

CAN I COMBINE SCIENCE AND BUSINESS IN A SINGLE JOB?

YES.

We'll show you how at Fraunhofer.



STARTING NOW, THE FRAUNHOFER INSTITUTE FOR APPLIED OPTICS AND PRECISION ENGINEERING OFFERS YOU AN EXCITING JOB OPPORTUNITY AS A

STUDENT ASSISTANT F/M IN THE FIELD OF JOINING OPTICAL MATERIALS

Fraunhofer is the largest organization for application-oriented research in Europe. Our fields of research are geared to the needs of people: health, security, communication, mobility, energy and environment.

The Fraunhofer Institute for Applied Optics and Precision Engineering IOF in Jena conducts application-oriented research in optical systems technology on behalf of industry and within the framework of publicly funded joint projects. The range of services offered by the Fraunhofer IOF includes system solutions, starting with new design concepts, through the development of technologies, manufacturing and measuring processes, to the construction of prototypes and pilot series for applications in the wavelength range from millimeters to nanometers.

Joints of optical components are subject to increasing requirements regarding transmission behavior, strength and thermal stability. To meet these requirements, joining technologies are used that do not require adhesives. One such joining technology is Plasma-Activated Direct Joining, in which a planar covalent bond is created at the atomic level. This process is applied and further developed within the working group "Optomechanical Precision Systems", for example to produce spectrometers suitable for use in space by joining prisms with optical gratings.

Your Tasks

Within the scope of a final thesis or an internship semester, the production of test specimens for the determination of the strength of joined components is to be optimized. The influence of different methods of sample processing (grinding, polishing) of the test specimens as well as their geometry shall be investigated. In addition to the experimental execution of the strength investigation on a tensile-compression testing machine, the surface characterization plays an important role.

What we expect from you

- You are a student of materials science, materials engineering, precision engineering, physics, photonics or a related field of study.
- You have initial experience in materials testing and/or surface characterization.
- You are interested in questions of technical mechanics.
- You are confident in using Microsoft Office applications.
- Your strengths include an independent, structured, flexible and reliable way of working

What you can expect from us

- Working in a collegial and open team
- Varying tasks in a dynamic work environment
- Flexible working hours

The remuneration is based on the collective agreement for the employment of auxiliary staff.

In case of identical qualifications preference will be given to severely disabled candidates.

We would like to point out that the chosen job title also includes the third gender.

The Fraunhofer-Gesellschaft emphasises gender-independent professional equality.

Fraunhofer is Europe's largest application-oriented research organization. Our research efforts are geared entirely to people's needs: health, security, communication, energy and the environment.

We look forward to receiving your application! Please use our online application portal.

<http://www.iof.fraunhofer.com>

Job Reference: **IOF-2020-26**

Closing date: **30.09.2020**