

The Polymer Competence Center Leoben GmbH (PCCL) is the leading Austrian center for cooperative research in the field of polymer technology and polymer science. In collaboration with companies in the polymer industry and numerous academic institutions, our around 100 highly-qualified employees jointly work in R&D projects on innovative polymer solutions for a wide range of applications, including the whole rubber composite process chain from the materials design, over processing to material characterization.

We currently aim to strengthen our team and offer a position in the research group "Surface Testing, Robot Vision and Artificial Intelligence" and look for a student employee in the field of tactile and oral haptics of elastomer surfaces. The goal is to create novel quantification techniques that reflect both finger touch and oral sensation to improve baby products like pacifiers.



# Student employee (f/m/x) in the field of

## "Tactile and Oral Haptics of Elastomer Surfaces"

### (JOB ID 20250610b)

#### Tasks

- Determination of material and surface parameters of elastomers (including measurements with optical microscopes, atomic force microscopy and nanoindentation).
- Experimental measurements using silicone-based artificial fingers.
- Support the development of an artificial tongue that closely mimics the surface structure and mechanical properties of a human tongue.
- Implementation of suitable sensor technologies.
- Application of appropriate data analysis methods.

#### **Required skills**

- Applicants should be enrolled in a Master's or diploma program in Physics, Polymer Engineering, Materials Science, or a related field at a university or university of applied sciences.
- Interest in biomimetic systems.
- Ideally, experience in material characterization and programming skills in Python.

#### We offer

- An interdisciplinary research environment combining materials science, sensor technology, and human perception.
- Collaboration in a highly-motivated multi-disciplinary team with excellent contacts to industry as well as to national and international research organizations.
- Perspective for follow-up projects (e.g., Master's studies).
- Working hours: 20 hours per week or as agreed (remote work and on-site presence by arrangement).
- On-site location: Leoben.
- We offer a gross monthly salary of €2,600 for a full-time position (40 hours per week), 14 times a year.
- Start of employment 01.07.2025.
- We aim to increase the number of women in our organization and would be happy to fill this position with a female researcher.

#### Contact

Please send your application (motivation letter, CV) along with copies of your certificates and diplomas to <u>jobs@pccl.at</u>, indicating the Job-ID 20250610b. If you have any technical questions regarding the job advertisement, please contact Dr. Thomas Ules, <u>thomas.ules@pccl.at</u>

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