

CFM (Centro de Física de Materiales) offers one-year position for a postdoctoral researcher, with the possibility of extension for an additional year, to investigate **how interfacial tuning in supramolecular peptide assemblies (SPAs) can be exploited as materials with tunable function, with particular emphasis on catalysis and bioactivity**.

The project will explore the design of **multicomponent peptide assemblies** to generate new supramolecular architectures with tunable interfacial environments. A central objective will be to understand **how peptide sequence and molecular organization govern the interplay between the different components** and how these interactions determine the structure, physicochemical properties, and functionality of the resulting interfaces.

The research will combine **computational and experimental approaches**, including molecular dynamics simulations, spectroscopic characterization, and advanced microscopy techniques, to achieve a molecular-level understanding of these systems. This knowledge will be used to **establish sequence–structure–interface–function relationships** and guide the rational design of supramolecular architectures with optimized catalytic activity and tunable interactions with target biological environments.

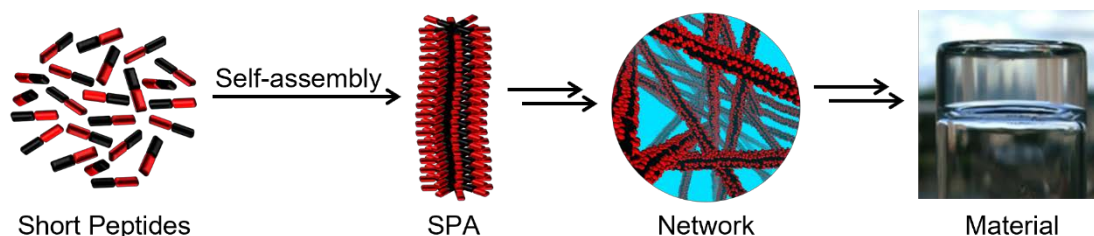


Figure 1. Scheme of the self-assembly of SPAs into Fibres, that then form a Network that gives rise to a Material.

Additional details:

- Full-time position: 37.5 hours/week.
- Gross annual salary: €40,244.66, paid in 14 instalments.
- Annual leave: 22 working days of paid annual leave per year of service.
- PhD qualification: Appointment is subject to the recognition of the candidate's PhD degree within the Spanish higher education system, where applicable.