

Postdoctoral Fellowships

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CALL FOR APPLICATIONS 2025 – FELLOWS

Supervisor Jean Comtet

Supervisor page https://blog.espci.fr/jcomtet/

Host Institution Centre National de la Recherche Scientifique (CNRS)

https://www.cnrs.fr/en

Research Lab Soft Matter Sciences and Engineering Laboratory

https://www.simm.espci.fr/-Home-.html

Project Title

Watching interfacial charge dynamics following liquid triboelectrification

Project Description

Liquid triboelectrification is the peculiar process by which the sliding motion of liquid droplets on hydrophobic surfaces leads to charge separation. Here, we propose to use scanning-based electrostatic mapping techniques to directly image the spatiotemporal dynamics of surface-deposited ions, getting novel insights on their interfacial frictionnal dynamics. Other projects revolving about interfacial soft matter can be discussed.

Keywords

triboelectrification, soft Matter, interfaces

Description of the Host Research Lab

Deformability — the ability of a material to change shape — is a key property in a very wide range of phenomena such as the debonding of an adhesive tape, the shaping of a solid by drip casting or the flow of a liquid through a porous medium. At SIMM, we investigate how complex liquids and soft solids form and... deform.