



Ollscoil Mhá Nuad Maynooth University

Department of Chemistry Post-Doctoral Researcher (Specified Purpose Contract)

The Role

Maynooth University is committed to a strategy in which the primary University goals of excellent research and scholarship and outstanding education are interlinked and equally valued.

We are seeking to recruit a postdoctoral researcher to work on an SEAI-funded research project on the photoelectrochemical generation of green hydrogen, combining solar cell materials with electrochemistry. The successful candidate will join the Electro-Materials, Environmental and Renewable Energy research group in the Department of Chemistry, directed by Professor Carmel Breslin. The research will involve computational studies on the design of perovskite-based materials for the photoelectrochemical production of green hydrogen. The computational studies will be carried out in collaboration with Dr Sousa Javannikkhah and will involve a combination of density functional theory (DFT) and molecular dynamics (MD) to screen perovskites and other materials for the photoelectrochemical splitting of water.

Principal Duties

This will include:

- Carry out the research work under the supervision and direction of the principal investigator.
- Engage in the dissemination of the research results, completing drafts of research papers and presenting the work at conferences, as required by the principal investigator.
- Carry out data analysis and maintain a data management plan.



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- Engage in appropriate training and professional development courses, in agreement with the principal investigator.

Administrative and other duties:

This will include:

- Carry out administration work associated with the project.
- Contribute to the organisation of the research lab and research group meetings.
- Comply with all University policies.

The ideal candidate will have:

Essential

- A PhD in Chemistry or Chemical Engineering, or a related field.
- A strong academic record in research, with publications in peer-reviewed journals.
- Research experience in electrochemistry, photoelectrochemistry and computational studies.
- Research experience in the analysis of surface analytical data, including XPS and XRD.
- Experience in setting up a photoelectrochemical system for hydrogen production.
- Very good communication skills.
- Ability to work independently and as part of a team
- Demonstrable knowledge and understanding of Research Ethics

Desirable

- Familiarity with computational analysis and electrochemical modelling.
- Experience in writing research proposals.
- Experience in organising symposia and effectively communicating research to non-specialist or public audiences.

Faculty and Research Institutes

The Faculty of Science and Engineering comprises the Departments of Chemistry, Biology, Experimental Physics, Computer Science, Electronic Engineering, Mathematics and Statistics, Psychology and Theoretical Physics. The role of the faculty is to coordinate the academic activities of individual departments, to oversee the strategic development of departments and to support interdepartmental



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programmes. The University has also established several interdisciplinary institutes to support high-quality research and build research capacity across disciplines.

Department

The Department of Chemistry has 15 academic staff members. It provides teaching in multiple degree programmes to over 700 students enrolled on undergraduate and postgraduate degree programmes. The Department of Chemistry offers well-established BSc Honours degree programmes in Chemistry, Pharmaceutical and Biomedical Chemistry and Science Education in a vibrant learning environment. It has a strong record of PhD student supervision, and current research strengths include electrochemistry, materials, sensor design, synthesis of small molecule therapeutics and diagnostics, and computational chemistry. The Department has an Athena SWAN Bronze Award and has a strong commitment to promoting gender equality.

More detailed information on research activity in the Department of Chemistry can be found at <https://www.maynoothuniversity.ie/chemistry>.

The University

Maynooth University is a very distinctive university, a collegial institution focused on science and engineering, humanities, and social sciences, and equally committed to research, teaching and community engagement. Located in Ireland's only university town, its distinctive features and character owe much to its unique history and heritage. It provides a high-quality educational experience to over 17,000 students on a campus with 18th century roots and 21st century dynamism.

Maynooth University is a place of lively contrasts – a modern institution, dynamic, rapidly-growing, research-led and engaged, yet grounded in historic academic strengths and scholarly traditions. We offer a range of programmes at undergraduate, postgraduate and doctoral level in the humanities, science and engineering and social sciences, including business, law and education, along with a range of international programmes and partnerships.

The strategic trajectory and accomplishments of Maynooth University, since its establishment as an autonomous public university, are exceptional and a source of great pride to the university community, staff, students and alumni. Maynooth University ranked in the top 90 global Times Higher Education (THE) Young University rankings in 2024. Maynooth University's growing global reputation is based on the originality, quality, importance and impact of its research and scholarship, commitment to teaching and learning, the quality of academic programmes, and its leadership in widening participation in higher education. The sources of success are the dedication of its staff and the energy and engagement of its students.

Maynooth University's Values



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Our values define who we are, what we believe in and how we act as a community. They underpin our future success and guide our expectations of ourselves and each other. Our values apply to everyone in the University community:

- Integrity
- Collegiality
- Responsibility
- Freedom of expression
- Ambition

Maynooth University Strategic Plan 2023 – 2028

The University's Strategic Plan 2023 - 2028 builds on our rich academic history and strong foundations to set out an ambitious and forward-looking path for the future of our University. This roadmap underscores our commitment to adapt to a changing world while staying true to our values. Our vision is to be a university of excellence, opportunity and impact, having a significant stake in all three. For more information about Maynooth University's future direction, please visit: <https://strategy.maynoothuniversity.ie/>

Plean Straitéiseach Ollscoil Mhá Nuad 2023 - 2028

Tógann Plean Straitéiseach na hOllscoile 2023 - 2028 ar ár stair acadúil shaibhir agus ar ár mbunchlocha láidre chun conair uailmhianach agus cheannródaíoch a leagadh amach do thodhchaí ár nOllscoile. Soiléiríonn an treochlár seo ár dtiomantas do dhul i dtáithí ar dhomhan atá ag síorathrú agus ár ngníomhaíochtaí a chur in oiriúint dó, agus san am céanna a bheith dílis dár luachanna Ollscoile. Is í an fhís atá againn a bheith mar ollscoil feabhais, deiseanna agus tionchair, agus lámh láidir a bheith againn i ngach ceann de na trí ghné seo.

