

**POSTDOCTORAL RESEARCH FELLOW - GLOBAL WATER DATA SCIENCE**  
**UNESCO CENTRE FOR WATER LAW, POLICY & SCIENCE**

**Three years fixed-term (2023 – 2026) GRADE 7 - £34,308 - £40,931 (1.0 FTE)**

**Responsible to: The Director, UNESCO Centre for Water Law, Policy & Science**

**Job Summary**

We are seeking an exceptional individual to join us as a Postdoctoral Research Fellow **Global Water Data Science** – within the UNESCO Centre for Water Law, Policy and Science, University of Dundee. The Centre is a pan-institutional interdisciplinary initiative, established in 2008, and currently located in the University's largest academic School, the School of Humanities, Social Sciences and Law. The postholder will join the core team and will build technical and data analytical capacity within the Centre, inclusive of the network of UNESCO Associates distributed throughout the University. There are also major collaborative opportunities working with the broader international UNESCO water family in pursuit of equitable access and sustainable management of water and sanitation for all, consistent with the UN Sustainable Development Goals.

**What Your Key Responsibilities Will Be**

The Postdoctoral Research Fellow **Global Water Data Science** will be responsible for analysing water resources, land use, technology and climate change relations over scales spanning the global to the local. You will promote and coordinate the use of geospatial intelligence in the field of global water resources using model-based prediction, optimization and data-enabled decision-support. You will be expected to participate in collaborative science with project partners, to play an important role in mentoring postgraduate researchers (PGRs) and undertake professional development activities in consultation with the Director of the Centre. Familiarity and expertise in open-source approaches, application programming interfaces, code repositories and reproducible documentation are expected.

As this is a strategic capacity building appointment, you will enjoy considerable autonomy to develop your own research interests aligned to the Centre's founding mission. There is an expectation that this will lead to the publication of excellent papers in peer-reviewed literature, and you should actively seek external grant funding. There will be opportunities to collaborate in the development of new training and teaching programmes. Through engagement and network building you will be expected to advance the Centre's and University's commitment to social purpose and to transforming lives, locally and globally.

**Your priorities will include:**

- Advance the university's excellence agenda in regard of internationally leading research into global water resources and ongoing environmental change;
- Develop digital infrastructure supporting the Centre's operations and coordinate the creation and delivery of online spatial data services and visualizations;
- Publishing results in peer reviewed journals and presenting at relevant national and international conferences;
- Develop grant proposals for external funding support;
- Contribute to positively building the Centre's external relations profile by producing regular updates for newsletters, social media, website etc.

#### Who we're looking for:

- PhD in geographical, earth or environmental sciences, engineering, information and computing sciences or closely related discipline;
- Experienced researcher with strong technical capabilities in empirical and/or numerical modelling for environmental applications, geospatial analysis (GIS) and visualisation;
- Collaborative scientist with proven publication record, preferably two or more first-authored papers in strong peer-reviewed journals;
- Excellent communication skills, including being able to effectively interact with people at all social and political levels, and across cultural boundaries;
- An independent thinker who is self-motivated and able to work to pressure and meet deadlines with minimum supervision.

Appointment as a Postdoctoral Research Assistant on the Grade 7 salary scale is dependent upon you having been awarded a PhD. An appointment may be considered if you are shortly expected to be awarded a PhD. In this case the initial appointment would be made as a Research Assistant on the Training Grade 7 salary scale (Spinal Point 25 – 28).

#### About the UNESCO Centre and University

Under the auspices of UNESCO's Intergovernmental Hydrology Programme (IHP) the Centre is the only Category II water Centre in the UK and unique in the UNESCO 'Water Family' in allying critical research on the law relating to fresh water with all relevant areas of science with policy development and implementation. Integration of relevant areas of research within the university is strongly encouraged, with institutional networks in place to bring researchers and teaching expertise from different disciplinary backgrounds together. This includes the MSc programme in Sustainability & Water Security.

The Centre is part of the School of Humanities, Social Sciences and Law. It sits between the Division of Energy, Environment and Society (EES), which includes geographers and environmental scientists, as well as energy lawyers, economists and political scientists and the Dundee Law School, home to environmental and water law academics. Wider issues of governance and social justice are important themes within the School, which further align to the University's priority themes of climate action & net zero, equity & inclusion and population & wealth expounded in the new University of Dundee Strategy 2022- 2027.

Since its inception, Centre staff have secured significant levels of external research funding (more than £5 million since 2008). The bulk of this has been related to interdisciplinary projects demanding dynamic interfaces to be developed between legal analysis, natural and political sciences, economics and stakeholder participation. In addition, the Centre's work has been characterised by a strong development focus, examining ways in which legal, institutional and policy frameworks at the national and international levels can be used to improve the water management situations in developing countries, most prominently in Bangladesh.

The main measure of research quality in the UK is the Research Excellence Framework (REF) and in the most recent results, published in May 2022, research in water contributed to the results for both Law and Geography & Environmental Studies. Achieving impact beyond the academy, helping to change lives locally and globally is a key concern for all members of the Centre, as exemplified by our winning of the prestigious United Nations Risk 2019 Award for the development of disaster-resilient 'floating homes' in Bangladesh.

## Who We Are

The University of Dundee is one of the world's top 250 institutions in the Times Higher Education 2023 rankings and is one of only 12 in the United Kingdom to hold a Gold Award in the Teaching Excellence Framework 2017. The University of Dundee is 34th in the world for the highest proportion of highly cited publications in the 2022 CWTS Leiden Rankings based on the proportion of citations in the most cited 1% of articles across all disciplines. In 2020 Dundee was awarded Scotland's first institutional Gold Watermark for Public Engagement from the National Coordinating Centre for Public Engagement (NCCPE).

The University of Dundee is a diverse community, and we are committed to opportunity for all. We have a flexible and supportive working environment, offering a range of family friendly policies. We have staff networks for LGBT+ and BME staff and a comprehensive Disability Service. We are also holders of an Athena Swan Bronze Award, the Bronze mark of the Race Equality Charter and members of Stonewall.

The University of Dundee is a signatory of the Researcher Development Concordat and is committed to enhancing the research environment and culture. Engagement and support of activities which assist the researcher development agenda at the University is therefore essential.

For further information about this position please contact the Centre Director **Professor John Rowan** at [j.s.rowan@dundee.ac.uk](mailto:j.s.rowan@dundee.ac.uk). To find out more about [the UNESCO Centre for Water Law, Policy and Science](#) please visit <https://www.dundee.ac.uk/water>