ALFRED-WEGENER-INSTITUT
HELMHOLTZ-ZENTRUM FÜR POLAR- UND MEERESFORSCHUNG



The Alfred Wegener Institute Helmholtz Centre for Polar and Marine Research (AWI) is a member of the Helmholtz Association (HGF) and funded by federal and state governments. AWI focuses on polar and marine research in a variety of disciplines such as biology, oceanography, geology, geochemistry, and geophysics, thus allowing multidisciplinary approaches to scientific goals.

PhD position in the DFG Project MitoCycle: Metabolic Rhythms and Mitochondrial Adaptation in Mussels (m/f/d/x)

Background

The DFG project MitoCycle integrates ecophysiology, transcriptomics, metabolomics, bioinformatics, and chronobiology to understand how mussels optimize energy metabolism in response to environmental cycles. The project is based in the Marine Chronobiology (Prof Dr Kristin Tessmar-Raible) and Integrative Ecophysiology (Dr Christian Bock) working groups of the AWI in Bremerhaven.

Your Tasks

- Conduct cutting-edge, qualification-oriented research integrating ecological physiology, biochemistry, and molecular biology to advance toward the successful completion of a PhD (Promotion)
- Characterize metabolic rhythms in marine mussels from tidal and atidal environments by developing and applying novel experimental and analytical approaches
- Design experiments to analyze transcriptomic and metabolomic profiles of different mussel tissues in relation to tidal and diurnal cycles
- Collect mussels from intertidal and subtidal zones, and maintain them in controlled aquaria for experimental studies
- Perform mitochondrial analyses and utilize transcriptomics and metabolomics tools to identify metabolic profiles and pathways associated with environmental adaptation
- Collect, process, and analyze data using advanced statistical and bioinformatic tools to ensure data integrity and maintain detailed records
- Present findings at scientific conferences and contribute to peer-reviewed journal publications

- Collaborate with interdisciplinary research teams at the University of Rostock led by Prof Inna Sokolova, to interpret results, refine experimental methods, and share progress in project meetings
- Co-mentor and supervise students or research assistants, working closely with Prof Dr Kristin Tessmar-Raible and Dr Christian Bock

Your Profile

- Completed academic university degree (Master's or equivalent) in Biology, Physiology, Biochemistry, or a related discipline
- Interest in mitochondrial biology, chronobiology, and metabolic adaptation, as well as motivation to learn new methods
- Physical ability to conduct fieldwork in coastal and intertidal zones, including working on wet and slippery surfaces, in variable weather conditions, and while carrying equipment in the field
- Excellent organizational and timely work habits, combined with careful documentation and a strong sense of responsibility
- High motivation and commitment to work independently and focus on a scientific qualification project (PhD)
- Creativity, scientific curiosity, and strong problem-solving skills, especially in developing original ideas and experiments
- Strong communication and presentation skills for conferences, meetings, and interactions within an international, interdisciplinary team
- Ability to work collaboratively in a team, including cooperation in laboratory and field settings and in mentoring students
- Very good English knowledge (approximately equivalent to **CEFR** level C1)
- Good knowledge of the German language, both written and spoken (approximately equivalent to **CEFR** level B1+B2)

Further Information

- **Contact in day-to-day work**: collaboration mainly with more than 5 people
- **Communication**: predominantly internal (with colleagues and other departments) in the following ways

1. By telephone: frequently (daily or several times a week)
2. E-mail: frequently (daily or several times a week)
3. Video conferencing (e. g., Webex): occasionally (several times a month)
4. Personal contact in presence: frequently (daily or several times a week)

- **Movement around the workplace:** regularly over longer distances (e.g., other buildings)
- **Business trips:** occasional (several times a year)
- **Expeditions**: occur

Please note that the general conditions listed serve as a guide and may vary depending on the specific area of application.

For further information on the specific position, please reach out to **Dr Christian Bock** (**Christian.Bock@awi.de**; +49(471)4831-2488)or **Prof Dr Kristin Tessmar-Raible (kristin.tessmar-raible@awi.de)**.
If you have any general questions about the application process, our Recruiting team will be glad to support you – please contact Lara Manthey (**bewerbungsmanagement@awi.de**, +49(471)4831-1097).
In **this overview** you will find further contact persons for various matters.

This position is limited to 3 years, starting June 2026. The salary will be paid in accordance with the Collective Agreement for the Public Service of the Federation (Tarifvertrag des öffentlichen Dienstes, TVöD Bund), up to salary level **13 (66%)**. The place of employment will be **Bremerhaven**.

All doctoral candidates will be members of AWI's postgraduate program **POLMAR** or another graduate school and thus benefit from a comprehensive training program and extensive support measures.
The AWI is characterized by

- Our scientific success - excellent research
- Collaboration and cooperation - intra-institute, national and international, interdisciplinary
- Opportunities to develop – on the job and towards other positions
- An international environment – everyday contact with people from all over the world
- Flexible working hours
- Health promotion and company fitness with Hansefit and Wellhub
- Support services and a culture of reconciling work and family
- Occupational pension provision (VBL)

AWI values diversity and actively promotes gender parity, as well as an open, inclusive environment that provides equal opportunities. We are convinced that diverse teams and a variety of perspectives enrich our work and our daily collaboration. In a continuous process of learning and reflection, we aim to ensure that all our employees can be themselves and feel a sense of belonging. We welcome applications from qualified people regardless of binary and non-binary genders, race and nationality, ethnic and social background, religion, age, disabilities, neurodivergence, sexual orientation, and other identities.

Applicants with disabilities will be given preference when equal qualifications are present.

AWI fosters work-family compatibility in various ways. As a new international member of our team, you can be sure that we will help you settle in. **Our Family Office and International Office will be glad to support you**, even before you start at AWI.

We look forward to your application!

Please submit your application online only by **March 22nd, 2026.** We kindly ask you to apply in English. No photo is required – we value your qualifications and experience.

Reference number: 26/16/D/Bio-b

Apply here