



The Institute of Mechanics and Mechatronics is located at the Faculty of Mechanical and Industrial Engineering of the TU Wien. Our research team is made up of graduates from a wide range of disciplines such as mathematics, physics, mechanical engineering and industrial engineering. Within the framework of research cooperations with industrial partners, we conduct application-oriented basic research with a focus on modelling, optimisation, simulation and control engineering.

PreDoc Researcher in Control Engineering

We are looking for **junior research assistants (pre-doctoral scientists)** to expand our work group of Control and Process Automation.

We offer several interesting and challenging positions at the TU Wien with a focus on modern control engineering methods (modelling & system identification, simulation, linear & non-linear control, optimisation). In particular, we seek highly motivated candidates for positions in the following research fields:

- **ageing analysis and performance optimisation of fuel cells in high-dynamic operation**
(in cooperation with the company AVL List GmbH, Graz),
- **battery monitoring and management,**
- **holistic energy management of a logistics fleet of e-cooling trucks,**
- as well as other topics in **optimal control & estimation in automotive, mechatronics, and energy systems.**

These positions offer the possibility to write a dissertation and are offered as full-time positions (40hrs/week).

Your profile:

- Completed (or advanced) relevant undergraduate (MSc-level) university studies, e.g. mathematics, physics, mechanical engineering, electrical engineering, process engineering or mechatronics
- High interest in developing future propulsion and energy systems. Optional: prior experience in these areas.
- High degree of motivation and commitment; goal-oriented and structured way of working
- Ability to work in a team (working language: English)

Your areas of responsibility:

- Scientific work in our research team
- Direct contact and cooperation with renowned industry partners in research projects
- Preparation of scientific publications and conference presentations
- Cooperation in university teaching

Your advantages:

- Full-time employment as part of a multi-year research project
- Possibility of obtaining a doctorate (Dr. techn.)
- Scientific guidance and support in our dynamic and innovative research team environment

Please send us your detailed application documents (including a letter of motivation and CV) via email to career.E325@tuwien.ac.at at your earliest convenience, latest June 3rd, 2022. Please direct any queries to this email.

Selected reference projects:

- <https://cdl-powertrain.tuwien.ac.at>
- <https://www.klimafonds.gv.at/themen/mobilitaetswende/servicesseiten/zem/fc4hd-heavy-duty-fuel-cell-road-demonstrator/>
- NEFI – New Energy for Industry: <https://www.nefi.at/en/hysteps/>, <https://www.nefi.at/en/edcsproof/>

Contact: Univ.Prof. Dr. Stefan Jakubek, TU Wien, Institute of Mechanics and Mechatronics,
Getreidemarkt 9/E325, 1060 Vienna, AUSTRIA

For the advertised position (full-time), the collective agreement tariff for project assistants, salary group B 1, § 49 (3) KV applies. The advertised position is subject to a minimum basic salary of EUR 3,058.60 gross per month (full-time equivalent). The university strives to increase the proportion of women, particularly in management positions and among scientific and artistic staff, and therefore expressly encourages qualified women to apply. Applicants who are equally suitable as the most suitable competitor will be accepted as a priority, unless the reasons for their application lie in the person of a competitor. Disabled persons with appropriate qualifications are explicitly invited to apply.