

# POST-DOCTORANT "Soft Matter and Chemistry Laboratory" - CDD de 2 ans

https://wwwdev.spip.espci.fr/fr/espci-paris-psl/emploi/archives/2016/post-doctorant-soft-matter-and-chemistry-laboratory

**CONTEXT** ESPCI Paris is a major institution of higher education (a French "Grande Ecole d'ingenieurs"), an internationally renowned research center (17 laboratories), and a fertile ground of innovation for industry. Teaching and research are in the fields of physics, chemistry and biology. The Soft Matter and Chemistry laboratory mainly focuses on the design, synthesis and study of polymeric and supramolecular materials. The laboratory is known for conducting fundament research inspired by or oriented towards industrial applications. The present project is a collaboration between two Institutions (International ANR grant), ESPCI Paris and Kyoto University. The person responsible of the project at ESPCI Paris is Dr Francois Tournillac. The partner at Kyoto University is Prof. Makoto Ouchi, a leading expert in sequence-controlled polymerizations. JOB PROFILE

#### Finality :

Precision macromolecular chemistry is an emerging field of synthetic chemistry aiming at controlling the succession of various monomers along the same polymer chain. Its ultimate ambition to produce sequences as perfect as those of Natural DNA molecules, proteins ... the aim of this project is to evaluate the potential of this chemistry in the field of materials science.

#### Missions and responsabilities :

The candidate will mainly work on the design of dedicated physico-chemical experiments to evidence new materials structures/morphologies phase transitions and properties. CANDIDATE PROFILE

#### Knowledge and skills :

A polyvalent profile is wished. Knowledge in the physico-chemistry of polymers physical properties of soft matter. Broad experimental skills will be a real asset for this project.

#### Duration and starting date :

The project is for two year starting as soon as possible. Requested diploma : Ph-D, an international experience will be greatly appreciated.

## Contact

Francois TOURNILHAC Telephone : +33 (0)1 40 79 46 30 CV and Support letter should be addressed to : francois.tournilhac@espci.fr Soft Matter and Chemistry Laboratory : http://www.mmc.espci.fr

### Accès

Métro ligne 7 (Place Monge/Censier Daubenton) RER B (Luxembourg) Bus 21, 27 & 47 3 stations Vélib proches

ESPCI Paris 10 rue Vauquelin 75231 Paris Cedex 05

+33 1 40 79 44 00 www.espci-paris.fr