

Open Postdoctoral Position

Unité Mixte de Physique CNRS/Thales, Paris area, France.

The postdoctoral researcher will join the Superconductivity Group to work on resistive switching and photoconductivity in devices and heterostructures based on superconducting oxides.

Role: The researcher will be involved in the fabrication of superconducting junctions and devices, their characterization via low-temperature ac/dc electrical transport measurements under different stimuli (electric fields, magnetic field, light,). The researcher will work together with graduate and undergraduate students and, to some extent, will be in charge of supervising and coordinating their work.

Required competences: The candidate holds a PhD, and must be <u>an experimentalist</u> with proven experience in some of the following:

- complex-oxide thin films heterostructures
- cuprates:
- ac/dc magnetro-transport, differential conductance measurements,
- Josephson characterization.
- Lithography, work in clean-room environment.
- Photoconductivity, optical set-ups, photovoltaic effects.

Personal/complementary skills: Excellent team player, rigorous and enthusiastic, the candidate has a strong scientific curiosity. Self-driven and motivated, she/he criticizes experiments and faces challenges in a constructive spirit. Fluent in spoken English or French, she/he writes well-organized papers in English.

Contract terms: 18 months contract, starting October the 1st 2021

Further information about the group's activities at <u>https://javierevillegas.wordpress.com/</u>

This position is funded by an ERC PoC, Further information of the research topic here : <u>https://www.iledefrance-gif.cnrs.fr/fr/cnrsinfo/un-financement-europeen-pour-prouver-le-potentiel-applicatif-des-memoires</u>

Applications through CNRS employment site: <u>https://bit.ly/3wyBzhd</u>