

IAF SPACE PROPULSION SYMPOSIUM (C4)  
Propulsion Technology (1) (3)

Author: Dr. George Schmidt  
NASA Glenn Research Center, United States, george.schmidt@nasa.gov

## KEYNOTE: PROPULSION TECHNOLOGY DEVELOPMENT ACTIVITIES AT NASA

**Abstract**

This presentation will provide an overview of all the current propulsion technology development activities taking place at NASA. It will cover all the work being performed at the principal NASA field centers responsible for propulsion system research and development for space applications, particularly Glenn Research Center and Marshall Space Flight Center. The technologies that will be addressed include chemical propulsion using cryogenic propellants, nuclear thermal propulsion and electric propulsion. The presentation will also describe current work in developing technologies to enable extraction, processing and utilization of lunar and extraterrestrial resources for propellant. In addition to outlining the current NASA projects focused on NASA technology, the presentation will also address the key challenges associated with the development of these technologies, especially at the component and subsystem level.