

The Faculty of Civil Engineering of Graz University of Technology seeks to appoint a full tenured professor of

## Railway Engineering and Transport Economy

starting, presumably by October 1<sup>st</sup>, 2024. The position (successor Peter Veit) is tenured according to Section 98 of Austrian University Act (§ 98 UG).

The Chair of Railway Engineering and Transport Economy represents the railway system with the interaction between infrastructure and operation. Special attention is paid to data-based maintenance optimisation in the sense of asset management and thus to the sustainable further development of railway networks. The field of maintenance comprises data management, data analyses, prognosis models derived from them and the respective economic evaluations in the sense of life cycle management. The descriptive analyses are to make use of the possibilities offered by digitalisation. At the same time, life cycle management is to be further developed for future operational challenges, such as modal shift and the consideration of climate change. In terms of system optimisation, the focus is on questions such as cause-related, system-compliant train path prices and the evaluation of different vehicle concepts.

We are looking for a person with an internationally recognised research profile in the field of transport infrastructure and life cycle management. A broad basic knowledge of railroad infrastructure and economic evaluation methods is therefore required. Experience in several of the following areas is desirable: analysis of track data, development of forecasting models for infrastructure quality behaviour and basic operational knowledge. Research and development activities must be demonstrated through relevant research projects or collaborations with rail-related industry and/or infrastructure companies.

In teaching, the candidate shall teach the theoretical fundamentals of the subject in the bachelor, master and doctoral programs. In-depth courses in research and/or practice are desirable - in particular, active participation in the design and implementation of the infrastructure master's program is expected.

Furthermore, a readiness for interdisciplinary cooperation with the scientific and industrial environment is required, especially with the Institute of Railway Infrastructure Design and the Institute of Structural Durability and Rail Vehicle Technology, as well as with the Research Cluster Railway Systems of Graz University of Technology. The selected ability to acquire third-party funding projects rounds off the requirements.

Requirements for employment are:

 An university education relevant subject, including a completed doctoral degree (PhD). Degrees must comply with Austrian accreditation standards.

- An outstanding academic track record in research and teaching
- Teaching experience and very good didactics, preferably shown by an Habilitation (venia docendi) or an equivalent scientific qualification
- Proven leadership skills

A good command of written and spoken German and English is required in order to be able to represent the subject inter/nationally and to be able to teach in both languages. If there is no sufficient knowledge of German, the willingness to learn the language at an adequate level for teaching is expected within two to three years.

Graz University of Technology aims to increase the proportion of women, in particular in management and academic staff, and therefore qualified female applicants are explicitly encouraged to apply. Until a balanced ratio of men and women has been achieved at the university, preference will be given to women if applicants are equally qualified.

Graz University of Technology actively promotes diversity and equal opportunities. Applicants are not to be discriminated against in personnel selection procedures on the grounds of gender, ethnicity, religion or ideology, age, sexual orientation (Anti-discrimination). People with disabilities and who have the relevant qualifications are expressly invited to apply.

Candidates should submit their detailed application

- using the application form sheet of TU Graz at https://www.tugraz.at/go/professorships-vacancies,
- presenting their CV and scientific record in teaching and research or in industries (copies of certificates and documents attached),
- displaying their planned activities in research and teaching and for the development of the institute,
- presenting the full texts of their five most important publications (pdf or link)

in a digital form at the latest by

## **February 19th, 2023**

(date and time of email timestamp) to the Dean of the Faculty of Civil Engineering Sciences, Graz University of Technology, Rechbauerstraße 12, 8010 Graz, Austria; E-Mail dekanat.bau@tugraz.at.

Hearings are planned for April 18th, 2023 and April 19th, 2023.

The Dean: Univ.-Prof. Dr.-Ing. Martin Schanz <u>www.tugraz.at</u>