

SPACE EXPLORATION SYMPOSIUM (A3)
Mars Exploration – missions current and future (3A)

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CONCEPT OF SAMPLE RETURN MISSION FOR MARS SURFACE EXPLORATION

Abstract

The quest for searching life on the other planet has been become the passion of modern science and all the people of earth wants to know, is the life possible on other planet? Till now we are unable to find out. Mars is one of the attractive planet in the universe where we supposed to possibilities of life. Several missions have been carried out to check whether the possibilities of life. This paper focuses on surface exploration of the Mars by taking the samples of soils and Rocks of the Martian surface and take it to the earth for the deep study and facts about the Martian surface with the help of Conceptual Rover. The designing of the rover such that it can dig the Martian soil and rock and take it to the separate compartment in the rover. The designing of the compartment in such a way that the samples could not be contaminated. If the mission success to bring the samples to the earth for the deeper study of the samples and compare it to the earth so that we would be able to know about the condition of the Martian surface and is the surface of the Mars habitable or not? If the samples match with earth's surface several other mission on the basis of it could be carried out and the future colonies could be established on the Mars.