Coventry University has made rapid advances in recent years and is now placed 33rd in the UK out of more than 150 Universities (source: The Guardian). It also won ‘New University of the Year 2014’ in The Times and The Sunday Times lists. Coventry University is now investing even more strongly in research excellence, with an additional investment of £100 million in research, plus a total spend of £150 million in its estate and facilities, including for Environmental Science research. The University is also setting up several new Research Centres, one of which, the Centre for Agroecology, Water and Resilience (CAWR), has hydrological and fluvial research at its heart (see below).

The historic city of Coventry itself, where some buildings date back to 1300, is located in the heart of the UK, at the hub of excellent road and rail networks, and only 25 minutes from Birmingham International Airport with its frequent direct flights to numerous European cities and to North American destinations. It is also just 30 minutes drive from Stratford-upon-Avon, Shakespeare Country and the beautiful Cotswold Hills beyond.

THE CENTRE FOR AGROECOLOGY, WATER AND RESILIENCE (CAWR)

The newly-established Centre for Agroecology, Water and Resilience (CAWR) is driving innovative, internationally excellent, research on the development of instability and resilience in water and food systems. CAWR has an approved plan for recruiting many new early career and senior staff, including Professors, Post-Doctoral Research Fellows and PhD students. This initiative is further supported by funds for new resources, labs, software, hardware and instrumentation. CAWR will grow from its current 14 members to over 50 scientists by 2017. Please contact us for updates and details (see below).

This is a senior post for very experienced researchers. Successful candidates have the exceptional opportunity to help shape the work and strategy of the Centre at this exciting start-up phase and help drive our future growth. Strong support will also be provided by the Centre’s dedicated administrative staff to free up crucial time for high-quality research and publication. CAWR will build strongly on its profile of excellent research, and further develop its international impact on key scientific fields, through development of novel concepts, models, methodologies, datasets, policy and practice.

This new position locates firmly in the ‘Hydrology, Climate and Environmental Change’ stream within the Water theme of CAWR. The four interacting research streams so far are:

- Fluvial Processes and Instability;
- Hydrology, Climate and Environmental Change;
- Urban Water; and
- Water Quality and Pollution Dynamics.

Centre for Agroecology, Water and Resilience (CAWR) page:
http://explore.coventry.ac.uk/centre/the-centre-agroecology-water-resilience/

Research Gate profile: https://www.researchgate.net/profile/Damian_Lawler/?ev=hdr_xprf

University Profile: http://explore.coventry.ac.uk/profiles/professor-damian-lawler/
JOB DESCRIPTION & PERSON SPECIFICATION

Job Title: Reader in Hydrological Change
Grade: 9
Salary Range: £46,404 - £57,900 per annum (GBP)
Mode: Full Time, Permanent
Coventry Ref No: REQ002597

Job Purpose

This new senior post, a Readership in Hydrological Change (approximately equivalent to an Associate Professorship in the USA), offers an exciting opportunity for an imaginative, dynamic and experienced researcher to lead, and carry out, excellent team research, and play a proactive role in developing the research strategy and resources of this new University Research Centre from its inception. This is one of several ‘water’ positions which will be advertised over the coming months and years as part of an energetic development plan for CAWR.

As a key senior member of the Centre, you will work with the CAWR co-Director CAWR co-Director, Professor Damian Lawler, and the ‘hydro’ team to: develop well-conceived research programmes; secure funding for research projects; lead the development of novel concepts, models, methodologies and datasets in the area of climate and/or environmental impacts (such as urbanisation or land use change) on Hydrological Change; build and strengthen networks with national and international partners; develop the CAWR software (and hardware) base; and, very importantly, publish excellent research papers in strong international journals. The aim is to conduct and publish internationally-excellent and world-leading research which makes a strong impact.

Duties and Responsibilities

1. Take a leading role with the co-Director in setting up the research strategy for Hydrology and Environmental Change within the overall framework of the water theme (‘hydro team’) and the Centre.
2. Develop new understanding of the impacts of climate and environmental change on hydrological responses (especially river flows and surface water) and process controls and interactions, in terms of novel concepts, models, relationships, analyses, methodologies and/or datasets, using appropriate and original theoretical, empirical, experimental and/or numerical modelling approaches (or combinations).
3. Take a leading role in developing such innovative research in collaboration with members of CAWR, and to regularly lead joint publication of results with the hydro team. These papers should be published in strong international, peer-reviewed scientific/engineering journals to help advance the discipline(s), strongly develop the Centre and the careers of its members, grow the reputation of Coventry University, contribute strongly to the Research Excellence Framework (REF2020), and to create a substantial international impact.
4. Disseminate other research outputs and promote international visibility of CAWR such as Conference presentations, peer-reviewed conference papers, invited seminars, practitioner meetings and publications.
5. Develop significant funding streams for collaborative projects to drive such high-quality research which will produce highly original outputs and international impact.
6. Contribute energetically to the research culture and environment of CAWR, for example in terms of interdisciplinarity and collegiate working.
7. Develop academic ‘good-citizenship’ and research impact, by taking a proactive role in the work of leading relevant scientific or engineering societies, organisations, professional bodies and networks, including their publications, initiatives, activities, Working Groups, Committees and/or Conferences, including convening and chairing meetings and sessions and driving initiatives (e.g. for BSG, BHS, CIWEM, ICE, Environment Agency, EGU, AGU, RGS or AAG) and peer-reviewing (e.g. for EU, NERC, EPSRC, Defra, Royal Met. Soc., NSF and for leading journals).

