

SF	Melt Inclusions in Izu Arc Lavas: Examining Slab-Derived Contributions to Intra-Oceanic Arc Magmas and the Role of Volatiles in the Subduction Factory	
	Adam Kent, Oregon State Univ.	
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<p>This grant was funded relatively recently (July 2003), and although few scientific results are available as yet, significant progress has been made. Specific achievements are:</p> <ul style="list-style-type: none"> • Organization of a successful U.S./Japan collaboration between the PI at Oregon State University and Professor Jun-Ichi Kimura, at Shimane University, Japan. This collaboration has lead to joint study of the petrogenesis of subaerial volcanic rocks in the Izu Arc via whole rock geochemical and isotopic studies together with investigation of melt inclusion major, trace and volatile element compositions. • An additional collaboration has also been organized between the PI and Professors Jim Gill, University of California at Santa Cruz, and Liz Widom, Miami University, Ohio, looking at lavas from the Izu rear arc sample suites. The PI will conduct studies of melt inclusions from the same samples used by Gill and Widom, who have been funded by MARGINS to investigate Re-Os and Hf isotope systematics. • We have successfully completed fieldwork, collecting samples from the islands of Izu-Oshima, Niijima, Udonojima and Hachichojima. This involved collection of over one hundred samples of the volcanic rocks of these islands. This material is also available to other MARGINS researchers. Analysis of these samples is currently underway at Shimane and Oregon State Universities. • A web site detailing the field activities and including candid (and uncensored) comments from the field diary of graduate student Mike Rowe, who assisted in field sampling, is under construction as part of the PI's "virtual fieldwork" page. Once complete the page will be linked to the PI's current website at www.geo.oregonstate.edu/people/faculty/kentad.htm. • MARGINS funding has also allowed continued development of laser-ablation ICP-MS techniques for analysis of silicate minerals and melt inclusions at Oregon State University. 		

Figures and Captions



Adam Kent and Jun-Ichi Kimura collecting samples from Izu-Oshima island.