 

**Research Assistant**

**(Horticultural Engineering – Low Carbon Footprint Indoor Plant Growing Systems)**

**Plant & AgriBiosciences Research Centre (PABC), Ryan Institute**

**Ref. No. NUIG-113-19**

Applications are invited from suitably qualified candidates for a full-time fixed term position as a Research Assistant in the research lab of Prof. Charles Spillane within the Plant & AgriBiosciences Research Centre, Ryan Institute at the National University of Ireland, Galway.

This position is funded by SEAI and is available immediately until October 2021.

**Job Description:**

The successful candidate will work in the inter-disciplinary research lab of Prof. Charles Spillane in the Plant & AgriBiosciences Research Centre, Ryan Institute at the National University of Ireland Galway. The Research Assistant will be a key researcher on a project to develop an energy generating greenhouse (contained plant) growing system for indoor growth of horticultural crops. The project is funded for three years by the Sustainable Energy Authority of Ireland (SEAI). The recruited individual will need to have a strong knowledge of indoor growing horticultural systems and of engineering (e.g. mechanical, electrical, electronic) with the capability to build bespoke indoor plant growing systems that effectively integrate nutrient supply, LED lighting, renewable energy systems, insulation, ventilation systems and Internet of Things (IoT) enabled sensor systems to maximise high quality plant product output while reducing the footprint of the system. Some knowledge of Life Cycle Analysis (LCA) and circular economy principles would be desirable, including a willingness to pursue research that is guided by LCA analysis.

**Duties:**

* The recruited candidate will work as part of an inter-disciplinary team on the project consisting of an inter-disciplinary Research Guidance Committee and a team of postgraduate students with complementary skills in plant sciences, horticulture, engineering and data analytics.
* The recruited candidate will be engaged in the research projects of all of the postgraduate students.
* The recruited candidate will assist in the day to day supervision of postgraduate students’ research.
* The recruited candidate will be responsible for monthly research progress reports towards the key performance indicators (KPIs) and milestones of the project.
* The recruited candidate will be responsible for coordination of the project on a day by day basis.
* The individual will work closely with Prof. Spillane and collaborators on development of a financing and commercialisation plan for a spin-out company arising from the research and development project.

**Qualifications/Skills required:**

**Essential Requirements:**

* Degree or postgraduate qualification in engineering and horticulture (or equivalent combination of qualifications)
* Prior research and development experience in engineering and horticulture
* Multi-disciplinary skillset integrating engineering and horticulture
* Willingness to engage in commercialisation process
* Proven capability to build bespoke indoor horticultural systems

**Desirable Requirements:**

* Advanced knowledge across the following areas: horticulture, agri-engineering, mechanical engineering, lighting systems, energy systems, plant nutrient systems, insulation and ventilation systems and internet of things / sensors.
* Advanced knowledge of Life Cycle Analysis and modelling of circular economy systems.

**Employment permit restrictions apply for this category of post**

**Salary**: €22,110-€24,106 per annum (Research Assistant Salary Scale)

**Start date**: Position is available immediately.

**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](http://www.nuigalway.ie/our-research/)

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

Further information about {school/centre} is available at <https://www.nuigalway.ie/plant-and-agribiosciences/>

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

**To Apply:**

Applications to include a short covering (motivation) letter, CV, and the contact details of three referees should be sent, via e-mail (in word or PDF only) to Prof. Charles Spillane: [e-mail](mailto:noreen.ryan@nuigalway.ie) [Charles.spillane@nuigalway.ie](mailto:Charles.spillane@nuigalway.ie)

Please put reference number **NUIG-113-19** in subject line of e-mail application.

**Closing date for receipt of applications is 5.00 pm Friday, 28th July 2019**

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

