

At Helmut Schmidt University / University of the Federal Armed Forces Hamburg (HSU/UniBw H), Faculty of Mechanical and Civil Engineering, Chair for Metrology (Prof. Dr. rer. nat. Isleif), one position is **available from the next possible date** for a

Research Assistant (m/f/d)

(salary group 13 TVöD; 39 hours per week)

for a limited period until 31.12.2024.

This is a position in the recently created “Metrology” working group within the Center for Digitization and Technology Research (dtec.bw). The working group is concerned with high-precision length change measurements using laser interferometry and investigates technologies for and from the field of gravitational wave detection. The aim is to design smart and minimalistic interferometer topologies and to investigate alternative interferometer technologies to provide high-precision optical sensors for next generation gravitational wave detectors (such as the Einstein Telescope), and other applications including wireless sensor and actuator networks.

Responsibilities:

- Conducting experimental work on laser interferometers and optics
- Collaboration on the realization of an optical, energy-autonomous and wireless network that meets real-time conditions
- Analysis of data from large sensor networks by means of machine learning
- Presentation of research results at international and interdisciplinary conferences and meetings
- Participation in teaching to the extent of basically 3,0 trimester-week-hour
- 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 scientific university degree [Diplom (univ.) or Master] in the field of physics or photonics or a related discipline
- Good programming skills (e.g. Python, MatLab or C++)
- Very good knowledge of English and German, both written and spoken

Furthermore desired:

- Experimental experience in working with fibers, optics and / or laser interferometers

- Experience in the field of mechanical and optical modeling
- Interest in interdisciplinary and international research
- Ability to work independently
- Creative and team-oriented way of working
- Proactivity and good communication skills

Features of this position:

- An extraordinary working environment due to two different locations within Hamburg (HSU Campus and DESY Campus) as well as a very good and cooperative working atmosphere
- Access to professional electronic and mechanical workshops as well as first-class laser laboratories with optimal conditions for sensor development in close proximity to experiments in basic research
- Opportunity to advance the research field as well as the implementation of own interests and ideas
- Possibility of membership in the PIER Graduate School [Partnership for Innovation, Education and Research (www.pier-hamburg.de)]
- Participation in the Quantum Universe cluster of excellence (www.qu.uni-hamburg.de)
- Capital-forming benefits
- Special annual payment
- Company pension scheme
- Flexible working hours
- You will benefit from targeted personnel development and an extensive range of further training and education opportunities.
- Inexpensive meals in the campus canteen with three meals a day
- You have the opportunity to participate in company health measures (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 information on technical questions, please contact Prof. Dr. rer. nat. Isleif, Tel.: 040/6541-3225 or by e-mail: isleifk@hsu-hh.de.

The employment is based on the collective agreement for the public service (TVöD) in conjunction with the Wissenschaftszeitvertragsgesetz (WissZeitVG). In principle, the activities correspond to pay group 13 (E13). However, the actual classification depends on the fulfillment of the relevant collective agreement and personal requirements.

Part-time employment is possible.

Applications from women are expressly encouraged. Women will be given preferential consideration in areas in which they are underrepresented, if they demonstrate the same eligibility, capabilities and professional performance, provided that the reasons relating to the person of a competitor do not prevail. We expressly welcome applications from severely disabled persons and persons with equivalent disabilities. Severely disabled persons and their equals will be given preferential consideration in cases of equal suitability, ability and professional performance. Only a minimum level of physical aptitude is required for them. The fulfilment of further prerequisites of the job announcement is considered individually.

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

www.hsu-hh.de und www.hsu-hh.de/mt/.

Please send your application with the usual documents exclusively in electronic form (pdf file), quoting the reference number **MB-2022**, by **20.06.2022** to:

personaldezernat@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".

If you do not provide the reference number, your application may not be considered and will be deleted immediately for data protection reasons.

