

At Helmut Schmidt University / University of the Federal Armed Forces Hamburg (HSU/UniBw H), Faculty of Mechanical and Civil Engineering, Professorship for Hydro-mechanics (Univ.-Prof. Dr.-Ing. Ebigbo), a position is **available from the next possible date** for a

Research Assistant (m/f/d)

(salary group 13 TVöD [Collective agreement for the public service]; 29,25 hours per week)

for a limited period of 3 years.

The scientific work will be carried out as a part of the research project “Modelling of reactive mass transport and microbial conversion of hydrogen in the subsurface on the pore and Darcy scales”, which is funded by the German Research Foundation.

The professorship’s research interests lie in the field of flow and reactive transport in porous and fractured media. The advertised position focuses on the numerical simulation of the transport of microorganisms through heterogeneous porous media and the precipitation of carbonate minerals triggered by microbial activity.

Responsibilities:

- Development and implementation of numerical models for simulating microbial transport in porous media
- Modelling hydrogen conversion by subsurface microorganisms using suitable biochemical reaction kinetics models
- Presentation of research results at national and international conferences and publication in specialist journals
- Possibility of further academic qualification (e.g. doctorate or habilitation)
- Carrying out general administrative work as well as academic activities in academic self-administration

Qualification requirements:

- A completed university degree (Diploma [univ.] or Master) in civil/environment engineering, geosciences, physics, or another engineering/science field with a focus on fluid flow
- Proven knowledge in the field of reactive transport in porous media

Furthermore desired:

- Experience in numerical modelling of flow/transport
- Knowledge of foreign language in English with a proficiency level that corresponds at least to the language level B2 of the Common European Framework of Reference for Languages
- Proficiency in a programming language (e.g. Python, MatLab or C++)
- Knowledge of geochemical modelling (e.g. with Reaktoro, PHREEQC or The Geochemist's Workbench)
- Keen interest in academic work

Features of this position:

- Capital-forming benefits
- Annual bonus payment
- Company pension scheme
- Flexible working hours
- DeutschlandJobTicket with employer subsidy if the necessary requirements are met
- Possibility of claiming a childcare place in a daycare centre close to the campus if the necessary preconditions are met
- You will benefit from targeted personnel development and an extensive range of further training and education opportunities.
- Budget-friendly meals in the campus canteen with three meals a day
- Possibility of participating in the corporate benefits programme
- You have the opportunity to participate in workplace health promotion offers (for more information, see: www.hsu-hh.de/bgm/).
- Free parking on the campus grounds
- Possibility of using the Bundeswehr's own car-sharing service (for more information, go to: www.bwcarsharing.de).

For questions related to scientific or technical aspects, please contact Univ.-Prof. Dr.-Ing. Ebigbo, Tel.: 040/6541-3958 or by e-mail: ebigbo@hsu-hh.de.

The employment is based on the TVöD in conjunction with the Wissenschaftszeitvertragsgesetz (German Act on Fixed-Term Scientific Contracts). In principle, the activities correspond to pay group 13. Classification up to pay group 13 of the TVöD shall be made in accordance with § 12 of the TVöD with regard to the activities to be performed on a more than temporary basis and the fulfilment of the personal or collective agreement requirements (job characteristics).

Part-time employment is possible.

The Federal Armed Forces promotes professional equality between women and men and therefore particularly welcomes applications from women.

In accordance with the Sozialgesetzbuch IX (Social Code Book IX) and the Disability Equality Act, we expressly welcome applications from severely disabled persons; the fulfilment of the requirements for the advertisement will be considered on an individual basis.

The German Armed Forces supports the goals of the National Integration Plan and welcomes applications from people with a migrant background.

More information about the university and the professorship can be found at:

www.hsu-hh.de and www.hsu-hh.de/hmech.

Please send your application with the usual documents exclusively in electronic form (pdf file), quoting the reference number **BIW-0326**, by **12.04.2026** to:

personalabteilung@hsu-hh.de.

Note:

Information on data protection in the application process can be found on the website www.hsu-hh.de under the heading "Universität - Karriere - Datenschutzinformationen".

Applications without reference number will not be considered and will be deleted immediately for data protection reasons.

