

Nanosurf (www.nanosurf.com) is a leading provider of innovative atomic force and scanning tunneling microscopes (AFM and STM). Our products and services are trusted by professionals worldwide to help them measure, analyze, and present 3D surface information. Our scanning probe microscopes excel through their compact and elegant design, their easy handling, and their absolute reliability.

To support our R&D team in a cutting-edge collaboration project with ETH Zurich we are offering a

Student Internship (or Master Thesis) in Rheology experiments for Life Science Applications (6–12 months, as of April 2021 or later)

About the Project

Rheological characterization of the mechanical properties of cells and tissues in diseased and healthy states are essential to understand how mechanics drives diseases and to discover novel targets for therapeutic treatment. As an intern in the R&D department, you will work on mechanical analysis of biosamples by performing microrheology measurements with our new AFM instrumentation.

You will work in close collaboration with our university partner, the Biophysics Group of the ETHZ in Basel, led by Prof. Daniel Müller. Your main tasks will be involved in:

- Development of a new application together with experts from the R&D team and ETHZ.
- Reviewing literature on rheology measurements with AFM.
- Interpreting data collected from rheology experiments.
- Developing mechanical models to determine rheological properties.
- Present results at group meetings and write short reports.

Your background

We are looking for a highly motivated student with a background in physics, engineering, nanoscience, or equivalent who wants to do an industry project as part of his or her master's education. Candidates that have already finished their master thesis will also be considered.

Candidates should be talented in the lab and show an affinity for experimental work, including hardware characterization. Programming experience (E.g. Python) is a must. Basic knowledge of atomic force microscopy (AFM) or of cantilever-based measurement instruments is of special importance; you should know how to successfully perform systematic and high-quality measurements. Good communication skills in English are a must; knowledge of German is of advantage.

For more information, please contact Dr. Laura Gonzalez at gonzalez@nanosurf.com

Please submit your CV and a letter of motivation for this position to jobs@nanosurf.com