

POSITION: EXPERIENCED RESEARCHER IN DEVELOPMENT OF SENSING 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 innovative sensing methodologies, devices, and platforms for applications in agriculture and environmental protection (e.g. soil composition, pesticide residues in crops, bio-toxins, animal health status, environmental conditions, specific pollutants, gaseous and liquid samples, quality of packed and unpacked food products etc.)
- Supervision of PhD and Master Students
- Writing of grant proposals

General requirements:

- PhD degree in applied physics, electronic engineering, mechatronics or similar areas
- Minimum five years of experience in fields such as sensor modeling, design and fabrication. In exceptional cases, candidates with less experience will be considered.
- Ability to develop elegant solutions to complex problems in sensing of physical, chemical, and biological analytes
- Ability to create and develop ideas and generate outstanding scientific results
- Ability to lead and work in multidisciplinary team
- Ability to work in a fast-paced environment where several interdependent technologies are being developed simultaneously
- Ability to understand a variety of technical disciplines
- Excellent academic or industrial track record
- Excellent track record in research funding proposal preparation and project coordination/management is a bonus
- Excellent English skills

Specific requirements:

- Extensive knowledge in the field of: MEMS technologies / photolithography / thin and thick film deposition technologies (e.g. thermal evaporation, e-gun, (reactive) sputtering, spinning and screen printing) / electro-chemical deposition / sensors encapsulation.
- Experience in clean room facilities

- Experience with measurement and characterization equipment and techniques used in sensor fabrication processes and sensor final testing.
- Extensive knowledge in simulation & measurement software, such as FEM, Comsol, MatLab, LabView or similar

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