

## Sebastian Wolf

Position: PhD Student  
Project: B03  
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### Research Interests

- Monitoring of gas exchange in environmental processes within AquaDiva
- Development of fiber spectroscopic setup for onsite-gas measurements in AquaDiva
- Optical design
- Fiber and cavity enhanced Raman spectroscopy methods
- Raman Spectroscopy of liquids and gasses
- Monitoring of drug-target interaction

### Current Project

PhD thesis, working title: "Fiber and cavity enhanced Raman gas sensing techniques highly sensitive gas measurements"

Within this project, we want to design, build and specify cavity and fiber enhanced Raman spectroscopy setups for online measurements. A main goal is, to develop transportable and miniaturized setups, which can be used for on-site measurements to quantify biogenic gases at low concentrations. Those setups will help us, to quantify simultaneously different gases for a better understanding of environmental processes in the AquaDiva framework.

### Curriculum Vitae

- PhD topic "Fiber and cavity enhanced Raman gas sensing techniques highly sensitive gas measurements", FSU Jena
- M.Sc. Photonics at University of Applied Science in Aalen
- B.Eng. Optoelectronics at University of Applied Science in Aalen

### Publications

- **Wolf, S.**, Frosch, T., Popp, J., Pletz, M. W., & Frosch, T. (2019). Highly Sensitive Detection of the Antibiotic Ciprofloxacin by Means of Fiber Enhanced Raman Spectroscopy. *Molecules*, 24(24), 4512.