



Fire protection engineers apply science and engineering principles to protect people, property, and their environments from the harmful and destructive effects of fire and smoke. Specifically, I research the fire performance of wood and wood-based building materials to ensure that a building can be safely designed.

**Laura Hasburgh**  
Fire Protection Engineer  
Ph.D. (candidate), University of  
Wisconsin-Madison  
USDA Forest Service engineer

<http://www.naturalinquirer.org>



Laura Hasburgh



### **Important Engineer Characteristics:**

Genuine curiosity and the desire to solve real-world problems contribute most to my work. Being personally driven and having the ability to maintain momentum on a project are also key to finding solutions to a problem.

### **Example of a simple question I have tried to answer:**

How quickly does wood form char in real building fires? This information will then be applied to high-rise wood buildings so that the occupants and firefighters remain safe if a fire does occur.

### **Technology or equipment used in my work:**

I use a cone calorimeter to study the fire behavior of various materials and products. The cone calorimeter provides information such as the heat release rate, ignition times, and combustion products of a particular material.

### **: Most Exciting Work**

- Our team conducted fire tests
- on a two-story wood building.
- The tests examined the effect of
- exposed wood walls and ceilings
- on a full size apartment. The
- test results help us understand
- the contribution of wood to the
- compartment fire, life safety of
- occupants, and firefighter safety.

### **: When did you know you wanted to be an engineer?**

- I always enjoyed
- science, technology, engineering,
- and math (STEM) classes growing
- up. I learned about fire protection
- engineering when I started visiting
- colleges and learning about
- different career paths. I really enjoy
- my job because it is engineering
- with a strong human element.

<https://www.fpl.fs.fed.us/>