8. Act as Principal Investigator on major research projects, programmes and contracts, including effective management from project inception to successful completion, leading to fruitful internal and external collaborations to produce substantial novel results for dissemination and publication.

9. Acquire and lead-supervise PhD students and Post-Doctoral Researchers to successful project completion and timely publication of the results.

10. Develop and strengthen relationships and partnerships externally to initiate new collaborations to deliver excellent research, generate research income and maximise the impact of research results.

11. Provide academic leadership to others in CAWR, by helping to develop its software base for modelling or advanced statistical analysis in this key area, coordinate resources, set objectives, mentor early career staff, and organise CAWR activities.

12. Contribute to teaching programmes (though teaching is likely to be limited for this post): this may include, for example, lectures and seminars for the MSc in Environmental Management, and Masters project supervision and marking.

**HOW TO APPLY:**

For further details of the Coventry University research strategy and its new Research Centres, and how to apply for positions please click on:

[http://explore.coventry.ac.uk/](http://explore.coventry.ac.uk/)

Then click on the links you need on the left-hand sidebar, e.g.

Our Research Centres (for information on Centre for Agroecology, Water and Resilience)

Research jobs

Making an application

*NB. Please read the following Job Description and Person Specification below.*
## PERSON SPECIFICATION - READER IN HYDROLOGICAL CHANGE

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<th>ATTRIBUTES</th>
<th>ESSENTIAL</th>
<th>ADVANTAGEOUS</th>
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| **Education/Qualifications** | • Good Honours Degree (1<sup>st</sup> Class or Upper Second, or equivalent internationally) in an appropriate subject such as, Climatology, Geography, Civil Engineering, Environmental Science, Earth Sciences or relevant natural sciences discipline.  
• Completed PhD in a topic closely related to Hydrology, Climatology, Hydrological Change, River flow analysis | • Contributions to relevant scientific societies or professional bodies.  
• A good Masters degree in a related subject e.g. Climate Science or Hydrology |
| **Experience**           | • Substantial research experience working in hydrological change, and two or more of the following areas: climate impacts on river flows; climate change; hydroclimatology; relevant environmental change fields; flood modelling; climate dynamics; drainage basin processes.  
• Strong numerical modelling and/or advanced statistical analysis skills, including time series analysis and spatial data analyses.  
• Use of relevant datasets  
• Leading research teams in published, funded projects.  
• Strong record of preparing successful external funding applications and managing funded projects to completion and publication.  
• Supervision of a number of PhD research students to successful completion and publication.  
• Teaching and assessment at University level e.g. lectures, seminars, thesis supervision | • Working in more than one climatic environment  
• Working at different space/time scales e.g. regional, national, continental, hemispheric; daily; seasonal; annual; decadal  
• Inter-disciplinary research  
• Strong contributions to a strong research group  
• Engaging with practitioner communities  
• Teaching experience at Masters Degree level |
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<th>Research/Publications Special Interests</th>
<th>Job-related skills/ Aptitudes</th>
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| - Substantial record of publishing strong relevant peer-reviewed papers in high-quality journals.  
  - Presentations at key international conferences in the field.  
  - Up to date understanding of current research needs / debates within Hydrological Change. | - Use of appropriate specialist research software, e.g. two or more of: Advanced statistical analysis; Time series analysis; GIS; River flood / flow analysis.  
  - Project management skills.  
  - Ability to carry-out a research project with little supervision.  
  - Ability to present to, and communicate clearly with, colleagues, peers, practitioners, funders and students.  
  - Ability to manage and supervise junior colleagues and research students undertaking research projects.  
  - Ability to work flexibly.  
  - Excellent IT skills including with Microsoft Office suite, web presence, internet/email.  
  - Literature search skills including electronic databases | - Publications of studies in different systems, at different space/time scales e.g. regional, national, continental / hemispheric; and/or seasonal; annual; decadal | - Relevant programming language  
  - Familiarity with instrumentation and data acquisition / limitations for flow and climate monitoring |
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<th>Interpersonal Skills</th>
<th>Other Requirements</th>
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<td>• Excellent commitment and self-motivation</td>
<td>• May be required to work outside of normal 8.30am to 5.00pm hours including weekends, on occasion.</td>
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<td>• Team player</td>
<td>• Willingness to travel both within the UK and abroad.</td>
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<td>• Capability to work on own initiative</td>
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<td>• Excellent communication skills (written and oral)</td>
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<td>• Able to inspire, encourage and motivate others in the team</td>
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<td>• Proactive and ‘can-do’ attitude</td>
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<td>• Excellent organisational skills</td>
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<td>• Good time management</td>
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<td>• Presents a professional image to colleagues, potential funders, external groups and stakeholders.</td>
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**If you would like to discuss this post, CAWR, or future posts, please contact:**

Professor Damian Lawler  
Professor of Hydrology  
Co-Director, University Research Centre for Agroecology, Water and Resilience (CAWR)  
Coventry University, Coventry CV1 5FB

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Email: Damian.Lawler@coventry.ac.uk


Coventry University webpage: [http://wwwm.coventry.ac.uk/researchnet/cucv/pages/Profile.aspx?profileID=952](http://wwwm.coventry.ac.uk/researchnet/cucv/pages/Profile.aspx?profileID=952)

University Profile: [http://explore.coventry.ac.uk/profiles/professor-damian-lawler/](http://explore.coventry.ac.uk/profiles/professor-damian-lawler/)

Centre for Agroecology, Water and Resilience (CAWR) page - and links to projects: [http://explore.coventry.ac.uk/centre/the-centre-agroecology-water-resilience/](http://explore.coventry.ac.uk/centre/the-centre-agroecology-water-resilience/)