

• At BMD Lab, we explore electro-mechanical/chemical sensor & actuator device designs, materials, and microfabrication processes to create bio-integrated microdevices -wearables & implantables- as next-generation medical devices.

• The lab is composed of researchers with various backgrounds and technical interests. This creates a multidisciplinary research environment enabling a broad research portfolio.

Open position for Postdocs (bio-chemical sensors)

Cardiovascular diseases (CVDs) are the leading cause of death globally, with 18 million deaths annually. Recently supported by the European Research Council (ERC), 2ND-CHANCE project aims to provide novel solutions for management and elimination of major drawbacks of CVDs. The 2ND-CHANCE implant system consists of sensors and wireless communication system for continuous monitoring of CVDs. A Postdoctoral research fellowship for **chemical sensor development** is available in the Bio-integrated Microdevices Laboratory.

Qualifications:

- PhD in Chemistry, Biomedical Engineering, EE, or related fields with strong research foundation involving chemical-bio sensor systems and technologies
- Fundamental understanding of electrochemical processes & general sensing physics and signal transduction
- Scientific and functional excellence in applied chemistry; experience in sensing systems is a plus;
- 3+ years of sensor design engineering experience (graduate research is applicable)
- Experience in building prototype systems, surface functionalization, SAM
- Experience working with spectroscopy and other optical methods.
- Experience working with bio-medical applications
- Microfabrication experience is a plus

Responsibilities:

- Design & development of electrochemical sensor module architecture leading to proof-of-concept and initial prototype hardware
- Work within a team of engineers, and other scientists to design, model and help characterize prototype systems.
- Working closely with clinical team to optimize your application **Compensation:** A highly competitive salary depending on experience plus accommodation and meal benefits.

Contact Information

Interested candidates, please contact to Dr. Levent Beker (Ibeker@ku.edu.tr) along with a CV and a cover letter describing any previous experience, major publications, and contact information for two/three letters of reference.