Your Key to success

HSB

At Hochschule Bremen – City University of Applied Sciences, we are a dynamic and innovative institution dedicated to providing high-quality education and fostering academic excellence. Located in the vibrant city of Bremen, Germany, our university of applied sciences offers a diverse range of programs and research opportunities across various fields. With a strong emphasis on practical learning and applied and fundamental research, we strive to prepare our students and young researchers for successful careers in their chosen fields. We are proud to be a member of UAS7, a prestigious alliance of seven leading German universities of applied sciences.

Currently the Biological Structures and Biomimetics research group of Prof. Dr. Dirks at the Biomimetics-Innovation-Centre is looking for a

PhD student (f/m/d) “Fatigue and repair of insect cuticle”

Code: FK5-10-2023, Pay group / Entgeltgruppe 13 TV-L

Subject to the release of funds, the position will be filled with 65% of the full working hours per week (25.48 hours), limited to 36 months and starting at the earliest convenience. The position is suitable for part-time.

Project Description

Insect cuticle is one of the most common and versatile biological materials. Like any other biological structure, cuticle exoskeletons are at constant risk of being damaged by their environment. Surprisingly, in relation to its biological significance, only very little is known about the ability of cuticle exoskeletons to cope with cycling loading and in particular fatigue related stresses. To investigate these open questions, we will use a cross-disciplinary scientific approach, combining biology, materials sciences, and mechanical engineering. The outcome of our study will help us to understand how insect exoskeletons react to cyclic loading and allow us to gain first insight and explore fundamental biomechanical principles of cuticle fatigue and repair. Further information on the Dirks research group can be found via: https://www.hs-bremen.de/biostructures

YOUR AREA OF RESPONSIBILITY

- Conducting, documenting and evaluating scientific experiments
- Writing scientific publications
- Co-supervision of theses and student assistants
- Set-up, maintenance and repair of scientific equipment required for the project.
- Support in project administration (orders, etc.)

PROFILE & REQUIREMENTS

- Succesfully completed (or be close to completion) M. Sc. in either organismal zoology, biomimetics, biomechanics, materials sciences or a related discipline
- Good knowledge of standard research software (office, statistical software, Matlab, R, Python)
- Very good language skills in English, language skill in German at least level B2
- Willingness to work in an interdisciplinary team

OUR OFFER

- In our interdisciplinary and international team you will work on a DFG-funded fundamental research project
- An interesting and varied job in an international environment at a cosmopolitan university
- An open working atmosphere
- Flexible working hours at a family-friendly university
- Company pension scheme (VBL)
- Attractive workstations with good transport connections
- Varied catering in the student union canteen
- Wide range of opportunities for personal and professional development
- A subsidized job ticket for public transport
- Subsidized company fitness in all EGYM Wellpass-studios

In the case of university degrees that you completed outside the EU, please submit and the **assessment of the Central Office for Foreign Education (ZAB)**. Alternatively, please send a PDF excerpt from the database for the **the recognition and evaluation of foreign educational certificates (ANABIN)**.

For vocational qualifications completed outside Germany, please send the german translation and recognition in Germany. Information on this can be found at the **Federal Institute for Vocational Education and Training (BIBB)**.

Bremen University of Applied Sciences promotes the employment of women at all levels. Women are therefore particularly encouraged to apply.

Candidates with an officially recognized disability with essentially the same professional and personal qualifications will be given priority. Applications from persons with a migration background are welcomed.

Further information about the University of Applied Sciences Bremen can be found at **www.hs-bremen.de/en**. If you have any questions regarding the job advertisement, please contact **Prof. Dr. Jan-Henning Dirks at jan-henning.dirks(at)hs-bremen.de**.

We look forward to receiving your application (including a cover letter, a one-page motivation letter for pursuing a PhD in insect biomechanics and a CV including the names of two references) **by 01.09.2023 inclusive** via **career.hs-bremen.de** .

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