Prof. A. SILHANEK | Physics of Nanostructured Materials

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POSTDOC POSITION IN EXPERIMENTAL PHYSICS OF MAGNETIC METAMATERIALS

Metamaterials are artificial structures composed of engineered lego-like elemental bricks able to control the electromagnetic response of the system. In the low frequency limit, the electric and magnetic components of an electromagnetic wave can be decoupled. In this regime, it is possible to develop magnetic metamaterials for concealing or focusing static magnetic fields without disturbing the external magnetic field. In this project we aim at the understanding, design, and implementation of metasurfaces, in order to control low-frequency magnetic fields at the micro and nanoscales.

The group of *'Experimental Physics of Nanostructured Materials'* (http://www.mate.ulg.ac.be/) current research interest include superconductivity, magnetism, electromigration, thin film materials and nanodevices. In the framework of a starting project on DC magnetic metamaterials, we are looking for a post-doctoral researcher with background in solid state physics, good experimental skills and experience in low temperature experiments. Experience in physical vapor deposition, including thermal evaporation and sputtering, thin film metrology, nanofabrication, magnetic and electric measurements is an asset.

Job description

You will be responsible for the development of new measurement techniques, nanofabrication and to the investigation of magnetic metamaterials.

Profile

- You have a PhD degree in Engineering/Physics.
- Practical experience in nanofabrication, thin film growth, low temperature magnetic and electric measurements, superconductors and magneto-optical imaging is an asset.
- You are a self-starter and a hands-on person.
- You are able to pursue challenging interdisciplinary problems.
- You have excellent reporting skills and are able to present scientific results (publications, conferences, seminars).
- You can easily integrate in an interdisciplinary team with diverse backgrounds.
- You have an excellent command of the English language and excellent communication skills.

This postdoctoral position is funded by the FNRS through the University of Liège. Because of the specific financing statute which targets international mobility for postdocs, only candidates who did not stay or work/study in Belgium for more than 24 months in the past 3 years and having obtained the Ph.D. diploma no more than 6 years ago, can be considered for the position.

We offer

We offer a challenging position for 2 years at the University of Liège. The contract starts as soon as possible and no later than 1 September 2022, with a probationary period of 3 months. Wages are in accordance with the salary scale of the university.

Interested in this position?

Send your application, including your CV, publication list and contact details of at least two referees to asilhanek@uliege.be. This offer is valid until the position is filled.