



Master's Thesis

Development of an optical system for imaging microplastics in water samples

The goal of this Master's thesis is the development and optimization of an automated system for microplastic detection. Various flow cells will be designed, tested, and integrated to enable reliable particle identification. The work includes experimental investigations into the efficiency and compatibility of the components, as well as the evaluation of different setup and control concepts. This thesis offers the opportunity to contribute to an innovative solution addressing an urgent environmental issue.

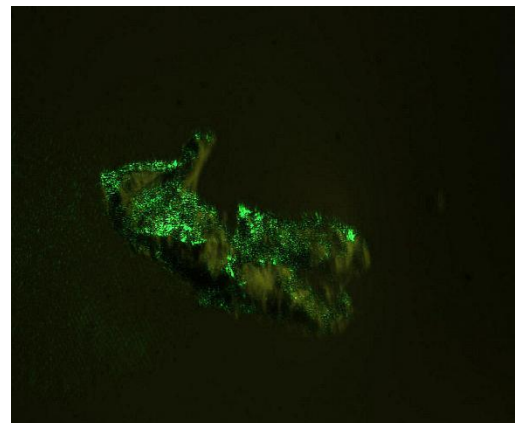


Image: Picture of a microplastic
particle size < 300Micrometer

Tasks:

- Research into the state of the art
- Concept development
- Design and integration
- Validation and evaluation

Education, experience, and skills:

- High motivation and ability to work independently
- Interest in optics and automation
- Experience with Python
- Thesis can be written in German or English

[1] <https://www.forschung-und-lehre.de/forschung/mikroplastik-verteilt-sich-auch-ueber-die-luft-1691>