

Staff Researcher position in Raman microscopy and spectroscopy for biomedical applications

Description

ICFO is offering a staff researcher position to a well-qualified, highly motivated and dynamic young scientist who wishes to enhance his/her scientific career in a friendly and stimulating environment.

The successful candidate will be joining the Super-resolution Light Microscopy & Nanoscopy (SLN) Research Facility at ICFO led by Dr. Pablo Loza-Alvarez which is equipped with front-end microscopy techniques that are able to operate a step beyond the commercial state of the art.

We are currently looking for a staff researcher with expertise in research projects in Raman spectroscopy for biomedical applications.

The main responsibilities for this position include (but are not limited to) the following:

- Working mainly in Raman microscopy techniques and in general in any other advanced imaging technique in the SLN facility.
- Participate in experimental Raman projects, designing a successful experimental workflow for the application.
- Manage and facilitate access, training, and support to users mainly in Raman applications.
- Analyse Raman data with advance statistical methods.
- Collaborate with industries requiring the use of Raman technology.
- Retention of critical know-how.
- Participate in research activities of the SLN.

Requirements & Conditions

Candidates must hold, at the time of contract initiation, an internationally-recognized Ph.D.equivalent degree (or evidence of its completion in the nearest future) preferably in Photonics, Biophotonics, Biophysics, Physics, engineering or related fields.

The candidate should have:

- Demonstrated experience in performing Raman imaging and spectroscopy (RS) measurements, and data analysis.
- Demonstrated experience in biological sample preparation for Raman applications
- Demonstrated experience in the use, and maintenance of commercial Raman microspectroscopy systems solving related issues and errors.
- Experience in the use of Multivariate analysis methods for Raman spectroscopy data: including Multivariate Curve Resolution (MCR), Principal Component Analysis (PCA), Partial Least Squares Discriminant Analysis (PLS-DA) and Calibration (PLS-C), etc.
- Good level of English in spoken and written form.
- Good collaborative skills to work and give support to different users in different applications
- Able to work as a part of a team
- Initiative and problem solving skills



Additionally, it would be considered as a plus:

- Knowledge in other light microscopy techniques (confocal, super-resolution, light-sheet, non-linear...).
- Experience in managing scientific research, writing research proposals and articles, and guiding junior researchers.
- Know-how and experience on experimental microscopy and optical design and set-up construction.
- Experience in other RS related optical techniques such as: CARS, TERS, SERS
- knowledge of other AI/ML tools for data analysis.

ICFO is an equal opportunity employer. Candidates are selected exclusively on merit and potential on the basis of submitted application material. No restrictions related to disabilities, citizenship or gender apply to ICFO positions. ICFO abides by the principles of openness, efficiency, transparency, supportiveness, and international comparability as stated in the European Charter for Researchers and the European Code of Conduct for the Recruitment of Researchers.

Salaries for ICFO Staff Researcher positions are assigned by the Selection Committee, based on experience and seniority of the applicant, as well as the assigned tasks and responsibilities within the group. Standard salaries range from a lower level aligned with national Ramon-y-Cajal fellowships to higher levels aligned with Marie Skłodowska-Curie individual fellowships.

The contract offered is a permanent contract.

Additionally, a family allowance is also available on request and after corresponding approval for people with family charges in the terms described in the corresponding policy.

Application process

Suitable candidates are requested to submit:

- Presentation letter with a declaration of interest,
- Curriculum Vitae, including contact details,
- The contact e-mail of two potential referees.

Candidates will be assessed as they apply and the call will remain open until the suitable candidate is identified.

Candidates may contact <u>jobs@icfo.eu</u> for formal enquiries regarding the application, as well as address scientific enquiries to <u>pablo.loza@icfo.eu</u>

For update information about the hosting group, please visit <u>https://www.icfo.eu/research-group/4/sln/home</u>.

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