



22nd Annual OCTC

TIE Conference

Teachers, Industry & Environment Conference

Wednesday, October 22, 2014

- 4:00-6:00 p.m. **Conference Registration**
- 5:00-6:00 p.m. **Welcome Dinner - *Sponsored by The Lubrizol Corporation***
- 6:15 p.m. **Shuttle Transportation to Ashland Chemical Company**
- 6:45 p.m. **Tour of Ashland Chemical Company**
Ashland Chemical Company is a global specialty chemical company that provides products, services and solutions throughout a variety of industries. The tour of Ashland Chemical Company provides conference participants an inside look at an operating chemical plant.
- 8:30 p.m. **Depart for Conference Hotel**

Thursday, October 23, 2014

- 7:00 a.m. **Breakfast - *Sponsored by Americas Styrenics***
- 7:45 a.m. **Conference Opening Remarks**
Jenn Klein, President, Ohio Chemistry Technology Council
Dr. Susan Matz, LyondellBasell
- 7:55 a.m. **Introduction of Ashland University Graduate Credit Opportunity**
Linda Pettit, Adjunct Professor, Ashland University
- 8:00 a.m. **Teaching Science with TOYS - *Presented by Terrific Science Program***
Unlock the mysteries of chemistry for your students by learning to use both homemade and purchased toys in your classes. Teachers will explore hands-on science activities that use toys and other common household items to teach the principles of scientific inquiry, physics and chemistry.
Lynn Hogue, Co-Founder, Terrific Science Program
- 10:00-10:10 a.m. **Break**
- 10:10-11:00 a.m. &
11:10-12:00 p.m. **Concurrent Sessions**
- Dancing Bubbles - *Presented by BASF Corporation***
In this activity teachers will observe the relative densities of household liquids, like syrup, oil and alcohol and solids, like plastics, wood and paper.
Hank Stateczny and Karl Schnapp, BASF Corporation
- Environmental Detectives - *Presented by the Ohio EPA***
Two activities from Project WET will illustrate how epidemiologists trace the source of water borne illnesses, and how environmental scientists track and prevent contamination of underground drinking water supplies. Teachers will learn how Ohio EPA and the Ohio Department of Health investigate cases of drinking water contamination, and where to borrow ground water flow models for classroom demonstrations.
Jeff Montavon, Carolyn Watkins and Kristopher Weiss, Ohio EPA



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Friday, October 24, 2014 (Continued)

8:00 a.m.

Ion Jones & the Lost Castle of Chemistry - Presented by The Carnegie Science Center

Discover the hidden treasures of chemistry in this action-packed, heart pounding adventure. Team up with chemistry adventurer "Ion" Jones and real PPG scientists on a global quest to collect the elements. Journey to rain forests, deserts, glaciers, ancient temples and prehistoric carbon deposits, and learn how we use chemistry in industry, biology, technology and the environment. Is it a far stretch from the Pillar of Polymers? Can we escape the Cavern of Catalysts in time? Decode riddles and undercover the secrets of elements and compounds. Discover the difference between physical and chemical reactions, and employ the scientific method as we learn to identify unknown substances safely. This interactive, multimedia chemistry demonstration is downright explosive!

Keri Medwid, The Carnegie Science Center

9:00-9:10 a.m.

Break

9:10-10:00 a.m. &
10:10-11:00 a.m.

Concurrent Sessions

Bouncy Balls: The Science of Polymers - Presented by LyondellBasell

Why do some balls bounce higher than others, why do diapers absorb so much liquid, do all plastics repel water? The basic concepts of plastics (polymers) including the properties of plastics and their many uses will be discussed.

Amy Weiskittel, Dr. Susan Matz, Jan Galbraith, LyondellBasell

Survivor SESA Style: You are Stranded on a Desert Island - Presented by SESA

So begins the SESA Tech Challenge. Guided by the SESA crew, participants will use the materials provided to design and construct tools to attract a boat and be rescued. This session encourages higher level thinking skills and the creative use of technology.

Kathy Buescher, SESA

11:00 a.m.

Climate Kids: Evidence Based Learning - Presented by NASA

Explore the Planet's health report with NASA Climate Time Machine: researching air, temperature and sea ice. Fly along with NASA satellites with NASA's Eye on the Earth. Games, inquiry based activities and designing experiments are all part of this session.

Susan Kohler, Education Specialist, NASA

12:00 p.m.

Conference Closing Remarks

Jenn Klein, President, Ohio Chemistry Technology Council