

# "WALKING IN THE WOODS WITH QUANTUM CHEMISTRY - THE IMPORTANCE OF INHERENT CARBOCATION REACTIVITY IN TERPENE BIOSYNTHESIS"



**Abstract:** The results of quantum chemical calculations on the mechanisms of terpene-forming carbocation rearrangements will be described. Unusual phenomena, not usually associated with biological reactions, will be highlighted, e.g., concerted but highly asynchronous reaction steps in which multiple bond forming/breaking events are merged, pathways with post-transition state bifurcations, non-statistical dynamic effects.

**Host:** Professor Joseph P. Dinnocenzo  
**Email:** [joseph.dinnocenzo@rochester.edu](mailto:joseph.dinnocenzo@rochester.edu)

**GUEST SPEAKER:**  
**PROFESSOR**  
**DEAN TANTILLO**  
**UNIVERSITY OF**  
**CALIFORNIA,**  
**DAVIS**  
**DEPARTMENT OF**  
**CHEMISTRY**



**ORGANIC SEMINAR**  
**FRIDAY, APRIL 1<sup>ST</sup>, 2016 | 9:00 A.M.**  
**HUTCHISON HALL 473**  
**UNIVERSITY OF ROCHESTER**  
**DEPARTMENT OF CHEMISTRY**

