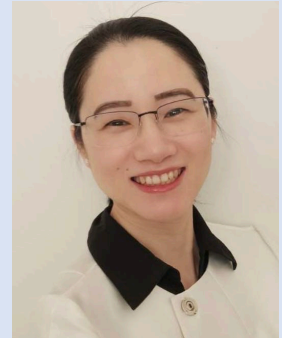


Seminar

Engineering Polymer Nanocomposites towards High-performance Composite Structures and Wearable Sensors

Dr. Shuying Wu

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Date: Tuesday, 25 July 2023, 16:00-17:00

Venue: Faculty of Eng. Bldg. #4, 1F, Room 205

Abstract:

Polymer nanocomposites have been increasingly used in the past decade for a variety of applications. The properties of polymer nanocomposites largely depend on their microstructures, i.e., dispersion, orientation, and self-assembly in the polymer matrix. Despite of the excellent properties of individual nanomaterials, the properties of their polymer composites are much lower as compared to theoretical prediction. To fully take advantage of the outstanding properties of nanomaterials, it is essential to control the microstructures. In this talk, Dr. Wu will introduce the recent contributions she and her colleagues made to develop new multifunctional polymer nanocomposites with tailored microstructures which have demonstrated applications ranging from flexible and stretchable strain sensors/energy harvesters to stiff and damage-tolerant composite structures.

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