



Trinity College Dublin
Coláiste na Tríonóide, Baile Átha Cliath
The University of Dublin

Post Specification

Post Title:	Research Fellow in Ecophysiology and Biogeochemistry
Post Status:	Specific Purpose Contract – Full time
Research Group / Department / School:	Plant-Climate Interaction Group, Discipline of Botany, School of Natural Science, Trinity College Dublin, the University of Dublin
Location:	Botany Building, Trinity College Dublin, the University of Dublin College Green, Dublin 2, Ireland
Reports to:	Professor Jennifer McElwain
Salary:	Appointment will be made at a point in line with Government Pay Policy at point 9 of Postdoctoral Researcher scale (€48,267) with annual increments of one point up the scale.
Hours of Work:	Full time
Closing Date:	12 Noon (GMT), 21 MARCH 2022

Post Summary

The School of Natural Sciences, Trinity College Dublin, are seeking to appoint a Research Fellow in Plant Ecophysiology and Biogeochemistry based in the Department of Botany in the Plant-Climate Interaction Group, supervised by Professor Jennifer McElwain. The post is offered for 4 years and is funded through the European Research Council Advanced Grant project TERRAFORM. The successful candidate will work as a part of the TERRAFORM team, including PhD students, postdoctoral researchers, research assistants, artists in residence and international collaborators.

TERRAFORM aims to investigate the terrestrial biospheres impact on the Earth system over geological time. It will specifically interrogate how plant traits of fossil plants have evolved over the past 300 million years and examine how the evolution of these traits impacted the carbon, nutrient and hydrological cycles in deep-time with a particular focus on weathering. TERRAFORM will be a labour-intensive team-based research project with state-of-the-art experimentation on living plants, biogeochemical analyses of living, historical and fossil plant material, paleo-ecosystem, and paleo-weathering modelling with international collaborators in the US and France.

Standard Duties and Responsibilities of the Post

The successful candidate will work as a part of the team based in the main Trinity College Campus (Botany Department, Watts Building) and the newly established Variable Atmosphere and Light Laboratory (VAL) based at the Trinity Technology & Enterprise Campus (TTEC) – Trinity East. The successful candidate will undertake research on the role of plants in chemically weathering the Earth surface. The research will involve conducting novel chemical weathering experiments in simulated paleo-climate and paleo-atmospheric conditions and data-model integration, such as scaling up experimental findings to paleo-ecosystem and global scale. All plant weathering experiments will be conducted in Trinity's Variable Atmospheric and Light Laboratory, using state-of-the-art controlled environment paleo-Earth simulation infrastructure. The candidate will receive advanced training in paleo-ecosystem or paleo-weathering modelling.

Principal duties will include:

- Contribute to the TERRAFORM research output by producing high-quality results and publications.
- Collaborate with the research team on other research work packages within the TERRAFORM project.
- Contribute to the project reporting and reviews when necessary.
- Attend training, courses and seminars relevant to the TERRAFORM project and the candidates' continued professional development.
- Co-mentor and assist with supervision of undergraduate and postgraduate students and junior members of the PI's research group.

- Participate in internal and external networking events and engage with the broader science communication and outreach activities.
- Collaborate actively with international collaborators and artists in residence within the TERRAFORM project.

Funding Information

European Research Council

<https://cordis.europa.eu/project/id/101020824>

Person Specification

Qualifications

- A PhD in plant ecophysiology or biogeochemistry.
- At least three years of postdoctoral experience in a relevant field to the TERRAFORM project.

Knowledge & Experience (Mandatory)

- Demonstrated knowledge and experience in plant ecophysiology and/or biogeochemistry.
- Experience at the doctoral level in designing and undertaking experimental research and analysing complex experimental data.
- Evidence of research activity including publications, conference presentations, awards or bursaries and future scholarly outputs (research proposals, working papers).
- Experience working with statistical analysis (R or similar) and demonstrable ability to manage large data sets.
- Demonstrated ability to generate and communicate new ideas and experience in setting own research agenda.

Knowledge & Experience (Desirable)

- Experience working with plant growth chambers/controlled environment chambers (e.g. CONVIRON or other).
- Experience working with infrared cameras (e.g. Optris or other) or gas isotope analysers (e.g. PICARRO or other).

- Experience with measurement or analysis biogeochemical data (e.g. XRF, ICPMS, ICP-OES, FTIR or ICP-AES).
- Experience in identifying opportunities of external funding sources, preparing grant proposals and assessing for research outputs for prospective commercial.

Skills & Competencies

- Proven ability to work as a part of a team as well as independently.
- Strong organisational skills and the ability to effectively plan and execute the research.
- Highly motivated individual with a strong focus on delivering project outputs within deadlines.
- Effective communication, interpersonal and organisation skills.
- Excellent team working skills with emphasis on equality, diversity and inclusion.

Application Procedure

Applicants should submit a full Curriculum Vitae to include the names and contact details of 2 referees (including email addresses) and a letter of interest, including a list of publications stating your rationale for applying to:

Dr Kamila Kwasniewska, TERRAFORM Project Manager

kkwasnie@tcd.ie

Further Information for Applicants

URL Link to Plant-Climate Interactions Group	https://www.tcd.ie/Botany/research/groups/plantclimate.php
URL Link to Earth Surface Research Laboratory	https://www.tcd.ie/Geology/esrl/

URL Link to Variable Atmosphere & Light Laboratory	https://www.tcd.ie/Botany/botanic-garden/
URL Link to Botany Department	https://www.tcd.ie/Botany/
URL Link to Human Resources	https://www.tcd.ie/hr/

Trinity College Dublin, the University of Dublin

Trinity is Ireland’s leading university and is ranked 108th in the world (QS World University Rankings 2020). Founded in 1592, the University is steeped in history with a reputation for excellence in education, research and innovation.

