



Internship, Bachelor & Master Thesis Opportunities

WASTEWATER TREATMENT AND OXIDATIVE PROCESSES — APPLICATION DRIVEN RESEARCH

Are you interested in environmental technologies, wastewater treatment or instrumental analytics? At IUTA, we are offering motivated students the opportunity to work on innovative projects focusing on application and optimization of different wastewater treatment techniques and methods in environmental analytics. You will take a deep-dive into topics like:

💧 **Wastewater ozonation** — Analyse the impact of ozone injection and matrix parameters on micropollutant elimination and bromate formation.

✳️ **Oxidative processes** — Evaluate the implementation of Advanced Oxidative Processes (AOPs) for elimination of a wide range of pollutants in different matrices.

🔬 **Instrumental environmental analytics** — Develop and validate new customised methods for our projects related to micropollutant elimination and wastewater treatment.

In addition, you will have the chance to engage with a broad network of research institutions and industry partners connected to our projects or commercial activities — opening doors for professional exchange, collaboration, and future career opportunities in both academia and industry.

WE ARE LOOKING FOR STUDENTS WHO:

- Are studying water science, chemistry, environmental or process engineering.
- Have a passion for laboratory work and a hands-on mentality
- Are curious about collaborative research in environment and water related topics.
- Want to work on projects with both scientific depth and industrial relevance.

WE CAN OFFER:

- Internships, Bachelor- and Master-Theses related to the mentioned topics.
- Open-minded, motivated and supporting work environment.
- State-of-the-art laboratories and pilot plants.

IUTA — Institut für Umwelt & Energie, Technik & Analytik e.V.

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AVAILABLE PROJECTS

Characterization of bromate formation in wastewater ozonation

In this project, you will work on the characterization of influence factors on bromate formation. Work packages contain design and evaluation of a synthetic wastewater matrix, laboratory ozonation experiments in full-factorial design and advanced data evaluation of the received results.

Method development LC-MS/MS

We frequently offer different analytical topics, e.g. method development with LC-MS/MS targeted on PFAS, micropollutants or transformation products, as well as non-targeted screening.

For further questions and application, contact **Andrea Börgers/Damian Schomers**
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