THIS FREE EVENT INCLUDES:
- Transportation / Welcome Lunch
- Educational Sessions / Facility Tour
- Space is limited to the first 100 registrants
  (PTi reserves the right to restrict or revoke admission.)

AGENDA HIGHLIGHTS:
- Best Practices in Extrusion Processing and
  Manufacturing, 2019 Current and Near-Future
  Opportunities for Smart Manufacturing
- Liquid Color & Additives in Extrusion:
  Advancements in Technology
- Energy Saving Cooling Technologies
- Size Reduction Options for Reclaim of
  Extruded Scrap

TUESDAY, SEPT 17TH — GENERAL SESSIONS

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>7:00-8:00 AM</td>
<td>Networking Breakfast: Exhibits Area</td>
</tr>
<tr>
<td>8:00 AM</td>
<td>Best Practices in Extrusion Processing and Manufacturing 2019 / Louis Columbus, IQMS</td>
</tr>
<tr>
<td>8:30 AM</td>
<td>A Guide to Extruder Upgrades / Dan Barlow, Integrated Control Technology</td>
</tr>
<tr>
<td>9:00 AM</td>
<td>Polymer Melt Rheology: What Is It? And Why Is It Critical for Extrusion? Olivier Catherine, Cloeren Incorporated</td>
</tr>
<tr>
<td>9:30 AM</td>
<td>Determining Viscosity Data Using a Slit Die Viscometer                Chris Rauwendaal, Rauwendaal Extrusion Engineering</td>
</tr>
<tr>
<td>10:00 AM</td>
<td>Networking Break: Exhibits Area</td>
</tr>
<tr>
<td>10:30 AM</td>
<td>Troubleshooting Seven Common Extrusion Defects: Using Purging and Best Practices to Cut Scrap / Jarred Packard, ASACLEAN-Sun Plastech, Inc.</td>
</tr>
<tr>
<td>11:00 AM</td>
<td>Product Enhancements for Increased Safety in Use, Operation and Maintenance of Size-Reduction Equipment / John Farney, Cumberland</td>
</tr>
<tr>
<td>11:30 AM</td>
<td>Current Technology and Near-Future Opportunities for Smart Manufacturing Allan Landers, Conair</td>
</tr>
<tr>
<td>Noon</td>
<td>Networking Lunch</td>
</tr>
<tr>
<td>1:00 PM-5:00 PM</td>
<td>Concurrent Breakout Sessions: FILM, SHEET, COMPOUNDING &amp; PIPE, PROFILE AND TUBING Visit ExtrusionConference.com to see full session abstracts</td>
</tr>
<tr>
<td>5:00-6:30 PM</td>
<td>Networking Reception: Exhibits Area</td>
</tr>
</tbody>
</table>

“One of the better Extrusion conferences I’ve ever been to!”
– W. Hobson - Dow Chemical Co.
### TUESDAY BREAKOUT SESSIONS

| FILM / Breakout Sessions | 1:00 PM | Fundamentals of Processing PE Plastomers for Blown and Cast Film  
Wes Hobson, The Dow Chemical Company |
|--------------------------|--------|------------------------------------------------------------------|
|                          | 1:30 PM| Improving Film Quality and Throughput with Ultra-Precise Chilled Air Temperature Control  
Michael Pilolli, D.R. Joseph Inc. |
|                          | 2:00 PM| Innovations in Cast Film Extrusion Die Technology / Sam Iuliano, Nordson |
|                          | 2:30-3:00| Networking Break: Exhibits Area |
|                          | 3:00 PM| Machinery Solutions for Sustainability in Flexible Packaging Films / Marliio Milliefanti, Macchi, S.p.A. |
|                          | 3:30 PM| Utilizing Post-Consumer Resin in Film Applications  
Khosrow Haliagi, Envision Plastics |
|                          | 4:00 PM| Blown Film Coextrusion Dies: A Comprehensive View of Design and Optimization  
Rafael Castillo, Dual Spiral Systems |
|                          | 4:30 PM| A Smarter Way to Blend: Innovative Solutions for Integrated Material Blending and Conveying  
Mark Jordan, Advanced Blending Solutions |
|                          | 5:00 PM| Polyethylene Resins Designed for Extreme Performance Benefits  
Dr. Sushant Roy, ExxonMobil |

