IHE Delft Institute for Water Education, the world's largest international graduate water education facility, works to strengthen water sector capacity to contribute to a world free of poverty and injustice, in which people manage their water and environmental resources sustainably and equitably.

Institute for Water Education under the auspices of UNESCO

More than 120 of IHE Delft's 200 staff members are academics from all over the world. About 250 guest lecturers from global academia and industry contribute to the Institute's educational programs. Each year, 750 international professionals, including about 200 MSc students, attend courses at IHE Delft. Our working language is English, and we promote a healthy work-life balance through measures that include support to staff who want to work part of their time from home.

IHE Delft is a unique knowledge institute in the Dutch research and educational landscape that combines excellence in education and research with work to advance global sustainable development. Partnerships are integral to achieving this mission: The Institute works closely with universities, government agencies, NGOs, and private sector institutions in the Netherlands and around the world. Through research, education and institutional strengthening, Institute staff make a tangible contribution towards all Sustainable Development Goals (SDGs) in which water is key.

The **Hydroinformatics and Socio-Technical Innovation Department** conducts research and provides post-graduate education and training to professionals. The department has two research groups: Hydroinformatics, and Knowledge and Innovation Studies.

The **Hydroinformatics Research Group** carries out research, education and capacity development in the area of hydroinformatics. It focusses on integration of data analysis, simulation modelling, optimization, artificial intelligence, information and communication technologies for water management. The main areas of application are flood and river basin management, urban and coastal systems. New knowledge and innovative digital tools developed by the group are incorporated into the PhD programme, MSc Profile on Digital Innovation and Hydroinformatics, the Erasmus MSc programme in Flood Risk Management, and other capacity development and technical assistance activities. The Group is composed of a senior group of scientists and educators, currently including six associate professors and one researcher. There is also a variable number of PhD fellows (currently ten), and visiting researchers.

IHE Delft has a vacancy for a

Professor of Hydroinformatics, Head of Research Group (m/f) – 1.0 fte

Profile of the successful candidate

Research: The successful candidate will have a research expertise in the core areas of Hydroinformatics, but should also show evidence of broader knowledge and research within the context of better management of river basins, floods and droughts, urban and coastal systems using simulation modelling, information and communication technology, artificial intelligence, and decision support systems. Such a breadth of expertise is needed for effective supervision of PhD fellows and MSc theses within the research group and collaboration in research and education with other research groups across the institute. The candidate will have a strong research profile demonstrated by a continuous record of high-quality publications, experience as an investigator of multi-institutional research programmes, and success in acquiring external funding.

Education: The successful candidate will be passionate about education as demonstrated by a successful record of teaching at the MSc level and student supervision at the MSc and PhD levels in multi-cultural settings. Experience in the use of innovative teaching techniques (e.g. blended and online courses), and adaptation of programmes to changing needs in the water sector would be

welcome. Evidence of success in acquiring fellowships and other forms of sponsorship is also an advantage.

Capacity Development: The successful candidate will have experience in projects related to institutional strengthening and development and delivery of professional training in low and middle-income countries. Highly valued experience will include assistance in working with partner academic institutions to establish training programs for partners in government and industry.

Professional Engagement: The successful candidate will be an active member of the water community with a well-developed network of researchers and practitioners internationally (or be prepared to develop this). Evidence of connection to water professionals and organisations from the Global South, and of engagement with stakeholder organisations and experience in the co-development of research activities will be an advantage.

Responsibilities

The new professor will assume leadership of the Hydroinformatics research group, will join other professors in service on the Academic Board of the institution, and will take on other roles in the department, institution, and educational programme based on need and interest. The professor will also support the head of the Hydroinformatics and Socio-Technical Innovation department, including modest administrative tasks, preparing annual plans, and participating in the end-of-year assessment of staff. He or she should be also prepared to take this role, typically for a 3-year term.

