Institute of Scientific Instruments The Czech Academy of Sciences
Královopolská 147, 612 64 Brno, Czech Republic
phone: +420 541 514 111
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Job Information

Job Title: Postdoctoral fellow / Associate scientist

Discipline: Applied Physics / Bio-Medical engineering

Monthly salary: 54 000 CZK

Position available from: 1. 6. 2020

Category: Academic / Research

We are seeking an exceptional candidate to join our ~€7m research project Gate2μ, cofounded from the European Regional Development Fund, The Ministry of Education, Youth and Sports of the Czech Republic and the Institute of Scientific instruments of the CAS.
The project Gate2μ combines expertise in wavefront shaping technologies, digital holography, fibre optics, and bio-medical photonics in an effort to introduce new imaging modalities deep inside living organisms.
The friendly international team of Gate2μ is located in newly refurbished premises of the Institute of Scientific Instruments, featuring spacious optics laboratory, access to mechanical workshops, small-animal facility and further support from skilled IT and administrative departments. The institute is well connected to the city of Brno with private car park, library and in-house dining facility.
The successful candidate will work on development of new experimental procedures for advanced control of light propagation in optical waveguides and their applications in bio-medical settings. Candidates should have extensive previous research expertise in the general area of Photonics. We are particularly interested in recruiting in one of the work-package focus areas:

Theoretical modelling of light propagation and scattering in complex media
Nonlinear optics
Light-matter interactions
Wave and vector optics,
Numerical and analytical description of optical problems

We are looking for a candidate with a proven track record of research. The successful candidate will be expected to work under a supervision of a senior expert, contribute to the development of advanced photonics models and their experimental verification, and contribute to the preparation of high quality publications. The post is offered for the duration of two years.

Person specification:

Essential:

- Experience in numerical and analytical modelling of wave propagation.
- Broad portfolio of programming skills.
- PhD in a relevant subject.
- Ability to contribute to research outputs.
- Excellent communication and interpersonal skills.
- Ability and willingness to work collaboratively with others.
- Ability to collaborate with existing members of a research group and learn new topics
- Excellent English (written and spoken)

Desirable:

- Experience of public engagement with science.
- Evidence of high quality research outputs as leading author.
- Czech language (written and spoken)

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Responsibilities:

- Undertake assigned research activities
- Contribute to publications in high quality research journals
- Present work at domestic and international conferences.
- Assist with project administration
- Participating in the outreach and recruitment activities.

Application Requirements:

Applicants must include with their application:

- Cover letter outlining the candidate's suitability for the role.
- Curriculum Vitae
- Overview of past research activities (1-2 pages)
- Names and contact details of at least two references.

Contacts:

To further discuss the details of this position, informal inquires may be made to Tomas Cizmar cizmart@isibrno.cz or Tomas Tyc tomtyc@isibrno.cz .

Closing Date: 26. 2. 2020

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