

The Department of Microsystems Engineering (IMTEK) is one of the world's largest and leading academic research centers in the field of microsystems technology. The Laboratory for MEMS Applications (Prof. Dr.-Ing. Zengerle) develops tools for diagnostics, microfluidics and life-science research. For a research project we are looking for a

PostDoc / Research assistant (m/f/d)

in the area of Microfluidics for

Automation of the sample preparation of a non-invasive micro-RNA-based urine breast cancer test

The aim of the project is to transfer the micro-RNA (miRNA) based test "Mammacheck" from clinical research into clinical automated routine operation for non-invasive diagnostics of breast cancer.

Your tasks:

- Automation of the sample preparation consisting of centrifugation, separation of cellular components, extraction of microvesicles and nucleic acid and reverse transcription
- Development of concepts for the automation solution and their integration into in the workflow of central clinical laboratories
- Design and construction of a complete system based on Liquid Handling Workstations
- Development of a suitable control software



Your profile:

- You have completed a university degree in biotechnology, mechanical engineering, mechatronics, microsystems engineering or similar with outstanding performance
- Interest in microfluidic problems and fun in programming and building prototypes
- Basic knowledge of programming in the languages C/C++, Python, HTML and CSS
- Good knowledge of CAD design (SolidWorks)
- Good communication skills in German and English and a high degree of interdisciplinary thinking and quick comprehension of complex requirements for the development of technical solutions

We offer:

- Young, dynamic, creative team and environment
- Attractive workplace in a modern, excellently equipped laboratories
- Good training opportunities

If you are interested, please contact us for further information:

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