



Post-Doctorate in Marine Biodiscovery

School of Chemistry and Ryan Institute, NUI Galway, Ireland Marine Institute

Ref. No. NUIG19-020

Applications are invited from suitably qualified candidates for a full-time, fixed term position as a post-doctorate in marine biodiscovery between the School of Chemistry and Ryan Institute at the National University of Ireland, Galway and the Marine Institute Oranmore.

This position is funded by the Marine Institute and is available from 01/03/2020 to contract end date of 28/02/2025 and subject to a one-year probationary period.

The aim of this project is to progress in the establishment of a National Marine Biodiscovery Laboratory in Ireland (NMBLI) located at the Marine Institute, Oranmore with the contribution of two academic partners: National University of Ireland Galway, and University College Cork.

The mentor Prof Olivier THOMAS is currently leading the Marine Biodiscovery group (https://www.nuigalway.ie/our-research/people/chemistry/olivierthomas/) at the School of Chemistry of NUI Galway, Ireland and the NMBLI (http://www.imbd.ie/) based at the Marine Institute while chemical analyses (MS, CD, NMR) will be performed at NUIG.

Job Description:

The successful candidate will work in close collaboration with the main Principal Investigator of the project and will co-supervise the work of two lab analysts at the Marine Institute. The post-holder will be in close contact with staff of the Marine Institute (Especially Marine Environment and Food Safety/Biotoxins), UCC and NUIG to manage and develop the laboratory and to interact with national and international industries working in marine sector and possible users of marine products.

The research activities will be centred on marine natural product chemistry and the development of efficient dereplication processes to quickly identify the most promising marine Irish species leading to biomolecules of potential industrial interest. They include the development of the platform of bioassays at the MI (antimicrobial and zebrafish) and the supervision of the taxonomic identification of Irish macro and micro-organisms. They could also involve aspects in marine chemical ecology on both types of organisms due to facilities for microalgal cultures at the MI and the Carna Marine Station of NUIG in Connemara.

Duties:

• Continue the development of the marine Biorepository at the Marine Institute including the expansion to marine micro-organisms (cyanobacteria and dinoflagellates);

- Undertake and be responsible for the sourcing (collection) of Irish marine organisms
- Continue the implementation of a chemical repository/database of marine natural products using the MetaboLights server;
- Develop efficient dereplication processes in MS/MS and NMR using databases like GNPS or SMART
- Undertake and supervise research on the purification and structure elucidation of marine natural products
- Liaise with and distribute samples and extracts to academic and industrial partners
- Promote the work of the project through conference and workshop presentations, and in peer-reviewed publications
- Assist project management team and interact with project partners
- Ensure that the project is carried out with reference to the appropriate health and safety guidelines and any other relevant NUI Galway/MI policies (e.g., purchasing and procurement)
- Maintain confidentiality of Intellectual Property (IP) associated with the project
- Assist in the application and protection of IP by identifying potential research results of value and preparing supporting documentation as required by the IP committee and Technology Transfer Office
- Assist with supervision and training of students/researchers on related projects as appropriate
- Lay the foundation for the further growth of the laboratory to become an international marine biorepository

Qualifications/Skills required:

The candidate should have a PhD in marine natural product chemistry or related area and some experience in management.

Essential Requirements: (criteria for shortlisting)

- PhD in Marine Natural Product Chemistry or related areas
- Experience in isolation (HPLC) and structure elucidation (NMR MS and ECD) of bioactive compounds from marine organisms
- Experience in the use of MS/MS and/or NMR for dereplication processes including molecular networks
- Demonstrable experience in both independent and collaborative research
- Excellent verbal and written communication skills (English language)
- Evidence of scientific publication and dissemination of results at conferences

Desirable Requirements:

- Experience in the biological screening of natural products
- Experience in project management
- Appropriate supervisory and teaching experience
- Appreciation of IP procedures relevant to university research
- Experience in Scientific diving
- International driving licence

Salary: €37,874 to €42,560 per annum

Start date: Position is available from 01 March 2020

Continuing Professional Development/Training:

Researchers at NUI Galway are encouraged to avail of a range of training and development opportunities designed to support their personal career development plans.

Further information on research and working at NUI Galway is available on Research at NUI Galway

For information on moving to Ireland please see www.euraxess.ie

Further information about our research is available at https://www.researchgate.net/profile/Olivier_Thomas2

Informal enquiries concerning the post may be made to Professor Olivier THOMAS

NB: Gárda vetting is a requirement for this post (as appropriate to Child Protection Policy)

To Apply:

Applications to include a covering letter, CV, and the contact details of three referees should be sent, via e-mail (in word or PDF only) to Olivier THOMAS: **olivier.thomas@nuigalway.ie** Please indicate reference number **NUIG19-020** in the subject line of the e-mail application.

Closing date for receipt of applications is 5.00 pm 15 February 2020

Interviews are planned to be held on 20th February 2020

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

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

