SPACE EDUCATION AND OUTREACH SYMPOSIUM (E1)
On Track - Undergraduate Space Education (3)

Author: Prof. Shinichi Kimura
Tokyo University of Science, Japan, skimura@rs.noda.tus.ac.jp

Prof. Ichiro Ueno
Tokyo University of Science, Japan, ich@rs.tus.ac.jp
Prof. Hideyuki Suzuki
Tokyo University of Science, Japan, suzukih@rs.tus.ac.jp
Prof. Tomoaki Tatsukawa
Tokyo University of Science, Japan, tatsukawa@rs.tus.ac.jp
Prof. Kozo Fujii
Tokyo University of Science, Japan, fujii@rs.tus.ac.jp
Prof. Makoto Yamamoto
Tokyo University of Science, Japan, yamamoto@rs.kagu.tus.ac.jp
Prof. Chiaki Mukai
Tokyo University of Science, Japan, mukai_chiaki@admin.tus.ac.jp

SPACE EDUCATION PROGRAM OF THE TOKYO UNIVERSITY OF SCIENCE A TRIAL FOR HANDS-ON SPACE EDUCATION USING REALISTIC MATERIALS

Abstract

Effective education on space technology and science is essential to the progress of future space activities. The Tokyo University of Science has conducted various space science and technology activities from basic theoretical research to execution of space missions. If we effectively utilize such experiences and resources of various space activities for space education, we expect to achieve real-time and comprehensive space education using realistic educational materials. Based on this idea, the Tokyo University of Science started the "TUS Space Education Program (T-SEP)"in 2015. In addition to lectures on space technology and science, the program also includes hands-on training of handling on-board equipment and active learning utilizing parabolic microgravity flight. During such active learning process, students learn the complete process involved in space missions, such as mission design, implementation, project management, and operations regarding various constraints. Such learning is very effective for acquiring individual knowledge of space technology and science and also attaining skills required for space missions. This paper introduces the outline of the T-SEP of the Tokyo University of Science and the results of the program that was performed from 2015 to 2016