

Ollscoil Mhá Nuad Maynooth University

Department of Physics 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 a postdoctoral researcher to work on the INFORM project. The INFORM project is an Environmental Protection Agency (EPA) funded interdisciplinary study that will assess the pre-/and post-radon concentrations following deep energy-retrofits scenarios of the large-scale national renovation strategy.

INFORM will utilise a building physics model (CONTAM), which will be parameterised based on representative Irish data to establish baseline scenarios and assess the impacts on pre- and post-radon concentrations of different renovation strategies. These impacts will be mapped against a representative portion of the national building stock, considering a range of radon potential values, local building topographies, and national renovation strategies. A health and economic assessment will be conducted to evaluate the economic implications of these findings.

The researcher will join an interdisciplinary team collaborating with researchers at Maynooth University, University of Galway and University College Dublin, and have the opportunity to collaborate on several other projects led by this group.

Principal Duties

Administrative and other duties:

- Conduct a specified programme of research under the supervision and direction of the Principal Investigator.
- Engage in the outreach and dissemination of the research at project meetings, workshops and conferences and contribute to writing reports and academic papers for publication and broader research dissemination.
- · Mentor and assist, as appropriate and as directed, graduate research students
- Liaise with other members of the INFORM project team, locally and internationally.
- Assist in developing and submitting new research proposals to EU and national funding agencies.



Post Ref: 035723

 Carry out additional duties as may reasonably be required within the general scope and level of the post.

The ideal candidate will have:

Essential:

- A PhD in a relevant area such as science, engineering or related disciplines relevant to the research topic.
- Experience in one or more of: indoor air quality, building physics and/or ventilation
- An understanding of the operational requirements for a successful research project
- Experience with programming languages (Python, R, or equivalent etc.)
- Strong communication skills, including the ability to present research findings to both scientific and non-scientific audiences.
- Excellent verbal and written communication (English language) skills
- Evidence of scientific publication and dissemination of results at conferences

Desirable:

- Experience with building physics models and/or indoor air pollution simulations
- Knowledge of radon and/or radioactivity
- · Ability to work and coordinate with multiple project partners and stakeholders
- Experience in science outreach activities
- Experience in statistical analysis of environmental research data.

Faculty and Research Institutes

The Faculty of Science and Engineering comprises the Departments of Physics, Biology, Chemistry, Computer Science, Electronic Engineering, Mathematics and Statistics, Psychology and Theoretical Physics. The role of the Faculty is to co-ordinate the academic activities of individual departments, to oversee the strategic development of departments and to support interdepartmental programmes. The University has also developed a number of interdisciplinary institutes to support excellent research and to build research capacity across disciplines.

Department

The Department of Experimental Physics has 16 permanent members of academic staff, together with technical and support staff. It offers a full range of undergraduate courses in a vibrant learning environment, including degree programmes in Experimental Physics (BSc Single and Double Major) and Physics with Astrophysics (BSc Single Major). The Department also provides service teaching for undergraduate and postgraduate courses. Research MSc and PhD degrees are currently offered in the fields of astronomical instrumentation, observational astronomy, terahertz optics, environmental physics, cryogenic detectors and molecular physics.

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 15,000 students on a campus with 18th century roots and 21st century dynamism.

The strategic trajectory and accomplishments of Maynooth University, in the 25 years 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 in 2024 ranked in the top 90 global Times Higher Education (THE) Young University rankings, placing 86th in the world. 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 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. With over 15,000 students Maynooth offers a range of programmes at undergraduate, postgraduate and doctoral level in the humanities, science and engineering and social sciences, including business, law and education. The University also offers a range of international programmes and partnerships.

Maynooth's unique collegial culture fosters an interdisciplinary approach to research, which its worldclass academics bring to bear in tackling some of the most fundamental challenges facing society today. The University's research institutes and centres consolidate and deliver this impact as vibrant communities of learning, discovery and creation. Research at Maynooth also is very much central to its teaching and the University prides itself on placing equal value on its research and teaching missions.

Maynooth University's Values

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, 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 uaillmhianach agus cheannródaíoch a leagadh amach do thodhchaí ár nOllscoile. Soiléiríonn an treochlár seo ár dtiomantas do dhul i dtaithí 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

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;
- Appointments will be approved by the President based on the report of the selection board;
- It is anticipated that interviews will be held during late July/early August.
- The appointment is expected to be effective as soon as possible thereafter.

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.

Terms and Conditions

Tenure	This a full time, temporary post for a specified purpose, anticipated to be 18 months duration. Project end date is anticipated to be 28th February 2027.
Location	The place of work is the campus of Maynooth University, Maynooth, Co. Kildare.
Salary	Post-Doctoral Researcher (2025): €45,847 p.a. (1 point - with increment) Appointments will be made in accordance with public sector pay provisions.
Hours of work	A 37-hour working week is in operation in respect of full-time positions (prorated for part-time positions). This can be reviewed or adjusted from time to time through national agreements.
Annual Leave	Annual leave and public holidays are provided for in the University policy: https://www.maynoothuniversity.ie/human-resources/policies/annual-leave-policy Annual leave will be allocated on a pro-rata basis for part-time and temporary positions.



University policies	Employees of the University will be subject to the terms of the University
and schemes	policies and schemes, available on the University website at:
	https://www.maynoothuniversity.ie/university-policies
	https://www.maynoothuniversity.ie/human-resources/policies
Pension	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
Eligibility	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-permit-eligibility/
	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.
	Former Irish Public Service employees - Certain Restrictions on Eligibility
	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:
	 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)
	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.
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 Law

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, 6th July 2025.



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