The new professor is expected in the future to build close collaboration with the Water Resources research group of the Delft University of Technology (TU Delft). The current professor of Hydroinformatics holds a professorial position (zero appointment) at the Water Resources research group of TU Delft. The new professor is also expected to acquire a professorial position (zero appointment) at the Water Resources research group of TU Delft.

Together with the other scientific staff members, the newly appointed professor will be expected to:

- provide strategic guidance to research and educational programmes of the Research group, and of the Hydroinformatics Laboratory, and to contribute to their execution;
- supervise research of MSc and PhD students;
- initiate and execute new research lines and to acquire new projects and grants in the area of hydroinformatics, especially supporting digital innovation, new technological developments and smart water management in an interdisciplinary context;
- contribute to a range of educational activities of IHE Delft, ensuring their quality and sustainability;
- in research and education ensure collaboration with other research groups of Institute, and follow the principles of open science;
- represent the department and the Institute in The Netherlands and abroad.

Requirements

- PhD in the field of hydroinformatics, applied mathematical modelling, water sciences, remote sensing, computer sciences, machine learning, civil or environmental engineering with an orientation to water related problems, from a university of high standing;
- International research reputation demonstrated through a continuous record of high impact publications, externally funded research grants, and service in the professional community;
- Demonstrable ability to acquire research funding, manage research groups, and supervise PhD students;
- A broad outlook on and experience in solving interdisciplinary engineering and management of water-related problems, with focus on advanced modelling and digital technologies and their employment for developing end-user applications;
- Experience lecturing at the MSc level, supervision of PhD and MSc thesis research, and development and management of degree programmes;
- Interest and experience in research, advisory, and educational/training projects in the Global South countries;

- Experience in valorisation of research outputs through engagement and cooperation with partners from civil society, government, and the private sector;
- Excellent command of the English language;
- Excellent communicative and organizational skills.
- Willingness to travel abroad for short-term assignments.

IHE Delft follows an open procedure of recruitment, which respects diversity and provides equal opportunity to applicants of all backgrounds.

Terms of employment

This position is offered as a permanent position. However, a temporary position (18 months) is initially offered, following which a permanent contract will be considered. The position is based in Delft, The Netherlands. A competitive salary (scale 15/16) is offered depending on qualifications and experience in accordance with the conditions of employment for Dutch Universities. The appointment implies entry into the Netherlands' Civil Service Pension Fund (ABP).

Information and application

Questions related to this vacancy may be directed to the Head of the Department, Dr Biswa Bhattacharya (T: +31 (0)15 2151749 or E: B.Bhattacharya@un-ihe.org) or Professor Dano Roelvink (T: +31 (0)15 2151838 or E: d.roelvink@un-ihe.org) or to the Senior HR Advisor, Ms. Petra Tollenaar (T: +31 (0)15 2151749 or E: P.Tollenaar@un-ihe.org).

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Applications should be in English, and respond specifically to the requirements. The application, including curriculum vitae, motivation letter, statement of teaching and research interests and experiences and the names and contact details of two contactable referees, should be sent to IHE Delft, attn. Human Resource Management (E: recruitment@un-ihe.org), PO Box 3015, 2601 DA Delft, The Netherlands, stating vacancy-number 22-HSTI-02. (The application should be in one PDF file with your family name as the filename). Short listed applicants will be notified by the end February. The likely dates of interview for the shortlisted applicants are 8th March and 10th March.

The deadline for applying is 31 **Jan 2023**.

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

By submitting your application for this vacancy, you agree with the privacy statement below:
The personal data you share through your application file and other means will only be used by IHE Delft for the purpose of the recruitment and selection process in order to evaluate your suitability for the vacancy for which you have applied, as well as for communication purposes related to the vacancy. IHE Delft will process your personal details in accordance with the EU General Data Protection Regulation of 25 May 2018. For more information we refer you to the privacy statement of IHE Delft: https://www.un-ihe.org/privacy-statement
Without your prior consent or other legal basis, no information will be shared with third parties. For further questions please contact our Data Protection Officer at dpo@un-ihe.org.