

# University Assistant without Doctorate / PhD Position (m/f/d) in the Area of Building Physics

- At the Institute of Building Physics, Services, and Construction (Unit of Building Physics)
- 40 hours per week; beginning July 2023; limited to 5 years
- Application Deadline: 07.06.2023



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. TU Graz offers an inspiring working environment with outstanding infrastructure and service-oriented university management.

## DUTIES/RESPONSIBILITIES

- Conducting pioneering research in the field of building physics in one of the following areas:
  - Urban climate dynamics and their representation in building simulation models
  - Assessing the role of blue & green infrastructure in urban climate resilience
  - Model Predictive Control for heating and cooling load optimisation
  - Life Cycle assessment of building services, assessing the whole life impacts on ventilation and cooling systems
  - Cradle-to-Cradle life cycle assessment of bio-based modular housing solutions
  - Urban densification – the potential for climate resilient refurbishment of loft spaces in historical inner city buildings
  - Enhancing comfort, health and well-being in naturally ventilated European educational buildings
  - Enhancing the acoustic performance of urban school building
- Assistance in teaching and independent supervision of workshops and lectures in the field of building physics and building construction
- Independent supervision of master's and bachelor's theses in the field of building physics and building construction
- Writing peer reviewed journal and conference papers
- Administrative work
- Participation in meetings and relevant courses

## REQUIRED SKILLS AND QUALIFICATIONS:

- Degree in civil engineering, mechanical or similar
- In-depth knowledge in building physics and building construction
- Very good knowledge of spoken and written German and English
- High motivation and background knowledge to conduct research in one of the following topics (please specify which topic in your application)
  - Urban climate dynamics and their representation in building simulation models
  - Assessing the role of blue & green infrastructure in urban climate resilience
  - Model Predictive Control for heating and cooling load optimisation
  - Life Cycle assessment of building services, assessing the whole life impacts on ventilation and cooling systems
  - Cradle-to-Cradle life cycle assessment of bio-based modular housing solutions
  - Urban densification – the potential for climate resilient refurbishment of loft spaces in historical inner city buildings
  - Enhancing comfort, health and well-being in naturally ventilated European educational buildings
  - Enhancing the acoustic performance of urban school buildings
- Experience in building simulation (e.g. CFD) and in the monitoring of buildings (monitoring and measurements)
- Knowledge of R, Matlab or Python
- Independent way of working and ability to work in a team

## Apply now >

We look forward to your complete application (letter of motivation, curriculum vitae, references, further documents) quoting the reference number 2190/23/005 to [dekanat.bau@tugraz.at](mailto:dekanat.bau@tugraz.at) by June 6 2023 at the latest.

We offer a minimum annual gross salary based on full-time of € 45,882.20, overpayment possible depending on qualification and experience. Graz University of Technology aims to increase the proportion of women and therefore qualified female applicants are explicitly encouraged to apply. Graz University of Technology actively promotes diversity and equal opportunities. People with disabilities and who have the relevant qualifications are expressly invited to apply.

### Contact

Graz University of Technology  
Dean of the Faculty of Civil Engineering Sciences  
Univ.-Prof. Dr.-Ing. Martin Schanz  
Rechbauerstraße 12, 8010 Graz

<https://ibpsc.tugraz.at>

Information on the data processing of your application can be found at [www.tugraz.at/go/datenschutzzinformation-pa](http://www.tugraz.at/go/datenschutzzinformation-pa).