



**UNESCO-IHE**  
Institute for Water Education

The **UNESCO-IHE Institute for Water Education** offers graduate education in Delft, The Netherlands, and carries out research and capacity building projects all over the world. The mission of UNESCO-IHE is to contribute to the education and training of professionals and to build the capacity of sector organizations, knowledge centres and other institutions active in the fields of water, the environment and infrastructure in developing countries and countries in transition.

UNESCO-IHE has a permanent staff of 180, of which 90 are scientific staff, while about 250 guest-lecturers from academia and industry contribute to the educational programme. Each year 750 participants (incl. about 200 new MSc students per year) from all over the world attend the various regular and short courses at UNESCO-IHE. The Institute has an international staff & student community with English as working language

The **Department of Integrated Water Systems and Governance** provides post-graduate education and training in various areas of water management. In addition the Department carries out research and supports the development of education and research capacity in universities and other knowledge centres in the developing world.

Within this Department, the Hydroinformatics Chair Group (HI) focuses on developing advanced methods of water modelling, forecasting optimisation, data assimilation building computer-based systems assisting water management, as well as providing training in the area of Hydroinformatics and the Master and PhD level.

The HI Group has the following vacancy:

## **Junior Lecturer/Researcher (1.0 FTE)**

As a new staff member of this interdisciplinary group you will be engaged in carrying out research and education in the area of hydroinformatics.

### **Responsibilities**

This position is meant to provide support research and training activities in the department, mainly for the projects BPutra and GroundTruth2.0 both dealing with hydrological modelling, optimisation, data fusion and data assimilation. In particular, for BPutra, it is required to analyse different data sources in hydrology and to aggregate them by applying data fusion techniques to improve hydrological simulation of data scarce Brahmaputra catchment. For GroundTruth2.0 it is required to improve and apply data fusion techniques (merging data from various sources – gauges, remote sensing, ensemble weather forecasts, citizen observatories), expanding in-house algorithms for optimal design of monitoring networks and data assimilation and to analyse the impact of data fusion in economic terms to demonstrate that citizen observatories may reduce the costs of in-situ monitoring networks. Contribution to education, MSc guidance and other research projects related to hydroinformatics is also expected.

## Required qualifications

### Education

- PhD in hydroinformatics or in hydrological / hydraulic modelling
- MSc in the fields of hydrological modelling, hydraulic modelling and/or hydroinformatics, with emphasis on flood modelling, flood forecasting or flood mapping.
- Major in Civil, Environmental or Agricultural Engineering

### Work and research experience

- Experience with data fusion techniques of data coming from heterogeneous sources or expertise on data assimilation for hydraulic and hydrological models is required
- Experience in the use of MATLAB scripting language, preferably in water or environmental research modelling studies is required
- Experience in European Research projects is a plus
- Experience in education and in guiding students would be also seen as an asset.

Excellent knowledge of English (oral and written) is a must. Knowledge of another European language would be also an asset.

## Terms of employment

This position is a temporary (project-based) position for maximum 30 months. The position is based in Delft, The Netherlands. A competitive salary (grade 10) is offered depending on qualifications and experience in accordance with the conditions of employment for Dutch Universities. Candidates are to be prepared to carry out short-term missions abroad. A Dutch/ EU work permit is required.

## Information and application

Additional information can be obtained from Professor D.P. Solomatine, Dr Leonardo Alfonso and Dr Biswa Bhattacharya.

Applications (in English), should respond specifically to the requirements, and can be sent until **October 7th, 2016 (closing date)** including curriculum vitae, motivation letter and the names and contact details of two contactable referees, to UNESCO-IHE, attn. Human Resource Management (E: [vacancies@unesco-ihe.org](mailto:vacancies@unesco-ihe.org) ), stating vacancy-number **16-IWSG-08**. Please send one PDF file with all documents and name it with your family name

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