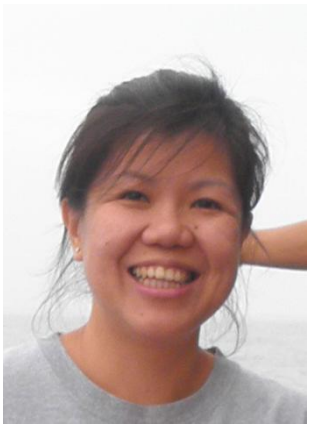
NANYANG TECHNOLOGICAL UNIVERSITY

CBC SEMINAR ANNOUNCEMENT



Dr Yeun-Mun Choo
University of Malaya

Structure Elucidationof Natural Products: Navigating Through the Stereochemistry Maze

The nature has been a well-tested source for producing structurally intriguing chemical compounds. It was reported that approximately 50% of the drugs currently in market for various treatments have its origin from natural sources. In many instances, these chemical compounds contain stereocenters which gave rise to the specific stereoconfiguration and/or conformation of the compounds. It is evident that the stereochemistry of chemical compounds have significant implication on the biological activities as the enzymes and receptors are highly selective. Hence, in addition to elucidating the skeletal structure of the chemical compounds, the assignment of the stereocenter's configurations carries equal importance when reporting the structure of the compounds.

With the advancement of modern technology, various spectrometry methods are available to shed lights on the configuration of stereocenters. Spectroscometry method such as X-ray crystallography and electronic circular dichroism (ECD) has been gaining momentum in assisting the assignment of stereocenter's configurations in the chemical compounds. However, the inability to obtain samples in its suitable form are hampering the use of these methods, e.g. crystals in the case of X-ray and suitable models for electronic circular dichroism (ECD), and hence, NMR spectroscopy is still heavily relied upon for the assignments of stereocenters. This paper dwells on the theme of stereochemistry in the backdrop of the process of structure elucidation of compounds from natural products. The process is hardly straight forward but the hints are always clear if one is willing to give a second thought.

Date:	**31st October 2012 (Wednesday)**
Time:	**11:00am – 12:30pm**
Venue:	**NTU SPMS CBC Building Level 2, Conference Room**
Host:	**Assoc Professor Tan Choon Hong**