United Nations Educational, Scientific and Cultural Organization

IHE DELFT Institute for Water Education under the auspices of UNESCO

IHE Delft is the largest international graduate water education facility in the world and is based in Delft, the Netherlands. The mission of IHE Delft is to work in partnership to strengthen capacity in the water sector, to achieve global sustainable development. IHE Delft has a permanent staff of 230 of which more than 140 are academics from all over the world, while about 250 guest lecturers from academia and industry contribute to our educational programmes. Each year 750 professionals (including about 200 new MSc students per year) from all over the world attend various water-related courses at IHE Delft. The Institute has an international staff & student community with English as the working language.

Land and Water Management Department

The Land and Water Management Department aims to add value to (human) managed land-water systems through monitoring, assessing, understanding and anticipating the impact of intervention and change. The Department cover a broad range of disciplinary knowledge, across the physical domains of water-land-environment, the policy and management domains of linking information to action and decision-making, and the technology and society domains, looking at technological innovations in land and water that can support societal development.

The Land and Water Management Department is looking for a:

Researcher

32 hours per week

Job description

This work is directly related to the ongoing EC Horizon2020 project 'NEXOGENESIS' (nexogenesis.eu). NEXOGENESIS is a 4-year project (September 2020-September 2025) coordinated by IHE Delft that aims to improve the efficacy of water-related policy development within a water-energy-food-ecosystems context, using stakeholder engagement strategies, system dynamics modelling, and machine-learning techniques. NEXOGENESIS applies a coherent approach in five case studies, one of which is based in South Africa. NEXOGENESIS aims to ultimately influence policy by the signing of 'river contracts' in some of the case studies, and to help inform EU policy (e.g. the Water Framework Directive, the Common Agricultural Policy, and the Green Deal).

The candidate will work closely with Dr. Janez Sušnik (NEXOGENESIS coordinator) in two main ways. Firstly, the candidate is expected to contribute to the development of system dynamics models in the project, and to engage closely with all related project Work Packages and partners. This part of the work is also assisted by an on-going PhD student, who the candidate will help mentor. The second aspect is to help assist the coordinator in project management activities, helping ensure the project runs smoothly and efficiently.

This position requires detailed knowledge and demonstrable experience of system dynamics modelling in a complex systems context. Knowledge of the R programming language is a major advantage. The candidate will be expected to contribute to the writing of reports and Deliverables as part of project requirements, as well as academic publications. The candidate must have an affinity for working closely with partners from a vast array of disciplinary and cultural backgrounds. Good project organisation skills are essential. As the post includes PhD mentoring and teaching opportunities, a willingness and enthusiasm to engage in such activities in required, and some experience would be beneficial. In addition, the candidate will be expected to contribute to the presentation of results at conferences and workshops. The candidate should be expected to travel to project meetings as required.

In addition, this role will contribute to the ongoing WEF-Tools project led by IHE Delft (project leader: Prof. Graham Jewitt; wef-tools.un-ihe.org). This project requires a similar skill set to NEXOGENESIS, i.e. system dynamics modelling, many-stakeholder engagement especially within a southern-African and north-African/Middle Eastern context, and project management abilities.

Requirements

IHE Delft is searching for an early- to mid-career academic researcher with a doctoral degree (PhD) in a related subject with a strong quantitative component in water/food/energy resources analysis and systems modelling in a related subject. He/she should have proven excellent analytical and communication skills with a solid track record commensurate with the career level being sought. The candidate must have an academic interest in global water, food and energy systems analysis. The candidate must have proven experience with System Dynamics Modelling, have familiarity with systems thinking concepts, and be competent with the R programming language. The candidate should be able to communicate and work with partners from a diverse range of European countries, from both academia and the private sector.

Terms of employment

The position is based in Delft, The Netherlands. A competitive salary (scale 10) is offered depending on qualifications and experience and in accordance with the Collective Labour Agreement for Dutch Universities (VSNU). Candidates should be prepared to carry out short-term missions abroad.

Information and application

Additional information can be obtained from Janez Sušnik, (j.susnik@un-ihe.org) Senior Lecturer in Water resource Management.

Applications (in English) should respond specifically to the requirements and should be sent before

18 February (closing date) including curriculum vitae, statement of teaching and research interests, motivation letter and the names and contact details of two contactable referees (*as one PDF file with your family name as the filename*), to IHE Delft, attn. Human Resource Management (recruitment@un-ihe.org), PO Box 3015, 2601 DA Delft, The Netherlands, stating vacancy-number **22-LWM-01.**

Reactions from staffing agencies and other 3rd parties are not appreciated.