## Af-P012

## Equation of state of aluminous Mg, Fe-silicate perovskite

# Norimasa Nishiyama[1], Tatsuhiko Harada[2], Shigeaki Ono[3], Takehiko Yagi[4], Takumi Kikegawa[5]

[1] ISSP, Univ of Tokyo, [2] ISSP, Univ of Tokyo, [3] ISSP, Univ. of Tokyo, [4] Inst. Solid State Phys, Univ. Tokyo, [5] IMSS, KEK

We measured unit cell volumes of aluminous Mg, Fe silicate perovskite and magnesium silicate perovskite at same pressure and temperature conditions to evaluate the effect of Al and Fe on the thermo-elastic properties of silicate perovskite. X-ray diffraction experiments at high pressure and high temperature were carried out at BL14C2 in KEK-PF, Tsukuba. The unit cell volumes at ambient condition of aluminous Mg, Fe silicate perovskite and magnesium silicate perovskite are consistent with previous works. The thermo-elastic parameters of equation of state of aluminous Mg, Fe silicate perovskite are now under calculation.