

Topic Sessions	Outline	Presentation Style
<p>T1 : Water-rock interaction (Joint session with SRG))</p> <p>Conveners *tsuchiya[a]mail.kankyo.tohoku.ac.jp okuyama-gsj[a]aist.go.jp koichiro[a]u-gakugei.ac.jp</p>	<p>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.</p>	<p>Oral Poster</p>
<p>T2 : Geologic and geophysical exploration of the Moon: From Apollo to SELENE-2 (Joint session with JSPS)</p> <p>Conveners *tomoko.arai[a]it-chiba.ac.jp ksaiki[a]ess.sci.osaka-u.ac.jp ohtake.makiko[a]jaxa.jp sugiharata[a]jamstec.go.jp</p>	<p>Lunar science has advanced with lunar exploration missions. Returned samples, and data set of the Apollo missions gave us with a basic understanding of the Moon. Today, geochemical and geophysical data set of the Japanese Kaguya mission have become a new standard of lunar science. Lunar landing mission, SELENE-2 is currently being planned to further explore lunar interior/surface, and to demonstrate new implications and hypotheses based on the Kaguya data. In this session, presentations on analytical, experimental, theoretical and remote-sensing studies related to lunar science are welcome. Scientific objectives and landing site candidate of the SELENE-2 will be also discussed.</p>	<p>Oral Poster</p>
<p>T3: Evaluation of long-term activity and disaster measures of active volcanoes in East Japan</p> <p>Conveners *hasegawt[a]mx.ibaraki.ac.jp t-ohba[a]gipc.akita-u.ac.jp fujiwara[a]mx.ibaraki.ac.jp</p>	<p>Kirishima volcano, rank-B active volcano in Kyushu, West Japan, erupted this year. On the other hand, there are many potentially hazardous, rank-B volcanoes in East Japan. Such as, Bandai, Azuma and Adataro volcanoes, located at Fukushima, successively erupted and claimed many lives in Meiji Period. In this session, we discuss the disaster measures of active volcanoes (not only rank-B) in East Japan based on long-term evaluations of volcanic activity. We welcome not only geological and petrological studies but also theoretical and experimental contributions.</p>	<p>Oral Poster</p>
<p>T4: Rheology, from crust to core</p> <p>Conveners *katayama[a]hiroshima-u.ac.jp ohuchi[a]sci.ehime-u.ac.jp yunishi[a]sci.ehime-u.ac.jp</p>	<p>Recently, many studies on rheological properties of minerals, which form the interior of the Earth, have been performed. We need to revisit the dynamics of the Earth from the viewpoint of rheology, and we seek to formulate future directions of the study of rheology. We welcome contributions on rheological properties of the lithosphere, asthenosphere, and core of the Earth, from a broad variety of disciplines including mineral and rock physics, geology, geodynamics and any other relevant fields. Topics related to transportation properties of materials in the interior of the Earth are also welcomed.</p>	<p>Oral Poster</p>
<p>T5: Dynamism of crustal fluids: Influences of fluids on deformation and metamorphic processes in rocks</p> <p>Conveners *kokamoto[a]mail.saitama-u.ac.jp torutake[a]mail.sci.hokudai.ac.jp</p>	<p>Existence and migration of fluids must be necessary for crustal dynamics, which can be comparable with bloods in human being. While fluids, in which a lot of chemical elements can be dissolved, play an important role in element migration in rocks, fluid migration itself causes high-speed heat migration (i.e. heat advection), thereby causes deformation and metamorphism in the surrounding rocks. In particular, the relation between crustal fluids and inland earthquakes has recently been suggested. In this topic session, petrologists, structural geologists and geophysicists will all get together, and discuss dynamism of fluids.</p>	<p>Oral Poster</p>
