## 2021 Session Outline

Special Session		Outline	Style
S1: Earth materials science related to igneous processes Conveners Morihisa Hamada: mhamada[a]jamstec.go.jp	Recent advances i magmas, such as p magmas, volcanic remarkable. Most of to nano-structure of and so on. The pur welcome multidisc high P/T experimen	n Earth materials science to decode igneous processes and geodynamics of nartial melting of mantle and generation of primary magmas, differentiation of eruption, ore formation, contact metamorphism and metasomatism, are of these studies are based on geochemical analysis and observation of the micro- f mantle xenoliths, volcanic and plutonic rocks, volcanic gases, hot spring waters pose of this special session is to discuss the latest studies and to promote it. We iplinary contributions based on field observations, analyses of natural samples, nts and theoretical modelling to better understand igneous processes.	Oral and Poster
S2: Water Rock Interaction Conveners Noriyoshi Tsuchiya: noriyoshi.tsuchiya.e6[a]tohoku.ac.jp Yasuko Okuyama: okuyama.gsj[a]gmail.com Koicihro Fujimoto: koichiro[a]u-gakugei.ac.jp Tetsuo Kawakami: kawakami.tetsuo.3e[a]kyoto-u.ac.jp		Topic session "Water – Rock Interaction" involves multidisciplinary research for roles of "fluids" to the Earth Processes, related to metamorphic rocks, volcanic rocks, hydrothermal alteration, ore deposit, hydrothermal experiments, and transport phenomena of fluids. Research methods are also multidisciplinary research methods, such as field survey, experiment, numerical calculation and modeling, will be expected. This topic session also includes geological application such as mineralogical study of radioactive decontamination, nuclear waste geological disposal and carbon dioxide capture and storage and geothermal energy.	Oral and Poster
S3: Tectonics of East Asia Conveners Yasutaka Hayasaka: hayasaka[a]hiroshima-u.ac.jp Kosuke Kimura: kimurakoske[a]hiroshima-u.ac.jp Tomoyuki Shibata: tomo33hk[a]hiroshima-u.ac.jp Kaushik Das: kaushik[a]hiroshima-u.ac.jp		Recently, few-km size lenticular bodies of cratonic complex including Neoarchean 2.7 Ga granite gneiss, the oldest rock body in Japan, were discovered in the Tsuwano area of Shimane Prefecture SW Japan (Kimura et al., 2019a, b, JGSJ; 2021, EPSL). This oldest basement rock complex is a key unit to understand the tectonic lineage of Japanese Islands with respect to the East Asian cratonic rocks. We welcome researches on tectonics in East Asia to deepen the discussion on this discovery.	Oral and Poster
<ul> <li>S4: Earth materials science related to plate convergence region</li> <li>Conveners Toru Inoue: toinoue[a]hiroshima-u.ac.jp Jun-ichi Ando: jando[a]hiroshima-u.ac.jp Ikuo Katayama: katayama[a]hiroshima-u.ac.jp </li> </ul>		Hiroshima Institute of Plate Convergence Region Research (HiPeR)" was established in 2017, and HiPeR has been promoting Earth materials science related to plate convergence region where important various phenomena are intensively occurring. This special session will be held to commemorate this conference in Hiroshima University. We welcome a wide range of researches aiming to clarify the phenomena such as "rock and water circulation", "elementary process of fault movement" and "magma generation process" by "experiment", "observation" and "field survey / observation of natural samples".	Oral and Poster
Regular Session		Outline	Style
R1: Characterization and description of minerals Conveners Koichi Momma: k-momma[a]kahaku.go.jp Toshiro Nagase: toshiro.nagase.d8[a]tohoku.ac.jp Yasuyuki Banno: y-banno[a]aist.go.jp Masanori Kurosawa: kurosawa[a]geol.tsukuba.ac.jp Hiroshi Kitawaki: kitawaki[a]cgl.co.jp		This session focuses on mineral descriptions, characterization, 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, studies on gem identification, and studies on development of analytical methods for mineral sciences are welcomed. <b>Joint Session with The Gemmological Society of Japan.</b>	Oral and Poster
R2: Crystal structure, crystal chemistry, physical properties of minerals, crystal growth and applied mineralogy Conveners Kazuki Komatsu: kom[a]eqchem.s.u-tokyo.ac.jp Mariko Nagashima: nagashim[a]yamaguchi-u.ac.jp Akira Yoshiasa: yoshiasa[a]kumamoto-u.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.	Oral and Poster
R3: High-pressure science and deep Earth's material Conveners Takaaki Kawazoe: kawazoe[a]hiroshima-u.ac.jp Ryosuke Sinmyo: sinmyo[a]meiji.ac.jp Takeshi Sakai: sakai[a]sci.ehime-u.ac.jp Masayuki Nishi: nishimasa[a]ess.sci.osaka-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.	Oral and Poster

R4: Mineral sciences of the Earth surface Conveners Keisuke Fukushi: fukushi[a]staff.kanazawa-u.ac.jp Hiroshi Sakuma: SAKUMA.Hiroshi[a]nims.go.jp Jun Kawano: j-kawano[a]sci.hokudai.ac.jp Tadashi Yokoyama: t-yokoyama[a]hiroshima-u.ac.jp Satoshi Utsunomiya: utsunomiya.satoshi.998[a]m.kyushu-u.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.	Oral and Poster
R5: Extraterrestrial materials Conveners Tomoki Nakamura: tomoki.nakamura.a8[a]tohoku.ac.jp Yusuke Seto: seto[a]crystal.kobe-u.ac.jp Shogo Tachibana: tachi[a]eps.s.u-tokyo.ac.jp	We welcome contributions on mineralogical sciences of extraterrestrial materials such as presolar grains, cosmic dust, meteorites, lunar samples, and return samples.	Oral and Poster
R6: Plutonic rocks, volcanic rocks and subduction factory Conveners Masao Ban: ban[a]sci.kj.yamagata-u.ac.jp Atsushi Kamei: kamei-a[a]riko.shimane-u.ac.jp Tsukasa Ohba: t-ohba[a]gipc.akita-u.ac.jp Tatsuhiko Kawamoto: kawamoto.tatsuhiko[a]shizuoka.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.	Oral and Poster
R7: Petrology, Mineralogy and Economic geology Conveners Norikatsu Akizawa: akizawa[a]aori.u-tokyo.ac.jp Takuya Echigo: echigo[a]gipc.akita-u.ac.jp	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).	Oral and Poster
<b>R8: Metamorphic rocks and tectonics</b> <b>Conveners</b> Shunsuke Endo: s-endo[a]riko.shimane-u.ac.jp Fumiko Higashino: higashino.fumiko.2m[a]kyoto-u.ac.jp	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.	Oral and Poster