

Open Doctoral Candidate Position

Eurecat is a technology centre locating in Catalonia, Spain. For the second time, Eurecat has opened the PhD programme called “Vicente López”. This programme has been named according to the great Catalan innovation promoter Vicente López Martínez (1954 – 2012) and it has the target to increase and develop the scientific knowledge to be transferred later into the use of industry.

Altogether, Eurecat has 17 technological units covering traditional industrial technologies but also digital technologies and biotechnologies. One of them is Functional Textiles unit, which is working actively in the area of e-Textiles, where electronics is integrated into textile materials. In co-operation with the Electronic Engineering Department of UPC, the unit has opened a PhD position related to textile wearables and monitoring of the user.

Object of the Doctoral Theses:

Research of the temperature and heat monitoring of the user via textile wearables and development of the measuring system for the personal energy expenditure monitoring.

Tasks:

- Study and characterisation of textile materials to work as electronic devices in contact with the human body (design, performance, accuracy, stability, etc.)
- Design and development of the textile sensors for body temperature and body heat flow monitoring by using textile materials
- Design and development of the electronic system adapted to control the new textile sensors and data acquisition with filtering
- Evaluation and characterisation of the sensors integrated into a wearable e-textile solution
- Development of wireless transceiver to enable the electronic system to communicate with the cloud or Smartphone
- Publication of the results via scientific articles and conference presentations

Requirements:

A relevant Master's degree awarded by a university, preferably from electronic engineering. The doctoral student must have good skills in English.

Employment Relationship:

The approximate timescale for completing the doctoral degree is 3 years with full working hours. The doctoral student would preferably start in September 2019. The salary is 14.400 € for the first year with the raise of 1.200 € for the second year.

Location:

Tecnocampus scientific park

Av. de Ernest Lluch, 36, 08302 Mataró (Barcelona province), Spain

How to Apply:

Please send your application via Eurecat web page on 31st of July 2019 at the latest.
<https://eurecat.talentclue.com/en/node/44298267/12623479>

Besides, please send a copy of your CV to Auli Piedra (auli.piedra@eurecat.org) and Raúl Fernandez Garcia (raul.fernandez-garcia@upc.edu)

More Information about:

- Eurecat: <https://eurecat.org/en/eurecat/>
- Vicente López programme: <https://eurecat.org/en/eurecat/vicente-lopez-phd-scholarship-programme-2019/>
- Functional Textiles unit: <https://eurecat.org/en/field-of-knowledge/functional-textiles/>
- Polytechnic University of Catalonia (UPC):
https://www.upc.edu/en?set_language=en
- Department of Electronic Engineering (UPC): <https://www.upc.edu/en/r-d-i/departaments-research-centres-and-laboratories/departaments>

Contacts for Questions:

- Eurecat, PhD scholarship program: Ricard Jimenez (ricard.jimenez@eurecat.org)
- Eurecat, Functional Textiles unit: Auli Piedra (auli.piedra@eurecat.org)
- UPC, PhD tutoring & Electronic engineering: Raúl Fernandez Garcia (raul.fernandez-garcia@upc.edu)