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Aviation Fuels Property Prediction App

A cost-efficient application working with 2D chromatography rapidly and accurately determines aviation fuel properties like density, viscosity, and flash point, enabling easier integration into aeronautic and military/defense operations.

Researchers at Purdue University have developed a application for rapid determination of aviation fuel properties. Current tests are time consuming and require large volumes of fuel for testing. The application created by Purdue researchers works in conjunction with a 2D chromatography to accurately determine fuel properties including density, viscosity, net of heat combustion, flash point, and freezing point. The program has been tested in Purdue University's Fuel Laboratory of Renewable Energy (FLORE). This cost-efficient solution can be easily integrated into aeronautic and military/defense applications.

Advantages:

--Fuel Efficient

-Green Technology

-Rapid Detection

Potential Applications:

-Aviation

-Military/Defense

TRL: 2

Intellectual Property:

N/A, N/A, N/A

Keywords: Aviation fuel properties determination, 2D chromatography application, rapid fuel testing, cost-efficient fuel analysis, fuel density analysis, viscosity determination, net heat of combustion, flash point testing, freezing point analysis, aeronautic applications, military defense fuel testing,

Technology ID

2019-KILA-68384

Category

Aerospace & Defense/Thermal Management & Combustion Optimization

GreenTech/Carbon Management

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green technology fuel analysis, rapid detection fuel, fuel efficient technology