Hiroshima Univ

Seminar 5研究科共同セミナー

## Post-Transition State Bifurcations are Gaining Momentum - Implications for Synthesis and Biosynthesis

## Speaker: Prof. Dr. Dean Tantillo

Department of Chemistry, UC Davis, USA Date: Tuesday, January 15th, 2019 Time: 16:00–17:30 Venue: B301 room, School of Science



When the steepest descent pathway following a transition state structure for a given reaction splits in two, the reaction is said to involve a post-transition state bifurcation (PTSB). The presence of a PTSB presents complications for predicting product selectivity, in that a single transition state structure allows direct access to two products without any intervening minima (intermediates). Examples of reactions from organic synthesis and biosynthesis for which PTSBs have been proposed will be discussed, along with emerging guidelines for predicting the existence of a PTSB and the selectivity that arises from its presence.