

Space BD

Completes Transportation of Customer Samples to ISS in Life Science Business

Samples launched on SpaceX's Crew Dragon supply ship



CRS-26 launch @NASA

Tokyo - Space BD, a leading Japanese space startup, announces that the transportation of the samples from companies and research institutes in Japan and overseas to the International Space Station (ISS) has been completed in the life science business utilizing the Japanese Experiment Module "Kibo" on the ISS.

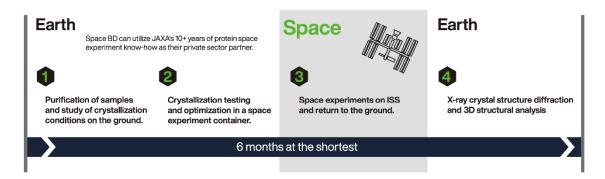
The sample was loaded aboard SpaceX's Crew Dragon supply ship as part of NASA's 26th Commercial Resupply Service mission (CRS-26), and was launched from Kennedy Space Center in Florida, USA on Sunday, November 26, 2022 at 2:20 p.m. EST.

Space BD leads search for crystallization conditions on the ground, examination of suitability for space experiments, sample filling work, etc. in partnership with the Japan Aerospace Exploration Agency (JAXA) and MARUWA Foods and Biosciences. Protein Crystal Growth experiments have already started on the launched sample, and it is scheduled to return to the ground around mid-January 2023.

About Space BD life science business and protein structure analysis service

Space BD utilizes the onboard experimental facilities of the ISS "Kibo" to develop a life science business "Protein Structure Analysis Service" using technology for producing high-quality protein crystals that takes advantage of the characteristics of microgravity space. This service supports the determination of target protein structural information and the verification of interactions with compounds, etc., which are important in drug discovery research.

In the selection of candidate compounds, which requires a huge amount of time in the drug discovery process, conducting experiments based on high-quality protein structural information greatly shortens the lead time and contributes to cost reduction.



From the start of service in May 2021 to December 2022, we have supported JAXA's academy public offering project, and supported the launch of a total of more than 200 samples (including 22 Space BD private projects).



Loading CRS-26 samples at NASA Kennedy Space Center (Back: Space BD employee)

Private sector project in this time (CRS-26)

Through collaboration with channel partners HelioX Cosmos(Taiwan) and Airvantis (Brazil), we launched samples of four domestic and overseas users, including users in Taiwan and Brazil.

In addition to protein crystal growth for the purpose of drug discovery, this launch will also carry a protein crystallization solution that the students of Iwate Prefectural Hanamaki Kita High School studied as part of an educational program. About 20 high school students volunteered to participate, fostering their interest in space experiments and life sciences.

Space BD will contribute to the future of people by proposing new possibilities of space in life science research.

■ Comment from Shuji Yamazaki, Business Development at Space BD



This is our second launch. We prepared the samples entrusted to us by our customers at the launch site in the United States with our partners JAXA and Maruwa foods. We will continue to strive to improve business development and service quality in order to meet the various needs of our customers, including drug discovery research.

■ About MARUWA Foods and Biosciences, Inc.

Company : MARUWA Foods and Biosciences, Inc.

Address : 170-1 Tsutsui-cho, Yamatokoriyama-shi, Nara, Japan

Management : Koji Inaka, President

Establishment : January, 1974

Business : Provide services and products related protein

URL : https://maruwafoods.jp/

■ About Space BD

Space BD is a space business development firm that aims to be a company that represents Japan and develops a world-class industry. Since its foundation in 2017, Space BD has provided a one-stop service from proposing business plans to providing engineering support regarding space utilization, including the International Space Station (ISS). Space BD provides broad support as a space business development firm with over 100 projects to date, including the handling of approximately 50 satellites.

URL: https://space-bd.com/