

CBC SEMINAR ANNOUNCEMENT



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Synthesis, the unfashionable and the infamous

It is not easy to think of a field of synthetic chemistry that is less popular than fundamental hydrocarbon chemistry. It is also hard to imagine a group of structures with a greater reputation for instability than the polyenes. This talk aims to convince you that fundamental hydrocarbon chemistry has significant potential for original discoveries and that at least some of your assumptions about the instability of polyenes are wrong!

For many years, the dendralenes (branched oligo-alkenes) were thought to be too unstable to be synthetically useful. We demonstrated that the perception was false: we were the first to prepare the dendralenes and we did so using standard laboratory equipment. We recorded their spectroscopic, physical and chemical properties and discovered alternation in their behaviour – the first time such a property has been witnessed in a family of fundamental structures since the annulenes. We have also demonstrated that dendralenes have the unique capacity to undergo diene-transmissive cycloadditions, spectacular processes that result in many new bonds being forged in a single operation. This presentation will demonstrate that the dendralenes represent the tip of the iceberg when it comes to as yet un-prepared hydrocarbons with huge synthetic potential. We will reveal new discoveries and efficient synthetic applications involving these unfashionable and infamous structures.

Date:	23rd July 2012 (Monday)
Time:	11:00am – 12:30pm
Venue:	NTU SPMS CBC Building Level 2, Conference Room
Host:	Asst Professor Philip Chan