

# MASTER THESIS

- practical-experimental
- literature research
- theoretical-mathematical

BEST - Bioenergy and Sustainable Technologies GmbH is the competence center in Austria that conducts pre-competitive industry-related research in the field of bioenergy and biobased economy.

## PAID MASTER THESIS Topic: Microalgae cultivation

In the area Biochemical Technologies we aim for increasing the sustainability of processes. In this context we focus on microalgae/cyanobacteria, biogas and wastewater technologies as well as on residue utilization and CO<sub>2</sub>-based gas fermentations. Our work on biotechnological conversion follows the principle of cascading utilization.

Within your work you will investigate the response of microalgae to environmental factors connected to the climate crisis, such as an increase in temperature and pesticide concentration in ponds due to heavy rain and flooding. In this context you will cultivate and harvest microalgae at lab scale under different conditions and evaluate their growth and biomass composition.

### Your tasks

- Working in a project team
- Supervised development of experimental plans
- Learning to carry out various analyses
- Supervision of experiments
- Presenting and discussing your results

### General requirements

- Background/study in the fields of microbiology / biotechnology / environmental sciences is desired
- Interest in and enthusiasm for carrying out practical experiments and conscious handling of the equipment
- Accurate, well organized and independent way of working

### We offer

- Exciting research questions
- Active scientific supervision of your practical work and thesis by BEST
- Colleagues experienced in working on scientific issues and theses
- Working in a skilled and young team
- Motivating and motivated working environment
- Well-equipped laboratories

In the spirit of diversity, BEST would especially welcome applications from women!

Application under:

#### General Conditions:

**Study:** microbiology | biotechnology | environmental sciences  
**Start:** February 2024  
**Location:** 3430 Tulln, Konrad-Lorenzstr. 20  
 → ONLY 20 min from U4 Heiligenstadt  
**Payment:** Yes, minor employment  
**Duration:** 6 Months

#### Contact:

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Further information: [https://www.best-research.eu/content/en/competence\\_areas/biorefineries/biochemical\\_technologies](https://www.best-research.eu/content/en/competence_areas/biorefineries/biochemical_technologies)

Area 1 Biorefineries  
Subarea 1.2 Biochemical Technologies

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