



Master/Bachelor thesis or compulsory internship and HiWi: Aquaculture research group

Job type: HiWi/student assistant

Master and/or Bachelor thesis

Location: Bremerhaven

Start: anytime

Research division: Biosciences, Aquaculture research group

Project **InCraSus** – Invasive Crab Recycling for Sustainable Circular Economy

Background: The invasive Chinese mitten crab *Eriocheir chinensis* is found in almost all coastal waters in Germany. The crabs are caught in specially developed traps, but the resulting biomass remains largely unused. In the InCraSus project, we aim to produce high-quality raw materials from the raw biomass and use them, for example, as feed in aquaculture. The focus here is on optimization through protein hydrolysis and the general characterization of the biomass. The resulting biomass will then be tested for its suitability as feed for shrimp (*Litopenaeus vannamei*).

Die invasive Wollhandkrabbe *Eriocheir chinensis* kommt mittlerweile in fast allen küstennahen Gewässern Deutschlands vor. Die Krabben werden inzwischen in speziellen entwickelten Fallen abgefischt, die so entstehende Biomasse ist bis dato noch weitestgehend ungenutzt. In dem Projekt InCraSus möchten wir aus der Rohbiomasse möglichst hochwertige Rohstoffe herstellen und diese z.B. als Futtermittel in der Aquakultur zur verwenden. Der Schwerpunkt liegt hier auf der Optimierung durch Proteinhydrolyse und der allgemeinen Charakterisierung der Biomasse. Im Anschluss wird die entstandene Biomasse für ihre Eignung zur Fütterung von Shrimps (*Litopenaeus vannamei*) untersucht.

Tasks:

The project offers several opportunities for students to gain experience and conduct studies in the topics of bioeconomy and shrimp nutrition:

- Biomass refinery, feed production
- Laboratory experiments including proximate analyses and protein hydrolysis
- Feeding experiments with shrimp

Requirements:

- Previous experience or strong desire with aquaculture and RAS systems
- Experience in laboratory work
- Team worker, good communication skills
- Proficient in German and/or English language
- For MSc-studies: proficient in statistical analyses, data exploration and experimental design

Further information

Experiments will be conducted in the Centre for Aquaculture Research (ZAF) and in the laboratories of AWI in Bremerhaven. The project is ongoing and will offer varying opportunities throughout the following two years.

The practical work takes place exclusively in Bremerhaven. Regular on-site attendance is required.

Interested?

For further information or application (in German or English with a short cover letter and CV merged into a single PDF) contact **Dr. Hilke Alberts-Hubatsch** (halberts@awi.de) or check our AWI website at: <https://www.awi.de/forschung/besondere-gruppen/aquakultur/aquakulturforschung/projekte/incrasus.html>

