

At Helmut Schmidt University / University of the Federal Armed Forces Hamburg (HSU/UniBw H), Electrical Engineering, Professorship for Experimental Physics and Material Science (Univ.-Prof. Dr.-Ing. Kip), a position is **available from the next possible date** / a position is **available as of 01.07.2026**

### **Research Assistant (m/f/d)**

**(salary group 13 TVöD [Collective agreement for the public service]; 39 hours per week)**

for a limited period of 3 years.

The research focus of the professorship lies in the microstructuring of optical materials for various applications, particularly in integrated photonics, the realization of waveguide lasers, optical frequency conversion, and optomicrofluidics.

The advertised position offers the opportunity to actively contribute to the development and implementation of innovative microfluidic components based on lithium niobate. Microfluidic structures are fabricated by selective etching of femtosecond laser-induced modifications within the crystal volume. The research focuses on the use of surface acoustic waves and their controlled interaction with liquids in etched microchannels.

Within the framework of the research project, you will be responsible for the independent design, fabrication, and experimental investigation of such systems. Sample fabrication will be carried out in the well-equipped laboratories of the professorship, including cleanroom and laser laboratory facilities. A particular emphasis is placed on the development of integrated micropumps and on novel approaches for the precise manipulation of particles in liquids.

The position offers a strong, interdisciplinary research environment at the interface of photonics, materials science, and microfluidics, as well as the opportunity to contribute your own ideas and experimentally realize innovative concepts. International collaborations and the presentation of results at conferences are explicitly encouraged.

### **Responsibilities:**

- Independent execution of the described research project
- Presentation and publication of research results in international peer-reviewed journals and at conferences
- Systematic analysis and review of English-language scientific literature
- Assistance in teaching to the extent of basically 3 trimester hours per week
- 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 physics, optical technologies/photonics, materials science or related disciplines

### **Furthermore desired:**

- 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
- Knowledge of language in German with a proficiency level that corresponds at least to the language level B2 of the Common European Framework of Reference for Languages
- Experience in experimental work, e.g. in the field of optical technologies, photonics or laser technology
- Initiative and a willingness to work as part of a team
- interest in scientific work and the ability to teach

### **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 participation in the corporate benefits program
- You have the opportunity to participate in workplace health promotion offers (for more information, see: [www.hsu-hh.de/bgm/](http://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](http://www.bwcarsharing.de)).

For questions related to scientific or technical aspects, please contact Univ.-Prof. Dr.-Ing. Kip, Tel.: 040/6541-2457 or by e-mail: [kip@hsu-hh.de](mailto:kip@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 planned appointment date or the "start date" mentioned is a date that may change due to the course of the tendering procedure.

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](http://www.hsu-hh.de) and [www.hsu-hh.de/laser/](http://www.hsu-hh.de/laser/).

Please send your application with the usual documents exclusively in electronic form (pdf file), quoting the reference number **ET-0326**, by **17.05.2026** to:

[personalabteilung@hsu-hh.de](mailto:personalabteilung@hsu-hh.de).

Note:

Information on data protection in the application process can be found on the website [www.hsu-hh.de](http://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.

