

You are a very motivated researcher, having a PhD and practical experience in the fields of laser physics, applied physics, non-linear optics, mechanical /electrical engineering or similar?  
You are willing to work and expand your horizons in a highly interdisciplinary and multinational research environment?



TECHNISCHE  
UNIVERSITÄT  
WIEN

**Postdoc Position open** in the field of **laser-based material processing** (specifically multi-photon lithography also referred to as high-resolution 3D printing) at the TU Wien (Vienna, Austria) within the research group “3D Printing and Biofabrication”.

### **Living in Vienna**

Located in the heart of Europe Vienna is renowned for its culture, stunning imperial as well as modern architecture and vast green spaces, which make up over half of the city. Vienna has been ranked as the most livable city in the World multiple times.

### **Working at TU Wien**

Technische Universität Wien (TU Wien) founded in 1815 as an Imperial and Royal Polytechnic Institute (k. k. Polytechnisches Institut) is one of the oldest engineering schools in Europe. The university consists of eight faculties that cover the classical engineering disciplines and natural sciences. The teaching and fundamental as well as applied research receives high international and domestic recognition. Being one of the most innovative institutions in Austria, TU Wien is consistently ranked among the best with regard to the number of granted patents. Furthermore, TU Wien is striving to ensure family-friendly conditions for the university staff, alongside their career or academic work.

The successful candidate will join a highly interdisciplinary and multinational research laboratory with excellent infrastructure in the heart of Vienna. The group “3D Printing and Biofabrication” is a part of Additive Manufacturing Technologies (AMT) initiative, which has a strong record of accomplishments, including a number of high-profile research / industrial projects (two consecutive ERC Grants, Christian Doppler Laboratories, large European projects), three spin-off companies, plenty of inventions and highly cited publications. Our research projects are at the interface of engineering, material development and biomedical research, including 3D bioprinting: <https://www.tuwien.at/koop/amt>

### **Expected Qualifications:**

We are looking for a highly motivated, enthusiastic and outstanding candidate with post-doc experience and a proven scientific track record, including peer-reviewed publications, grant applications and student supervision, able to work independently in- and outside the lab. Within our highly interdisciplinary group it is not expected that a candidate possesses a comprehensive background in every area, but practical experience in laser-based material processing, nonlinear optics, z-scan, design of optical systems, including lithography or fluorescence microscopy, mechanical design (e.g. AutoCAD, Solid Works) and programming (python, C++), will be considered a strong asset. Experience in tissue engineering, 3D cell culture, bioprinting or similar will be positively evaluated.

### **We provide:**

- Interesting research topics within innovative highly interdisciplinary environment promoting curiosity, creativity, innovation and companionship
- Excellent opportunities for personal development in scientifically stimulating surrounding
- Flexible working hours, reconciling career and family, a range of according university services

**Contract information:**

Employment starting early 2023, the expected minimum contract duration is 2 years. **The gross monthly salary for the full-time PostDoc position starts at around 4.000 €** (paid 14 times per year). In exceptional cases, part-time employment might be considered. The salary and the terms of employment are set in accordance to the collective labor agreement of the Austrian Universities and trade union of public service.

The exact conditions, starting date and the salary will be agreed upon with the individual candidate.

**Application documents:**

- A motivation letter listing significant achievements, relevant experience referring to the description of this position and indicating preferred start date (no longer than 2 pages)
- CV, including education / internship / employment / publication record
- Names of three people who could provide a reference, if already available the reference letters can be included with the application

Qualified candidates should apply by sending the above documents by the 15<sup>th</sup> of January 2023 per e-mail with the subject line "Optics PostDoc Application AMT" to: [sekretariat+E308@tuwien.ac.at](mailto:sekretariat+E308@tuwien.ac.at)

We look forward to receiving your application and getting to know you personally!

[Institute of Materials Science and -Technology (E308), TU Wien, Getreidemarkt 9, Vienna, Austria]

**Important:** Applications not providing the requested information will not be considered!

The submitted files should not exceed 5 Mb in total.