Discovering and developing transition metal catalyzed \([m+n], [m+n+o], [m+n+o+x]\) cycloadditions to reach various cyclic compounds are important for the “ideal synthesis” of functional molecules, which usually have various-sized ring skeletons that are not easy or difficult to be accessed by the traditional organic reactions. Recently we developed several rhodium catalyzed cycloaddition reactions of vinylcyclopropanes with alkynes, alkenes, allenes, and CO to construct five-, six-, and eight-membered carbocycles with the aid of calculations (see these \([(5+2)+1], [7+1], [3+2], and [(3+2)+1] cycloadditions in the scheme below). Some of these reactions have been applied to the synthesis of natural products to demonstrate the impacts of these cycloaddition reactions on synthesis.

**CBC SEMINAR ANNOUNCEMENT**

**Professor Yu Zhi-Xiang**
Peking University

Rh-Catalyzed \([(5+2)+1], [7+1], [3+2], and [(3+2)+1] Cycloadditions

Date: 28th January 2011 (Friday)
Time: 10.45am – 12.15pm
Venue: NTU SPMS CBC Building Level 2, Conference Room
Host: Professor Loh Teck Peng