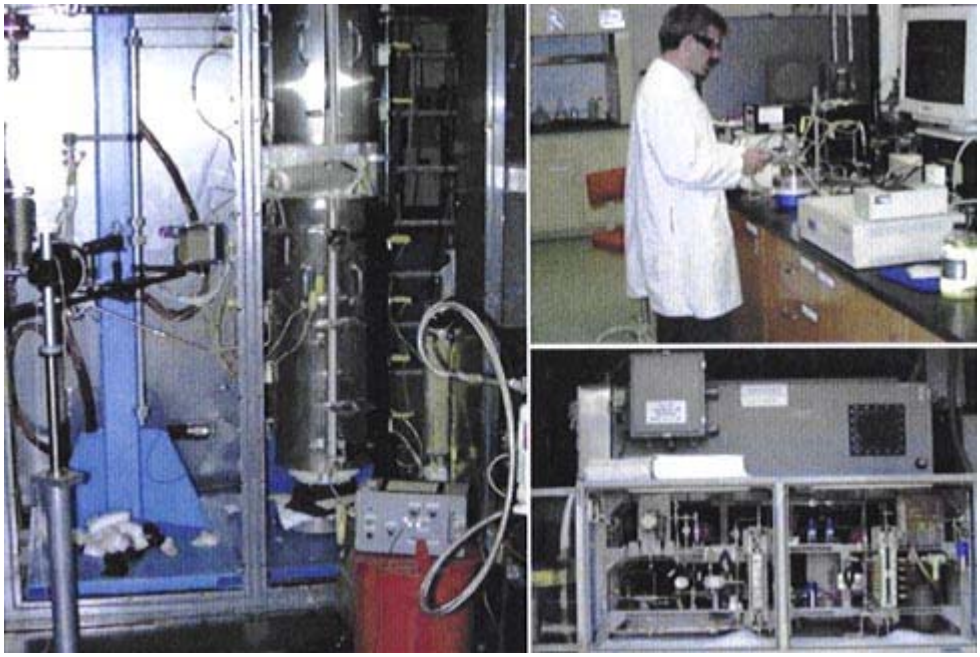
NATIONAL AEROSPACE FUELS RESEARCH COMPLEX



Description:

A state-of-the-art set of facilities that enables fundamental research, exploratory development and in-house advanced development of fuels, fuel additives and fuel system components for turbine engine powered, scramjet powered hypersonic and advanced combined cycle propulsion systems. Facilities include analytical chemical analysis equipment, bench scale fuel system component simulators, reduced scale fuel system simulators for aircraft and advanced hypersonic vehicles, and advanced modeling and computational systems. The facilities are used to evaluate affordable technologies to increase fuel heat sink, improve operations at low temperatures, improve altitude relight, reduce pollutant emissions and study aircraft fuel system safety. Analytical and simulation tools are used to solve user problems with legacy systems used today.

Purpose:

To develop a better understanding of new and developmental fuel and fuel additive performance under a wide variety of relevant conditions. Test and modeling areas include physical properties, combustion/emissions performance, high temperature behavior (thermal stability), low temperature behavior, biological growth, fuel condition sensors, and thermal management.

Products:

Test data and modeling results on existing and developmental fuels and additives under a wide range of conditions.

Availability:

Available for joint projects with other U.S. Government agencies, U.S. industry and universities on an as-available basis.

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