

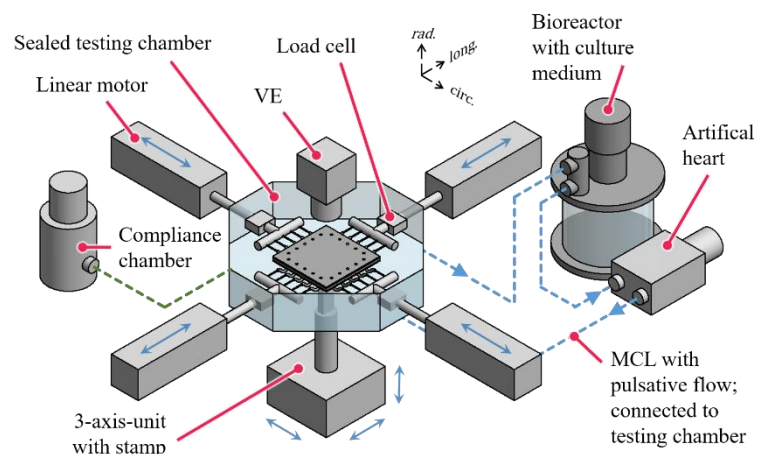
Open Position:
PhD Student in Experimental Biomechanics
for a Scientific Project in Graz, Austria

One position for a **PhD Student in Experimental Biomechanics** for 3 years; expected start **as soon as possible** at the Institute of Biomechanics, Graz University of Technology in Austria.

Acceptance conditions: M.Sc. in (Bio)mechanical Engineering, Automation Engineering, Electrical Engineering, Mechatronics, Physics or related field and experience with desire to pursue a PhD degree.

Requested qualifications: Knowledge in the areas of automation and control, design, development methodology, production engineering, and solid mechanics; interest in biomechanics and experimental laboratory work; desire to work in a multidisciplinary, collaborative team environment; fluent English is required.

The PhD Student will be integrated into a collaborative team to build and control a testing bench able to induce artificial injuries on blood vessels under controllable and as close as possible realistic conditions to detect the resulting mechanical changes in the vascular tissue. For a schematic testing setup concept see the right figure.



The project aims to improve our understanding of damage mechanisms during coronary stent implantation (CSI). Vascular damage during CSI needs to be reduced since it is shown to be the most potent stimulus for in-stent restenosis. The long-term goal of this project is to develop a material damage model, which can be used in finite element analyses to optimize stents and stent delivery systems.

Classification: B1 according to the collective agreement for university employees; the monthly minimum charge for this use is currently € 2.205,60 gross (14 times a year) for 30 h per week with the willingness to overpay, depending on qualifications.

Please send your application (cover letter, sample of written work such as the Master Thesis, CV, and contact information for 2 references) to Gerhard Sommer (sommer@tugraz.at).

Application deadline: **June 30th, 2021**