oral

SPACE EXPLORATION SYMPOSIUM (A3)

Moon Exploration – Part 1 (2A)

Author: Dr. Ming Li China Academy of Space Technology (CAST), China

Prof. Zezhou Sun China Academy of Space Technology (CAST), China

OVERVIEW OF CHINA CHENG'E – 3 MISSION AND DEVELOPMENT OF FOLLOW-ON MISSION

Abstract

The Chinese Lunar Exploration Program is putting forward and has already achieved great progress. The Chang'E - 3, launched on December 14th, 2013, has landed successfully near the Rainbow Bay on the Moon. Then on December 15th, the Lunar Rover named Yutu left her footprints on the surface of the Moon. After 40 years of silence, the human being gave the Moon a warm embrace. Soft landing and rover exploration of Chang'E-3 spacecraft is the second step in Chinese Lunar Exploration Program which includes orbiting, landing and sample returning to the Earth. The China Academy of Space Technology (CAST) takes in charge of the overall development of the Chang'E - 3 spacecraft. This paper introduces the mission characteristics and its achievements, specifically the results of the flight procedure, the soft landing procedure, the separation between the Lander and the Rover, the sleeping and waking up procedure, the working state of the Lander and the Rover exploration on the surface of the Moon. This paper also summarizes the technical innovations of the Chang'E - 3 spacecraft. Some progress and status of Chang'E follow-on mission development is also introduced. China will take responsibility for the space exploration and play an important role in making the space development beneficial for all humankind.