Chemical Demonstration Injures Students

By Richard Wronski and John Keilman Tribune staff reporters October 12, 2001

A flash fire burned seven students in a chemistry class when an experiment went awry Thursday in Genoa-Kingston High School, leaving one of the students in critical condition. Three 16-year-olds from the school in DeKalb County were being treated late Thursday in the burn unit at OSF St. Anthony Medical Center in Rockford. A boy was in critical condition with second-degree burns to his upper body and possible third-degree burns to a forearm, according to hospital officials. His clothing caught fire when an experiment malfunctioned, school officials said. One girl was admitted in serious condition and another girl was in fair condition, said Gerri Gustafson, director of community relations.

The other four students were treated at Kishwaukee Community Hospital in DeKalb and released, according to a spokeswoman. The accident occurred when a science instructor was conducting a demonstration before 20 to 25 sophomores, juniors and seniors in a chemistry class, according to school Supt. Richard Leahy.

"It's a very routine experiment," Leahy said. "It's been done in the building many times."

The instructor, Doug Schiller, was using a solution of methyl alcohol, salt and water in an experiment to identify salts, such as sodium chloride and potassium chloride, by the color of the flame they create. A ceramic loop was dipped in the solution then passed over a flame. Schiller was conducting the experiment in the front of the classroom, and the students were seated in their desks several feet away. Some of the methyl alcohol ignited, causing the flash of fire, officials said.

Schiller and Assistant Principal John Francis, who happened to be in the class at the time, used their bare hands to help put out the burning clothing, officials said. Neither of the adults was believed to have sought medical treatment.

Officials described the accident as a flash fire, not an explosion. Sycamore Fire Chief Bill Riddle said there was no significant damage to the classroom.

Leahy, who expressed regret over the accident, said the experiment is a staple of science classes and Schiller was a veteran teacher. "We are terribly concerned about safety and welfare of all students," he said. "Nothing is more important."

Andy Small, laboratory manager of the chemistry department at Northern Illinois University in DeKalb, said the experiment is conducted in almost every high school and college chemistry class in the country. "There's a certain way to do it and we stress safety and never had a problem with this experiment," said Small, who could not explain the accident.

Some of the Genoa-Kingston chemistry students, as well as about 30 students in an adjacent biology class, went through a decontamination process after the accident. The students showered and their clothing was placed in plastic bags.

Classes were canceled at the 450-student school Friday so authorities can continue the investigation. Thursday evening activities were canceled, as was the Friday football game. The accident occurred about 10:30 a.m., according to officials. Police and fire departments from Genoa, Sycamore and several other nearby towns responded. All the students were initially taken to Kishwaukee Hospital and a helicopter later transported three students to St. Anthony.