

Open post-doctoral position in experimental physics

Starting date: beginning of 2023

Duration: 1 year + 1 year renewable

Address: Laboratory of Physics and Material studies (LPEM), ESPCI Paris - CNRS - Université PSL - Sorbonne Université
10, rue Vauquelin 75005 Paris
<http://www.lpem.espci.fr>

Topic: Electronic properties of organic magnetic molecules self-assembly / superconductor hybrids

The project aims to address the emergence of new coherent quantum states with possible topological properties in hybrids composed of magnetic molecules self-assemblies and superconductors. The electronic and structural properties at very low temperatures in ultra-high vacuum conditions will be studied by STM/STS and AFM associated with angle-resolved photoemission measurements.

The postdoctoral candidate will join the Quantumspecs team and will be in charge of sample preparation and spectroscopy/microscopy measurements in tandem with thesis and master students.

The contract is concluded for one year and is renewable for one year by agreement (salary: 2500-2800€/month depending on the candidate experience).

Pre-requisites: a PhD in experimental physics is a necessary pre-requisite to apply. Experience in the following domains will be favorably considered: superconductivity, supramolecular self-assembly at surfaces, scanning tunneling microscopy/spectroscopy, angle resolved photoemission spectroscopy.

Working environment: The Quantumspecs group (<https://qs.lpem.espci.fr/home>) has its own low temperature Scanning Tunneling Microscope and Angle Resolved Photoelectron Spectroscopy equipment coupled to ultra-high vacuum fully equipped MBE chambers. The laboratory has its own helium liquefaction system at the disposal of the team.

The School of Physics and Industrial Chemistry of the city of Paris (<https://www.espci.psl.eu/>) offers excellent working conditions with the delivery of a brand new and functional research building in the center of Paris

PSL university is among the best universities according to the international rankings especially in Physical Sciences: <https://psl.eu/en/university/psl-international-rankings>

How to apply: please contact stephane.pons@espci.fr