



ImplantSens

European Training Network for development of implantable biosensors

Early stage researcher position at
Agencia Estatal Consejo Superior de Investigaciones
Científicas (CSIC)
Institute of Catalysis

ESR4: Directed evolution of galactose oxidase for implantable sensors

The fellow will produce redox enzymes, such as galactose oxidase and glucose oxidase, with optimized performance towards oxidation of sugars under physiological conditions. He/she will immobilize the evolved enzymes on nanostructured electrodes for optimizing electron transfer, electrocatalytic detection and switching capabilities.

Planned Secondments:

- University of Limerick - Design of electrode architectures
- EYOWN Madrid - High-throughput biomolecular screening.
- Southampton University - Covalent modification of electrode surfaces.

Employment: Full-time and fixed term researcher contract for 36 months. The fellow will be enrolled in one of the PhD programmes of the Autonomous University of Madrid (UAM, https://uam.es/EscuelaDoctorado/Home.htm?language=en_GB)

About the Employer

The Institute of Catalysis (ICP-CSIC) forms part of the UAM-CSIC Campus of Excellence sited in Madrid, Spain. ICP is one of the research centers included in the area of Chemistry and Chemical Technologies of the Spanish National Research Council, (CSIC, the main research body in Spain). ICP's main goal is to carry out scientific research in the field of catalysis with special emphasis in catalyst (of both chemical and biological origins) and process characterization. The subjects of the institute's research deal with green chemistry, use and transformation of energy vectors, environmental protection, sensors, synthesis of drugs, cosmetics and food products. More than 150 persons work in the ICP, including scientific staff, support personnel and postgraduate students.



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