

EARTH OBSERVATION SYMPOSIUM (B1)
Interactive Presentations (IP)

Author: Mr. Hemant Singh
Birla Institute of Technology and Science(BITS), India

HYPERSPETRAL IMAGING IN CUBESATS : A POSSIBILITY AND PROMISING TECHNOLOGY
FOR DEVELOPING NATIONS**Abstract**

Remote sensing has been one of the most important application of satellites. Hyperspectral imaging was a milestone in remote sensing as the kind and amount of data it provided increased the importance and applications of remote sensing. Cubesats have been helping educational institutes in gaining hands on experience of building a satellite and in majority of cases the satellites had educational and experimental purpose. Recently institutions, space agencies and upcoming startups are using Cubesat platform for commercial purposes. In this paper we will be exploring the possibility of hyperspectral imaging in Cubesats, which was impossible few years ago, but the breakthrough in MEMS and in the field of low power spectroscopy sensors have shown that in coming years this will be a achievable goal. This promising technology if made available at such low cost using Cubesat platforms will make this technology accessible to developing nations for agriculture, mineral exploration, urban planning etc. which can play a key role in accelerating the development of these nations