| SHEET / Breakout Sessions | 1:00 PM | Direct to Sheet Compounding  
Sushant Jain, Processing Technologies International |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1:30 PM</td>
<td>New Machine Concepts for Floatable PP-Based Coffee Capsules Increase Efficiency and Mitigate Environmental Impact / Thorsten Bung, Kuhne</td>
</tr>
</tbody>
</table>
|                            | 2:00 PM| New Non-Nuclear Solid-State Thickness Sensor for the Measurement and Automatic Profile Control of Extruded Film, Sheet and Coatings  
Eric Reber, Mahlo America |
|                            | 2:30-3:00| Networking Break: Exhibits Area |
|                            | 3:00 PM| Automating the Sheet Winding Process for Improved Operator Safety and Productivity  
Joe Connelly, Parkinson Technologies |
|                            | 3:30 PM| Advances and Developments in Multi-Nipping Rollstacks  
Peter Rieg, battenfeld-cincinnati |
|                            | 4:00 PM| Resin Drying DOE: How to Ensure Your Resin is Properly Dried  
Braulio Polanco, Systematic Extrusion |
|                            | 4:30 PM| Challenges and Solutions in Melt Filtration for Sheet / Monika Gneuss, Gneuss |

<table>
<thead>
<tr>
<th>COMPOUNDING / Breakout Sessions</th>
<th>1:00 PM</th>
<th>Managing Melt Temperature in a Twin-Screw Extruder / Brian Haight, Leistritz</th>
</tr>
</thead>
</table>
|                                 | 1:30 PM| It’s Science, Not Art: Analysis Tools to Improve Your Compounding Results  
Jeff Galloway, Krauss-Maffei |
|                                 | 2:00 PM| Water Bath Length Determination: A Theoretical Approach  
Bruce Spencer, SABIC |
|                                 | 2:30-3:00| Networking Break: Exhibits Area |
|                                 | 3:00 PM| The Extruder as a Polymerization Reactor for Organometallic Catalyzing and Compatibilizing Recycled Polymers to Achieve Sustainability Goals  
Salvatore Monte, Kenrich |
|                                 | 3:30 PM| Improving Process Control of Pelletizing Operations via Advanced Control Platforms  
Mike Duff, Graham Engineering |
|                                 | 4:00 PM| Compounding of TPE and TPV on the Corotating Intermeshing Twin-Screw Extruder / Sabine Schoenfeld, Coperion |
|                                 | 4:30 PM| The Three M’s of Delivering Powders to Compounding Extruders  
David Kennedy, VAC-U-MAX |

| PIPE, PROFILE, TUBE / Breakout Sessions | 1:00 PM | The Latest Tools for Efficient and Optimized Profile Die Development  
John Perdikoulas, Comuplast North America |
|----------------------------------------|--------|------------------------------------------------------------------|
|                                        | 1:30 PM| Enhancements to Downstream Extrusion Water and Vacuum Tanks to Facilitate a Higher Level of Precision and Repeatability  
Robert Bessemmer, Novatec |
|                                        | 2:00 PM| Virtual Pressure Measurement: Analysis and Performance / Bill Kramer, US Extruders |
|                                        | 2:30-3:00| Networking Break: Exhibits Area |
|                                        | 3:00 PM| How Control Systems for Electrical Motors Compare / Gerry Lamorte, CDS Machines |
|                                        | 3:30 PM| The Latest Advancement in Dimensional Measurement and Control for Tube, Pipe, and Profile Extrusions / Keith Donahue, Zumbach |
|                                        | 4:00 PM| Screw Design Concept and PVC Flow Behaviors in a Counter-Rotating Twin Screw Extruder  
Haikun Xu, Krauss-Maffei |
|                                        | 4:30 PM| State of Technology in Profile Extrusion  
Daniel Cykana, Extrusion Solutions |
## WEDNESDAY, SEPT 18TH — GENERAL SESSIONS

