CYTENA | MASTER'S THESIS (m/f/d)

Quality Standard & Test Procedure for Piezoelectric Dispensing Modules

Location: Freiburg **Scope: Master's Thesis | Part-time** **ID: JR100262**

Develop a reproducible quality standard for a key technology.

At CYTENA, you will develop a standardized test procedure to objectively evaluate the performance, quality, and reliability of piezoelectric dispensing modules. Your work combines experimental setup, measurement technology, data analysis, and practical laboratory applications.

YOUR RESPONSIBILITIES

- Identify relevant performance and quality parameters
- Develop measurement methods and acceptance criteria with defined limits
- Design and implement a comparable test setup
- Plan, conduct, and statistically evaluate experiments
- Investigate the relationship between measured values and real dispensing performance
- Evaluate applications for long-term testing, fault diagnosis, and potential series testing
- Document methods and results clearly and present them to the R&D team

WHAT YOU BRING

- Current Master's studies, e.g. Mechatronics, Mechanical Engineering, Electrical Engineering, Microsystems Engineering, Medical Engineering, Physics, or a comparable field
- Interest in systems engineering, micro-actuators, test development, and experimental work
- Basic knowledge of CAD, preferably SOLIDWORKS, Python, data analysis, and statistics
- Structured, analytical, and independent working style with a hands-on mentality
- Laboratory experience and knowledge of piezo systems, microfluidics, or laboratory automation are an advantage
- Fluent English; German skills are a plus

WHY CYTENA?

- Practice-oriented Master's thesis involving relevant life science technology
- Agile, international R&D environment with flat hierarchies
- Flexible working environment and close collaboration with interdisciplinary teams
- Modern location at Freiburg's Güterbahnhof with rooftop terrace and team benefits

INTERESTED? APPLY ONLINE NOW!

Scan the QR code and submit your application directly through the Workday portal.
Applications by email cannot be accepted for data protection reasons.