

SCHOOL CHEMISTRY LAB SCIENCE & SAFETY WORKSHOP

MAY 22, 2017
RIVER VALLEY COMMUNITY COLLEGE, CLAREMONT, NH
9:00 AM - 4:00 PM

AGENDA

8:00 - 9:00 AM Registration, Networking, and Breakfast

9:00 AM Dave Waddell, Waddell Environmental, LLC

The Culture of Laboratory Safety

- Why schools should be concerned?
- Responsibility, accountability, and liability for laboratory safety
- How to encourage a culture of safety within an academic laboratory
- *Exercise:* What's wrong with this picture, and how could it be fixed?

Break: (10:00 - 10:10 AM)

Proper Chemical Management

- Hazardous laboratory chemicals: Corrosive acids and bases, oxidizers, reactives, toxic compounds and those that pose reproductive or cancer risks
- Proper chemical storage by compatibility
- Proper chemical labeling
- How to conduct and maintain a chemical inventory safely and efficiently

Chemical Hazard Control

- OSHA hazard communication and lab safety standards
- Safety data sheets and the chemical hygiene plan
- Methods for reducing waste including alternatives to using hazardous chemicals, small-scale and microscale chemistry

Lunch [12:00 - 12:45]

Exercise: Small scale double-displacement reactions [12:45 - 1:10]

Identifying and Fixing Unsafe Situations [1:10 - 1:45]

- Eyewash and shower safety problems
- Unsafe storage practices
- Food and chemicals don't mix
- Components of a spill plan and spill kit

Break: [1:45 – 1:55]

The Chemical Hygiene Plan [1:55 – 2:55]

- Toxicology and the hierarchy of hazard control
- Routes of exposure
- Controlling exposures to hazardous chemicals
 - Ventilation and indoor air quality problems
 - Personal protective equipment
- Reviewing the chemical hygiene plan template

Exercise: Inspection of a science chemical stockroom [2:55 – 3:30]

3:30 – 3:55 PM Melissa Zych, NH Department of Environmental Services & Teresa Ferrara, NH WORKWise

An overview of hazardous waste requirements applicable to public and private schools and available disposal options.

3:55 – 4:00 PM Wrap-up; Evaluations; Prize Drawings

