Speciation and oxidation states of marine particulate Fe and Mn: sampling and analysis
Phoebe J. Lam, Associate Professor, Department of Ocean Sciences, University of California, Santa
Cruz

Over the past 15+ years, I have used synchrotron x-ray techniques (mostly hard x-ray microprobe and bulk XAS) to probe the mineralogy and oxidation states of marine particulate Fe and Mn. I will give a broad overview of the questions we ask (and have answered), as well as describe our sample collection and preparation methods and general strategy for sample analysis at the beamlines.