



OLLSCOIL NA GAILLIMHE
UNIVERSITY OF GALWAY



HR EXCELLENCE IN RESEARCH

Postdoctoral Researcher – Epic-Air Climate Modelling

Centre for Climate and Air Pollution Studies (C-CAPS), Ryan Institute, School of Natural Sciences, Physics
Ref. No. 011389

JOB ADVERTISEMENT

Applications are invited from suitably qualified candidates for a full-time fixed term position as a Postdoctoral Researcher with the Ryan Institute's Centre for Climate and Air Pollution Studies at the University of Galway, Ireland.

This position is funded by Research Ireland and is available immediately for 2 years with possible extension after the initial term.

The position will be to join the Centre for Climate and Air Pollution Studies (universityofgalway.ie/c-caps/), led by Prof. Jurgita Ovadnevaite, and to facilitate Climate modelling activities under the Epic-Air project (universityofgalway.ie/epic-air/).

Salary: Postdoctoral Researcher salary scale €46,305 - €59,063 per annum, (subject to the project's funding limitations), and pro rata for shorter and/or part-time contracts.

The default position for all new public sector appointments is the 1st point of the salary scale. This may be reviewed, and consideration afforded to appointment at a higher point on the payscale (subject to the project's funding limitations), where evidence of prior years' equivalent experience is accepted in determining placement on the scale above point 1, subject to the maximum of the scale. ([Research Salary Scales - University of Galway](#))

Closing date for receipt of applications is 17:00 (Irish Time) on 24th October 2025. It will not be possible to consider applications received after the closing date.

***Please review full job description for further details and essential requirement**

JOB DESCRIPTION

Job Description:

The successful candidate will facilitate climate modelling activities under the Research Ireland Epic-Air project (www.universityofgalway.ie/epic-air/)

Duties:

- Run WRF-Chem model in nested mode at high resolution (9km – 3km) over regions/periods of interest using different emission inventories.
- Integrate the WRF-Chem with an Earth System Model (ESM)



- Improve/adapt appropriate model parameterisation schemes.
- Deploy WRF-Chem and ESM to simulate the decadal trends of air quality and climate, accounting for their interactions
- Perform sector emission sensitivity studies (by scaling down/enhancing specific emissions)
- Assess the impact from the missing fluxes on regional climate due to short-term radiative forcing.
- Plan, co-ordinate and implement research project.
- Work with other team members to plan project activities and set key milestones.
- Determine appropriate methodologies for research, with advice and support as appropriate.
- Keep up to date with research related methods and techniques, in particular with WRF-Chem and ESM models.
- Present findings at international conferences, lead peer-reviewed publications and lead/contribute to proposal and project report writing.
- Engage in the dissemination of the results of the research with the support and under the supervision of the principal Investigator.
- Any other duties assigned commensurate to this level of post

ELIGIBILITY REQUIREMENTS

Essential Requirements:

- PhD in Atmospheric Physics or similar (*option to be appointed as a Research Associate on point 1 of scale, if candidate has submitted thesis and awaiting VIVA*).
- Experience in operating WRF-Chem model
- Experience in operating ESM model
- Experience in handling large atmospheric data sets
- Experience in working with High Performance Computing system
- Experience in air pollution emission inventories development and source adjusted shared socioeconomic pathways (SSP)

Desirable Requirements:

- Recognised track record for research as evidenced by a publication record in peer-reviewed journals
- Experience in atmospheric measurement methods
- Expertise in inter-disciplinary and cross-disciplinary approaches
- Valid driving licence

CONTINUING PROFESSIONAL DEVELOPMENT

Continuing Professional Development/Training:

Researchers at University of Galway are encouraged to avail of a range of training and development opportunities designed to support their personal career development plans. University of 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 [HERE](#) for further information.



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FURTHER INFORMATION/LINKS

- **TO APPLY:** [Search Current University of Galway vacancies](#). Applications must be submitted online.
 - [How to apply guide](#)
- For informal enquiries, please contact Prof Jurgita Ovadnevaite, Email Jurgita.ovadnevaite@universityofgalway.ie
- [University's Strategic Plan](#)
- [Working in Research at University of Galway](#)
- [Moving to Ireland \(Euraxess\)](#)
- [Applicant Information](#)
- We reserve the right to re-advertise or extend the closing date for this post.
- University of Galway is an equal opportunities employer.
- All positions are recruited in line with Open, Transparent, Merit (OTM) and Competency based recruitment.

