

Postdoc position in high-frequency biochip research and development

at the Bioelectrodynamics research team, Institute of Photonics and Electronics of the Czech Academy of Sciences, Prague, Czech Republic

Project description

We are looking for applicants who have a desire to conduct top research in the field of RF-microwave biosensors/biopchips. The specific research project is on developing novel classes of high-frequency microchips for the 0.1MHz - 50GHz band for the characterization and manipulation of protein nanostructures and other bionanostructures, with the ambitious goal of such methods to enable new diagnostics and treatment methods in medicine and biotechnology.

As a postdoctoral researcher you will work in an interdisciplinary research team, you will develop your own microchips concepts, you will model and simulate them in state-of-the-art microwave and microfluidic design tools, you will fabricate them in the IPE clean-room environment, and you will characterize them in our microwave laboratory with existing measurement setups or with setups you still have to develop. You are expected to present your research results at international conferences and to write journal publications for highly ranked microwave, bioelectromagnetics, biotechnology, and interdisciplinary scientific journals.

Project funding is provided via Czech Science Foundation project of which your supervisor is grant holder.

Qualifications

The successful applicant is expected to hold or to be about to receive a Ph.D. degree in Electrical Engineering, Engineering Physics, or equivalent. The Ph.D. degree should be in RF/microwave engineering. Experience with microfabrication technology is an asset, but not required. Knowledge of microwave design tools and RF/microwave measurement technology is required.

The successful applicants should have an outstanding academic track record, and well developed analytical and problem solving skills. We are looking for highly motivated young professionals, who are able to work independently as well as to be good team players. Good command of English orally and in writing is required to publish and to present results at international conferences and in international journals.

Contact

For additional information about the position please contact Dr. Michal Cifra, team leader Bioelectrodynamics, <http://www.ufe.cz/en/michal-cifra>

Lab webpage: <http://bioed.ufe.cz/>

To apply

Please send

- motivation letter on why you want to join the group (maximum one page)

- resume/CV

- list of publications

- two letters of recommendation

to Mrs. Plasilova, plasilova@ufe.cz, with the subject HFBIO. Name all your documents according to Lastname_Firstname_CV.pdf.

The position is available starting from July 1, 2016, the contract is for 1.5 year (extendable upon agreement).