



OSAC RESEARCH NEEDS ASSESSMENT FORM

Title of research need:

Keyword(s):

Submitting subcommittee(s): **Date Approved:**

(If SAC review identifies additional subcommittees, add them to the box above.)

Background Information:

1. Description of research need:

The primary characteristic of fuels used by fire investigators today is ignition temperature. These temperatures are published for many fuels in a variety of sources. Often the temperature is reported as a discrete number. In evaluating fire cause fire investigators often misapply the concept of ignition temperature when evaluating the viability of a fuel given a known heat source. Ignition temperature, however, is less important when evaluating ignition source or fuel competency than critical heat flux. This is a concept with which many investigators need to become more conversant. Heat release rates of common materials and fuel packages are required to support fire growth analysis. Fuel characteristics need to be cataloged and reported in a way that can be used validly by fire investigators. This research need is for the Development of practical tools that can be used by the fire investigator to evaluate fuel characteristics and the performance of fuels under fire conditions in support of understanding fire growth as it relates to the determination of origin.

2. Key bibliographic references relating to this research need:

3a. In what ways would the research results improve current laboratory capabilities?

3b. In what ways would the research results improve understanding of the scientific basis for the subcommittee(s)?

3c. In what ways would the research results improve services to the criminal justice system?

This research will help the fire investigation community to better analyze fire growth and spread and improve their ability to determine the origin of a fire.

4. Status assessment (I, II, III, or IV):

	Major gap in current knowledge	Minor gap in current knowledge
No or limited current research is being conducted	I	III
Existing current research is being conducted	II	IV

This research need has been identified by one or more subcommittees of OSAC and is being provided as an informational resource to the community.

Approvals:

Subcommittee	Approval date: <input type="text"/>
<i>(Approval is by majority vote of subcommittee. Once approved, forward to SAC.)</i>	

SAC		
1. Does the SAC agree with the research need?	Yes <input type="checkbox"/>	No <input type="checkbox"/>
2. Does the SAC agree with the status assessment?	Yes <input type="checkbox"/>	No <input type="checkbox"/>
If no, what is the status assessment of the SAC: <input type="text"/>		
Approval date: <input type="text"/>		
<i>(Approval is by majority vote of SAC. Once approved, forward to NIST for posting.)</i>		