## 2014 JAMS Annual Meeting Sessions Outline

Special Session	Outline
S1:Igneous processes and fluids  Conveners M. Hamada: mhamada[a]jamstec.go.jp S. Yoshimura: shumpyos[a]sci.kj.yamagata-u.ac.jp S. Okumura: sokumura[a]m.tohoku.ac.jp T. Kuritani: kuritani[a]mail.sci.hokudai.ac.jp	Fluids in the crust and mantle transfer heat and mass efficiently and thereby cause various types of igneous processes, including production and differentiation of magmas, vapour transport and volcanic eruptions. In this session, we discuss such igneous processes as well as physicochemical properties of fluids. We welcome contributions based on field observation, analysis of natural samples, high P/T experiments and theoretical modeling.
S2:Water Rock Interaction  Conveners N. Tsuchiya:tsuchiya[a]mail.kankyo.tohoku.ac.jp Y. Okuyama:okuyama-gsj[a]aist.go.jp K. Fujimoto:koichiro[a]u-gakugei.ac.jp	The Earth's crust is composed from solid materials and fluids, and Water - Rock Interaction is one of essential processes for understanding Evolution of the Earth. This special session on "Water -Rock Interaction" includes wide range of topics which are from basic science to engineered technologies for underground utilization and development.

Regular Session	Outline
R1:Characterization and description of minerals  Conveners R. Miyawaki:miyawaki[a]kahaku.go.jp M. Akasaka:akasaka[a]riko.shimane-u.ac.jp M. Kurosawa:kurosawa[a]geol.tsukuba.ac.jp	This session focuses on mineral descriptions and analytical methods of earth and planetary materials. Descriptions of occurrence, morphology, internal texture, crystal structure, chemistry, fluid inclusion, solid inclusion, crystal imperfections in minerals, and studies on development of analytical methods for mineral sciences are welcomed.
R2:Crystal structure, crystal chemistry, physical properties of minerals, crystal growth and applied mineralogy (IYCr2014)  Conveners K. Komatsu:kom[a]eqchem.s.u-tokyo.ac.jp K. Sugiyama:kazumasa[a]imr.tohoku.ac.jp A. Yoshiasa:yoshiasa[a]sci.kumamoto-u.ac.jp A. Nakatsuka:tuka[a]yamaguchi-u.ac.jp K. Momma:k-momma[a]kahaku.go.jp M. Okube:makisan[a]lipro.msl.titech.ac.jp	This session covers structural description of natural and synthetic minerals, their growth and dissolution mechanism together with interesting physic-chemical properties. Presentations dealing with advanced analytical techniques for characterizing a variety of mineral structures and their fundamental properties are welcome. In addition, this session is a special session on "International Year of Crystallography 2014 (IYCr2014)". Thus, we will also welcome various topics such as the history of harmony between modern crystallography and earth-and-mineralogical sciences, recent topics, future vision, and educational studies on crystallography and mineralogical science.
R3:High-pressure science and deep Earth's material  Conveners H. Kagi:kagi[a]eqchem.s.u-tokyo.ac.jp T. Nagai:nagai[a]mail.sci.hokudai.ac.jp T. Inoue:inoue[a]sci.ehime-u.ac.jp	It is significantly important to understand the wide range of mineral sciences in the Earth's interior, because dynamics in the Earth's interior must be closely related to not only the evolution of the Earth but also the environment near the Earth' surface. The aim of this session will be to discuss the full range of physical and chemical properties of minerals on the basis of experimental and computational approaches. Targeted materials are not only minerals but also their analogous, amorphous materials and melt.
R4:Mineral sciences of the Earth surface  Conveners K. Fukushi:fukushi[a]staff.kanazawa-u.ac.jp S. Utsunomiya:utu[a]chem.rc.kyushu-u.ac.jp T. Kogure:kogure[a]eps.s.u-tokyo.ac.jp	This session aims to present the latest advances in the mineralogical sciences of the Earth surface. The session will cover physical and chemical characteristics of nanoscale minerals, biomineralization, processes at water-mineral interface, inorganic-organic interactions, and others.
R5:Extraterrestrial materials  Conveners T. Nakamura:tomoki[a]m.tohoku.ac.jp Y. Seto:seto[a]crystal.kobe-u.ac.jp S. Tachibana:tachi[a]ep.sci.hokudai.ac.jp	We welcome contributions on mineralogical sciences of extraterrestrial materials such as presolar grains, cosmic dust, meteorites, lunar samples, and return samples.
R6:Plutonic rocks, volcanic rocks and subduction factory  Conveners M. Ban:ban[a]sci.kj.yamagata-u.ac.jp A. Kamei:kamei-a[a]riko.shimane-u.ac.jp T. Ohba:t-ohba[a]gipc.akita-u.ac.jp	This session focuses on studies of plutonic and volcanic rocks. We expect lively discussions on magma genesis, magma emplacement and their relationship with tectonics, from the viewpoint of various disciplines such as petrology, mineralogy, geochemistry, dating, and geology. This session also welcomes studies on subduction factory that produces continental crust.

Conveners	This session accepts a wide range of petrological, mineralogical, economic geological, and geochemical studies that deal with earth and planetary materials. We expect various discussions about constituent materials of the earth.  (Joint Session with SRG(Society of Resource Geology)
	We call for interdisciplinary contributions dealing with crustal and mantle dynamics at the plate convergent boundaries, including approaches from petrology, structural geology, geochronology, fluid inclusion studies, numerical modeling and isotope geochemistry.