Probing the Mechanism of Nanoparticle Assembly at Oil-Water Interfaces

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***Abstract***

Water-oil interfaces have become attractive platforms to direct, assemble and manipulate nanoparticles for research and applications in diverse fields including colloidosomes and Pickering emulsions for pharmaceuticals, cosmetics and food.  In this talk, I will present our efforts to understand NP assembly at interfaces of two immiscible liquids.  In addition, I will present our work to deliver conventional, molecular surfactants at the interface using the nanoparticles as the carriers similar to the targeted and controlled delivery approach used in biomedicine.