

グローバル COE プログラム
「先進的実験と理論による地球深部物質学拠点」
平成 22 年度 若手成果発表会



平成 23 年 3 月 14 日 (月), 総合研究棟 I 4 階会議室

9:00 成果発表会主旨説明 土屋卓久 (GRC 教授)

9:05 G-COE 現況説明 入船徹男 (拠点リーダー)

第一部 地球深部科学 / Deep Earth Science

~ 司会 丹下慶範 (GRC 助教) ~

9:10 市川浩樹 (GCOE-PD) Self consistent model of core formation and the effective metal-silicate partitioning in the magma ocean

9:25 臼井佑介 (GCOE-PD) D" 不連続面上下における異方性の地震波解析及び鉱物物理モデリングの研究成果について

9:40 Dirk Spengler (SRFC-PD) Exsolution rates of pyrolytic supersilicic garnet

9:55 大内智博 (GCOE-PD) High pressure and temperature fabric transitions in olivine and variations in upper mantle seismic anisotropy

10:10 川添貴章 (GCOE-PD) Experimental study on rheological properties of deep mantle minerals at P-T conditions of lower mantle and mantle transition zone

10:25 休憩 / Break

~ 司会 桑山靖弘 (GRC 助教) ~

10:45 西 真之 (JSPS-PD) Presence of large metastable regions in stagnant slab estimated by slow Si-Al diffusion rate in garnet

11:00 Arnaud Metsue (GCOE-PD) Thermodynamic properties of ferrous Fe-bearing MgSiO_3 perovskite and post-perovskite

11:15 Fulong Wang (GCOE-DC2) P-V-T equation of state of stishovite up to mid-lower mantle conditions

11:30 篠崎彩子 (JSPS-DC2) Effect of H_2 to Mg_2SiO_4 under high pressure and temperature condition

11:45 Yongtao Zou (JSPS-DC2) Phase relations and synthesis of majoritic khorringite garnet at high pressure and high temperature

12:00 昼食 / Lunch

~ 司会 Mathew Whitaker (GRC 助教) ~

13:30 宮内 新 (GCOE-DC1) Numerical Investigations of the effects of spatial variations in physical properties on the mantle convective patterns

13:45 Cuiping Yang (GCOE-DC1) Equation of state of antigortite under high pressure and high temperatures determined by in situ x-ray diffraction

14:00 Chunyin Zhou (GCOE-DC1) Phase relations in $(\text{Mg}_{0.93}\text{Fe}_{0.07})\text{SiO}_3$ to 24 GPa: implications for seismic velocities of subducted harzburgite

14:15 河野義生 (GCOE-RF) Elastic wave velocity measurements on melt-bearing olivine polycrystals by ultrasonic and forced oscillation technique

14:30 Steeve Gréaux (GCOE-PD) Constrain on Ca-rich aluminosilicate systems to the depths of the Earth's mantle transition zone

14:45 休憩 / Break

第二部 高圧力科学 / High-Pressure Science

~ 司会 大藤弘明 (GRC 助教) ~

15:00 Jiaqian Qin (JSPS-PD) Synthesis of gamma-boron and phase boundary of beta and gamma-boron

15:15 町田真一 (GCOE-PD) Intermolecular interactions and symmetrization of hydrogen bond in hydrogen hydrate

15:30 山田明寛 (GCOE-PD) Volumetric change and the elastic wave velocity in vitreous GeO_2 at high pressure

15:45 出倉春彦 (SRFC-PD) 二酸化物における高圧下ポストコチュナイト構造転移

16:00 Li Lei (GCOE-PD) Cation order-disorder phase transitions in LiGaO_2 and disorder-activated Raman spectra in rocksalt-type $\text{Li}_{(1-x)/2}\text{Ga}_{(1-x)/2}\text{Mg}_x\text{O}$

16:15 Leiming Fang (GCOE-DC3) Experimental study on the stability and transition of graphitic C_3N_4 under high pressure and high temperature

16:30 磯部太志 (JSPS-DC1) Synthesis of 1 cm class nano-polycrystalline diamond using a large-volume kawai-type multianvil apparatus

16:45 総評 入船徹男

16:50 閉会 土屋卓久

連絡先: 教育研究高度化支援室

山田 朗 (内線 9651)