NANYANG TECHNOLOGICAL UNIVERSITY

CBC SEMINAR ANNOUNCEMENT

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Chemical Synthesis of Complex Natural Glycosides of Biological Significance

Many complex natural glycosides possess remarkable biological properties, therefore have attracted great attentions in chemical synthesis in order to understand their structure-activity relationships and the mechanisms of action. Focusing on the construction of the glycosidic linkages between the aglycon and the saccharides, I shall discuss the general synthetic strategies[1] and the glycosylation methods.[2] Highlighted are the gold(I)-catalyzed glycosylation protocol with ortho-alkynylbenzoates as donors[3] and its application in the synthesis of the biologically significant steroid glycosides, namely gordonoside F[4] and periploside A.[5]

Reference

(1) B. Yu, J. Sun, X. Yang, Acc. Chem. Res. 2012, 45, 1227.
(2) Y. Yang, X. Zhang, B. Yu, Nat. Prod. Rep. 2015, 32, 1331.
(3) Y. Tang, J. Li, Y. Zhu, Y. Li, B. Yu, J. Am. Chem. Soc. 2013, 135, 18396.
(4) S. Zhang, Y. Ma, J. Ma, B. Yu, X. Xie, Proc. Natl. Acad. Sci. USA 2014, 111, 14571.
(5) X. Zhang, Y. Zhou, J. Zuo, B. Yu, Nature Commun. 2015, 6: 5879.

Date:	**7th February 2017 (Tuesday)**
Time:	**4:30pm – 6:00pm**
Venue:	**SPMS Research & Graduate Studies Office Conference Room**
Host:	**Assoc Professor Liu Xuewei**