

3111

Reactive Chemical Hazards Assessment

1-Day Course

Instructor: Dr. William J. Rogers

Program Content:

As an introduction to reactivity of industrial chemicals and the evaluation of potential hazards due to their reactive nature, this course discusses identification and characterization of chemical hazards. Also discussed is the use of a hierarchical evaluation and management approach for safer and more economical chemical processes.

- Why a systematic approach to chemical reactivity is important
- Why reactive hazard management should include management of risk
- Definition of a potentially hazardous reactivity
- Types of chemicals and chemical reactions
- Chemical incompatibility
- Chemical energy of formation and potential release of energy
- Effects of catalysis, inhibitors, contaminants, and corrosion products
- Reaction conditions including temperature, pressure, concentration, and time
- Equipment reliability and availability including failure, testing, and repair
- Systematic prediction of potential chemical hazards using literature information, computation methods, screen testing, and detailed experimental analysis
- Industrial case studies illustrating effects of energy, reaction pathways, unexpected reactions, kinetics, and aging

Who Should Attend?

Reactive hazards analysts, process safety managers/coordinators, operators managers/superintendents.

0.7
CEUs

7
PDHs