



Advances in Polyolefins 2013

October 13-16, 2013

Sonoma Valley, CA

SUNDAY, OCTOBER 13

2:30 PM	<i>REGISTRATION</i>	
3:15 PM	James E. McGrath and Pal Arjunan Overview and Objectives of the Workshop	
KEY NOTE ADDRESS SESSION		
Introduction: Pal Arjunan & Jim McGrath		
3:30 PM	Robert H. Grubbs, California Institute of Technology Synthesis of Polymers with Controlled Stereochemistry Using Olefin Metathesis Catalysts	1
4:00 PM	Srivatsan Iyer, Braskem-USA N. America Energy Transformation and its Impact on Petrochemicals	2
4:30 PM	Patrick Brant, ExxonMobil Chemical Company Overview of Drivers and Responses in Polyolefins: Keys to Their Continuing Success	3
5:00 PM	Raphael Crawford, Albemarle Corporation Driving Success in the Polyolefin Resin Industry through Innovative Catalytic Solutions	4
5:30 PM	Edmund Carnahan, Dow Chemical Company Advances in Olefin Block Copolymers	5
6:00 PM	<i>GENERAL DISCUSSION ON TOPICS/END SESSIONS</i>	
6:30 PM	<i>WELCOME RECEPTION</i>	

MONDAY, OCTOBER 14

7:00 AM	<i>CONTINENTAL BREAKFAST</i>	
INVITED LECTURE SESSION II		
Discussion Leader – Pal Arjunan, Trelleborg Offshore US Inc.		
8:30 AM	Tobin J. Marks, Northwestern University Bridging Homogeneous and Heterogeneous Polymerization Catalysis. Tuning Catalyst...Catalyst and Catalyst...Support Interactions	6
9:00 AM	Lawrence R. Sita, University of Maryland Polyolefin Origami - Extending Structure and Function Using a Limited Toolset	7
9:30 AM	T.C. (Mike) Chung, The Pennsylvania State University Functional Polyolefins for Energy Applications	8
10:00 AM	<i>BREAK</i>	

Monday, October 14, cont'd

INVITED LECTURE SESSION III		
Discussion Leader – Dan Vanderlende, Univation Technologies		
10:30 AM	Joe Edson, Freeslate, Inc. Acceleration and Automation of Ziegler-Natta Catalyst Synthesis and Associated Olefin Polymerizations	10
11:00 AM	Miran Milosevic, SABIC, Europe, THE NETHERLANDS Kinetic Modeling Approach and Design of a Full-Scale Commercial Model from a Lab-Batch Scale Slurry Polymerization Process	11
11:30 AM	<i>GENERAL DISCUSSION ON MORNING TOPICS</i>	
12:00 noon	<i>LUNCH</i>	
INVITED LECTURE SESSION IV		
Discussion Leader – Jim McGrath, Virginia Tech		
1:30 PM	Scott Milner, The Pennsylvania State University Finding the Tube without Touching the Chains	13
2:00 PM	Franck D'Agosto and Christophe Boisson, Université de Lyon, FRANCE Telechelic Polyethylenes by Catalyzed Chain Growth	14
2:30 PM	Christophe Boisson, Université de Lyon, FRANCE Borate and MAO Free Activating Supports for Molecular Complexes in Olefin Polymerization	15
3:00 PM	<i>BREAK</i>	
INVITED LECTURE SESSION V		
Discussion Leader – Srivatsan Iyer, Braskem-USA		
3:30 PM	Paul J. DesLauriers, Chevron Phillips Chemical Company LP Correlating Molecular Weight Distributions to Capillary Rheology Measurements Using Chemometric Methods	16
4:00 PM	Yves Ramjoie, INEOS Technologies Novel Polyolefin Technology Solutions	17
4.30 PM	David Bergbreiter, Texas A&M University Applications of Polyolefin Oligomers as Solvents, Ligands, and Additives	18
5:00 PM	<i>GENERAL DISCUSSION ON AFTERNOON TOPICS</i>	
5:30 PM	<i>SESSION ENDS</i>	
6:00 PM	<i>RECEPTION AND POSTER SESSION</i>	

TUESDAY, OCTOBER 15

7:00 AM CONTINENTAL BREAKFAST

INVITED LECTURE SESSION VI

Discussion Leader: Donald L. Morrison, Boulder-Scientific Co.

