

The 287th MANA Special Seminar



Controlling the Properties of Nanobiomaterials in Solution and at the Interfaces

Chair: Dr. Takao Aoyagi (MANA PI)

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Soft materials, such as polymer nanoparticles and thin films play a crucial role as functional building blocks in the design of nanomaterials. However, the development of polymer-based nanosized materials for biomedical and pharmaceutical application is still in its initial stage and it requires profound understanding of fundamental physico-chemical rules that govern self-assembly of polymers at the nanoscale. This presentation underlines some fundamental and practical aspects in the field of polymeric nanobiomaterials and focuses on (i) developing new nanoparticles for pH-dependent oral drug delivery,¹ (ii) investigating the properties of polysaccharide thin films constructed using layer-by-layer technique,² and (iii) designing functional polymer nanocoatings with tunable ligand/receptor interactions.³ The studies aimed at understanding the effects of non-covalent interactions, which control the behaviour of these systems on the molecular level, on their structural and functional adaptivity

Namiki site

Venue: Auditorium, 1F, WPI - MANA Bldg.

Date: October 4th, Thursday Time: 15:30-16:15

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