

## FAIRGLUCOSE

### DIGITAL AND SUSTAINABLE DIAGNOSTIC DEVICES FOR ALL

#### Job description

The position is to conduct a 12-months research.

#### Requirements

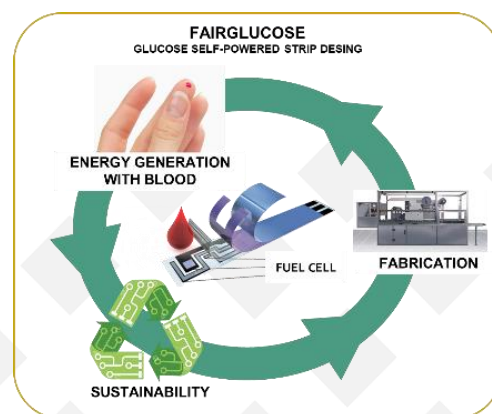
We are looking for enthusiastic candidates, ready to enjoy multidisciplinary research!

Science Degree (Chemistry, Nanotechnology, Biochemistry) or Engineering Degree (Biomedical) is required. Good command in English – specially reading - is valuable.

#### Description of Group/Project

Self-powered Engineered Devices research group is a group from the IMB-CNM (CSIC) located at the UAB Campus. In the last years, the team has developed **single use power sources that act as self-powered sensors**, paving the way towards simpler, battery-less but digital diagnostic approaches that aim for a final deployment in Low Income Countries where cost and sustainability are key drivers. Our expertise comprises biochemical energy generation, rapid prototyping of devices and printed electronics. The group is particularly interested in developing solutions from idea to real device.

The aim of the project FAIRGLUCOSE (funded by ERC Proof of Concept programme) is to develop a low cost, sustainable and self-powered standalone glucose sensing system that uses the energy of a drop of blood to power the measurement. Prototyping techniques, screen-printing, ink formulation, enzymatic characterisation and electrochemistry will be implemented. The sample will be analysed, and the output electrochemical signal will be generated automatically without the need of an external power source. We aim to significantly push our development towards a fully operative solution to be potentially applied to detect different biomarkers in the field of companion diagnostics.



#### How to apply

All applications must be sent to [susana.liebana@imb-cnm.csic.es](mailto:susana.liebana@imb-cnm.csic.es)

#### Deadline for applications

April 22<sup>nd</sup>

#### Expected start date

June or July 1st