

# GLOBAL WARMING

EARTH HAS BEEN HERE BEFORE

While the current global warming is driven by the burning of fossil fuels, Earth's past has had warming events triggered by other processes that also released carbon dioxide and/or methane. Many were more severe than is expected of the current trend. Among the uncertainties about the future of the current trend are its severity, effects on the ecosystem, and duration. Study of the past hothouse events can provide valuable clues.

The first speaker will introduce the audience to hothouse events in Earth's past. The following speakers will present three of the most severe: the Paleocene-Eocene Thermal Maximum, due to methane released from the seafloor; the end-Triassic event, due to carbon dioxide from volcanic eruptions along the North America-Europe-Africa join; and the end-Permian event, from carbon dioxide and methane released during eruptions in central Siberia. Each will highlight the effects on the ecosystem and the duration of the recovery. The final speaker will compare the present trend with past episodes of intense volcanic CO<sub>2</sub> emission, in order to anticipate the trend over the next several centuries.

**FRI APR 19**  
**12:30–5:30PM**

CSU CHANNEL ISLANDS • ALISO 150

Registration requested  
[biology.csuci.edu/poe](http://biology.csuci.edu/poe)

## SCHEDULE

**12:30 PM**

Opening Remarks

**Richard Rush, Ph.D.**  
President, CSU Channel Islands

**Christopher Wheeler, Ph.D.**  
Lecturer, Geology Program CSU Channel Islands

**12:50 PM**

Exploring Earth's past history to help manage the future

**David Bottjer, Ph.D.**  
Professor and Chair, Department of Earth Sciences,  
University of Southern California (USC)

**1:15 PM**

The Paleocene-Eocene Thermal Maximum

**James C. Zachos, Ph.D.**  
Professor, Earth and Planetary Sciences Department,  
University of California, Santa Cruz

**2:05 PM**

Ecosystem reorganization across the Triassic-Jurassic transition associated with massive CO<sub>2</sub> rise

**Frank A. Corsetti, Ph.D.**  
Associate Professor, Department of Earth Sciences,  
University of Southern California (USC)

**3:00 PM**

The End-Permian Hothouse Event

**Matthew E. Clapham, Ph.D.**  
Assistant Professor, Department of Earth and Planetary Sciences,  
University of California, Santa Cruz

**3:50 PM**

Large igneous provinces and warm climates

**David L. Kidder, Ph.D.**  
Associate Professor, Department of Geological Sciences,  
Ohio University



California State  
University

### INSTRUCTIONALLY RELATED ACTIVITIES

C H A N N E L  
I S L A N D S

#### Parking on-campus:

Parking on campus is \$6 - Follow signs once on campus.

Off-campus parking: Free parking at the Camarillo Metrolink Station/Lewis Road. Shuttle cost is \$1.25 each way.

The organizers would like to thank the students of Channel Islands for funding the symposium through Instructionally Related Activities.