Protein therapeutics has seen an exponential growth in the last decades in oncotherapy. In particular, recombinant protein complexes such as antibodies and immunotoxins have emerged as eminent therapeutic candidates. However, the development of recombinant chimeras is often laborious and the activities of fused enzymes can be significantly reduced. Moreover, it is extremely challenging to use genetic engineering methods to prepare modular protein hybrids with functional synthetic components to reengineer their structures and functions. Consequently, the development of synthetic methodologies that could provide new avenues to expand our current arsenal of protein therapeutics is valuable. Our strategy focuses on developing integrative chemical platforms that allow rational design and customization of biotherapeutics to address specific systems, for instance, intracellular transport, molecular targeting, controlled release, etc. In this manner, we seek to overcome the limits of chemistry and biology in protein design and therefore, broaden the scope of the medical applications by merging the best of both worlds.

CBC SEMINAR ANNOUNCEMENT

Dr Kuan Seah Ling
Max Planck Institute for Polymer Research

Chemistry Meets Biology: Towards Designer Protein Therapeutics?

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Date: 13th February 2018 (Tuesday)
Time: 2:30pm – 4:00pm
Venue: SPMS Research & Graduate Studies Office Conference Room
Host: Asst Professor Shao Fangwei