



# FALL 2016 SEMINAR SERIES

DEPARTMENT OF OCEAN, EARTH, AND ATMOSPHERIC SCIENCES  
3:00PM – ROOM 200 IN THE OCEANOGRAPHY/PHYSICS BUILDING  
THURSDAY SEPTEMBER 22<sup>nd</sup>, 2016

## “RE-INVESTIGATIONS OF CaCO<sub>3</sub> DISSOLUTION RATE KINETICS.”

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### ABSTRACT

Along with co-I Jess Adkins (Caltech), we have been working on re-investigations of CaCO<sub>3</sub> dissolution rate kinetics. This talk will outline some of the big questions in terms of ocean carbonate cycling, some of the big questions in dissolution kinetics, and then offer some new data that may provide answers (or partial answers) to these questions. I will discuss our new methodology for measuring carbonate dissolution rate, very precisely, very accurately at conditions close to equilibrium (heretofore not possible). I will discuss two new discoveries we've made, one on the role carbonic acid plays in mediating dissolution rate and another on the role pressure plays in dissolution kinetics. Finally, I will show data from field dissolution rate measurements as all the lab work in the world doesn't amount to a hill of beans if there can be no field proof.

**AFTER THE SEMINAR, PLEASE JOIN US IN ROOM 404, THE ZANEVELD CONFERENCE ROOM, FOR COFFEE AND COOKIES, AND TO MEET WITH THE SEMINAR SPEAKER.**