

||||| 特集：国際宇宙ステーションの応用利用 |||||
(技術紹介)

宇宙実験でタンパク質結晶生成実験を成功に導く技術

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The Key Technology of the Protein Crystallization in Space

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Abstract

JAXA, Japan Aerospace Exploration Agency, has been conducting the High-quality Protein Crystallization Project using International Space Station; ISS. JAXA has developed total technologies for obtaining high-quality protein crystals in space. The success rate of crystallization has been significantly increased to about 80% through the project. The most remarkable point was that maximum resolution was still improved by space experiment even if the ground-crystal showed excellent resolution. For Successful space experiment, total technical improvement is crucial. Especially, it is important to choose the sample which can enhance the effect of microgravity.