

# FOAMS 2018 Conference - Montreal, September 13-14 2018

## DAY 1 : Sept 13, 2018

7:30-8:15	<b>On-site Registration - Badge pick-up</b>
8:15-8:25	<b>Welcome</b>
8:25-9:05	<b>Keynote: Outstanding Achievements Award Lecture</b> Jim Throne, Sherwood Technologies (USA)
<b>Session 1: Extrusion foaming process</b>	
9:05-9:30	Design Considerations for Physical Foam Extrusion with CO <sub>2</sub> and N <sub>2</sub> Andy Cauffman, Promix Solutions (USA)
9:30-9:55	Insights into the process and equipment to produce microcellular PET foams using extrusion foaming Daniele Tammaro, Sulzer Chemtech (Switzerland)
9:55-10:20	CO <sub>2</sub> -assisted foaming of PLA by using a planetary roller extruder for an enhanced mass and heat transfer Judith Winck, Ruhr-University Bochum (Germany)
10:20-10:45	Morning break
<b>Session 2: In-mold Foaming</b>	
10:45-11:10	Advances in high performance thermoplastic foams Isa Fonseca, BASF (Germany)
11:10-11:35	Thermoplastic Sandwich Structures with Bead Foam Core – Novel Processing Approaches Volker Altstaedt, University of Bayreuth (Germany)
11:35-12:00	Non-isothermal crystallization of hard segment in poly(ether-block-amide) (Pebax®) and the impact on foam injection foaming under N <sub>2</sub> Ruosong Li, University of Toronto (Canada)
12:00-13:20	Lunch
<b>Session 3: Foam structure and properties</b>	
13:20-13:45	High Energy Return Foam of Thermoplastic Polyester Elastomers (TPEE) Andre Oosterlaken, DSM Engineering Plastics (USA)
13:45-14:10	Tailor-made polyurethane foam morphology for defined thermal conductivity Gisbert Riess, Montanuniversität Leoben (Austria)
14:10-14:35	Thermal properties of highly loaded piezo-composite foams Gayaneh Petrossian, Washington State University (USA)
14:35-15:00	Thermal Properties and Morphology of Polyamide 6 Blends Foam Shu Kai Yeh, National Taiwan University of Science and Technology (Taiwan)
15:00-15:25	Afternoon break
<b>Session 4: Chemical foaming agents and additives</b>	
15:25-15:50	Chemical foaming of Copolyamide by reactive extrusion for automotive applications Mathilde Auclerc, University of Lyon (France)
15:50-16:15	Extruded PS foams nucleated by novel supramolecular additive to enhance foam morphology and properties Merve Demir, University Bayreuth (Germany)
16:15-16:40	Advances in Polyolefin Foaming Technology Colin Li Pi Shan, Dow Plastics (USA)
17:00-19:00	<b>Reception / Poster session</b>
19:00-21:00	<b>Award banquet</b>

8:00 **Welcome**

8:00-8:40 **Keynote: From 10 bubbles to 10,000 bubbles across a human hair: Transparent Foams in Polyetherimide**  
 Vipin Kumar, University of Washington (USA)

**Session 5: Nanocellular foams properties**

8:40-9:05 Developing Transparent Insulating Polymeric Nanofoam for Energy Efficient Window Application  
 Jie Li, Argonne National Laboratory (USA)

9:05-9:30 Nanocellular polymers based on PMMA: Recent approaches to produce these materials with improved cellular structures and properties  
 Miguel Rodriguez Perez, University of Valladolid (Spain)

9:30-9:55 Scalable process for the economical production of lightweight polymer nanofoams  
 Roland Oberhoffer and Alexander Müller, Sumteq (Germany)

9:55-10:20 Morning break

**Session 6: Nanocellular foams and fundamentals**

10:20-10:45 Low-density bimodal nanocellular PMMA/PVDF foams for super-insulating applications  
 Guilong Wang, Shandong University (China)

10:45-11:10 Stress-induced cell size decrease in PMMA foams – the importance of hydrostatic stress in solid state foaming  
 Angelika Beinert, Cambridge University (UK)

11:10-11:35 Graded and layered foams by gas foaming using periodic mass transport boundary conditions  
 Ernesto di Maio, University of Naples (Italy)

11:35-12:00 Modelling Percolation Threshold of Conductive Polymer Composite Foams with Multi-cell Growth  
 Sai Wang, University of Toronto (Canada)

12:00-13:20 Lunch

13:20-14:00 **Keynote: Challenges and solutions in the recycling of polystyrene foams**  
 Mario Grenier, Dyne-A-Pak (Canada)

**Session 7: Sustainable foams**

14:00-14:25 Influence of Repeated Recycling of Polystyrene on Morphological Attributes during Solid-State Microcellular Foaming  
 Abhishek Gandhi, CIPET, Bengaluru (India)

14:25-14:50 Polystyrene Recycling by Dissolution  
 Solenne Brouard, PolystyVert

14:50-15:15 Sustainable Nanocellulose Additives for Enhanced Polyurethane Foams  
 Geoff Fisher, Performance BioFilaments Inc. (Canada)

15:15-15:45 Afternoon break

**Session 8: Nano-composite foams**

15:45-16:10 In-Situ Shrinking Microfibers Enhanced Strain Hardening of Linear Polymers  
 Patrick Lee, University of Vermont (USA)

16:10-16:35 Dispersion of carbon additives in styrenic polymer blends and its impact on foaming with CO<sub>2</sub>  
 Anson Wong, DowDuPont Specialty Products Division (USA)

16:35-17:00 Physical Foaming: A Facile Platform to Enhance Thermal Conductivity and Electrical Properties of the Polymer-Graphene Nanoplatelets  
 Mahdi Hamidinejad, University of Toronto / NanoXplore (Canada)

17:00-17:10 Conclusion and next conference announcement