MICROGRAVITY SCIENCES AND PROCESSES SYMPOSIUM (A2) Facilities and Operations of Microgravity Experiments (5)

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MATERIALS SCIENCE PROCESSING FACILITIES FOR SPACE APPLICATIONS IN CHINA

Abstract

This paper reports on series facilities of microgravity materials processing and research experiments in China. The first facility for space materials science research in China was developed in the middle of 1980s, and more than ten types of different materials were processed by using this facility under microgravity onboard the Chinese 9th recoverable satellite in 1987. Since then, various facilities of microgravity materials experiments had been developed for space applications onboard both the recoverable satellites and manned spacecrafts in China. In this paper, several typical facilities designed by Chinese scientists and some space experimental results will be introduced. Besides, a brief prospect of the Chinese future plan for space materials science will be given in this paper.