

Session proposal for IMA2022

**Mineralogy, petrology, and geochemistry of C-type asteroid Ryugu and Solar-System small bodies**

The JAXA's Hayabusa2 spacecraft explored C-type near-Earth asteroid (162173) Ryugu and successfully returned the first sample from C-type asteroid in December 2020. The amount of returned sample exceeds 5 grams, which is the largest ever from deep space. Detailed analysis of Ryugu samples, led by the Hayabusa2 project and JAXA, has been in progress since June 2021. The initial analysis phase by the project ends in June 2022, and the sample will be available to the community. This session will focus on new mineralogical, petrological, and geochemical findings from Ryugu samples, their comparison with the meteorite collection, and implication to origin and evolution of the asteroid and the Solar System. Contributions highlighting analysis of related pristine samples, sample science of Solar-System small bodies, and technical development for analysis of primitive extraterrestrial samples are also welcome.