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ADVANCES IN POLYOLEFINS 2007
September 23 -26, 2007
Santa Rosa, California USA

SUNDAY, SEPTEMBER 23

2:30 p.m.	<i>REGISTRATION BEGINS</i>	
	James E. McGrath and Pal Arjunan	
3:30 p.m.	Overview and Objectives of the Workshop	
KEY NOTE ADDRESS SESSION		
<i>Introduction: Pal Arjunan & Jim McGrath</i>		
	Kurt W. Swogger, The Dow Chemical Company	
3:45 p.m.	Emerging Challenges/Opportunities in Polyolefins	1
	Howard Turner, Symyx Technologies, Inc.	
4:15 p.m.	High Throughput Research Methodologies and Innovation in the Polyolefins Industry	2
4:45 p.m.	<i>BREAK</i>	
INVITED LECTURE SESSION I		
<i>Discussion Leader – Lloyd Robeson, Air Products (retired)</i>		
	Peter Hanik, Pretium Consulting, LLC	
5:00 p.m.	Innovation Model as Applicable to Polyolefins Industry R/D	3
	Abbas Razavi, Total Petrochemicals Research Center, BELGIUM	
5:30 p.m.	Single Site Catalyzed Polyolefins, Academic and Industrial Challenges	4
<i>WELCOME RECEPTION, SPONSORED, IN PART BY:</i>		
6:00 p.m.	SYMYX CORPORATION	
7:00 p.m.	<i>DINNER ON YOUR OWN</i>	

MONDAY, SEPTEMBER 24

7:30 a.m.	<i>BREAKFAST</i>	
INVITED LECTURE SESSION II		
<i>Discussion Leader – Bill Fraser, The Dow Chemical Company</i>		
	Robert M. Waymouth, Stanford University	
8:30 a.m.	Catalysts for Novel Styrene / Ethylene Copolymers	5
	Brian L. Goodall, Imperium Renewables, Inc.	
9:00 a.m.	Novel Catalysts for the Controlled Copolymerization of Olefins and Acrylates to Linear, High Molecular Weight, Random Copolymers	6
	Manfred Bochmann, University of East Anglia, UNITED KINGDOM	
9:30 a.m.	New Types of Highly Unsaturated Isobutene Polymers Via Zinc-Based Initiators	7
10:00 a.m.	<i>BREAK</i>	
INVITED LECTURE SESSION III		
<i>Discussion Leader – Pal Arjunan, CMR Inc./Innovante Corporation</i>		
	Sarah Martin, The Dow Chemical Company	
	INFUSE™ Olefin Block Copolymers: From Molecular Design to Market	
10:15 a.m.	Introduction	8
	Neng Guo, Northwestern University	
10:45 a.m.	Bimetallic Effects in Homopolymerization of Styrene and Copolymerization of Ethylene and Styrenic Comonomers. Scope, Kinetics, and Mechanism	9
	Armenag H. Dekmezian, ExxonMobil Chemical Company	
11:15 a.m.	Design of Propylene-based Olefin Block Copolymers	10
11:45 a.m.	<i>LUNCH</i>	

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INVITED LECTURE SESSION IV		
<i>Discussion Leader – Eric Baer, Case Western Reserve University</i>		
	Benjamin Monrabal, Polymer ChAR, SPAIN	
1:15 p.m.	Microstructure Characterization of Polyolefins	11
	Donald. A Winesett, ExxonMobil Chemical Company	
1:45 p.m.	Chemical Imaging Techniques For Polyolefin Blends	12
	Anne Hiltner and Eric Baer, Case Western Reserve University	
2:15 p.m.	Properties and Solid State Structure of New Olefinic Block Copolymers	13
2:45 p.m.	<i>BREAK</i>	
INVITED LECTURE SESSION V		
<i>Discussion Leader – Abhi Patil, ExxonMobil Corporate Research</i>		
	Javier Revilla Vazque – Innovante/CID-DESC, MEXICO	
3:00 p.m.	High Throughput Tools/Capabilities to Polyolefins R/D	14
	Jun-ichi Imuta, Mitsui Chemicals, Inc., JAPAN	
3:30 p.m.	Growth of Functional Olefin Polymers by Single Site Catalysts	15
	Ralph Colby, The Pennsylvania State University	
4:00 p.m.	Rheological Characterization of Novel PP Copolymers	16
	Kazushi Mashima, Osaka University, JAPAN	
4:30 p.m.	Half-metallocene Complexes of Group 4 and 5 Metals as Unique Catalyst Precursors for Olefin Polymerization	17
5:00 p.m.	<i>SESSION ENDS</i>	
	<i>RECEPTION AND POSTER SESSION, SPONSORED, IN PART BY:</i>	
5:30 p.m.	ALBEMARLE CORPORATION	
6:30 p.m.	<i>DINNER ON YOUR OWN</i>	

