

EXPLORATION OF MARTIAN SURFACE USING AN AUTONOMOUS OCTOCOPTER

Full Name: Kartik Shah
Affiliation (if any): University of Petroleum and Energy Studies
Mailing Address: S.W 31 Soamibagh Agra
Mobile no : +91- 9557630435
Email: kshah41976@gmail.com

Abstract:-

To make an Octocopter that will land with the rover that will be deployed in 2018/20. This Octocopter will carry a set of instruments and will hover upto a certain height of 20-65m or more.

- 1) The main aim of the Octocopter is the analysis of the Martian atmosphere for the presence of methane or other gases and its composition.
- 2) It will also help the rover by delivering it samples of the Martian soil. Ex:- Suppose right now this Octocopter is present on mars it can help the curiosity rover by directly taking samples of soil in Mount sharp base and deliver it to the rover.
- 3) It can act as an orbiter that will send HD images back on Earth.

This Octocopter can also help in investigation of Mars moon's – Phobos and Deimos. It can also be used for studying and going deep down in the atmosphere of Titan and Enceladeus.