

Catalytic Single Chain Polymeric Nanoparticles in Action: Exploiting Their Functions in Complex Biological Media

Single Chain Nanoparticles (SCNP) are intriguing bio-inspired architectures resulting from the folding of an individual polymer chain. The well defined tertiary structure together with their ease of functionalization endows them with high potential for a variety of applications in the field of materials and catalysis. Here we investigate the behavior of SCNP in living cells and demonstrate their ability to perform a catalytic function in the biological environment. Our results pave the way towards the use of SCNP for medical purposes as well as highlight the challenges for the design of polymeric architectures able to function in complex media.