

5th ICPC Short Course on Polyolefin Characterization Techniques Agenda

Sunday, September 21 st , 2014	
7:30 - 8:15	Registration.
Introduction to Polyolefins <i>Joao Soares</i>	
8:15 – 9:00	<ul style="list-style-type: none"> · Polyolefin types. · Olefin polymerization reactor types. · Olefin polymerization catalysts. · New polyolefins. · Microstructure – Properties.
Polyolefin Microstructure <i>Benjamin Monrabal</i>	
9:00 - 9:30	<ul style="list-style-type: none"> · Polyolefins Microstructure. · MMD, CCD, Bivariate Distribution.
GPC Basics <i>Wallace Yau</i>	
9:30 - 10:30	<ul style="list-style-type: none"> · Basic GPC mechanism. · Molecular Weight average concept. · GPC retention. · Band broadening. · Different ways to do calibrations. · GPC-Light Scattering. · GPC-Viscometry. · Universal calibration. · Triple detector. · Mark Houwink Plot. · Quad detector.
10:30 - 10:45	Coffee Break
GPC - Practical Considerations <i>David Gillespie</i>	
10:45 - 12:00	<ul style="list-style-type: none"> · Sample and System Preparation. · Column Technology. · Detector Technology. · Band Broadening considerations. · Systematic Approach.
GPC - Calculations <i>Alberto Ortín</i>	
12:00 - 12:45	<ul style="list-style-type: none"> · Conventional GPC. · Viscometer. · Light Scattering. · Chemical Composition along the MMD.
12:45 - 13:45	Lunch
CCD Techniques: TREF, CRYSTAF, CEF and CFC <i>Benjamin Monrabal</i>	
13:45 - 15:15	<ul style="list-style-type: none"> · Fundamentals of Crystallization techniques. · TREF. · CRYSTAF. · CEF · Calibration and Calculations. · Hyphenated Techniques. · Cross Fractionation Chrom.
15:15 - 15:30	Coffee Break
High Temperature HPLC <i>Willem Degroot</i>	
15:30 - 16:15	<ul style="list-style-type: none"> · Fundamentals of Liquid Chromatography. · Background of HT-LC Development. · High Temp. Solvent Gradient Interaction Chromatography. · High Temp. Thermal Gradient Interaction Chromatography. · Applications and New Developments.
Preparative Fractionation <i>Benjamin Monrabal</i>	
16:15 - 16:45	<ul style="list-style-type: none"> · Preparative Fractionation techniques. · Molar Mass Fractionation. · Composition Fractionation.
Applications	
16:45 - 17:45	<ul style="list-style-type: none"> · Application examples.