

The Leibniz Centre for Tropical Marine Research ([www.leibniz-zmt.de](http://www.leibniz-zmt.de)) in Bremen is a member of the Leibniz Association, which is supported by the German Federal and State Governments. Through its research, ZMT contributes to developing science-based strategies for sustainable use of tropical coastal systems.

## Master thesis project

“Seagrass microbiome dynamics under environmental change”

Starting in September 2017

### Background of the project:

The microbial community and associated biogeochemical processes of tropical seagrasses and macroalgae will be compared under varying nutrient and temperature conditions in a 4-6 month long mesocosm experiment. This project will take place at the ZMT in the marine experimental ecology facility (MAREE) and will be a joint working group effort of the “Tropical Marine Microbiology” and the “Algae and Seagrass Ecology” group. Planned start date of the mesocosm experiments is August and will run until December 2017.

### Thesis:

The MSc student will analyze the microbial community composition along with biogeochemical processes, including inorganic and organic nutrient fluxes, N<sub>2</sub>-fixation, and denitrification. These parameters will be measured across the sediment/water-column interface. Methods include DNA and RNA extraction, high through-put sequencing, bacteria community analyses using bioinformatic tools and quantitative polymerase chain reactions (qPCR).

### Requirements:

Applicants will hold a BSc. in preferably Marine Biology, Biology, Ecology or Environmental Sciences. Very good English skills are preferred.

### Application:

Interested candidates are invited to send a letter of interest, a CV and the contact information of one referee as a single pdf file to:

Dr. A. Gärdes ([astrid.gaerdes@leibniz-zmt.de](mailto:astrid.gaerdes@leibniz-zmt.de)) until **August 15, 2017**.

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