

Free Public Lecture

# Commutations in the Oceans

## USGS Shipboard Research Sparked Scientific Advances

By William R. Normark and David W. Scholl, Marine Geologists

- Alaskan work from the Survey's M/V *Eider* in the 1950's led to visualizing how great earthquakes and tsunamis originate along trenches
- In the 1970's, researchers discovered deep-sea "black smokers" and the Survey's R/V *S.P. Lee* found massive sulfide deposits on the Juan de Fuca Ridge
- USGS scientists on the R/V *Farnella* confirmed and mapped humongous submarine landslides off Hawaii's coasts in the 1980's
- Extensive international Pacific Ocean expeditions of the *Lee* in 1982-84 yielded a rich harvest of discoveries, including sea-floor cobalt concentrations
- Where we are heading-what are the challenges for future discoveries in the oceans?



R/V Farnella



M/V Eider



R/V S.P. Lee

Thursday, March 31, 2005, 7:00 p.m.

USGS, Conference Room A, Bldg 3, Menlo Park, California

U.S. Department of the Interior • U.S. Geological Survey • Western Region Center

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