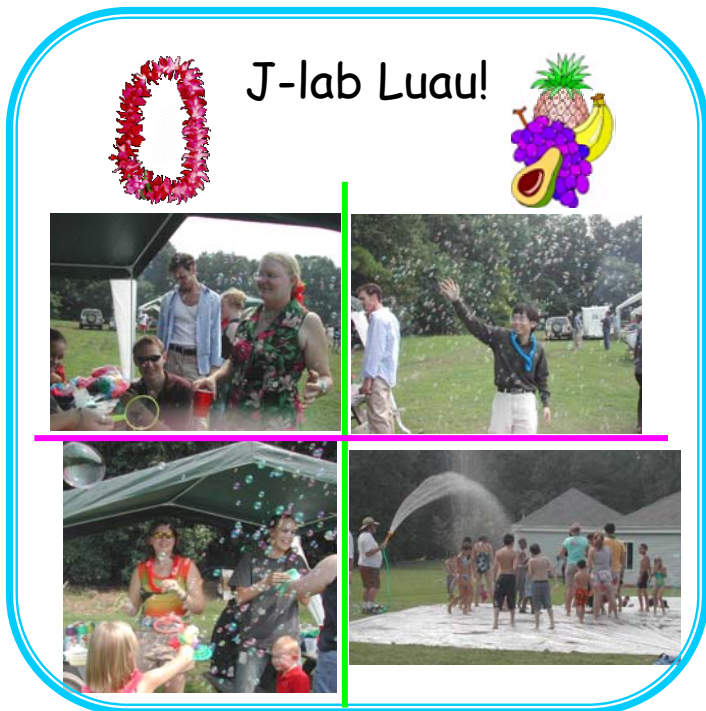


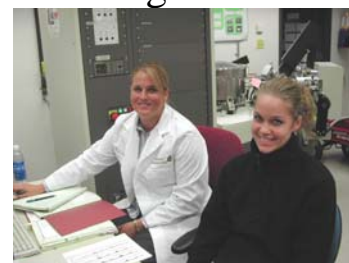


Applied Research Center Student Newsletter

C-ing Double



J-lab Luau!



Our two Christines- Christine Conrad on the left and Christine (Dee Dee) Hopkins on the right- spent some time on the ToF-SIMS analyzing planar luminas that have been placed in natural sediments.

July's Featured Researcher



Top Right: Michael Bagge-Hansen, Scott Wight, Amy Wilkerson; **Top Left:** Jia Huang; **Bottom Left:** Natalie Pearcy and Dee Dee Hopkins **Bottom Right:** The Slip-n-Slide

On July 22, the lab participated in J-Lab's Summer Luau, complete with palm trees and tropical birds. Several of our researchers volunteered to help with the event: Natalie and Dee Dee worked in the bubble and tatoos tent, while Amy and Kelly helped decorate the area with a variety of leis, fish, birds, and inflatable palm trees. There was a bubble machine, tropical tatoos, a dunk booth, a slip n' slide (eventually supplied with bubbles), and a ridiculous amount of good food.

Lab Visitors



Some of our recent lab tours include Phylip Balitsky (left), a computer science major at UVA, and Stephen Douglass (right, pictured with Natalie Pearcy and Michael Bagge-Hansen), an undergrad at William and Mary.

Jia Huang, pictured above with Dee Dee Hopkins at the ToF-SIMS, is a William and Mary graduate student in Applied Science, and his research involves the study of organic fouling of FEL optical cavity mirrors. It is well recognized that the degradation in the performance of FEL cavity mirrors occurs as a consequence of accumulated carbonaceous deposits from trace organics present in the normally hard environment. Jia Huang studies these deposits first by simulating the contamination on the mirrors with a known solution and using FT-IR and ToF-SIMS to find the lowest contamination concentration he can test. Once this is done, he characterizes the simulated samples as well as real samples taken directly from the FEL cavity, and studies the effects of different cleaning methods on the contamination levels.

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