

Oklahoma ACS Family Night

Friday 24 September 2010

CHEMICAL DEMONSTRATIONS

Dr. John Michael Ferguson
University of Central Oklahoma

Reasons for performing chemical demonstrations include reinforcing lessons taught in the classroom, exposing students to chemistry, pure entertainment, or even promoting one's own school or club. A performer can increase audience interest by increasing the scale of the effects (bigger fires, louder noises, larger quantities of chemicals, etc.), but another, highly effective way is to use drama and storytelling in the presentation. By using the effects as part of a story, the audience can be drawn into the performance in a way that a mere "bigger bang" does not allow.

This talk will feature a range of chemistry demonstrations, as well as some valuable lessons and advice gleaned from fourteen years of performing chemistry shows.

Oklahoma Baptist University, Shawnee, OK <http://www.okbu.edu>

6:00 pm Social Hour & Picnic Wood Science Building Lawn
games [indoor/outdoor], volleyball & croquet

7:30 pm Presentation Wood Science Building - Large Lecture Hall

Menu

Hamburgers & hotdogs
potato chips
pickles
cookies
soft drinks

Cost

\$8 members
\$5 students
\$3 children under 12

RSVP Deadline

Tuesday, Sep 21st, 5 pm
Contact Shawna York
405-878-2028, Shawna.York@okbu.edu
[indicate # of adults & # children]

John Michael Ferguson Biographical Sketch

John Michael (Mike) Ferguson grew up in Topeka, Kansas. His interest in chemistry was sparked in 9th grade, and he graduated the University of Kansas in 1987 with a B.S. in chemistry. Though he entered Iowa State University planning to pursue a career in research, Mike soon discovered that he enjoyed teaching and decided to focus on teaching undergraduate students. He graduated Iowa State with a Ph.D. in Organic Chemistry in 1993.

Mike joined the faculty at the University of Central Oklahoma in 1995. From his first experience giving science demonstrations to pre-school children at the UCO Child Study Center in 1996, his interest (and audience) grew. He was soon performing shows at local elementary schools and as part of National Chemistry Week events at local malls.

It was not long before Mike decided that adding a plotline or theme to his shows would make them more enjoyable for the audience (as well as the performers). Several UCO students performed with him in several Harry Potter-themed shows at several locations including Science Museum Oklahoma. When working with the Gear-Up program from 2002-2004, his performances revolved around the theme of encouraging students to go to college and pursue degrees in science. Several students assisted him in several shows as part of "Mad Scientist Day" at Edmond's Washington Irving Elementary School, which were based on old-fashioned science fiction serials. Altogether, about 20 students, as well as his daughter and son, have performed with him in shows.

Mike has been a regular performer at Chemistry Day celebrations at Science Museum Oklahoma (Omniplex), as well as shows at local malls in conjunction with National Chemistry Week. Audiences have ranged from small classrooms of pre-school students to guests at Martin Park Nature Center to Cub Scout Blue and Gold banquets to entire student bodies at elementary schools.

Directions to Wood Science Building Oklahoma Baptist University Shawnee, OK.

From I-40:

- Exit at Kickapoo Interchange. Head South on Kickapoo until you reach University [**third traffic light**].
- Turn **west** onto University and then next **right** onto “The Oval”.
- Wood Science Building is the first building on the right.

From South:

- Take **Kickapoo Spur Exit** off US 177. North on Kickapoo to University.

Parking

If spaces are available, attendees can park on “The Oval”.

If not, follow “The Oval” back around to University and parking lots can be found on both sides of the street **west** of “The Oval” on University.