OCTC Foundation hosts 18th Annual Teachers, Industry, and Environment (TIE) Conference

TIE Conference teacher participants don hard hats for a tour of ISP Columbus, a member company of the OCTC.

Fifty one teachers from across Ohio recently experienced an intensive, hands-on program focused on creative approaches to teaching principles of physics, chemistry, and the life sciences to elementary and middle school students. The 18th Annual Teachers, Industry, and Environment (TIE) Conference, hosted by the Ohio Chemistry Technology Foundation, was held October 13-15 at the Doubletree Hotel in Worthington. Each teacher was sponsored by a member company of the Ohio Chemistry Technology Council.

Highlights of the conference included a guided tour of ISP Columbus, a manufacturer of specialty products; a networking luncheon for teacher participants and members of the Ohio Chemistry Technology Council's Board of Directors; and remarks by Heidi Cressman, Director Women in Engineering Program, University of Akron, on what girls and women perceive in the STEM fields and what the program does to dispel some of those perceptions. In addition, a session was conducted by Linda Pettit, Ashland University, on obtaining graduate credit for attending TIE, an exciting addition to the program. One third of those in attendance took advantage of this new opportunity.

Scientists from industry, universities, and Ohio's environmental agency demonstrated dramatic experiments that teachers can easily duplicate in their own classrooms. *Michelle Edwards, Miami University,* opened the program with "Teaching Science with TOYS" a workshop that unlocks the mysteries of chemistry for students by learning to use both homemade and purchased toys in the classroom; *Hank Stateczny and Karl Schnapp, BASF Corporation,* presented "Dancing Bubbles", a workshop designed to assist teachers with teaching density – a concept often difficult for middle school students to grasp; *Amy Weiskittel and Sue Matz, LyondellBasell,* presented "Bouncy Balls – The Science of Polymers" which demonstrated the basic concepts of plastics (polymers) including the properties of plastics and their many uses; *Heather Hunt, Val Conrad and Christine Cisco, Science Education for Science Advancement (SESA),* presented "Survivor SESA Style", challenging teachers to design and construct tools from materials provided to attract a boat and be rescued; *The Carnegie Science Center* presented "Captain Green's Time Machine", an interactive demonstration that explores innovation in solving environmental issues; and the *Ohio EPA* compared the turbidity of muddy and clear water, and ways to prevent soil erosion.

Teachers observe as another actively participates in a “Dancing Bubbles” experiment.

The Carnegie Science Center conducted several experiments using ordinary household products.

Val Conrad, SESA, encourages teacher participation in the workshop “Science of Air”.

Karl Schnapp, BASF, assists teachers with his liquid nitrogen ice cream recipe.

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If you would like to learn more about the Teachers, Industry, and Environment (TIE) Conference, please visit the Education Link on our website www.ohiochemistry.org, or contact Chris Materni at cmaterni@ohiochemistry.org.