### 7:00-8:00 AM  
**Networking Breakfast: Exhibits Area**

### 8:00 AM  
- Introduction to Scientific Extrusion / Presented by Braulio Polanco, *Systematic Extrusion*

### 8:30 AM  
- Improving Extrusion System Productivity via Digital Technology, Activ-Check with Line Remote Monitoring / John Christiano, *Davis-Standard*

### 9:00 AM  

### 9:30 AM  
- Liquid Color & Additives in Extrusion: Advancements in Technology / Paul Maguire, *Riverdale Global*

### 10:00 AM  
**Networking Break: Exhibits Area**

### 10:30 AM  
- Size-Reduction Options for Reclaim of Extruded Scrap / Dana Darley, *Vecoplan*

### 11:00 AM  
- Energy Saving Cooling Technologies / Bob Smith, *Thermal Care*

### 11:30 AM  
- Drying Secrets to Producing Defect Free Extrusion Products / Mark Haynie, *Novatec*

### Noon  
**Networking Lunch**

### 1:00 PM-5:00 PM  
**CONCURRENT BREAKOUT SESSIONS: FILM, SHEET, COMPOUNDING & PIPE, PROFILE AND TUBING**  
Visit ExtrusionConference.com to see full session abstracts

### 5:00-6:30 PM  
**Networking Reception: Exhibits Area**

---

## WEDNESDAY BREAKOUT SESSIONS

### FILM / Breakout Sessions

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
</tr>
</thead>
</table>
| 1:00 PM | Improved Equipment Design to Reduce Material Usage / Mark Wodrich, *Macro Engineering*
| 1:30 PM | Optimizing the Film Extrusion Process for Ideal Quality Analysis: Results of High-Performance Polymers / Christoph Pielen, *CW Brabender*
| 2:00 PM | An Overview of Nano-layer Coextrusion Process for Flat Sheet and Film: Principle, Potential and Industrial Applications / Olivier Catherine, *Cloeren Incorporated*
| 2:30-3:00 PM | **Networking Break: Exhibits Area**
| 3:00 PM | Web Process Alignment / Scott Glover, *The Advanced Team*
| 3:30 PM | Going, Going, Gone: Common Problems in Film Manufacturing Solved with Dry Ice / Steve Wilson, *Cold Jet*
| 4:00 PM | Triple Bubble: An Opportunity to Comply with Regulatory Challenges / Adolfo Edgar, *Kuhne*
| 4:30 PM | Industry Trends Impacting Flexible Packaging and How Machinery Suppliers Can Help / Steve DeSpain, *Reifenhauer*

### COMPOUNDING / Breakout Sessions

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
</tr>
</thead>
</table>
| 1:00 PM | Benefits and Challenges of Entering Twin-Screw Extrusion / Dean Elliott, *Entek*
| 1:30 PM | How Robust is your Feeding Technology? Key Considerations to Ensure Reliable and Even Smarter Performance / John Winski, *Coperion K-Tron*
| 2:00 PM | Precision Compounding for 3D Filament Production / Charlie Martin, *Leistritz*
| 2:30-3:00 PM | **Networking Break: Exhibits Area**
| 3:00 PM | Effective Compounding Transitions / Kenneth Russell, *Optimized Compounds*
| 3:30 PM | The Compounding Extruder of the Future / Adam Dreblatt, *Century Extrusion*
| 4:00 PM | The Advantages of Processing PLA Using the Farrel Continuous Mixer / Patrick Lahnmann, *FARREL POMINI*
| 4:30 PM | Twin Screw Extruder for a Wide Variety of New Processes / Paul Martin, *JSW* |
### PIPE, PROFILE, TUBE / Breakout Sessions

