

The Department of Chemistry and Biochemistry

Seminar Series

Presents a Seminar Titled:

“New Multi-Component Rhodium-Catalyzed Higher-Order Carbocyclization Reactions”

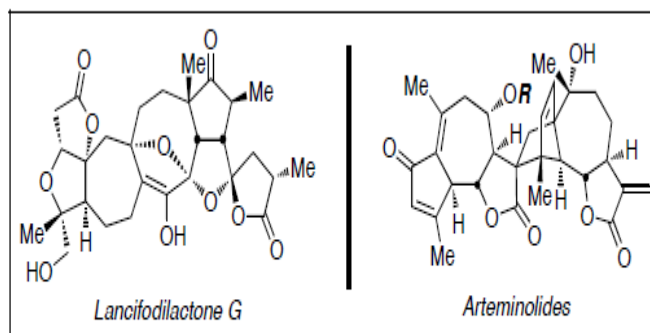


Presented By

Dr. P. Andrew Evans

Chair & Professor, Alfred R. Bader
Organic Chemistry
Department of Chemistry
Queens University
Kingston, Ontario

Transition metal-catalyzed higher-order carbocyclization reactions provide powerful methods for the stereoselective construction of complex polycyclic systems that are generally not accessible *via* classical pericyclic reactions.^[1] We have demonstrated the merit of the rhodium-catalyzed [m+n+n] carbocyclization reactions of carbon and heteroatom tethered 1,6-enynes with carbon monoxide and alkynes.^[2,3] Recent studies have explored the development of a stereoselective rhodium-catalyzed [3+2+2] carbocyclization of 1,6-alkenylidenecyclopropanes with activated alkynes for the construction of *cis*-fused bicycloheptadienes.^[4] The seminar will outline the scope and limitations of some of these transformations and their application to challenging bioactive natural products, as exemplified by lancifodilactone G and the arteminolides.



Thursday, February 7, 2013 at 12:20 in BAL 1012