IPRC INTERNATIONAL PACIFIC RESEARCH CENTER
IN THE SCHOOL OF OCEAN AND EARTH SCIENCE AND TECHNOLOGY AT THE UNIVERSITY OF HAWAI'I AT MĀNOA

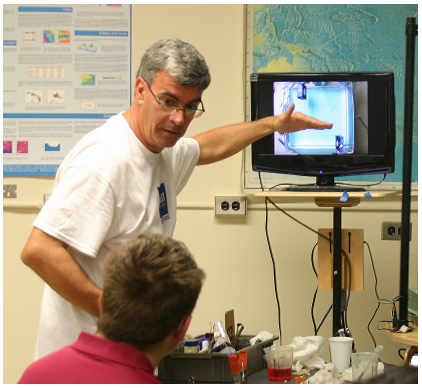
IPRC scientists reach out to science fans of all ages

Last week saw the 13th biennial Open House for the School of Ocean and Earth Science and Technology (SOEST) at the University of Hawai'i at Mānoa. There were presentations, demonstrations, and hands-on activities on topics ranging from volcano eruptions to coral production, crater impacts to fish prints, infrared imaging to stone implement crafting. Several IPRC researchers contributed their own knowledge to the welter of information, focusing on climate and ocean topics.

Tobias Friedrich and Michelle Tigchelaar introduced students, teachers, and parents to the effects of carbon dioxide on the ocean and its coral reefs. A captivating video showed exhaust channeled straight from a car's tailpipe to a water canister, changing the water from a neutral green to a low-acidic yellow color. A live demonstration followed, dramatically illustrating the active dissolution of coral in a stronger acidic solution. Friedrich finished with a stark series of images modeling the increasing danger of severe acidification of our oceans by 2100 if no changes are made to global carbon output.

Jan Hafner provided an intriguing look at the movement of debris around the Pacific Ocean basin. He traced pathways of debris from the 2011 Japanese tsunami, describing the successive waves of different debris types that result from sorting by wind interaction. Jan had on hand several examples of debris that have washed up on our Hawaiian shores: an oyster buoy, a mini-refrigerator door, and several pieces of wooden beams. He finished up discussing the accumulation of general debris into the centers of gyres in all the ocean basins, particularly the Great Garbage Patch in the northeastern Pacific Ocean.

Niklas Schneider helped run an ongoing demonstration of "Weather in a Tank" in conjunction with others from the Department of Oceanography. As a suitable complement to Hafner's presentation, he demonstrated the production of ocean gyres by adding colored dyes to a rotating water-filled tank. He also showed the natural accumulation of added fragments into "garbage patches."



Axel Timmermann did his usual great job of giving an eloquent presentation in the Speaker's Room, this one about glaciation events in Hawai'i.