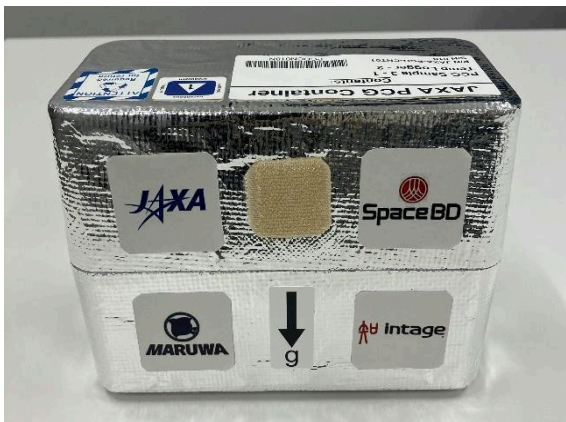


11th October, 2024
Space BD Inc.

Space BD Protein Experiment Samples for AI Drug Discovery Launched to ISS

Samples for the same experiment conducted by Gakushuin Boys' Senior High School and Girls' Senior High School students also on board, launched on November 5

Space BD Inc., a leading space company providing various services including satellite launches and microgravity research on the ISS, has launched samples for AI drug discovery research with Intage Healthcare Inc. Comparative samples for the same experiment conducted by Gakushuin Boys' Senior High School and Girls' Senior High School students were launched to the International Space Station (ISS). These samples were loaded onto the Dragon cargo spacecraft and launched on the Falcon 9 rocket as part of NASA's 31st Commercial Resupply Service mission (SpX-31), operated by SpaceX. The launch took place on Tuesday, November 5, 2024, at 11:29 AM Japan Standard Time. This initiative is part of Space BD's life science business utilizing the Japanese Experiment Module "Kibo" on the ISS.



Left: Container loaded with samples for this launch. Right: Scene of sample filling operation at NASA Kennedy Space Center (Center: Space BD employee)

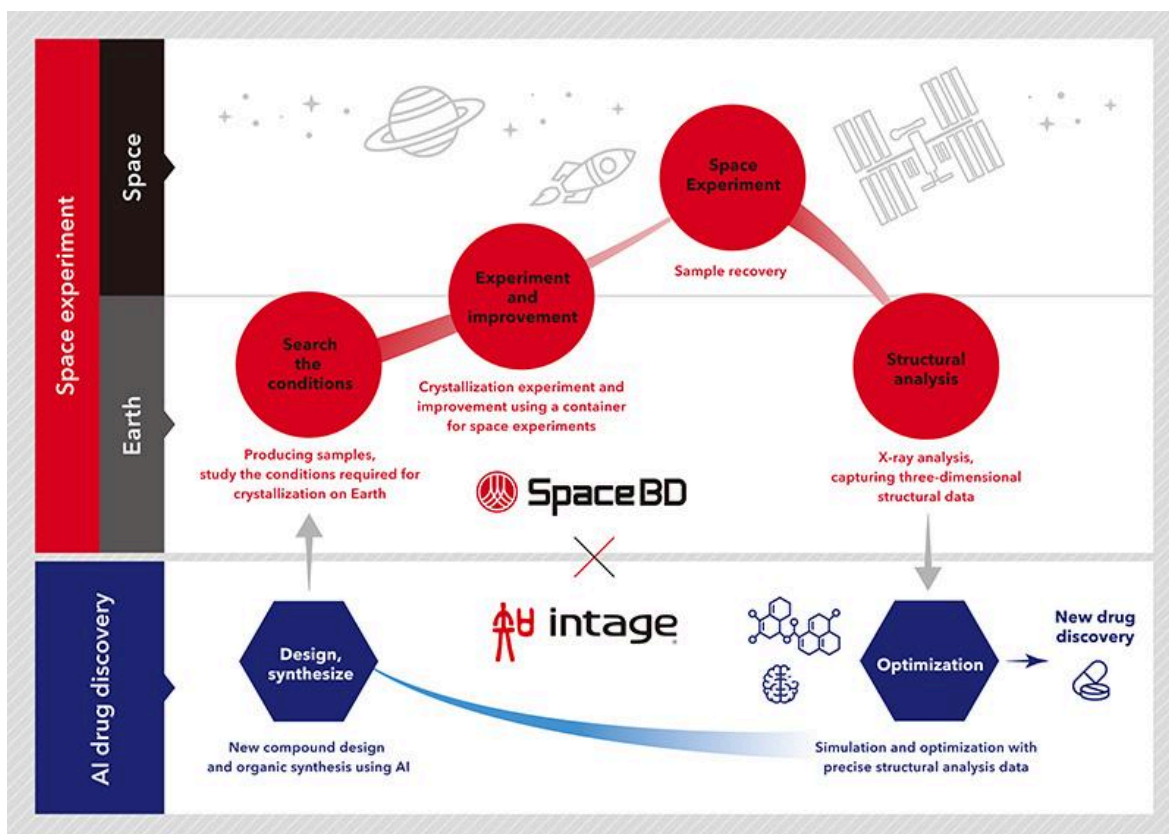
Space BD has supported five launches in its Life Science business to date. The samples launched includes over 480 sets from JAXA's open call for academic research proposals and 37 paid-use sample sets commissioned to Space BD.

Our Space Experiment × AI Drug Discovery Initiative

Space BD signed a joint research agreement with Intage Healthcare in 2022 and has been advancing a first-of-its-kind initiative in the world, combining AI drug discovery with space experiments.

By utilizing the microgravity environment of the International Space Station (ISS), it becomes possible to generate high-quality protein crystals that cannot be obtained through ground-based experiments, allowing for the acquisition of precise structural

information. Our current initiative aims to develop compound optimization techniques by combining the detailed structural information obtained from space experiments with AI drug discovery technology that has gained global attention. This is expected to significantly contribute to improving the accuracy of AI drug discovery models. The goal of the initiative is to expand the potential of space experiments by encouraging participation in space-based drug discovery research, and contributing to the optimization of development costs and timelines in pharmaceutical research.



Collaboration with Gakushuin Boys' Senior High School and Girls' Senior High School

In August 2024, as part of the collaborative efforts outlined in the industry-academia partnership agreement signed between Gakushuin University and Space BD in March 2022, we conducted a 'Protein Crystallization Workshop.' This workshop was organized for high school students as part of the integrated education program offered by the Faculty of Science at Gakushuin University. Twenty high school students from both the boys' and girls' high school divisions participated in crystallization experiments during the workshop. After the samples return, we plan to conduct comparative experiments between the samples crystallized on Earth and those crystallized in the space environment.



Students from Gakushuin Boys' Senior High School and Girls' Senior High School conducting protein crystallization experiments

■ About Space BD

Space BD is a one-stop service provider of various solutions to foster commercial utilization of space. Ranging from launch of small satellites with commercial launchers as well as via the International Space Station, to supporting pharmaceutical research with protein crystallization in microgravity, Space Bd can support everything from business plan formulation and market research to hands-on technical operations. As of Oct 2024, Space BD has supported over 80 satellite projects from and over 500 related missions.

U R L : <https://space-bd.com/en/>