

UCLA

DEPARTMENT OF CHEMISTRY AND BIOCHEMISTRY

presents

Organic Colloquium

with

Professor Thomas R. Hoye



Department of Chemistry
University of Minnesota

“What's New with the Hexadehydro-Diels–Alder (HDDA) Reaction?”

Abstract. Since mid-2011 researchers in our laboratories have been developing a process that we call the hexadehydro-Diels–Alder (HDDA) reaction. This net [4+2] cycloisomerization produces an o-benzyne derivative, which is then rapidly captured in a subsequent trapping event. The HDDA reaction is a rare example of a transformation that generates a high-energy, reactive intermediate by way of a highly exothermic reaction! This two-stage benzyne generation/trapping cascade results in the rapid assembly of structurally complex benzenoid products. This chemistry is both preparatively valuable and mechanistically enlightening. Fundamentally new modes of benzyne reactivity have been uncovered. I will discuss these developments in the historical context of underlying classical chemistry as well as from the perspective of its fundamental mechanistic and energetic features. *In this presentation I will emphasize the more recently completed and ongoing aspects of our studies.*

Thursday, January 29, 2015

5:00 PM

Cram Conference Room - 3440 Molecular Sciences Bldg

For further information, contact David Gingrich at gingrich@chem.ucla.edu