# Master Thesis: Analysis of Antibiotics of Last Resort in Waste- and Surface Water by LC-MS/MS

## Background

Most antibiotics belong to the emerging contaminants of the aquatic environment resulting in the spread and evolution of multiresistant bacteria. The research in the institute focuses on the degradation of antibiotics and on their influence on the microbial ecosystem. Therefore, a robust and sensitive method for the analysis of these contaminants is necessary for environmental monitoring.

## Tasks

The aim of the project is to develop a method for the quantification of linezolid, tedizolid and tigecyclin in waste- and surface water by LC-MS/MS. The project also involves the use of online-SPE (solid phase extraction) and isotopically labeled compounds.

## Additional Information

The place of work is the Karlsruhe Institut for Technology (KIT). The thesis can be written in English or German. In total, we have capacity for two students. For early applicants a furnished room for rent can be provided.

Questions and applications send to Alexander Timm.

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