



University Assistant (Post-Doc)

Full-time | limited until 01.11.2027

TU Wien is Austria's largest institution of research and higher education in the fields of technology and natural sciences. With over 26,000 students and more than 4000 scientists, research, teaching and learning dedicated to the advancement of science and technology have been conducted here for more than 200 years, guided by the motto "Technology for People". As a driver of innovation, TU Wien fosters close collaboration with business and industry and contributes to the prosperity of society.

At the Institute of Chemical, Environmental and Bioscience Engineering, in the Research Group for Bioresource Technology (Chair of Process Systems Engineering, Prof. Dr. Stavros Papadokonstantakis) TU Wien is offering a position as university assistant (post-doc) until 30.01.2028 for 40 hours/week. Expected start: February 2023.

Your Tasks:

Title: Process systems engineering for circular economy concepts

- Collection of data to characterize the important flows for circular economy concepts (e.g., plastics, biomass, nutrients, metals) from an Austrian and European life cycle perspective.
- Characterization of mature and emerging technologies that could be part of circular economy (e.g., plastics refinery, biorefinery, NPK refinery) and/or be integrated into existing industrial infrastructures (e.g., the petrochemical sector) to ramp-up circular economy projects.
- Application of (i) multi-objective superstructure optimization methods to select the most promising design alternatives and (ii) meta-modelling data science methods to translate numerical results into rules/heuristics and/or guidelines for knowledge synthesis.
- Participation in development and handling of courses and supervision of MSc and PhD students.
- Dissemination of research results through scientific publications and participation in conferences, seminars, etc.

Your Profile:

- Completed PhD degree in chemical or process (systems) engineering, sustainability sciences, or an equivalent university degree in Austria or abroad.
- Participation in projects and publications in the field of circular economy projects and management preferred but not mandatory.
- Experience in one or more of the following research areas: process modelling and optimisation, technoeconomic and/or sustainability assessment.
- Experience or interest to further advance in the field of process systems engineering, particularly in mathematical methods and programming with focus on optimization and data science methods.
- Good command of English and German.

We Offer:

- Continuing personal and professional education and flexible working hours
- Central location of workplace with very good accessibility (U1/U2/U4 Karlsplatz)
- A creative environment in one of the most liveable cities in the world
- Additional benefits for employees can be found at the following link: [Fringe-Benefit Catalogue of TU Wien](#)

TU Wien is committed to increasing the proportion of women in particular in leadership positions. Female applicants are explicitly encouraged to apply. Preference will be given to women when equally qualified, unless reasons specific to a male applicant tilt the balance in his favour.

People with special needs are equally encouraged to apply. In case of any questions, please contact the confidant for disabled persons at the university, Mr. [Gerhard Neustätter](#)

Entry level salary is determined by the pay grade B1 of the Austrian collective agreement for university staff. This is a minimum of currently EUR 4,061.50/month gross, 14 times/year for 40 hours/week. Relevant working experiences may increase the monthly income.

We look forward to receiving your application until 01.12.2022.