CONFERENCE PST CONFERENCE ROOM (PROPLAST) STRADA COMUNALE SAVONESA, 9 15057 RIVALTA SCRIVIA (AL) POLYMERS 30th November

In the last twenty years the interest in replacing a dominating metals sector with plastics has increased considerably. These studies have led to the development of high quality technological solutions. Focusing on this goal, thermoplastic polymers with improved electric and thermal conductivity have been developed. Although having satisfactory technical features, to date the development of intrinsically conductive polymers has not led to a real commercial breakthrough due to the high cost thereof, in particular, in comparison to traditional conductive materials (metals such as copper, aluminum, iron). However, the possibility of increasing the conductivity of polymers using conductive additives is of great interest, especially from an industrial point of view and considering the fact that it is possible to use common polymers and traditional compounding techniques. On 30 November 2012, Proplast, ECNP and TMP are organizing a conference on the technological solutions for improving thermal and electric conductivity of polymers, in order to present an overview of the possibilities which are already commercially available and being developed to participants.

2012















9.00 Registration

- 9.30 Conference Opening *Piero Cavigliasso (Proplast) Loredana Faccincani (TMP)*
- 9.45 Modelling of the electric behavior of polymer matrix nanocomposites Josè M. Kenny (ECNP) - Italian talk

PROGRAMME

SESSION 1 - Electrical conductivity 1- Chairman: Josè M. Kenny (ECNP)

- 10.30 Electrical conductivity through conductive carbon blacks: a practical and reliable choice

 Daniele Bonacchi (Timcal) Italian talk
- 11.00 Use of Stainless Steel Fibers for Electro Conductive plastics *R. De Witte, R. Labrado (Ferroplast-Bekaert)* English talk
- 11.30 Coffee break

SESSION 2 - Electrical conductivity 2 - Chairman: Josè M. Kenny (ECNP)

- 12.00 Multifunctional renewable resources polyurethanes: electrically conductive and flame resistant

 Andrea Castrovinci (ICIMSI-SUPSI) Italian talk
- 12.30 Electric and thermal conductivity in thermoplastic compounds: compounds and cutting edge applications

 Luca Posca (Lati) Italian talk
- 13.00 Carbon nanotubes based compounds: state of the art *Eligio Martini (Maip)* Italian talk
- 13.30 Lunch

SESSION 3 - Thermal conductivity - Chairman: Carlo Latorre (Polimerica)

- 15.00 Thermally conductive polymers and composites: state of the art and prospects

 Alberto Fina (Politecnico di Torino) Italian talk
- 15.30 Use of Thermal Conductive Materials for Heat Management Solutions. Examples of Applications and Technical aspects for design optimization *Giorgio Coppolino (DSM), Abel Pot (DSM)* English talk
- 16.00 Polymer heat exchangers: case studies from Thermonano EU project and other applications *Guido Saracco (Politecnico di Torino)* Italian talk
- 16.30 LNP Konduit compounds for thermal management solutions *Willem Hamersma (Sabic)* English talk
- 17.00 Conference Ending Piero Cavigliasso (Proplast)