

Graz University of Technology is the longest-established university of technology in Austria. Here, successful teams of students, talented up-and-coming scientists, ambitious researchers and a lively start-up scene enjoy an inspirational environment as well as access to top-quality equipment. And all this in one of the most innovative and livable regions in Europe with close access to the alps as well as the Mediterranean Sea. TU Graz offers an inspiring working environment with outstanding infrastructure and service-oriented university management.

The **Institute of Experimental Physics** at TU Graz has an opening for a

University Assistant without Doctorate / Doctoral Position in the Area of

Attosecond Time Resolved Quantum Mechanics

40 hours/week, fully funded, tentative start date April 1st, 2023, 3 years (with the option of an extension for 4 years)

We are seeking a research enthusiastic graduate in physics or physical chemistry to work with us on attosecond time-resolved experiments investigating the quantum-state evolution of atomic and molecular systems driven by extreme light fields. With a set of cutting-edge experimental tools, we envisage the PhD project to provide insight in the laser-controlled formation of desired molecular assemblies and the quantum-mechanically complete characterization of electronic and nuclear wave packets dictating the course of photochemical reactions.

These activities will be strongly interlinked with other attosecond projects on laser-controlled magnetization dynamics, attosecond microscopy of carrier dynamics in electronic circuitry and laser metrology for environmental and space sensing applications.

Duties and Responsibilities:

- Development of an attosecond Fourier-transform spectroscopy setup
- Proof-of-concepts experiments tracking ultrafast wavepacket dynamics
- Data analysis, interaction with theorists and manuscript preparation

All of the above with a lot of guidance by senior PhD students, Postdocs and permanent Scientists.

And:

- Teaching of undergraduate lab-courses and/or tutorials

Required Skills and Qualifications:

- Degree in physics / physical chemistry / chemistry with a CV showing indications of curiosity
- Urge to build and run a first-of-its kind experiment
- Interest to dive into basic research questions and join an international team of researchers and students
- Experience in lab research, possibly laser spectroscopy

We offer:

- A Welcome Center, that supports international employees in visa, entry and residence permits, looking for accommodation, living in Graz, and networking and integration
- Interesting area of responsibility
- Excellent work-life balance (flexible working schedule)
- Possibility for Home-Office (for a maximum of 40 % of the working hours per week)
- University's sports program
- Exciting opportunities for professional and personal development
- Public transport subsidy
- Workplace Health Management
- Award for being the most family-friendly enterprise in Styria 2018
- Wide range of food on campus
- Shopping Discounts

We offer an annual gross salary based on full-time of at least **€ 45882,20 (i.e. net income > 2000€ per month)**

Graz University of Technology actively promotes diversity and equal opportunities. People with disabilities and who have the relevant qualifications are expressly invited to apply.

Protecting the health of our students and employees is of high importance to our university. For this reason, equally qualified candidates who are fully vaccinated against COVID-19 will be given preference.

Please send your complete application (letter of motivation, curriculum vitae, publication list, two contacts willing to provide letters of recommendation, certificates and other documents indicating the position and reference number **5110/23/002** to bewerbungen.mpuq@tugraz.at

Deadline for application: March 19th, 2023

Contact:

Graz University of Technology
Dean of the Faculty of Mathematics, Physics and Geodesy
Univ.-Prof. Dr.rer.nat. Jussi Behrndt
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www.iep.tugraz.at

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