





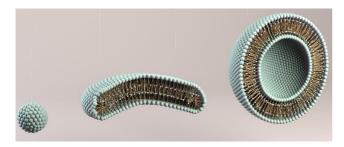
PhD in Surfactant Science and Soft Matter

3 years, starting 2023

From self-assembly to formulation of sustainable surfactants

The topic

Surfactants are compounds omnipresent in commercial products, from paints to home and personal care detergents, like soaps or shampoos. Mainly produced by a classical petrochemical approach and eventually disposed in water treatment plants, in the perspective of a more circular economy, significant research needs to be done to improve their environmental footprint, while optimizing their mildness in the conditions of application. For this reason, new solutions are nowadays at study.



The goal of the PhD project is to explore the opportunity of new sustainable surfactants in potentially commercial formulations, in particular by studying their self-assembly, properties, texture in solution and extension to formulations with high commercialization potential.

The candidate

The candidate must hold a Master 2 degree in chemistry, physical chemistry, formulation, materials science or physics, with documented practice in soft matter science. Experience in the study of surfactants and knowledge of rheology will be considered with positivity. Additional experience in light scattering, NMR (liquid and/or solid), small-angle scattering (x-ray, neutrons and/or light) will be particularly appreciated. The candidate must speak fluent English.

Additional information

The project involves a full-time CIFRE contract with forecast starting date in early 2023. The project will take place at two sites, the Laboratoire de Chimie de la Matière Condensée de Paris at Sorbonne Université (Paris, France) and the Solvay Research Center in Bristol (PA, USA). Gross salary varies between 2 185,00 €/month and 2 497,00 €/month.

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