

Master Student Thesis / Internship Electrical Engineering MedTech



Reference: PLN-3

- Start: 1st April 2024
- Duration: 6 months
- Location: Teltow (Berlin)
- Application deadline: 31st March 2024

Memorthotic is a project that strives for a new concept of textiles for individualized medical garments. The key aspect of the project is transfer of functionality of smart polymers – as piezoelectricity, shape-memory, or sensing – to knitted textiles. Yarns that are used for knitting are polymeric multi- and monofilaments, whose function is initiated with external stimuli. The offered position is focused on development of an approach to externally initiate those functionalities. The objective of the project is to develop a device that can controllably initiate functional response of textiles coordinated through a feedback loop with respective sensors.

You will be part of a young and growing team consisting of polymer scientists and a textile engineer, supported by an electrical engineer. This is a collaborative project with RWTH Aachen. Besides mastering your technical skills, you will have an opportunity to receive trainings in development of market-relevant innovative technologies.

To support our team, we are looking for a motivated and active **Master Student** interested in **Polymer Processing**. The project offers an opportunity to write a **Master's Thesis**. Equal opportunity is an important component of our HR policy to build a cohesive and successful team. We would therefore like to encourage qualified women to apply.

You will contribute to Memorthotic by...

- Conception and scrutiny of the design of electric devices
- Manufacturing and testing of electric devices
- Implementation functionality control in textiles
- Design of the research approach and temporal planning
- Ensuring cross-institutional and interdisciplinary collaboration
- Quality assurance
- Attending conferences and writing scientific publications

You are qualified, because you...

- ...are enrolled into Electrical Engineering program or comparable at a German university
- ...have solid academic knowledge in Electrical Engineering
- ...have initial practical experience in sensor technology
- ...have strong problem-solving and analytical, as well as communication skills
- ...excellently speak English or / and German

We can offer you

- Technologically and socially meaningful projects with lasting impact and open opportunities for career development
- An exciting project in a research center with more than 1,100 employees from around 50 nations
- Weekly schedule and working hours according to requirements of your university
- Excellent technical infrastructure and modern workplace equipment
- Various opportunities for further training
- Flexible working time models and the option of mobile work
- Free employee assistance program (EAP)

We are looking forward to receiving your application, including a Cover Letter, a short CV, and all necessary documents to

muhammad.farhan@hereon.de or victor.izraylit@hereon.de

Helmholtz-Zentrum
hereon

Helmholtz-Zentrum Hereon

Helmholtz-Zentrum Hereon conducts international cutting-edge research for a changing world: Approximately, 1,100 employees contribute to the management of climate change, the sustainable use of the world's coastal systems and the resource-compatible improvement of the quality of life. From fundamental understanding to practical applications - the interdisciplinary research spectrum covers a unique range.

Institute of Active Polymers

At the Institute for Active Polymers, research focuses on multifunctional polymer materials and their interaction with living systems. With information-based design approaches, sustainable innovations for regenerative medicine, age-appropriate living and bio-based consumer products are targeted. The institute is located in Teltow near Berlin.

Have we aroused your interest?

We look forward to receiving your application documents (cover letter, curriculum vitae, references, certificates, etc.), quoting the reference number TC001.

Kantstrasse, 55
14513 Teltow
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