IAF MATERIALS AND STRUCTURES SYMPOSIUM (C2) Advancements in Materials Applications and Rapid Prototyping (5)

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DESIGN & PERFORMANCE ANALYSIS OF A 3D PRINTED MODEL ROCKET

Abstract

Since 2014 there is an increase in the intensity of awareness about 3D printing throughout the country. The major challenge that we faced is the amount of precision that this technology can provide in getting the stability. This paper analyses how 3D printing technology can be used in aerospace industries, not only for making small Satellite or components but also the complete structure of the rocket with less economical constrain. Main objectives of this paper are to design and manufacture a model rocket using 3D printing technology with high accuracy with no payload present in it. And also examine how it can lead us to achieve a better flight characteristic after the launch is executed. It is expected to achieve an apogee of 1800 m.