

## **PRELIMINARY RESULTS FROM THE MICROSCALE COMBUSTION CALORIMETER ROUND ROBIN**

Richard N. Walters and \*Natallia Safronava

Federal Aviation Administration, Fire Safety Branch, William J. Hughes Technical Center,  
Atlantic City International Airport, NJ 08405

\*SRA International, Linwood, NJ

Results from the first round robin for the microscale combustion calorimeter (MCC) will be presented. Equipment from different manufacturers conforming to ASTM D 7309-07 was used to test several polymers that thermally decompose over a wide temperature range. The peak heat release rate (W/g), temperature at peak heat release rate (°C), heat release capacity (J/g-K), total heat released (J/g), and the mass fraction of pyrolysis residue (g/g) obtained from the different labs was used to calculate the repeatability and reproducibility of the MCC for these thermal combustion properties.