

SPACE PROPULSION SYMPOSIUM (C4)  
Advanced Propulsion : Non Chemical, Non Electric (6)

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DEVELOPMENT OF EXPERIMENTAL STUDY TO THE MAGNETOHYDRODYNAMICS (MHD)  
ACCELERATOR

**Abstract**

Experimental study of MHD accelerator experiences two different phases. In the first stage, a MHD accelerator was used to accelerate the work gas as an auxiliary equipment to realize higher Mach number in the test section. In the second period, the MHD accelerator is studied specially for the MHD energy bypass scheme in aircraft application. I analyze the design and the performance of various MHD accelerators in both the first phase and the second one. Then I propose my design of the experimental equipment for further research.