We invite application for the position of

Post-Doctoral Research Fellow

Climate Change, Air Quality and Impacts

North-West University (NWU) is on the lookout for a dedicated Postdoctoral Researcher to delve into the pressing issue of climate change effects on sustainable livelihoods and housing in the North-West province.

Location: North-West Province, South Africa
Duration: 3 years

Overview: Collaborate with the North-West Provincial Government (NWPG) using the Quintuple Helix of Innovation framework. Address climate challenges and shape the future of sustainable livelihoods and housing in the region.

Scan QR code or follow this link to apply via the Post-Doctoral Application Form.

For further enquiries contact Prof Roelof at Roelof.Burger@nwu.ac.za with subject line: ***CCAQI Postdoc Enquiry****.*

NWU® | *Unit for Environmental Sciences and Management*

Key Research Areas:

- Analyzing climate variability's effect on housing quality and infrastructure using WRF and WRF-CHEM modelling.
- Assessing vulnerabilities in housing due to climate stressors through integrated modelling and fieldwork.
- Projecting risks and evolution of climate variability on infrastructure utilizing advanced modelling techniques.
- Developing effective adaptation strategies for minimizing climate change impacts based on modelling insights and stakeholder engagement.
- Investigating climate change-induced disasters and their repercussions with a focus on modelling-based risk assessment and mitigation strategies.

Candidate Attributes:

- Educational Background: PhD in Environmental science, Geography, or related discipline, with expertise in atmospheric science or climate modelling preferred.
- Experience: Proven research accomplishments in climate modelling, proficiency in utilising WRF and WRF-CHEM models, and understanding of their applications in assessing climate change impacts on infrastructure and livelihoods.
- Technical Skills: Mastery of research methodologies, including WRF and WRF-CHEM modelling, Python programming, familiarity with GIS, statistical packages, and related software.
- Collaboration: Ability to work in interdisciplinary teams, prior engagement with stakeholders within the Quintuple Helix framework, and experience integrating modelling results into actionable stakeholder recommendations.
- Project Management: Strong record in managing research projects involving complex modelling techniques and meeting deadlines.
- Personal Traits: Proactive, adaptable, and a deep commitment to utilising advanced modelling techniques to address the challenges of climate change adaptation and mitigation.

Core responsibilities:

- Examine climate change impacts on livelihoods, housing, and air quality through literature review, data analysis, fieldwork, and WRF modelling.
- Engage with stakeholders from various sectors within the Quintuple Helix framework to integrate air quality and climate change modelling insights into adaptation strategies.
- Design, conduct, and refine experiments to enhance understanding of the interactions between climate change, air quality, housing, and livelihoods.
- Publish findings in peer-reviewed journals and disseminate research outcomes at relevant conferences.
- Attend and contribute to relevant conferences and workshops to stay updated on advancements in air quality and climate change modelling techniques and their application in addressing climate change impacts on communities.

Applications and enquiries:

1. If you are interested in applying, please submit the following documentation:
2. A letter of motivation, detailing your relevant experience and research interests, current research activities as well as your interest in the project(s).
3. A Curriculum Vitae including a list of publications.
4. The names, contact details and relationship of at least three references (including doctoral supervisor).
5. Proof of completion of PhD or, in the case of a final year PhD candidate, a letter from your supervisor stating the expected date of submission of the PhD thesis.
6. Copy of identification document or passport.

The closing date for applications is 30 April 2024 at 12:00 (noon).