Léigh anseo le haghaidh breis eolais faoi thodhchaí Ollscoil Mhá Nuad: <https://strategy.maynoothuniversity.ie/?lang=ga>

Our Strategic Plan sets out an ambition to be an excellent place to learn and work, and an inclusive community where students and staff can flourish and make a distinctive contribution to the national system of higher education and the public good. Achieving this requires staff to have a strong sense of connection to the University and support from colleagues. We recognise that our people are our greatest resource and actively seeks to attract, develop, and retain a talented workforce by creating a positive and welcoming University environment. As well as offering a competitive salary, access to a public sector pension scheme, and annual leave allowance, the University also provides other facilities and benefits including, but not limited to:

- Family-friendly leave schemes



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- Tax Saver travel scheme and Cycle to Work scheme
- On-campus crèche
- On-campus restaurants and coffee shops
- Employee Assistance Programme
- Health and Well-Being programmes
- Education support opportunities
- Continuous Professional Development opportunities, including leadership programmes, mentoring, Aurora programme.
- Study and Exam leave
- Sports facilities and gym

To learn more about being part of the Maynooth University team, please visit our website at <https://www.maynoothuniversity.ie/human-resources/come-work-with-us>

Selection and Appointment

- Only shortlisted candidates will be invited to attend for interview;
- Candidates invited for interview will be required to make a brief presentation.
- It is anticipated that interviews will be held during the month of June 2026.
- The appointment is expected to be effective from July 1.

Equality and Diversity

Maynooth University actively works to ensure equality, celebrate the diversity of our community, and promote inclusion. To learn more about our commitment to Equality and Diversity, please read the Maynooth University [Equality and Diversity Policy / Polasaí Comhionannais agus Éagsúlachta](#), our policy on the [Employment of People with Disabilities](#), and our [Gender Equality Action Plan 2023-2026](#). We aim to reflect the diversity of the community we serve and welcome applications from all individuals across our society.

Maynooth University is an equal opportunities employer and is committed to supporting applicants to enable their full participation in the recruitment process. Applicants are invited to disclose a disability during the recruitment process to ensure adequate measures are in place to enable their full participation.

Terms and Conditions

Tenure	This is a full time, temporary post for a specified purpose, anticipated to be 12 months duration.
Location	The place of work is the campus of Maynooth University, Maynooth, Co. Kildare.
Salary	Post-Doctoral Researcher (level 1) - €46,805 p.a. (1 point)



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	Appointments will be made in accordance with public sector pay provisions.
Hours of work	<p>A 37-hour working week is in operation in respect of full-time positions (pro-rated for part-time positions).</p> <p>This can be reviewed or adjusted from time to time through national agreements.</p>
Annual Leave	<p>Annual leave and public holidays are provided for in the University policy: https://www.maynoothuniversity.ie/human-resources/policies/annual-leave-policy</p> <p>Annual leave will be allocated on a pro-rata basis for part-time and temporary positions.</p>
University policies and schemes	<p>Employees of the University will be subject to the terms of the University policies and schemes, available on the University website at:</p> <p>https://www.maynoothuniversity.ie/university-policies</p> <p>https://www.maynoothuniversity.ie/human-resources/policies</p>
Pension	<p>This is a pensionable post. Employees of the University will enter into a public sector pension scheme, and as such, applicants must ensure they are eligible to become a member of a public sector pension scheme for the duration of the appointment. Details of the public sector pension schemes are available at: https://www.maynoothuniversity.ie/human-resources/pension-information</p>
Eligibility	<p>Applications from non-EEA citizens are welcomed. Applicants should note that eligibility is determined by the Department of Enterprise, Trade and Employment. Further information regarding eligibility is available at: https://enterprise.gov.ie/en/what-we-do/workplace-and-skills/employment-permits/employment-permit-eligibility/</p> <p>Non-EEA applicants are responsible for ensuring they can secure a visa to travel to Ireland. Any offer of employment is conditional on applicants securing the appropriate employment permissions.</p> <p>Former Irish Public Service employees - Certain Restrictions on Eligibility</p>

	<p>Eligibility of applicants formerly employed by an Irish Public Sector body, and who availed of an Irish Public Service Redundancy or Incentivised Retirement Scheme under the Schemes below, may be affected:</p> <ul style="list-style-type: none"> • Collective Agreement: Redundancy Payments to Public Servants • Incentivised Scheme for Early Retirement (ISER) • Department of Health and Children Circular (7/2010) • Department of Environment, Community & Local Government (Circular Letter LG(P) 06/2013) <p>Applicants should ensure that they are eligible to be re-engaged in the Irish Public Service under the terms of such Schemes. Applicants should address queries with their former Irish Public Sector employer.</p>
Garda vetting	Garda vetting or clearance may be required by the University.
Medical	The University may require a medical examination as a condition of employment.

Data Protection

Applications to the University will be treated in accordance with the University Data Protection Policies. For information on the University's Data Protection Policies and Privacy Notice, please see our website: <https://www.maynoothuniversity.ie/data-protection>

Application Procedure

Closing Date:

23:30hrs (local Irish time) on Sunday, **24th of May 2026**.

Please note all applications must be made via our **Online Recruitment Portal** at the following link:

<https://www.maynoothuniversity.ie/human-resources/vacancies>

Applications must be submitted by the closing date and time specified above. Any applications which are still in progress at the closing time on the specified closing date will be cancelled automatically by the system.

Late applications will not be accepted.

Maynooth University is an equal opportunities employer
The position is subject to the Statutes of the University



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