

A researcher position is available at the earliest possible date within the project “WAKOS 2 – *Water at the coasts of East Frisia*” at Faculty V, Institute for Biology and Environmental Sciences (IBU), Research Group Hydrogeology and Landscape Hydrology:

Researcher (m/f/d)

(pay grade 13 TV-L, 100% until 28.02.2027)

The **working group Hydrogeology and Landscape Hydrology** investigates hydraulic and hydrochemical processes in the aquatic environment, in particular the interaction between surface water and groundwater, coastal hydrogeology, the role of water in ecosystems as well as the behaviour of pollutants in groundwater. The project **WAKOS** addresses the effects of climate change on water resources in north-western Germany, whereby our subproject focusses on groundwater salinisation below islands. Hence, we are looking for a **groundwater modeller** to investigate climate-induced changes on freshwater lenses below barrier islands and the expected consequences for the local water supply, using Norderney Island as an example. Both slow groundwater salinization as a result of sea level rise as well as the potentially very sudden salinization due to extreme events such as storm surges in combination with dune breaches and floods will be addressed. We use numerical density-dependent groundwater flow and transport modelling to quantify the expected changes in groundwater salinity and freshwater volumes for Norderney and to explore potential adaption strategies to minimize salinisation.

Essential requirements:

- University degree (Master or Diploma) in earth or environmental sciences, water engineering, environmental modelling or an equivalent education with hydrological/hydrogeological components
- A very good understanding of groundwater flow and transport processes, including variable density numerical modelling, demonstrated by a publication record in peer-reviewed international journals
- Programming skills in scripting languages, preferably Python and/or Matlab
- Ability to work under limited supervision and adapt to changing circumstances in order to prioritise and address problems in a constructive professional manner
- Excellent communication and organisational skills and a strong interest in collaborative research

Desirable:

- PhD in environmental sciences, ideally with a focus on hydrogeology and groundwater modelling
- Experience with density-dependent groundwater flow modelling using SEAWAT

The University of Oldenburg strives to increase the percentage of female employees in the field of science and encourages applications from female candidates who will be preferred when equally qualified according to § 21 Abs. 3 NHG. Handicapped applicants will be given preference in case of equal qualifications.

The position is suitable for part-time work.

Please send your application with CV, list of publications and certificates via e-mail in a joint pdf-file until the 09.02.2025 to Prof. Dr. Gudrun Massmann: gudrun.massmann@uni-oldenburg.de.