Chemical & Physical Sciences
UNIVERSITY OF TORONTO
MISSISSAUGA

COLLOQUIUM

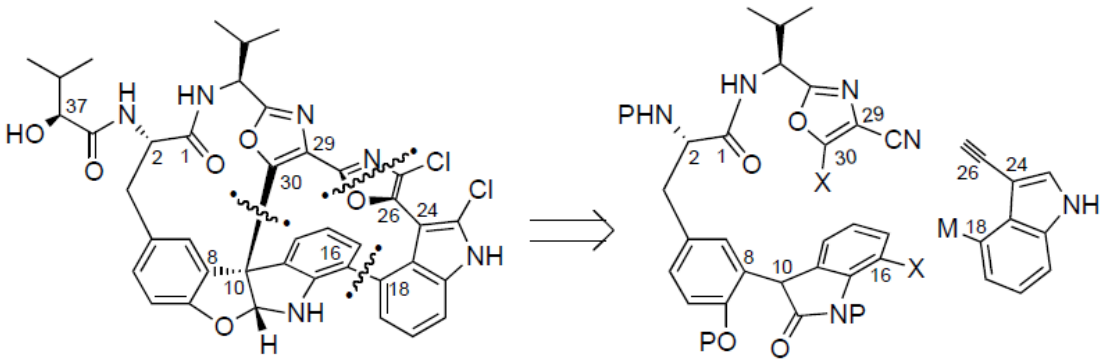
TUESDAY OCTOBER 11TH, 2011
12:00 P.M. (SHARP) – 1:00 P.M.
INSTRUCTIONAL BUILDING 240

Tarek Sammakia

University of Colorado

"Lessons Learned Towards the Synthesis of Diazonamide A."

Diazonamide A is a marine-derived natural product that shows potent anti-mitotic activity. It is available in limited quantities from natural sources, and has been a popular target for synthesis. This lecture will describe our progress towards the total synthesis of this compound. The development of new reactions, specifically nucleophilic aromatic substitution reactions of oxindoles and oxazoles, for the formation of the quaternary carbon at C-10, will be highlight and subtle substrate modifications that influence the course of the reaction will be described. The use of Pd-catalyzed arylations for similar purposes will also be discussed in the context of the desired key carbon-carbon bond-forming reaction between C-10 and C-30.



diazonamide A
key bond disconnections