One position for a **PhD Student** to perform tests of coronary arteries in interaction with a **stent** 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 Physics, (Bio)mechanical Engineering, Biomedical Engineering, Mechatronics or related field and experience with desire to pursue a PhD degree. Interest in 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 work with 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:** The monthly minimum charge for this use is currently € 2.293,95 gross (14 times a year) for 30 h per week with our willingness to overpay, depending on working hours.

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).

**Deadline:** As soon as possible but not later than **August 15, 2022**.

Graz: July 12, 2022