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The MoHole: Journey to the Earth's mantle

MICHIBAYASHI, Katsuyoshi^{1*}, Susumu Umino², Natsue Abe³, Ryo Anma⁴, Toshiya Fujiwara³, Takeshi Hanyu³, Yumiko Harigane⁵, Hiroyuki Kimura¹, Jun-ichi Kimura³, Shuichi Kodaira³, Hidenori Kumagai³, Tomoaki Morishita², Kentaro Nakamura⁶, Toshio Nozaka⁷, Yasuhiko Ohara⁸, Tetsuya Sakuyama³, Takeshi Sato³, Nobukazu Seama⁹, Eiichi Takazawa¹⁰, Masako Tominaga¹¹, Japanese Group for the MoHole¹²

¹Institute of Geosciences, Shizuoka Univeristy, ²Earth Science Course, School of Natural Science, Kanazawa University, ³IFREE, JAMSTEC, ⁴Graduate School of Life and Environmental Science, University of Tsukuba, ⁵Institute of Geology and Geoinformation, AIST, ⁶Precambrian Ecosystem Laboratory, JAMSTEC, ⁷Department of Earth Sciences, Okayama University, ⁸Hydrographic and Oceanographic Department, Japan Coast Guard, ⁹Department of Earth and Planetary Sciences, Kobe University, ¹⁰Department of Geology, Niigata University, ¹¹Department of Geological Sciences, Michigan State University, ¹²Research Institutes and Universities

The MoHole MDP proposal is planned to submit to International Ocean Discovery Program (IODP) in April 2012. This proposal has been compiled based on a series of workshops since 2006 (see http://www.jp.mohole.org). The goal of the MoHole project is to drill completely through intact oceanic crust formed at a fast spreading rate into the upper mantle. Full penetration and sampling of intact crust, Moho, and upper mantle in oceanic lithosphere will provide hitherto unattainable information on the composition and melting of the upper mantle, the construction and cooling of the oceanic crust, the chemical exchange between the crust and oceans, and the linkages between these processes including a global carbon cycle. In this contribution, we summarize the current activities and aspects related to the MoHole project.

MDP: Multi-phase Drilling Projects

Keywords: mantle drilling, oceanic plate, oceanic crust, Moho, uppermost mantle

