Optimize Coextrusion to Improve Barrier properties in Films

A 90 min online short course
by Dr. Eldridge M Mount

To register, please visit:
http://polymers.s.specialchem.com/online-course/1090-Coextrusion-Barrier-Packaging-Film

Barriers play an important role in food & industrial applications to protect products from light, gas, water vapors, flavor/aroma. Along with this need for increased shelf life, industry strive to reduce further and further weight, hence playing on film thickness. But as films become thin, barrier properties are affected and other product irregularities such as layer instability, melt disturbance seep in.

Achieve better barrier performance in your thin films without compromising on other important mechanical properties such as strength, stiffness...

Eldridge M Mount will discuss how to minimize problems (layer instabilities, melt disturbance ...) that are frequently faced when improvements in barrier properties are made.

Why you should attend:

1. Save time reaching optimal barrier properties (OTR, WVTR..) in your thin films by wisely adjusting co-extrusion parameters (polymer flow rate, die temperature, piston speed...)
2. **Gain control over layer thickness & uniformity** without compromising on barrier & other mechanical properties (stiffness, strength...)

3. **Solve faster demanding cases** (divided barrier layers, combination of incompatible polymers...) by implementing the tips & tricks from the expert

**Who is it for?**

Chemists, Engineers in Research and Development who are interested in improving the way they conduct multi-layer extrusion to achieve high barrier properties in their thin layer products.

**Outline**

The following sections will be covered during this session:

1. **Troubleshooting for effective barrier in thin films**
   - Rheological considerations
   - Layer thickness & distributions
   - Avoiding flow disturbances
   - Avoiding edge encapsulation
   - Combining incompatible polymers

2. **Optimization of coextrusion methods & equipment**
   - Feed Block methods
   - Multicavity Dies
   - Determining the best combination for thin films

**Real Life Cases will be shared at different stages during the presentation.**

**Presented by Dr. Eldridge M Mount**

Dr. Mount is an independent consultant in the coextrusion, extrusion, film, metallization and film converting industries. He is a leader in the development of metallized films for barrier applications and film laminations. His expertise is in oriented and coextruded polymer film product and process design and research. The design and implementation of extrusion systems and coextrusion die specification and system specification including installation and start-up. He is also recognized for effective trouble shooting of cast, mono and biaxial orientated film and sheet coextrusion melt casting and pinning, and film surface treatment by corona, flame and plasma systems. EMMOUNT Technologies, LLC offers consulting and technical training in film orientation, barrier technologies, coextrusion and extrusion and also measures polymer melt viscosity with a capillary rheometer.

Eldridge has over 35 years industrial experience in the extrusion and orientation of polypropylene and polyester films at ExxonMobil Chemical and ICI Americas Film Divisions. He managed the intellectual property of Mobil Chemical Films Division and has courtroom experience as an expert witness. A frequent contributor to SPE ANTEC, AIMCAL and
TAPPI conferences, he is a member of the SPE Extrusion Division Board of Directors, and a Fellow and Honored Service Member of SPE. Appointed AIMCAL Metallizing Consultant in 2001 and a past VP of the Society of Plastics Engineers. He has a Bachelors degree in Chemistry from West Chester University and a ME and PhD in Chemical Engineering from Rensselear Polytechnic Institute.

Past attendees feedback

Content: ★★★★★ Technical Level: ★★★★★ Speaker: ★★★★★ (31 evaluations)

Eric P., from Nypro Inc.:  
"A very good course! Can be used to better educate our employees to respond to customers & product development. Provided valuable scientific background on how barrier works."

Ted H., from Multibase Inc.:  
"Gave a great overview as well as some of the specifics with regards to improving barrier properties."

Lucy H., from Meadwestvaco:  
"An Excellent Course! Provided good information on co-extrusion methods and equipment to improve barrier."

Past attendees profile

- R&D – Applied/Formulation/ Product development - 50%
- Technical services/Customer assistance -20%
- Basic Research – 20%
- Production/manufacturing - 5%
- Other departments – 5%

Repsol, DSM, BASF, Cray Valley USA, Eastman, Milliken, Kraton, B.V.Multibase Inc., Bostik, Nypro Inc, Westlake Chemica... 

Next session: Tue. February 10, 2016 at 10 a.m. ET / 4 p.m. CET - Your local time

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SpecialChem is not accountable for users’ costs linked to participating in the Online Course, including but not limited to the phone and Internet connection fees. We provide local phone numbers when available.

Your registration includes:

- **Pdf slides** at least 24h before the live session
- **1h online short course** by an independent expert
- Live interaction with the expert during the **30-minute Q&A session**
- **Q&A Transcript** when you submit your feedback on the course
- **Expert contact details** to further discuss your projects

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