

## GHz ultrasonic velocity measurements of iron beyond the bcc-hcp transition

\*Akira Yoneda<sup>1</sup>, Ryo Tsuruoka<sup>2</sup>, Seiji Kamada<sup>3</sup>, Hidenori Terasaki<sup>2</sup>

1. Institute for Planetary Materials, Okayama University, 2. Graduate school of Science, Osaka Univ., 3. Frontier Research Institute for Interdisciplinary Sciences, Tohoku Univ.

We have been developing GHz ultrasonic measurement in DAC up to ~15 GP both for P and S waves. This project of measuring iron was started after the achievements of preliminary work on KCl and natural olivine up to ~15 GPa (Yoneda et al., JpGU2019). We would like to present (1) additional technical improvements recently, and (2) preliminary experimental results at around 1 GPa.

Keywords: GHz ultrasonic measurement, iron, high pressure