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
</tr>
</thead>
</table>
| 1:00 PM| A Die Designer’s Guide for Utilization of Land Length for Process Optimization  
Steve Schick, Teel Plastics |
| 1:30 PM| Versatile Single Screw Extrusion System for Typical Thermoplastic Resins  
Jingyi Xu, Graham Engineering |
| 2:00 PM| The Importance of Controlling Belt Gap When Processing Precision Micro-Bore Medical Tubing  
Robert Bessemer, Novatec |
| 2:30-3:00 PM| Networking Break: Exhibits Area |
| 3:00 PM| Accurate Prediction of Cooling, Shrinkage, and Distortion of Extrudate Profile in Calibrator and Post-Calibrator Regions  
Mahesh Gupta, Plastic Flow |
| 3:30 PM| What Affects Cut Lengths?  
Gerry Lamorte, CDS Machines |
| 4:00 PM| Where’s My Weight? Maximizing Material Savings Through Precision Measurement  
Brad Allen, Inoex |
| 4:30 PM| Are You Leaving Profit on the Shop Floor?  
Tom Kvinge, Extreme Coatings |

### SHEET / Breakout Sessions

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
</tr>
</thead>
</table>
| 1:00 PM| Emerging Trends in Thick-Gauge Sheet  
Steve DeAngelis, Davis-Standard |
| 1:30 PM| In-line Compounding of Flexible PVC without Pre-Mixers for Sheet  
Nathan Garrison, Krauss-Maffei |
| 2:00 PM| Innovative High-Speed Extrusion Technology for Thin-Gauge Sheet  
Sushant Jain, PTI/Processing Technologies International |
| 2:30-3:00 PM| Networking Break: Exhibits Area |
| 3:00 PM| The Who, What, When, Where & How of Expanding PP Gauge Range  
Mike Duff, Graham Engineering |
| 3:30 PM| From Pounds and Profit to Trust and Transparency: A Story of Building a Safety Culture in Manufacturing  
Curtis Perry, SEKISUI |
| 4:00 PM| Screw, Barrel, Gear Pump, and Chill Roll Designs For Sheet Extrusion  
Walter Smith, Nordson |
| 4:30 PM| Sheet Extrusion Troubleshooting - Black Specks on Start Up  
Rick Barnes, Paulson Training |

### THURSDAY, SEPT 19TH — GENERAL SESSIONS

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
</tr>
</thead>
<tbody>
<tr>
<td>7:00-8:00 AM</td>
<td>Networking Breakfast: Exhibits Area</td>
</tr>
</tbody>
</table>
| 8:00 AM| Optimization of Extruder Barrel Temperatures  
Chris Rauwendaal, Rauwendaal Extrusion Engineering |
| 8:30 AM| Transforming into an Intelligent Factory: Think Big, Start Smart, Scale Fast  
Willem Sundblad, Oden Technologies |
| 9:00 AM| Inpush-Output Analysis  
Allan Griff, Edison Technical Services |
| 9:30 AM| Save that Scrap! Choosing and Sizing the Correct Size-Reduction Equipment for your Specific Application  
Dave Miller, Conair |
| 10:00 AM| Networking Break: Exhibits Area |
| 10:30 AM| Troubleshooting Your Dust and Streamer Problem  
Joe Lutz, Pelletron |
| 11:00 AM| Extrusion Screw Cleaning Tips  
Tim Whisman, Maxiblast |
| 11:30 AM| New Developments in Chillers Providing Precise Heating and Cooling in One Unit  
Rick Holzhauer, Delta T Systems |
| Noon  | Energy Efficiency Differences in AC and DC Motors on Extruders  
Scott Barlow, Integrated Controls Technology |
| 12:30 PM| Conference Concludes |
THANK YOU!
To Our Extrusion 2019 Sponsors

PLATINUM SPONSORS:

D.R. Joseph INCORPORATED

GOLD SPONSORS:

SILVER SPONSORS:

Connect at Extrusion 2019

LIMITED SPONSORSHIPS AND EXHIBIT SPACE ARE STILL AVAILABLE!

