HELLENIC REPUBLIC
MINISTRY OF DEVELOPMENT AND INVESTMENTS
GENERAL SECRETARIAT FOR RESEARCH AND TECHNOLOGY

FORTH
FOUNDATION FOR RESEARCH AND TECHNOLOGY – HELLAS
INSTITUTE OF ELECTRONIC STRUCTURE AND LASER

One Post-doctoral Research Fellow in the project

Optical MEmristors, based on Photo-fluidity, Chalcogenide Whispering GAllery Mode Cavities (OMEGA)

FORTH-SYNERGY grant

Ref: 31930
Heraklion 19/6/2020

The Institute of Electronic Structure and Laser (IESL), of the Foundation for Research and Technology Hellas (FORTH), in the framework of the FORTH-SYNERGY project OMEGA, is seeking to recruit one (1) Post-doctoral Research Fellow.

Job Description

Optical Memristors are disruptive photonic elements which have attracted significant attention during the last few years, while offering unique switching and memory-like characteristics, for driving the future optical networks and sensing systems. The FORTH-SYNERGY project **Optical Memristors, based on Photo-fluidity, Chalcogenide Whispering Gallery Mode Cavities (OMEGA)** proposes the elaboration of an optical memristive component, fusing together the exotic photo-sensitivity properties of chalcogenide glasses (ChGs) and the extreme power accumulation and modal state density of whispering gallery modes (WGMs) resonation inside spheroid microcavities.

A highly competitive, post-doctoral research fellow is sought for the project OMEGA, for 12 months initial contract, with an additional up to 12 months, extension foreseen upon performance. The successful candidate must have a PhD degree in Physics or Electrical/Electronic Engineering, with a strong experimental/theoretical background in Optical Fiber Devices and/or Whispering Gallery Mode systems, being proven by publications record, previous experience and/or thesis subject and reference letters. The applicants must provide at least two names (preferably three) of academics who can provide reference letters. Previous background on Glass science/photosensitivity will be considered as a strong asset. Applications without satisfying the above criteria will not being considered.

FORTH is a major research organization in Greece, with the mission to pursue high quality basic and applied research. IESL focuses its research activities in the fields of lasers and applications, materials science, microelectronics and devices and theoretical-computational physics, being the main laser research centre in Greece. The Laser and Applications Division at FORTH/IESL has a strong international presence with diverse activities: atomic/chemical physics, pump-probe studies, and nano-processing, photonics and fibre optics, biomedical applications of lasers. FORTH/IESL is a leading research institute in Europe, participating in hundreds of EU funded projects, also operating as a European Research Infrastructure (Ultraviolet Laser Facility-ULF) for more than 25 years, and is currently supported through the Access to Research Infrastructures Activity of the Human Research Potential Programme of the EC. FORTH-IESL is also a member of the Extreme Light Infrastructure, ACTPHAST 4R & 4.0, the Joint Undertaking ENIAC, the NFFA-EUROPE, IPERION-CH/MOLAB, and ESMI facilities.

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The successful applicant will work at the Photonic Materials and Devices Laboratory (PMDL) of FORTH/IESL (https://pmdl.iesl.forth.gr/), with a research agenda focused in the research of materials, designs and laser based fabrication methods for the development of Photonic Devices mainly in fibre geometry, with emphasis given on photonic crystal fibres, whispering gallery modes and new types of optical fiber sensors. PMDL provides a rich photonic infrastructure and unique device development know-how, while operating in a multi-cultural/national mode and providing access to international collaborations. The successful applicant will be based at the premises of IESL, however, since the project OMEGA is a collaborative scheme between FORTH/IESL and FORTH/ICE-HT, short visits to the premises of ICE-HT (Patras) for work on material science issues with Dr. Spyros Yannopoulos are anticipated.

Required qualifications

- PhD degree in Physics or Engineering
- Experience in optical fiber devices
- Experience in whispering gallery mode systems/physics
- Materials/glass science/photosensitivity
- Working knowledge of English

Location: IESL-FORTH, Heraklion Crete GREECE
Start Date: August 2020 onwards
Project Duration: 12 Months with possibility of extension according to the needs of the project

Application Submission
Applications received before **July 9th 2020** will receive immediate attention; however, applications will be reviewed thereafter until the position is filled.
Interested candidates who meet the aforementioned requirements are kindly asked to submit their applications to the address (hr@iesl.forth.gr), with cc to the Scientific Coordinator Dr Stavros Pissadakis (pissas@iesl.forth.gr).

In order to be considered, the application must include:

- Application Form (please download file from the job openings webpage https://www.iesl.forth.gr/en/jobs-bids/jobs/job-positions)
- Detailed CV and list of publications
- Names of three academic referees
- Scanned copies of academic titles

Applications will be reviewed till the position is filled

Contact
For information and questions regarding the application and selection procedure, candidates are asked to contact the secretariat (hr@iesl.forth.gr), tel. +30 2810-391301.
For information and questions about the advertised position and the research activity of the group or the institute, please contact Dr Stavros Pissadakis (pissas@iesl.forth.gr), tel. +30 2810-391348.

GDPR

FORTH is compliant with all legal procedures for the processing of personal data as defined by the **Regulation EU/2016/679 on the protection of natural persons with regard to the processing of personal data.**

FORTH processes the personal data and relevant supporting documents that you have submitted to us. Processing of that data is carried out exclusively for the needs and purposes of this specific call. Such data shall not be transmitted to or communicated to any third party unless required by law.

FORTH retains the above data up to the announcement of the final results of the call, unless further process and reservation is required by law or for purposes of exercise, enforcement, prosecution of certain one's legitimate legal rights' as defined in the Regulation EU/2016/679 and/or in national law.

We inform you that under the **Regulation EU/2016/679** you have the rights to be informed about your personal data, access to, rectification and erasure, restrictions of process and objection to as provided by applicable regulation and national laws.

We acknowledge also to you, that you have the right to file a complaint to the national Data Protection Authority. For any further information regarding exercise of your personal data protection rights, you may contact the Data Protection Officer at FORTH at dpo@admin.forth.gr.

You have the right to withdraw your application and consent for the processing of your personal data at any time. We inform you that, in this case, FORTH shall destroy such documents and/or supporting documents submitted and shall delete the related personal data.