

PhD Student Position:

Superparamagnetic Particles for Magnetic Hyperthermia-Driven Heating in Thermal Fluids

(HOLMES project, Knowledge Generation Projects. Coordinated Type Oriented Research, MICINN, Spain)

Contract Term: 3 Years

To: Universidad de Santiago de Compostela

Project Objectives:

1. Investigate the thermal and magnetic properties of different types of magnetic particles in thermal fluids.
2. Develop effective methods to optimize magnetic hyperthermia in energy applications.
3. Evaluate the potential of magnetic hyperthermia in energy applications.

Justification:

Magnetic hyperthermia uses superparamagnetic nanoparticles that heat up in an alternating magnetic field, with the effects controlled by adjusting the field's frequency and intensity. The predoctoral student will contribute to advancing the project by optimizing magnetic materials, frequency, and field strength control to fully harness the technology's potential in the energy sector.

Student Requirements:

1. Graduate in Physics, Engineering, Materials Science, or related fields.
2. Interest in research in nanomaterials and applications of magnetism in energy.
3. Skills in laboratory techniques, data analysis, and scientific writing.

Contact:

Interested applicants should send a full CV, a Letter of Interest, and Contact Details by **January 31, 2025, to:**

José Rivas, PhD

Professor

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