

## Postdoctoral Position in the ERC-PoC project ANTS



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The group of [Prof. Francisco Rivadulla](#) (ERC-StG 2010) is seeking for a **Postdoctoral associate** with strong background in **Thermal and electrical transport of thin-films**. This is an excellent opportunity to join **ANTS**, a cutting-edge research funded by the [ERC-Proof of Concept](#) grant.

The aim of **ANTS** is to prove the viability of spin-dependent thermoelectric phenomena to design ultra sensitive thermal sensors. Particularly, based on the Anomalous Nernst effect in conducting ferromagnets the project will try to design a new type of thermal sensor for applications in microcalorimetry.

### DESCRIPTION

The applicant will work on the development of **a new type of thermal micro-sensor based on the Anomalous Nernst Effect** in different types of metallic ferromagnets, including metals and oxides. He/she will be in charge of fabrication of thin-films and measurement of their spin-dependent thermoelectric properties.

### REQUIREMENTS

We seek outstanding individuals with initiative, creativity and team-working ability and with a PhD in Physics, Materials Science, or Chemistry.

Training in advanced electrical/thermal measurements in micro/nanostructures, as well as in thin-film fabrication will be highly considered.

Good communication skills and proficiency in written and spoken English are essential.

### REFERENCES

Paper: "Anomalous and Planar Nernst Effect in thin films of half-metallic ferromagnet  $La_{2/3}Sr_{1/3}MnO_3$ " C. T. Bui, F. Rivadulla, [Phys. Rev. B \*\*90\*\*, 100403\(R\) 2014](#).

Patent: [ES2528865\(B2\)](#), [WO2016026996](#).

### STARTING DATE AND TERM

Fall 2016, 18 months contract.

### APPLICATIONS

Applications should be sent directly to Prof. Rivadulla, [f.rivadulla@usc.es](mailto:f.rivadulla@usc.es), including a CV (maximum 2 pages), a complete list of publications and the name and the e-mail of two contact persons, indicating in the subject **ANTS**.

### DEADLINE

August 30th, 2016