

22-23 MAY 2017

PITTSBURGH
Pennsylvania

TechnoBiz Training Program

POLYMERS, CHARACTERIZATION, AND RHEOLOGY

Venue: Crowne Plaza South Hotel, Pittsburgh

EVENT CODE: PIDT-17-164

Organized by **Plastics Industry Department @ TechnoBiz (PIDT)**

Managed by **Czuba Enterprises Inc.**

This two-day program provides a broad overview of polymer science, with an emphasis on polymers used in plastics manufacturing processes such as injection molding, extrusion, and blow molding. Topics to be covered include polymer structure and chemistry, measurement methods for characterizing polymer properties, and rheological concepts for both shear and elongation. The emphasis of the program is on the basics of polymer science as applied to plastics processing.

Program Content

1. **Plastics Industry Overview**
2. **Polymers**
 - a. Introduction to Polymers
 - b. Polymer Structure
 - c. Polymer Chemistry
 - d. Commercial Polymers
 - i. Commodity Polymers
 - ii. Engineering Polymers
 - iii. High Temperature Polymers
3. **Characterization**
 - a. Introduction to Polymer Properties
 - b. Physical Properties
 - c. Mechanical Properties
 - d. Thermal Properties
4. **Rheology**
 - a. Key Terms
 - b. Flow Mechanisms
 - c. Shear Viscosity
 - d. Elongational Viscosity
 - e. Measuring Viscosity
 - f. Pseudoplastic Behavior
 - g. Analyzing Process Flow



Who Should Join This Program?

This program is intended for anyone who works directly with polymers, particularly with plastics processing. This includes operators, set-up technicians, process engineers, floor supervisors, and plant managers of plastics manufacturing operations.

Program Instructor: Prof. Kirk Cantor

Kirk Cantor is Professor of Plastics and Polymer Engineering Technology at the Pennsylvania College of Technology where he has been since 1990. Prior to joining the faculty at Penn College, he was an aerospace engineer at NASA where he worked with polyethylene film for high altitude scientific balloons. Kirk received his Bachelor of Science in Aerospace Engineering from the University of Maryland and his Master of Science and PhD in Polymer Science from The Pennsylvania State University. He is the author of "Blown Film Extrusion" from Hanser Publications and of numerous articles on polymer extrusion.

Registration Fee/ Person

- 750 US\$/Person (register before 25 February 2017)
- 800 US\$/Person (register before 25 March 2017)
- 850 US\$/Person (register after 25 March 2017)

The registration fee includes documentation, lunch and refreshments during training days. *Group Discount:* If 3 or more than 3 delegates join from the same organization, 10% discount will be offered on total registration fee.

To register, please contact

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