

# Thesis Bachelor/Master

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## *Investigation and testing of different contacting possibilities for flexible thin-film conductor paths*

The working group Smart-Textiles at the University of Applied Sciences Kaiserslautern in Germany and the Biomedical Device Engineering group of the Faculty of Engineering Technology: Electronics-ICT are currently looking for a student for a thesis with a focus on investigation of different contacting possibilities.

We develop thin film sensors made of gold on flexible PI foils for close-fitting applications. A challenge is the reliable electrical contacting of the very thin (~. 200 nm) thin gold conductor paths.

Within the scope of your thesis different contacting possibilities are to be developed and tested. Possible approaches would be e.g. mechanical clamping, pressure contacts, isotropic or anisotropic conductive adhesives or wire bonding. The contacting process should produce electrically reliable, low-resistance contacts, be mechanically sufficiently resilient and small enough for integration into wearables. The work is part of the transnational cooperation between UHasselt and UAS Kaiserslautern, Campus Zweibrücken.

Most experimental work can be carried out either in Hasselt or in Zweibrücken, depending on the student's preference. The cooperation between the two working groups will be organized through video conferences and short stays.

You should bring:

- Basic knowledge of electrical engineering.
- Ideally knowledge in mounting and connection technologies
- Reliable, independent and solution-oriented work
- Good command of English
- Willingness to travel

That's what we offer:

- Exciting work and a friendly working environment
- Supervision and support for the final thesis
- Personal challenges and further development

If you are interested, please contact:

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