

## Post doctoral position at the chemistry department of the Ecole Normale Supérieure in Paris

The current nano-biotechnologies interfacing synthetic materials and cell biology requires a better understanding of cell-surface interactions on the micro-to-nanometer scale. Recent developments in our group of thermoswitchable copolymer layers (e.g. poly(L-lysine)s (PLL) bearing poly(*N*-isopropyl acrylamide) (PNIPAM) pendent grafts) enables temperature-controlled ligand display and cell adhesion.

The aim of the ANR project CASCADE is to develop new micropatterned surfaces exhibiting both nano and micro structurations by combining the stimuli-responsive PLL-copolymer micropatterns with micelle nanolithography and organization of peptide-presenting gold nanoparticles on substrates for cell culture. As a proof of concept we will study the existence of crosstalks between integrins and cadherins in cell adhesion, motility and contraction.

This highly interdisciplinary project is a collaboration between the chemistry department of the ENS, the ICS in Strasbourg and the Jacques Monod Institute. Preference will be given to applicants with prior research experience as an experimentalist, and background in the broad areas of soft matter, physical chemistry of polymers, surface characterization. Interest and prior work in collaboration with biologists will be an add. Skills in cell culture experiments will be considered positively. The initial appointment is for 18 months, with likelihood of an extension. The position will be open by the 01/05/2019 until it is filled.

Please send your CV and application letter to : [emmanuelle.marie@ens.fr](mailto:emmanuelle.marie@ens.fr)