The Chinese University of Hong Kong
Department of Biomedical Engineering

Graduate Seminar – PhD Oral Defence

Student : Mr. XIE, Xian

Supervisor : Prof. DUAN, Liting

Date : 20 June 2023

Time : 10:30 am

Zoom Link : https://cuhk.zoom.us/j/92468489194?pwd=bXI2UnVUbkYyRlJ4OVBsSDdjYi9iZz09

Meeting ID : 924 6848 9194

Password : 230916

Title: Dynamic Supramolecular Biomaterials Based on the Self-assembly and Phase Separation of Biomolecules to Regulate Cell Behaviors for Biomedical Applications

The natural extracellular matrix (ECM), playing an essential role in cell adhesion, cell–cell communication, differentiation, and other functions, consists of a complex network of proteins, proteoglycans, and numerous other biomacromolecules. Few studies report the mechanism underlying the formation of ECM structures. Meanwhile, it is challenging but highly desirable to design synthetic polymeric matrices to emulate both the complex biophysical and biochemical properties of natural ECM. In this dissertation, the researcher reports several supramolecular dynamic biomaterials based on the assembly of peptides and proteins for mimicking the essential properties of natural ECM and further explores how these synthetic matrices direct cellular behaviors.

***** ALL ARE WELCOME *****

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