8:00 AM	Moshe Kol, Tel Aviv University, ISRAEL From Salans to Salalens and Back: The Search for Active AND Isospecific Polymerization Catalysts	19
8:30 AM	Matthew Thorn and Steven Diefenbach, Albemarle Corporation Improving Activation Efficiency of Non-Alkylated Metallocenes for Olefin Polymerization Without Sacrificing Polymer Properties	20
9:00 AM	Patrick Brant, ExxonMobil Chemical Company Fundamentals of Stretch Cling Film	21
9:30 AM	BREAK	

INVITED LECTURE SESSION VII

Discussion Leader – Steve P. Diefenbach, Albemarle Corporation

10:00 AM	Kenneth Wagener, University of Florida The Synthesis of Precision Polyolefins Containing a Variety of Pendant Acid Groups	23
10:30 AM	Benny Freeman, University of Texas, Austin Thermally Rearranged Polyimides for Applications in Olefin/Paraffin Separations	24
11:00 AM	Rick King, BASF Corporation Stabilization of Polyolefins: An Overview of Chemistry & Effects	25
11:30 AM	GENERAL DISCUSSION ON AFTERNOON TOPICS	
12:00 noon	LUNCH	

INVITED LECTURE SESSION VIII

Discussion Leader: Pat Brant, ExxonMobil Chemical Company

1:30 PM	Saeid Mehdiabadi and João B.P. Soares, University of Alberta, CANADA The Importance of Having Detailed Ethylene/ α -Olefin Polymerization Kinetics with Metallocene Catalysts for Developing New Polyolefin Products	26
2:00 PM	Timothy F.L. McKenna, C2P2-Equipe LCPP, ESCPE-Lyon, FRANCE Effect Of N-Hexane as Inert Condensing Agent (ICA) During Gas Phase Ethylene Polymerization on Supported Catalyst: from Experimental to Modeling Analysis	27
2:30 PM	A. Willem deGroot, The Dow Chemical Company A Modern Toolbox for Polyolefins Molecular Structure Determination	28
3:00 PM	BREAK	

TUESDAY, OCTOBER 15, CONT'D

INVITED LECTURE SESSION IX		
Discussion Leader: Len J. Buckley, Institute for Defense Analysis, DOD		
3:30 PM	<u>Tad Kog</u> and <u>Benjamin S. Hsiao</u>, Stony Brook University Structures of Polyolefins Confined at the Nanometer Scale	29
4:00 PM	<u>Eric Baer</u>, Case Western Reserve University Polyolefin Based Multilayer Films via Forced Assembly	30
4:30 PM	<u>Rufina Alamo</u>, Florida State University Crystalline Properties of Late Generation Polyolefins	31
5:00 PM	<i>GENERAL DISCUSSION ON TOPICS</i>	
5:30 PM	<i>DINNER ON YOUR OWN</i>	

WEDNESDAY, OCTOBER 16

7:00 AM	<i>CONTINENTAL BREAKFAST</i>	
INVITED LECTURE SESSION X		
Discussion Leader: Arnold Lustiger, EMR&E Corporate Labs		
8:30 AM	<u>Kathleen O'Leary Havelka</u>, Elevance Renewable Sciences From Biorefinery to Performance Technology: Transforming Renewable Olefinic Building Blocks into Lubricants and Other High Value Products	32
9:00 AM	<u>James E. McGrath</u> and <u>Lloyd Robeson</u>, Virginia Tech Opportunities for Polymer Blends of Ethylene Copolymers with Polar Polymers Including PVC and Thermoplastic Polyurethanes	33
9:30 AM	<u>Josef Jancar</u>, Brno University of Technology, CZECH REPUBLIC Effect of Multiple Extrusion on Impact Fracture of Three Polypropylene Impact Copolymers	22
9:30 AM	<i>GENERAL DISCUSSION ON TOPICS</i>	
10:00 AM	<i>BREAK</i>	
INVITED LECTURE SESSION XI		
Discussion Leader: Jim McGrath, Virginia Tech		
10:30 AM	<u>Robert Brüll</u>, Fraunhofer Institute for Structural Durability and System Reliability, Darmstadt, Germany Frontiers of Liquid Chromatography for Polyolefins	37
11:00 AM	<i>Pal Arjunan and Jim McGrath: Closing Remarks</i>	