

(005) PhD Position in Bioelectroanalysis for Next-Generation of (Bio)Sensors

The **UCAM-SENS** unit is seeking a highly motivated PhD student to join its cutting-edge research in **Bioelectroanalysis**. This position focuses on the development of advanced electrochemical sensing technologies for real-time health monitoring and diagnostics.

About UCAM-SENS

UCAM-SENS is a top-tier research unit dedicated to advancing **(bio)electroanalytical sensing** for digital transformation in **healthcare, sports, food safety, and environmental monitoring**. By integrating electrochemical techniques and imaging technologies, the unit delivers cutting-edge solutions with real-world impact.

Led by **Prof. María Cuartero (ERC Fellow)** and **Prof. Gaston Crespo**, UCAM-SENS fosters innovation, education, and industrial collaboration. The unit operates within **HiTech**, a research incubator that promotes a multicultural, multidisciplinary research environment.

PhD Research Focus

The selected PhD student will contribute to **the development of advanced bioelectroanalytical tools** for real-time health monitoring, focusing on electrochemical sensing, bioelectrode development, and analytical performance enhancement.

Position Requirements

Required Qualifications

- M.Sc. degree in **Analytical Chemistry, Electrochemistry, Biochemistry, Biotechnology, Nanotechnology, Biomedical Engineering, or related fields**.
- Proven experience in one or more of the following areas:
 - **Electrochemical biosensors**
 - **Bioelectroanalysis and bioelectronics**
 - **Wearable and implantable sensors**
 - **Microfluidic-based electrochemical platforms**
 - **Data-driven sensor signal processing**
- **Fluent English proficiency** (B2/C1 level or higher).
- Strong analytical, problem-solving, and experimental skills.

Personal Skills

We are looking for candidates who:

- ✓ Can work both independently and within a research team.
- ✓ Demonstrate problem-solving abilities and adaptability in tackling complex research questions.
- ✓ Are professional, goal-oriented, and eager to contribute to scientific innovation.

What We Offer

- ✓ **PhD degree (3-4 years)** in an internationally recognized research environment.
- ✓ **Close supervision** by leading experts in bioelectroanalysis:
 - **250+ publications** (85% in Q1, 80% in D1 journals)
 - **5 international patents**
 - **Multiple technology-based startups**
 - ✓ **Multidisciplinary research clusters** with senior mentorship.
 - ✓ **Support for relocation and settling** in Murcia, Spain.
 - ✓ Access to **state-of-the-art laboratories** and industry collaborations.
 - ✓ A unique academic setting at **UCAM**, housed in the **historic Jerónimos Monastery**, a National Monument.
 - ✓ Life in **Murcia** – a vibrant Mediterranean city with **300+ sunny days per year**, stunning beaches (**Costa Cálida**), mountains, and rich cultural heritage.
 - ✓ **Start date: As soon as possible.**

How to Apply

Submit your application via the UCAM recruitment system before the deadline (**midnight, CET/CEST**).

Application Requirements

- **CV (max. 2 pages)** detailing academic background and experience.
- **Application letter (max. 2 pages)** explaining:
 - Your motivation for joining UCAM-SENS.
 - How your background aligns with the PhD project.

- **Copies of diplomas and transcripts** (translated into English or Spanish if necessary).
- **Proof of English proficiency** (if applicable).
- **Representative publications or technical reports** (include abstracts and web links for long documents).
- **Reference letters** from previous supervisors or professors.

Join us and be part of a cutting-edge project shaping the future of bioelectroanalytical sensing!