

IAF SPACE EXPLORATION SYMPOSIUM (A3)  
Interactive Presentations - IAF SPACE EXPLORATION SYMPOSIUM (IP)

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ISPACE'S 2022 LUNAR MISSION AND FUTURE CAPABILITIES

**Abstract**

ispace inc. endeavors to expand humanity's economic sphere beyond Earth by discovering and utilizing resources on the Moon. Utilization of lunar resources, particularly water ice, will be crucial to the economic development of cislunar space and enabling further human exploration to the Moon, Mars and beyond.

Over the past five years, ispace inc. has significantly expanded its global presence. In addition to further expanding our headquarters in Tokyo, ispace is proud to have created major subsidiaries in Luxembourg and, as of 2021, the United States.

First, our presentation will update the global space community on progress made towards ispace's M1 and M2 missions facilitated by the revolutionary Hakuto-R lander currently undergoing assembly and integration. The presentation will provide an overview of the key science objectives accomplished by our upcoming missions and illustrate the payloads that will be flown to Lacus Somnorum and the Lunar South Pole.

Next, the presentation will describe advancements of ispace's lunar program, showcasing advancements in lander and rover design. Specifically, the presentation will detail ispace inc.'s expanded presence in the United States and the plans for our advanced lunar lander program, which will feature significantly greater capability compared to existing offerings. We intend to present how our U.S.-based advanced lander program will facilitate sophisticated prospecting for lunar water and, in turn, the creation of a water-based lunar supply chain.