

# POST-DOC POSITION OFFER

## Instituto de Nanociencia y Materiales de Aragón (INMA)

### CV preselection, pending the official announcement

RESEARCH FIELD: microfluidics, lab on chip, gas

RESEARCHER PROFILE: post-doc

DEADLINE (CV preselection): 15<sup>th</sup> Feb. 2022.

LOCATION: Spain › Zaragoza

TYPE OF CONTRACT: temporary (18 months)

JOB STATUS: full-time

EU RESEARCH FRAMEWORK PROGRAMME H2020

Call Identifier: **SU-SEC-2019** (H2020 GA No. 883390)

**Advanced Surface Enhanced Raman Spectroscopy (SERS) based technologies for gas and liquids sensing in the area of chemical protection**

<https://sersing.eu/> <https://cordis.europa.eu/project/id/883390>.



### Project Description

SERSing entails the development of novel handheld or robot-mounted instrumentation for near-real-time or on-demand detection/identification of chemical threats coupled with advanced algorithms to aid responders and incident commanders in hazard assessment and decision-making.

### Main Tasks

- Development of portable microfluidic platforms for gas phase collection and hazardous gases/vapors identification comprising micro-preconcentrators and SERS detection units.
- Elaboration of periodic scientific reports, deliverables and presentations in the framework of the SERSing Project.
- Writing of scientific papers for international journals, scientific contributions to conferences.

### Requirements

- **Doctorate** in Chemical Engineering, Industrial Engineering, Physics, Chemistry, Materials Science or related.
- **Skills/Qualifications:** microfabrication, microfluidics technology, CFD modelling, transport phenomena, porous materials, nanomaterials.
- **Practical experience:**
  - Standard microfabrication techniques and soft lithography. Incorporation of functional porous materials or nanomaterials in the microfabrication process.
  - Lab on Chip Technologies.
  - Simulation, Experimental Testing and Validation of functional microdevices for gas phase applications.
  - Use of analytical instrumentation and methodologies for characterization of multicomponent gas mixtures composition.
  - Functional Characterization of Integrated microanalytical systems for gas phase applications.

### How to apply for pre-selection

Send your CV and your bionote including your main achievements, before 15<sup>th</sup> February 2022, to: gallegoj@unizar.es.

Official announcement of the Post-doc position: pending (the pre-selected candidates will have further information about how to officially apply).