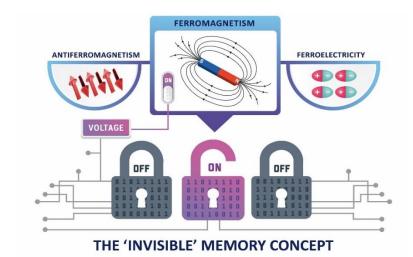




PhD POSITION funded by the European Research Council (ERC Advanced Grant)

<u>TOPIC:</u> Using Voltage to Make Magnetic Data Invisible: A New Concept to Enhance Data Security Based on Engineered Magnetoelectric Materials

A PhD position is available at the "Group of Smart Nanoengineered Materials, Nanomechanics and Nanomagnetism (Gnm³)" of the Physics Department at Universitat Autònoma de Barcelona. We are looking for a highly motivated candidate that will investigate how to make magnetic data in computers, cell phones or credit cards "invisible" by applying electric voltage for anti-hacking and anti-counterfeiting applications. The project has been recently awarded 2.5 M€ by the European Research Council. Since it is a high-risk/high-gain research programme, we need candidates with an **outstanding CV** and, more importantly, **a high degree of ambition and motivation**, and with **good personal qualities** to work in our Team. The duration of the appointment is 3 years, with the possibility to be extended with a postdoctoral position after the PhD is completed.



Additional requirements for a stronger application are:

- Previous expertise on sputtering and other thin-film deposition techniques.
- Previous knowledge on magnetic materials and magnetoelectric actuation in general.
- Outstanding level in English, in particular for scientific writing (publications and projects).

The Universitat Autònoma de Barcelona (UAB) was awarded the "Campus of Excellence" for its activities related to the fields of nanoscience and nanotechnology. In addition to educational objectives, UAB intends to establish itself as one of the research icons in Europe. Our Group, led by Prof. Jordi Sort, has coordinated several R&D projects at international level and has also links to industry. The research activity at Gnm³ is focused on the design, synthesis and characterization of advanced materials with unique properties, suitable for widespread innovative engineering applications. Prof. Sort 's research has been awarded by the Catalan Physical Society (2000), the Spanish Royal Physical Society (2003), the Federation of Materials Societies (2015) and UPC/Naturgy (2020). We are very active and have achieved an outstanding publications record, which is a guarantee that our PhD candidates can easily find opportunities to continue their academic careers as postdocs and become leaders in their research field in the future. For further information, please see: http://jsort-icrea.uab.cat/.

Interested applicants should send a **full CV**, a **Letter of Interest** and the **Contact Details of two senior researchers** which could support their application before 30/08/2022 to Jordi.Sort@uab.cat.