

Postdoctoral Research Position in High-Pressure Physics

Universitat de València – ICMUV, Valencia, Spain

Applications are invited for a two-year postdoctoral research position in the group of Prof. Daniel Errandonea at the Institute of Materials Science (ICMUV), Universitat de València, Spain. Starting date 15 October 2027.

The successful candidate will join an internationally active research group working on the physics and materials science of materials under extreme pressure and temperature conditions. The research will focus on understanding and controlling the structural, electronic, vibrational, and physical properties of advanced materials under high-pressure conditions.

Research topics

The position may involve one or more of the following research areas:

- High-pressure physics and materials science.
- Pressure-induced structural and electronic phase transitions.
- Fast-ion conductors and materials for energy-related applications.
- High-pressure synchrotron X-ray diffraction.
- Raman and infrared spectroscopy under pressure.
- High-pressure/high-temperature experiments and laser-heating techniques.

The research will involve close interaction with national and international collaborators and may include experiments at large-scale facilities and synchrotron radiation sources. The candidate will have the opportunity to contribute to the development of new research directions within the group's activities in high-pressure and extreme-conditions science.

Candidate profile

Essential requirements:

- **A university degree in Physics.**
- **A PhD in Physics or a closely related field** at the time of appointment. The Ph.D. Should have been obtained after 1 January 2022.
- A strong background in experimental condensed-matter physics or materials science.
- Demonstrated ability to conduct independent scientific research.
- Good scientific writing and communication skills.
- Ability to work effectively in an international, multidisciplinary research environment.

Desirable qualifications:

Experience in one or more of the following areas will be particularly valued:

- High-pressure experiments.
- Diamond-anvil-cell techniques.
- Synchrotron X-ray diffraction.
- Raman or infrared spectroscopy.
- Optical or electronic characterization of materials.
- High-pressure/high-temperature experiments.
- Materials synthesis and characterization.
- Density-functional theory or other computational methods.
- Analysis of structural, electronic, or vibrational properties of materials.

Candidates with a strong background in Physics but whose previous research has been conducted in a different area of condensed-matter or materials physics are also encouraged to apply if they have a strong interest in developing expertise in high-pressure research.

What we offer

The successful candidate will join a dynamic research environment at the **Universitat de València**, with access to the facilities and scientific infrastructure of the ICMUV and to international collaborations and large-scale research facilities.

The position offers the opportunity to develop an independent research profile while working on scientifically challenging problems in **high-pressure physics, advanced materials, and extreme-conditions science**, and to participate in the preparation of scientific publications and international research proposals.

Application

Interested candidates should submit, before 15 October 2026 :

- A **CV**, including a list of publications.
- A **brief statement of research interests** and motivation for applying.
- Contact details for **at least two academic referees** who may be contacted for references.

Applications should be sent to:

Prof. Daniel Errandonea

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