPERIENCED RESEARCHER IN DEVELOPMENT OF MICROFLUIDIC BIOSENSORS AND DEVICES

Who we are

BioSense Institute cross-fertilizes two vital sectors of today: ICT and agriculture. Recognizing that ICT plays a pivotal role in ensuring sustainable, smart and inclusive growth of agriculture, we focus on multidisciplinary, game-changing and needs-driven research in nano and microelectronics, new materials, communications, signal processing, remote sensing, biosystems, artificial intelligence, IoT and big data, driven by our desire to make a significant impact to the society in which we live in. BioSense Institute has coordinated or participated in a large number of international research projects, including over 30 H2020 projects.

Through the project ANTARES, the first ranked in the course of the prestigious Horizon 2020 Teaming Call, BioSense Institute is funded with 28 M€ to become European Centre of Excellence for advanced ICT solutions in agriculture. The project budget is dedicated to the attracting global talent as well as to the construction of the new building and purchase of the state-of-the-art equipment.

BioSense Institute is situated in Novi Sad, Serbia. Novi Sad is a friendly and safe city of approx. 350.000 inhabitants in the north of Serbia, on the banks of the Danube river, facing the northern slopes of Fruška Gora mountain. Due to the combination of a vibrant social and cultural life with particularly favorable cost of living (for details please check <https://www.numbeo.com/cost-of-living/>), Novi Sad is an ideal choice for a broad range of people, from busy single professionals to families with schoolchildren.

Job description:

- Development of microfluidic-based sensors platforms for the applications in agriculture and environmental protection
- Integration and testing of microfluidic sensors, devices, and systems
- Development of novel microfluidic fabrication technologies
- Supervision of PhD and Master Students
- Writing of grant proposals

General requirements:

- PhD degree in Biotechnology, Physics, Electrical or Mechanical Engineering, or related fields
- A minimum of two years of experience in design, fabrication, and testing of microfluidics sensors and devices
- Excellent academic or industrial track record
- Solid track in research funding proposal preparations and project coordination/management is preferable
- Excellent English skills
- Ability to structure and document your work properly
- Ability to create and develop ideas and generate outstanding scientific results.

Specific requirements:

- Extensive experience in modeling & simulation of the microfluidic chips and systems
- Extensive experience in microfluidic system integration and testing
- Knowledge in the field of microfabrication technologies (photolithography, metal patterning, soft lithography and/or rapid prototyping)

- Knowledge in the field of 3D mechanical CAD (SolidWorks, Autodesk Fusion 360, or similar) and prototyping technologies such as machine processing, 3D printing or inkjet molding.
- Excellent understanding of sensing technologies
- Experience in electrochemical and/or optical sensing
- Experience in bioassay development is preferred
- Experience and knowledge of electronics aspects of sensors
- Ability to understand a variety of technical disciplines
- Experience with microfluidics, modifications for on-chip reagent storage, point-of-need-friendly protocols for nucleic acid extraction, or other techniques
- Knowledge about mammalian cell culture is an advantage
- Excellent understanding of sensing technologies
- Experience in electrochemical sensing and/or optical sensing
- Ability to understand a variety of technical disciplines, work in a multidisciplinary environment in an autonomous yet collaborative fashion

We Offer:

- The ability to make a difference in a dynamic and rewarding working environment in a top-ranked European Centre of Excellence
- The opportunity to work in a team comprised of renowned experts and using state-of-the-art laboratories
- The possibility to develop own research team and pursue own cutting-edge research directions
- Favourable cost of living and advanced quality of life
- Full administrative support in relocation for the entire family

Earliest Starting Date: January 2020

Contract Duration: up to 4 years (with a possible extension or a permanent (tenure) position based on the performance)

Submit your applications including a detailed CV, list of publications and any other relevant information to jobs@biosense.rs

Informal enquiries should also be sent to jobs@biosense.rs