

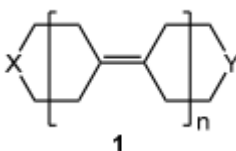
CBC SEMINAR ANNOUNCEMENT



Professor Cornelis van Walree
Flinders University

Nanomaterials for electronic, optical, and optoelectronic applications

In my seminar I will address the synthesis, characterization and functioning of nanomaterials for electronic, optical, and optoelectronic applications. These nanomaterials on one hand feature σ - π conjugated oligo(cyclohexylidenes) and their end-functionalized derivatives, compounds of type 1. In these partly unsaturated hydrocarbons the π -bonds interact with each other via the σ -orbitals. It will be shown that this alternative mode of conjugation forms the basis for attractive electronic and optoelectronic properties. In particular photoinduced charge separation, the use as molecular conduction wire and the formation of supramolecular assemblies (for instance with semiconductor quantum dots) are discussed.



A second topic concerns the synthesis and characterization of colloidal CaS and SrS nanocrystals. These wide band gap semiconductors can function as host for luminescent guests and as such represent biocompatible luminescent nanomaterials.

Date:	12th July 2012 (Thursday)
Time:	11am – 12.30pm
Venue:	NTU SPMS CBC Building Level 2, Conference Room
Host:	Asst Professor Philip Chan