

7th ICPC Short Course on Polyolefin Characterization Techniques Founders 3&4 Room, The Royal Sonesta Houston Hotel

| Sunday, October 21, 2018 | | GPC - Practical Considerations <i>David Gillespie</i> | |
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| 7:30 - 8:15 | Registration. | 11:40 - 13:00 | <ul style="list-style-type: none"> · Sample and System Preparation. · Column Technology. · Detector Technology. · Band Broadening considerations. · Systematic Approach. |
| Introduction to Polyolefins <i>João Soares</i> | | 13:00 - 14:00 | <i>Lunch</i> |
| 8:15 - 9:00 | <ul style="list-style-type: none"> · Polyolefin types. · Olefin polymerization reactor types. · Olefin polymerization catalysts. · New polyolefins. · Microstructure – Properties. | CCD Techniques: TREF, CRYSTAF, CEF and CFC <i>Benjamin Monrabal</i> | |
| Polyolefin Microstructure <i>Benjamin Monrabal</i> | | 14:00 - 15:20 | <ul style="list-style-type: none"> · Fundamentals of Crystallization techniques. · TREF. · CRYSTAF. · CEF · Calibration and Calculations. · Hyphenated Techniques. · Cross Fractionation Chrom. |
| 9:00 - 9:30 | <ul style="list-style-type: none"> · Polyolefins Microstructure. · IR Spectroscopy, MMD, CCD, Bivariate Distribution. | 15:20 - 15:40 | <i>Coffee Break</i> |
| GPC Basics <i>Wallace Yau</i> | | High Temperature HPLC <i>Willem Degroot</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. | 15:40 - 16:30 | <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. |
| 10:30 - 10:50 | <i>Coffee Break</i> | Preparative Fractionation <i>Benjamin Monrabal</i> | |
| GPC - Calculations <i>Alberto Ortín</i> | | 16:30 - 17:00 | <ul style="list-style-type: none"> · Preparative Fractionation techniques. · Molar Mass Fractionation. · Composition Fractionation. |
| 10:50 - 11:40 | <ul style="list-style-type: none"> · Conventional GPC. · Viscometer. · Light Scattering. · Chemical Composition along the MMD. | Applications | |
| | | 17:00 - 18:00 | <ul style="list-style-type: none"> · Application examples. |