

July 17th, 2023



Title

“Development of optoacoustic and/or optical medical sensors”

Profile of the candidate

Bsc and Msc in:

Ingeniería Telecomunicaciones

Ingeniería Electrónica

Ingeniería Biomédica

Física

(or similar)

Background and project description

In the Sensors Division of the Medical Engineering Development & Innovation Center (<https://www.medicuam.com/sensors-group/>) we are developing new medical sensing concepts based on optoacoustic and optical technology. We offer a PhD student position within the framework of the FPI scholarships. The PhD candidate will develop optical and/or optoacoustic medical sensors from all their perspectives including 3D design, mathematical simulations, PCB design, development of signal processing algorithm etc. The prototypes will be tested in the clinics to proof their value for the diagnosis and monitoring of major diseases.

The Medical Engineering Development & Innovation Center (MEDICUAM, <https://www.medicuam.com>) is devoted to the development of medical technologies to solve unmet clinical needs and transfer them to the industry. Our members have played important roles in the creation of several start-up companies. This position is particularly well suited for engineers interested in entrepreneurial activities.

Department

Departamento de Tecnología Electrónica y de las Comunicaciones

Escuela Politécnica Superior

MEDIC

Universidad Autónoma de Madrid

Requisites

Basic knowledge of electronic circuits and elements.

Basic signal processing knowledge.

Basic understanding of the physics of waves.

Basic programming skills in matlab.

Knowledge on PCB design is a plus.

Basic knowledge of numerical methods (FDM, FEM, etc) is a plus.

Basic programming skills in C/C++ is a plus.

Fluency in English and Spanish is mandatory.

We offer

Excellent work environment at the forefront of medical technology development.

Career development plan.

Contact

Email your CV and a brief introduction to juan.aguirre@uam.es