



21CR Project 605-50020

## **Add-on Effort to ASHRAE RP-1073: Research Investigating for the Determination of Refrigerant Lower Flammability Limits in Compliance with Proposed Addendum 34p to ANSI/ASHRAE 34-1992**

### **Objective:**

To survey flammability test documents of refrigerants which ASHRAE 34 had previously safety classified to determine if testing was conducted under conditions of the proposed test methods in Addendum 34p. To test up to 15 refrigerants or refrigerant blend compositions that were not previously tested to the proposed standard. The add-on effort will expand testing of 9 additional refrigerants or blend compositions.

### **Information/items expected to result from this project:**

Refrigerant flammability safety classifications will be revalidated under the proposed new test methods.

### **How are the results likely to be applied:**

ASHRAE SSPC-34 will use the results of this project to justify flammability safety classifications of prior classified refrigerants once ASHRAE adopts the new test methods. Code officials and standards developers will use the lower flammability limit data to calculate refrigerant quantity limits used in ASHRAE 15, which is adopted by several model code development organizations. The publication of these values will expedite the use of alternative refrigerants.

### **Research subcontractor:**

ASHRAE/Underwriters Laboratories (Principal Investigator: Jacqueline Alpert)

### **Status:**

ASHRAE Research Project 1073 has been completed. Results are summarized in ASHRAE Symposium Paper HI-02-7-2, Wilson & Richard, 2002. "*Determination of Refrigerant Lower Flammability Limits (LFL) in Compliance with Proposed Addendum p to ANSI/ASHRAE Standard 34 (RP-1073)*". ASHRAE Transactions 2002, Vol. 108, Part 2, pp 739-756. American Society of Heating, Refrigeration and Air-Conditioning Engineers, Atlanta, GA.

**Responsible 21CR Subcommittee:** Working Fluids