TUESDAY, SEPTEMBER 25

7:30 a.m.	<i>BREAKFAST</i>	
INVITED LECTURE SESSION VI		
<i>Discussion Leader – Bryan L. Goodall, Imperium Renewables, Inc.</i>		
	Lloyd M. Robeson, Air Products (retired)	
8:30 a.m.	Polyolefin Blends	18
	Walter Kaminsky, University of Hamburg, GERMANY	
9:00 a.m.	Polyolefin-Nanocomposites by In-situ Polymerization with Metallocene Catalysts	19
	Don R. Paul, The University of Texas at Austin	
9:30 a.m.	Polyolefin Nanocomposites: Structure and Properties	20
10:00 a.m.	<i>BREAK</i>	
INVITED LECTURE SESSION VII		
<i>Discussion Leader: Don R. Paul, The University of Texas at Austin</i>		
	Pat Brant, ExxonMobil Chemical Company	
10:15 a.m.	Polyolefin Separators for Lithium Ion Battery	21
	Stephen A. Miller, University of Florida	
10:45 a.m.	Branched Polyolefin Architectures from Ethylene Alone	22
	Bernhard Wunderlich, University of Tennessee	
	Differences in Structural and Thermal Properties between Random and Precisely Structured Copolyolefins	
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11:45 a.m.	<i>LUNCH</i>	

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<i>Discussion Leader: Pat Brant, ExxonMobil Chemical Company</i>		
	Timothy F. L. McKenna, Queen's University, CANADA Challenges in Modelling Particle Growth and Morphology: A Theoretical and	
1:15 p.m.	Experimental Study	24
	Siripon Anantawaraskul, Kasetsart University, THAILAND Determination of Chemical Composition Distribution via	
1:45 p.m.	Simulated Crystaf Calibration Curve	25
	T. C. Mike Chung, The Pennsylvania State University Synthesis and Characterization of LCBPP and PVDF Thin Films for High Energy	
2:15 p.m.	Density Capacitors	26
2:45 p.m.	<i>BREAK</i>	
INVITED LECTURE SESSION IX		
<i>Discussion Leader: Don Schulz, ExxonMobil Corporate Research</i>		
	João B. P. Soares, University of Waterloo, CANADA Monte Carlo Simulation of MWD Evolution During Stopped-Flow Polymerization	
3:00 p.m.		27
	Pierre Lutz, ICS/CNRS, FRANCE Towards New Complex Macromolecular Architectures via Coordination (Co)	
3:30 p.m.	Polymerization of Macromonomers	28
	Donald G. Baird, Virginia Tech Including Shear Step-Strain Rheology in the Development of Multi-Mode Pom-Pom	
4:00 p.m.	Model Parameters	29
	Ioan Tincul, University of Stellenbosch, SOUTH AFRICA Propylene Copolymers with Fischer Tropsch Derived Olefins	
4:30 p.m.		30
5:00 p.m.	<i>DINNER ON YOUR OWN</i>	

WEDNESDAY, SEPTEMBER 26

7:30 a.m.	<i>BREAKFAST</i>	
INVITED LECTURE SESSION X		
<i>Discussion Leader: Don Morrison, Boulder Scientific Company</i>		
	Pal Arjunan, CMR Inc./Innovante Corporation Latest Commercial Trends in Polyolefin Catalysts, Process, and Materials	
8:30 a.m.		31
	Lubin Luo, Albemarle Corporation Albemarle New Activators. Solution and Supported Brønsted Acidic Aluminoxanes	
9:00 a.m.	and Aluminates	32
	Moris S. Eisen, Israel Institute of Technology, ISRAEL The Effect of Cocatalysts in the Polymerization of Propylene Towards Elastomeric	
9:30 a.m.	Materials	33
10:00 a.m.	<i>BREAK</i>	
INVITED LECTURE SESSION XI		
<i>Discussion Leader: Colin Li Pi Shan, Dow Chemical Company</i>		
	Greg Saunders, Polymer Laboratories, LTD, UNITED KINGDOM Size Exclusion Chromatography - A Versatile Tool for Polyolefin Characterization	
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	Hervé Marand, Virginia Tech Effect of Kinetic and Thermodynamic Defects on Polyolefin Secondary	
10:45 a.m.	Crystallization and Dynamics	35

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INVITED LECTURE SESSION XII		
<i>Discussion Leader: Steve Diefenbach, Albemarle Corporation</i>		
Minoru Terano, Japan Advanced Institute of Science and Technology, JAPAN		
Investigation on the Molecular States of Surface Ti Species on Ultra Low Ti Loading		
1:15 p.m.	MgCl ₂ -Supported Catalysts	37
Boping Liu, East China University of Science and Technology, CHINA		
Computational Molecular Modeling on the Mechanism of Active Sites Formation on		
1:45 p.m.	Phillips Cr Catalyst	38
Kevin Cann, Univation Technologies, LLC		
Diagnostic Tools for Activated Chromium Oxide Polymerization Catalysts with		
2:15 p.m.	Application to Catalyst and Polymer Structure	39
2:45 p.m.	<i>BREAK</i>	
INVITED LECTURE SESSION XIII		
<i>Discussion Leader: Minoru Terano, Japan Advanced Institute of Science and Technology, JAPAN</i>		
Toru Arai, Denka Chemical Company, JAPAN		
A Macromer Containing Divinylbenzene Unit as the Building Block of Topologically		
3:00 p.m.	Controlled Copolymers	40
Rick E. King III, Ciba Specialty Chemicals		
3:30 p.m.	Stabilization of Polyolefins: Chemistry and Effects	41
Youlu Yu, Chevron Phillips Chemical Company, LP		
An On-line Two-dimensional (2-D) α TREF- <i>h</i> SEC Technique for Polyolefins		
4:00 p.m.	Characterization	42
Leonardo C. Simon, University of Waterloo, CANADA		
4:30 p.m.	Gas Phase Ethylene Polymerization Using Metallocene/Clays	43
5:00 p.m.	<i>Pal Arjunan and Jim McGrath: Closing Remarks</i>	