Lessons Learned: Every demo and class experiment must have a hazard assessment! I'm sure this experiment was performed without incident prior to this flash fire, but something went wrong.

Have you reviewed each demo and experiment for incompatible materials or potential unexpected reactions?

Here are some resources for checking chemical compatibility:

CAMEO/CHRIS Manual

http://cameochemicals.noaa.gov/

CAMEO Chemicals is a tool designed for people who are involved in hazardous material incident response and planning. This tool is part of the <u>CAMEO software suite</u>, and it is available as a <u>website</u>, <u>mobile website</u>, and as a <u>downloadable version</u> that you can run on your own computer.

CAMEO Chemicals contains:

- A library with thousands of datasheets containing response-related information and recommendations for hazardous materials that are commonly transported, used, or stored in the United States.
- A reactivity prediction tool, which you can use to predict potential reactive hazards between chemicals.

CAMEO Chemicals was developed by the National Oceanic and Atmospheric Administration's <u>Office of Response and Restoration</u> in partnership with the Environmental Protection Agency's <u>Office of Emergency Management</u> and the U.S. Coast Guard's Research and Development Center.

Hazardous Substances DataBase out of the National Library of Medicine is organized by compound with a section on Chemical Safety & Handling > Hazardous Reactivities & Incompatibilities. HSDB is a toxicology database that focuses on the toxicology of potentially hazardous chemicals. It provides information on human exposure, industrial hygiene, emergency handling procedures, environmental fate, regulatory requirements, nanomaterials, and related areas. The information in HSDB has been assessed by a Scientific Review Panel. It is openly searchable by the public via Toxnet (<u>http://toxnet.nlm.nih.gov/newtoxnet/hsdb.htm</u>)

Holcomb High School evacuated following chemical reaction, flash fire

http://www.gctelegram.com/news/local/holcomb-high-school-evacuated-following-chemical-reaction-flash-fire/article_9cc7aab7-796f-5fa0-ad34-50518bb9ab87.html

HOLCOMB — Holcomb High School students were evacuated for about an hour Thursday morning following a

flash fire caused by a chemical reaction during a chemistry class.

No one was injured in the incident, which occurred at 10:20 a.m. in the science wing of the building.

HHS Principal Rob Schneeberger said the chemical reaction occurred while students were performing an experiment with a non-toxic chemical. Students and school staff used a fire extinguisher to immediately put out a small fire.

"The kids did a good job of putting the fire out," Schneeberger said.

Schneeberger said students and staff were evacuated to the football field bleachers and waited until getting permission from fire officials to re-enter the building.

"Students and staff did a great job of evacuating the building as per the drills we go through," he said.

Garden City Fire Chief Allen Shelton said firefighters were dispatched to the school at about 10:27 a.m.

"When we arrived on scene, there was light smoke in the science wing of the building. There had been a flash fire, but it had been extinguished by personnel at the school with the fire extinguishers. The building was evacuated when we arrived and then we vented the building," Shelton said.

Damage to the ceiling tile and vinyl flooring is believed to be cosmetic and was estimated to cost less than \$1,000, Shelton said.

Students were allowed back into the building at about 11:30 a.m., but the affected room remained closed until the fire extinguisher debris could be cleaned up. Schneeberger expects the room to re-open today.

School was back on schedule by 1 p.m.

"Everything went very well as far as when you're concerned about the safety and security of the kids," Schneeberger said.

Maggie Roth, a HHS junior, said most of the students thought the evacuation was just a drill.

"We all went out of the building, and then we heard them saying it wasn't a drill and they were calling a few different teachers to the area and stuff. Then we knew it was actually real," Roth said.

By then, everyone knew there were no injuries associated with the fire so no one was panicked, Roth said.

Kim Gates Laboratory Safety Specialist Environmental Health & Safety Stony Brook University Stony Brook, NY 11794-6200 <u>Kim.Gates@stonybrook.edu</u> <u>631-632-3032</u> FAX: <u>631-632-9683</u> EH&S Web site: <u>http://www.stonybrook.edu/ehs/lab/</u>