The research group Spectroscopic sensing of the Leibniz Institute of Photonic Technology (IPHT) offers a position for Hiwi and a topic for Bachelor/Master thesis in innovative fiber spectroscopy.

Within the scope of this project, innovative spectroscopic systems based on novel optical fibers and fiber arrays will be developed for highly sensitive and intrinsically specific Raman spectroscopy with applications in environmental sciences and medical diagnosis.

Your qualification:
University studies (B.Sc. or M.Sc.) in physics, photonics, chemistry, scientific instrumentation, laser-optotechnology, medical optics or related disciplines

Your skills and interest:
- Experimental and technical skills and interest in optical setups and instrumentation
- Knowledge in Raman spectroscopy and fiber optics would be helpful
- Interest in interdisciplinary work and scientific ambition

We offer:
- Attractive research environment with excellent instrumental equipment
- Possibility of interdisciplinary cooperation
- Young and dynamic team with interdisciplinary background

Literature
Highly sensitive broadband Raman sensing of antibiotics in step-index hollow-core photonic crystal fibers, ACS Photonics (2017), 4, 138-145

Fiber enhanced Raman spectroscopic analysis as a novel tool for diagnosis and monitoring of diseases related to hyperbilirubinemia and hyperbiliverdinemia, Analyst (2016) 141, 6104-6115


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