

Master Thesis Position: Development of a Microfluidic Setup for Biomolecule Separation in Urine

Looking for a highly motivated master's student to join a cutting-edge project aimed at revolutionizing health monitoring through the development of a commercial urine sensor. This sensor will be capable of measuring a wide array of biomarkers, including hormones and amino acids, contributing significantly to personalized medicine and health diagnostics.

Project Overview:

The core focus of this master thesis is the development and optimization of a microfluidic setup designed for the efficient and selective separation of biomolecules in urine. This entails creating a reusable and low-maintenance microfluidic circuit that can be seamlessly integrated into the urine sensor, marking a critical step towards the sensor's commercial viability.

Key Responsibilities:

- Design, fabricate, and test microfluidic devices for biomolecule separation.
- Analyze and optimize the separation efficiency and specificity for various biomarkers.
- Develop strategies for the long-term reuse and minimal maintenance of the microfluidic circuit.
- Collaborate closely with a multidisciplinary team to integrate the microfluidic setup into the overall sensor design.
- Contribute to the broader project goals of developing a user-friendly and commercially viable urine sensor.

Ideal Candidate Profile:

- Currently enrolled in a Master's program in Biomedical Engineering, Electrical Engineering, Mechanical Engineering, Biochemistry, Physics, or a related field.
- Creative problem-solving skills and a keen interest in biosensor technology and diagnostics.
- Excellent communication skills for effective collaboration within a multidisciplinary team.

Apply Now:

Submit your CV to join our mission in advancing personalized health diagnostics.