



**Technical Conference at PLAST 2015 –
May 6-7, 2015 Milan Fiera, Rho, Italy
Conference Centre, Room Aquarius
*Technology Innovations that Enhance
Value in Polymer Processing***

***Sponsored by: Center for Process Analysis and Control (CPAC), GIMAC,
MACPLAS, MK Optimization and Control***

This CPAC technical conference during PLAST 2015 will highlight advances in process operations that are of value in producing the next generation of high technology polymeric materials. These advances are enabled by recent developments in real-time analysis and data handling concepts that lead to improved process control through process understanding. The meeting format has three sections.

- **Day One - Wednesday, May 6 (14:00-18:00)**

"Overview of new material concepts and tools being developed to provide significant new capabilities in the field"

Invited talks:

- **New Material Development and Modifications In the Polymer Field (Exploring Renewable Resources for Plastics)**
Attilio Citterio, Milan Polytechnical, Italy
- **Electroactive Materials for Printed Electronics**
Alessio Marrani, Solvay, Italy
- **Merging new High-Throughput Screening Techniques and Statistical Experimentation Strategies for Enabling High Performance Polymer Product Innovations**
Eleni Karayianni, DuPont Performance Polymers R&D, Switzerland
- **Additives that will Improve the Performance of Polymer Products**
Michele Mauri, Roberto Simonutti and Alberto Bianchi, Graftonica (a spin off of Milan University-Bicocca), Italy

Discussion: Ray Chrisman, MK Optimization and Control, USA

- **Day Two - Thursday, May 7 (10:00-13:00)**

"Utilizing Developments in Continuous Processing - Process Control, Sampling and Sensing - the Applications and Benefits of these Technologies in Manufacturing Facilities"

Invited talks:

- **Advanced Rubber Nanocomposite via Process Controlled Reactive Extrusion.**
Stefano Testi, Alberto Scurati, Luca Giannini (Pirelli Tyre) and Maurizio Galimberti (Milan Polytechnical), Italy
- **Strategies for the Real Time Analysis of Polymer Streams**
Ray Chrisman, MK Optimization and Control, USA
- **Online Analysis Applied to Monitor Real-Time Distribution, Dispersion and Exfoliation – Resulting in Feed Back Control of a Continuous Process**
Andrea Castrovinci, SUPSI, Switzerland
- **Benefits from Calorimetry Combined with Spectroscopy – a Kinetic Assessment to Achieve Optimization and Safety of the Process (from Lab to Production Scale)**
Marino Nebuloni, University of Parma and Redox, Italy

- **Thursday, May 7 (14:00-18:00)**

"The applications and benefits of new technologies in manufacturing facilities - A description of the commercially available tools which are designed to enable production of the new array of polymeric materials"

Invited talks:

- **Micro-Extruder Technology Developments for Solids Handling**
Simone Maccagnan, GIMAC, Italy
- **Computation Fluid Dynamics on Twin Screw Extruder Rheology**
Corrado Moneta, ICMA San Giorgio, Italy
- **Process-Spectroscopy in Polymer Industry Development**
Viacheslav Artyushenko, Art Photonics, Germany and Simone Maccagnan, GIMAC, Italy
- **Control Technologies for Effective Use of Process Analytical Technology and Process Improvements**
Marco Banti, ABB, Italy

Discussion on Future Directions: *Ray Chrisman, MK Optimization and Control, USA*