

6-rams Multi Anvil Press installed in BL11

SANO, Asami^{1*}, HATTORI Takanori¹, ARIMA Hiroshi³, TABATA Satoshi², KONDO Masahiro², NAKAMURA Akihiro²

¹Japan Atomic Energy Agency, ²Tohoku University, ³Sumitomo Heavy Industries Techno-Fort Co.,Ltd.

Neutron diffraction is a powerful tool to investigate hydrogen in minerals and rocks. New neutron diffraction beamline "PLANET" is currently under construction at BL11 of Materials and Life Science Experimental Facility (MLF) at J-PARC, at Tokai, Ibaraki. One of the unique features of this beamline is that 6-rams multi-anvil high-pressure apparatus (ATSUHIME) is installed, to generate high pressure and high temperature conditions of earth's mantle. Maximum load of each hydraulic ram is 500-ton. Each rams are controlled independently by six plunger pumps. The press will be installed at experimental hutch at Feb. 2012. I will present the current status of the 6-rams multi-anvil apparatus.

Keywords: neutron diffraction, 6-rams press