CONTACT: Ryan Delahanty, Publisher ryand@gardnerweb.com | +1 630-345-3465
EXTRUSION 2019 HALL MAP

The Extrusion 2019 exhibits area showcases the industry’s leading companies with the most innovative and exciting products and services used in extrusion processing!

2019 EXHIBITORS

Aaron Equipment Company 416
Addex, Inc. 318
Advanced Blending Solutions 315
AEC / Cumberland 414
AIS Gauging 218
Artec Machine Systems 518
ASACLEAN – Sun Plastech 517
Berlyn ECM, Inc. 519
Brabender Technologie Inc 216
CDS Custom Downstream Systems 524
Cloeren Inc. 223
Compusplast International 617
Conair 419
Control Laser Corp. 413
Coperion & Coperion K-Tron 211
CST Industries 611
C.W. Brabender Instruments, Inc. 424
D.R. Joseph, Inc. 423
Davis-Standard, LLC 220
Delta T Systems 225
Dynapurge 525
Econ Inc 214
ENTEK Extruders 316
ESI-Extrusion Services, Inc. 411
Ettlinger North America 312
Extreme Coatings 623
Extrunet Americas 515
Extrusion Control & Supply 112
Flender Corp. 417
Foremost Machine Builders, Inc. 217
Frigel North America 526
Gala Industries, Inc. 312
Gneuss Inc. 418
GP:50 Melt Pressure 215
Graham Engineering Corp. 511
Guill Tool & Engineering 313
Hitachi America Ltd. 231
iD Additives, Inc. 319
Integrated Control Technologies 124
Jelliff Corp. 120
Kolcor 514
Leistritz Extrusion 619
Maag Americas 512
Maag Automatik 312
Macchi, S.p.A 524
Maguire + Syncro 324
Mahlo America Inc. 212
NFM Welding Engineers, Inc. 317
Nordson Corp. 520
Novatec 320
Oden Technologies 325
Orbetron, LLC 111
OVS Grinding 415
Parkinson Technologies 425
Paulson Training Programs 620
Plastics Machinery Group 323
Polymers Technology Center 618
Processing Technologies 123
International LLC (PTI) 119
PSI-Polymer Systems Inc 615
R&B Plastics Machinery 312
Reduction Engineering Scheer 113
Reifenhauser 219
Riverdale Global 624
Starrett 626
TRIA America 126
The Advanced Team 516
US Extruders 512
VAC-U-MAX 317
Vepcohlan, LLC 512
Versa Machinery 426
Windmoeller & Hoelscher 420
Witte Pumps & Technology 612

Visit ExtrusionConference.com to register and review all the sessions
Total Attendees and Exhibitors in 2018

573

In 2018, 90% of surveyed EXHIBITORS were satisfied

In 2018, 90% of surveyed ATTENDEES rated the content satisfying

Extrusion 2019 Conference Fees

Your conference registration includes access to all Extrusion 2019 sessions and to the exhibit area, as well as all breakfasts, refreshment breaks, lunches and networking events.

<table>
<thead>
<tr>
<th></th>
<th>ON OR BEFORE August 13, 2019</th>
<th>AFTER August 13, 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>SAVE $150 / EARLY BIRD REGISTRATION</td>
<td>$845</td>
<td>$995</td>
</tr>
</tbody>
</table>

Why Wait? Register Today!

Register Before August 13, 2019 To Save $150!

ExtrusionConference.com

Visit ExtrusionConference.com to register and review all the sessions