



*Environmental Sciences Seminar Series*

*Presents:*

*Paleontological Society Distinguished Lecture*

***Species diversification during a mass  
extinction - graptolites during  
the Late Ordovician***

***Dr. Stanley C. Finney***

***Department of Geological Sciences  
California State University –Long Beach***

**Date & Time: Tuesday, May 4, 2004, 5:00 PM**

**Location: Smittcamp Alumni House**

(Reception at 5 PM, promptly followed by lecture at 5:20 PM)

All members of the professional, educational, and research communities are welcome. For additional information, please contact the Earth & Environmental Sciences Department office at (559) 278-3086 or [vengieb@csufresno.edu](mailto:vengieb@csufresno.edu)

*Parking restrictions will be relaxed in Lot V (at Shaw and Woodrow Avenues) between 4:30 and 7:00 PM for seminar participants. An online campus parking map is available at: <http://www.csufresno.edu/univrelations/map/>*

## Abstract

Species diversification during a mass extinction - graptolites during the Late Ordovician

The stratigraphic section at Vinini Creek, Roberts Mountains, Nevada provides an unparalleled opportunity to examine the fate of graptolites, prominent Paleozoic zooplankton, during the Late Ordovician mass extinction event. On the basis of integrated biostratigraphic and sedimentologic evidence, the relatively complete extinction record, missing only the uppermost Ordovician and lowermost Silurian, can be examined in the context of ecological constraints. Diverse graptolite populations that flourished in the denitrification zone, at the margins of the oxygen-minimum zone, largely vanished when glacioeustatic sea-level fall resulted in the loss the oxygen-minimum zone. However, populations of one clade that inhabited the photic zone survived and even diversified.

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*Special Announcement from the Department of Earth & Environmental Sciences:*

*The Department of Earth and Environmental Sciences is sad to announce that Robert Henry "Gus" Gustafson passed away peacefully surrounded by family last Monday, April 12, in Flagstaff, Arizona. At the time, he and his wife Jackie were taking what he referred to as his "farewell to the Grand Canyon tour". He was seventy-seven years old.*

*Gus served for 22 years as the Instructional Technician for the (then) Department of Geology, retiring in 1989. Gus was liked by all who knew him, students, staff, and faculty alike. He defined high standards for what a Departmental Instructional Technician should be.*

*Gus is survived by his wife, and five children. No service is planned. The family has requested that in lieu of flowers, donations may be sent to:*

*Tuolumne County General Hospital Foundation  
c/o Cardiac Rehab  
PO Box 3784  
Sonora, CA 95370  
In memory of Bob Gustafson*

*He will be deeply missed.*