

Cruise Dates: April 23 – May 14, 2005

www.ridge2000.org/SEAS/

Would you like to bring deep-sea research and authentic student inquiry into your middle and high school science classroom? Want your students to understand what is happening in the deep ocean? If so, please join the *Student Experiments At Sea* (SEAS) program on its next research cruise April 23 – May 14.

SEAS is a web-based program where students become the scientists and see their questions answered as their own experiments “go to sea.” Through the SEAS program, students study mid-ocean ridge systems, develop proposals for experiments, observe (via the web portal) as experiments are conducted at sea, analyze genuine data, and submit their own reports as part of the Student Report Competition. SEAS students are invited to participate along side ridge scientists as they investigate the mysteries of this extreme environment.

This year's SEAS cruise will follow four student experiments as they are conducted aboard a deep-sea research cruise to the East Pacific. The research team, led by Rutgers' scientists Dr. Costa Vetriani and Dr. Rich Lutz, will be visiting hydrothermal vents at 9°N on the East Pacific Rise, and will focus on understanding the factors responsible for the biological community structure found at these vents. The student experiments, selected through a formal proposal competition, will be conducted alongside the scientists' investigations. This year's student experiments are:

- **Crabs' Catch of the Day (deep sea crabs feeding preference)**
- **Water, Water Everywhere – But Not In Here! (equipment testing at depths)**
- **Archaea Classification and Temperature**
- **Tubeworm Distribution (understanding where tubeworms are found and why)**

You and your students are invited to join the excitement via the SEAS Web site (www.ridge2000.org/SEAS/). Through this portal, you can observe the experiments as they are conducted at sea, download and analyze the collected data, and participate in a student experiment report competition in May/June. **A new feature, the “Classroom to Sea” Lab, allows students to conduct a laboratory exercise in their classroom and compare their data to data conducted at sea.** Details are all on the Web.

We hope you'll join us on this exciting adventure. Welcome Aboard!

SEAS is a pilot program funded by the National Science Foundation and sponsored by the Ridge 2000 research community (<http://www.ridge2000.org>). For more information on how to participate, visit the SEAS Web site Teacher page or contact Liz Goehring, Ridge 2000 E&O Coordinator at exg15@psu.edu.