



We work for  
**tomorrow**



---

# ***Master Thesis***

## ***Super Resolution Photoacoustic Microscopy with Structured Light***

### **Tasks:**

- Design and implementation of the experimental setup
- Automatization of the data acquisition and image formation process
- Resolution and contrast characterization of the developed microscope
- Application of the method for imaging cell structures on histological sections

### **Requirements:**

- Education: physics, technical engineering
- Hard skills: basic knowledge of optics, acoustics and signal processing
- signal skills: Python, MATLAB, LabView
- Soft skills: Initiative, structured working

### **Additional information:**

Start of work: possible from April 2023  
Period: 1 Year  
Salary: about 400€ per month  
Supervisor: Mag. Dr. Robert Nuster, Institute of Physics, University of Graz  
Co-supervisor: Ao. Univ.-Prof. Dr. Günther Paltauf, Univ.-Prof. Dr. Peter Banzer

***If you are interested to work within a project at the edge of laser acoustic and optical microscopy with modern light structuring methods do not hesitate to contact me (+43 316 380 5195, [ro.nuster@uni-graz.at](mailto:ro.nuster@uni-graz.at)) or just walk by!***