

講演会のお知らせ

講師：Prof. Luïsa Pérez-García

Universitat de Barcelona

演題：Self-Assembly of Multifunctional Nanostructured Materials for Biological Interfacing

Controlling interactions between nanomaterials and living cells is central to advances in nanomedicine. We develop chemically programmed, self-assembled and supramolecular materials—including hydrogels, nanoparticles, and silicon-based microdevices—that can interface with living cells to probe, track, and influence their behaviour. These platforms enable applications in biosensing, intracellular signaling, targeted delivery, and mechanical control of single cells. This talk will present examples of how supramolecular chemistry enables precise control over the properties and functions of advanced nanomaterials. In particular, We will present case studies including the surface modification of silicon microchips to enhance cellular internalization and enable real-time monitoring of intracellular glutathione levels. Also, we will discuss selected examples will highlight the integration of these systems into bioelectronic platforms, illustrating their potential to bridge biological processes with electronic readouts and control.

日時：令和7年6月22日（月）10：00～11：15

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