



HR EXCELLENCE IN RESEARCH

## Postdoctoral Researcher - Nanoscale Biophotonics Laboratory

School of Chemistry, NUI Galway

Ref. No. NUIG RES 215-21

Applications are invited from suitably qualified candidates for a full-time fixed term position as a Postdoctoral Researcher with the School of Chemistry at the National University of Ireland, Galway. This position is funded by the European Union's Horizon 2020 research and innovation programme under grant agreement No 862413 and is available from November 2021 to April 2023.

### Job Description:

This post covers a variety of activities in the funded PAT4Nano project. The successful candidate will work under the supervision of Prof. Alan Ryder to support the work plan approved in PAT4Nano in terms of management and technical expertise in Raman spectroscopy instrumentation. The candidate will be in charge of the technical work, consisting of developing Raman and multi-PAT systems for the online analysis of nanosuspensions. Furthermore, the candidate will supervise the work of students in complementary areas of research (e.g. using assembled instrumentation to study relevant processes). The candidate will support the reporting and management of the project and will engage with the dissemination activities at the different regions of the consortium.

### Duties:

- Undertake research as directed by the PI with the goal of developing the Raman based and multi-PAT measurement methodologies for the PAT4Nano project.
- Help develop and refine the Raman and multi-PAT instrumentation and optical sampling systems required for the project.
- Help manage and maintain NBL instrumentation and experimental facilities required for the PAT4Nano project.
- Work as part of a team to pursue and develop the research and commercialisation strategy for PAT4Nano outputs. Assemble, calibrate, validate, and refine several prototype Raman and multi-PAT systems for the online measurement of nanosuspensions.
- Assist in the training and supervision of other NBL personnel and students involved in PAT4Nano related research with respect to relevant analytical and experimental techniques.
- Support the PI on liaising with consortium partners and reporting to the EU Project Officer which includes meeting organisation, preparation of periodic scientific and financial reports.
- Monitor the WP deliverables, milestones, periodic reports, and schedule, with respect to NUIG's contribution to PAT4Nano technical activities.
- Deliver presentations and undertake outreach activities relevant to PAT4Nano as required by the PI for the successful delivery of the project.
- Keep appropriate records as directed and in line with Funder/University policies.
- Contribute to the research project's dissemination in whatever form - report, papers, chapters, books, etc.
- Undertake any other activities relevant to the PAT4Nano project as directed by the PI.

### Qualifications/Skills required:

#### Essential Requirements:

- PhD in Physics, Optical Engineering, Chemistry, or an equivalent discipline
- A demonstrated strong background in building/developing optical instrumentation.
- Must have proven experimental expertise in one or more of the following areas: (i) Optical instrumentation; (ii) The use of Raman spectroscopy, (iii) Computer programming for instrumentation control, or (iv) Relevant Process Analytical technologies.

- A strong research track record as demonstrated by first-author, peer-reviewed publications in instrumentation and/or spectroscopy-based research.
- Excellent verbal and written English language communication skills.

**Desirable Requirements:**

- Candidates with experience working with, or in industry (photonics or analytical science domains) are particularly welcome.
- Use of Raman spectroscopy and in particular for materials analysis.
- Specialized experience with PAT software, MATLAB, or computer programming.
- Appropriate supervisory or teaching experience may be an advantage.
- Mobility in EU countries to attend meetings and seminars.
- Experience in EU project management.

**Salary:** €38,631 to €44,659 per annum pro rata for shorter and/or part-time contracts (public sector pay policy rules pertaining to new entrants will apply).

**Start date:** Position is available from earliest possible start date in November 2021.

Further information on research and working at NUI Galway is available on [Research at NUI Galway](#). Researchers at NUI Galway are encouraged to avail of a range of training and development opportunities designed to support their personal career development plans. NUI Galway provides continuing professional development supports for all researchers seeking to build their own career pathways either within or beyond academia. Researchers are encouraged to engage with our Researcher Development Centre (RDC) upon commencing employment - see [www.nuigalway.ie/rdc](http://www.nuigalway.ie/rdc) for further information.

For information on moving to Ireland please see [www.euraxess.ie](http://www.euraxess.ie)

Further information about the Nanoscale Biophotonics Laboratory (NBL) is available at: [www.nuigalway.ie/nanoscale](http://www.nuigalway.ie/nanoscale) and PAT4Nano from [www.pat4nano.com](http://www.pat4nano.com)

Informal enquiries concerning the post may be made to Professor Alan Ryder at: [alan.ryder@nuigalway.ie](mailto:alan.ryder@nuigalway.ie)

**To Apply:**

Applications to include a covering letter, CV, and the contact details of three referees should be sent to Professor Alan Ryder, via e-mail only (in word or PDF only) to: [alan.ryder@nuigalway.ie](mailto:alan.ryder@nuigalway.ie). Please put reference number **NUIG RES 215-21** in subject line of e-mail application.

**Closing date for receipt of applications is 5.00 pm Wednesday 13<sup>th</sup> October, 2021**

**Interviews are planned to be held on October 29<sup>th</sup>, 2021**

Due to the University closure related to COVID-19, interviews may have to take place virtually and start dates may need to be delayed

NUI Galway reserve the right to readvertise or extend the closing date for this post.

National University of Ireland, Galway is an equal opportunities employer.

All positions are recruited in line with Open, Transparent, Merit (OTM) and Competency based recruitment