Located on an iconic campus in the heart of Dublin’s city centre, Trinity has 18,000 undergraduate and postgraduate students across our three faculties – Arts, Humanities, and Social Sciences; Engineering, Mathematics and Science; and Health Sciences.

Trinity is ranked as the 17th most international university in the world (Times Higher Education Rankings 2020) and has students and staff from over 120 countries.

The pursuit of excellence through research and scholarship is at the heart of a Trinity education, and our researchers have an outstanding publication record and strong record of grant success. Trinity has developed 19 broad-based multidisciplinary research themes that cut across disciplines and facilitate world-leading research and collaboration within the University and with colleagues around the world. Trinity is also home to 5 leading flagship research institutes:

- Trinity Biomedical Sciences Institute (TBSI)
- Trinity College Institute of Neuroscience (TCIN)
- Trinity Translational Medical Institute (TTMI)
- Trinity Long Room Hub Arts and Humanities Research Institute (TLRH)
- Centre for Research on Adaptive Nanostructures and Nanodevices (CRANN)

Trinity is the top-ranked European university for producing entrepreneurs for the past five successive years and Europe's only representative in the world's top-50 universities (Pitchbook Universities Report).

Trinity is home to the famous Old Library and to the historic Book of Kells as well as other internationally significant holdings in manuscripts, maps and early printed material. The Trinity Library is a legal deposit library, granting the University the right to claim a copy of every book published in Ireland and the UK. At present, the Library's holdings span approximately 6.5 million printed items, 400,000 e-books and 150,000 e-journals.

With over 120,000 alumni, Trinity's tradition of independent intellectual inquiry has produced some of the world's finest, most original minds including the writers Oscar Wilde and Samuel Beckett (Nobel laureates), the mathematician William Rowan Hamilton and the physicist Ernest Walton (Nobel laureate), the political thinker Edmund Burke, and the former President of Ireland Mary Robinson. This tradition finds expression today in a campus culture of scholarship, innovation, creativity, entrepreneurship and dedication to societal reform.

Rankings

Trinity is the top ranked university in Ireland and ranked 108th in the world (QS World University Rankings 2020). Trinity ranks in the top 50 in the world on 6 subjects and in the top 100 in 20 subjects (QS World University Rankings by Subject 2019). Full details are available at: www.tcd.ie/research/about/rankings.

The Selection Process in Trinity

The Selection Committee (Interview Panel) may include members of the Academic and Administrative community together with External Assessor(s) who are expert in the area. Applications will be acknowledged by email. If you do not receive confirmation of receipt within 1 day of submitting your application online, please contact the named Recruitment Partner on the job specification immediately and prior to the closing date/time.

Given the degree of co-ordination and planning to have a Selection Committee available on the specified date, the University regrets that it may not be in a position to offer alternate selection dates. Where candidates are unavailable, reserves may be drawn from a shortlist. Outcomes of interviews are notified in writing to candidates and are issued no later than 5 working days following the selection day.

In some instances the Selection Committee may avail of telephone or video conferencing. The University's selection methods may consist of any or all of the following: Interviews, Presentations, Psychometric Testing, References and Situational Exercises.

It is the policy of the University to conduct pre-employment medical screening/full pre-employment medicals. Information supplied by candidates in their application (Cover Letter and CV) will be used to shortlist for interview.

Applications from non-EEA citizens are welcomed. However, eligibility is determined by the Department of Business, Enterprise and Innovation and further information on the Highly Skills Eligible Occupations List is set out in Schedule 3 of the Regulations <https://dbei.gov.ie/en/What-We-Do/Workplace-and-Skills/Employment-Permits/Employment-Permit-Eligibility/Highly-Skilled-Eligible-Occupations-List/> and the Ineligible Categories of Employment are set out in Schedule 4 of the Regulations <https://dbei.gov.ie/en/What-We-Do/Workplace-and-Skills/Employment-Permits/Employment-Permit-Eligibility/Ineligible-Categories-of-Employment/> . Non-EEA candidates should note that the onus is on them to secure a visa to travel to Ireland prior to interview. Non-EEA candidates should also be aware that even if successful at interview, an appointment to the post is contingent on the securing of an employment permit.

Equal Opportunities Policy

Trinity is an equal opportunities employer and is committed to employment policies, procedures and practices which do not discriminate on grounds such as gender, civil status, family status, age, disability, race, religious belief, sexual orientation or membership of the travelling community. On that basis we encourage and welcome talented people from all backgrounds to join our staff community. Trinity's Diversity Statement can be viewed in full at <https://www.tcd.ie/diversity-inclusion/diversity-statement>.

Application Procedure

Application Procedure

Applicants should submit a full Curriculum Vitae to include the names and contact details of 2 referees (including email addresses), a letter of intent, to:-

Dr Kamila Kwasniewska
TERRAFORM Project Manager
kkwasnie@tcd.ie



**UNIVERSITY
VACANCIES IRELAND**
universityvacancies.com