<p>T6: Fluids in igneous processes</p> <p>Coveners *shumpyos[a]ep.sci.hokudai.ac.jp sokumura[a]m.tohoku.ac.jp kuritan[a]sci.osaka-cu.ac.jp</p>		<p>Oral Poster</p>
<p>T7: Rocks and mineral resources of Mongolia and Northeast Asia (Joint session with SRG and Mongolian SEG)</p> <p>Conveners *osanai[a]scs.kyushu-u.ac.jp y-watanabe[a]aist.go.jp M. smsatis[a]ipc.shizuoka.ac.jp</p>	<p>During the last decade, detailed studies of geology, petrology and mineralogy of Mongolia and NE-Asia shed light on the tectonic evolution of Asian continent. Various kinds of quite important mineral resources in these areas also formed under their complicated geologic and tectonic settings. In this session, we would like to have multi-disciplinary discussions on geology and mineral resources in NE-Asia with highly motivated topics in the wide field of Earth Sciences including geology, petrology, mineral resources, tectonics, etc.</p>	<p>Oral Poster In English</p>
<p>T8: A Moho Sketch: What we expect to obtain through ultra-deep drilling in ocean?</p>	<p>A long-standing ambition of scientific ocean drilling is to drill an ultra-deep hole (>6 km deep) in an intact portion of oceanic lithosphere, through the crust to the Moho and into the uppermost mantle. Three sites have been selected for the project, with the aim of</p>	<p>Oral Poster</p>

<p>Conveners *sekmich[a]ipc.shizuoka.ac.jp abenatsu[a]jamstec.go.jp tachi[a]eps.s.u-tokyo.ac.jp t-kawakami[a]kueps.kyoto-u.ac.jp hiraga[a]eri.u-tokyo.ac.jp</p>	<p>answering fundamental questions about the dynamics of the Earth and global elemental cycles. This session includes interdisciplinary presentations by a wide range of specialists as we explore ultra-deep drilling as a scientific tool with which to investigate the evolution of our planet.</p>	
Regular Sessions	Abstract	Presentation Style
<p>R1: Characterization and description of minerals Conveners *miyawaki[a]kahaku.go.jp akasaka[a]riko.shimane-u.ac.jp kurosawa[a]geol.tsukuba.ac.jp</p>	<p>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.</p>	<p>Oral Poster</p>
<p>R2: Crystal structure, crystal chemistry, physical properties of minerals, crystal growth and applied mineralogy Conveners *kazumasa[a]imr.tohoku.ac.jp yoshiasa[a]sci.kumamoto-u.ac.jp nagase[a]mail.tains.tohoku.ac.jp</p>	<p>This session covers structural description of natural and synthetic minerals, their growth and dissolution mechanism together with interesting physic-chemical properties. Advanced analytical techniques for characterizing a variety of interesting mineral structures and their fundamental properties are welcomed.</p>	<p>Oral Poster</p>
<p>R3: High-pressure science and deep Earth's material Conveners *inoue[a]sci.ehime-u.ac.jp kagi[a]eqchem.s.u-tokyo.ac.jp nagai[a]mail.sci.hokudai.ac.jp</p>	<p>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.</p>	<p>Oral Poster</p>
<p>R4: Earth's surface materials, environments, and life Conveners *fukushi[a]kenroku.kanazawa-u.ac.jp murakami[a]eps.s.u-tokyo.ac.jp tomsato[a]eng.hokudai.ac.jp</p>	<p>This session aims to present the latest advances in the mineralogical sciences of the Earth surface, covering crystal structure, chemical composition, surface property, dissolution, precipitation, biomineralization, mineral-water-atmosphere-microbe interactions, inorganic -organic interactions, and others.</p>	<p>Oral Poster</p>
<p>R5: Extraterrestrial materials Conveners *yuri[a]ep.sci.hokudai.ac.jp kaiden[a]nipr.ac.jp tachi[a]eps.s.u-tokyo.ac.jp</p>	<p>Oral and poster contributions on any aspects of mineralogical sciences of extraterrestrial materials such as presolar grains, cosmic dust, meteorites, and lunar samples are invited.</p>	<p>Oral Poster</p>