



Welcome to the **7th Asia-Europe Symposium on Processing and Properties of Reinforced Polymers** (AESP7, including European COST MP1105 Workshop of “Advances in Flame Retardancy of Polymeric Materials”), **Madrid 2015!!!**

February 4-6, 2015 • Madrid, Spain

About your Registration

Full Conference Registration and Student Registration include coffee breaks, conference luncheons, welcome reception and access to the technical sessions, the guided visit to the Old Madrid and the conference banquet.

Guests may purchase tickets for the welcoming reception and the conference luncheons at the registration desk. **Tickets are 20 € (Guided Visit to Old Madrid) and 50 € (Conference Banquet).**

Badges must be worn to gain access to the technical sessions and social functions.

Note to speakers

Presentations must be loaded in the central computer room 15 minutes before the start of the corresponding session.

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Guided visit to the Old Madrid	XXVI

16:35-16:50	Oral talk	Effect of Nano-TiO₂ Loading on Mechanical and Thermal Properties of Nitrile Rubber (NBR) Compounds , M. Javed , M. Rayees K., Jawad K.T.K, M. Ashar C., Shebeer A.R., Ramis M.K.
16:50-17:05	Oral talk	Analysis of the Fracture Mechanism of Graphite Nanoplatelets/Polypropylene Composites , L.C. Herrera-Ramírez , P. Castell, J.P. Fernández-Blázquez, A. Fernández-Cuello and R. Guzmán de Villoria
17:05-17:30	Closing	

Topic-2: Fire Retardant Material (European COST MP1105 Workshop of “Advances in Flame Retardancy of Polymeric Materials”)

DAY 1: 4th Feb (Wed)		
8:00-8:45	Registration	
8:45-9:00	Conference Opening	
9:00-9:30	Plenary 1	Hollow-tunneled Graphitic Carbon Nanofibres for LIBs , YM Chen, Y-W Mai , LM Zhou
Session 1	Chairperson: Charles Wilkie	
9:35-10:00	Keynote talk	A European Multidisciplinary Knowledge Platform to Enhance Research on Flame Retardancy , Paul Kiekens , Els Van der Burght
10:00-10:15	Oral talk	DSC, TGA of CeO₂-Polycarbonate composites: flame retardant predictions from experimental thermal data , C. Larosa and R. Eggenhöfner
10:15-10:30	Oral talk	Effect of Ammonium PolyPhosphate and Fillers on Flame Retardant and Mechanical Properties of Recycled PET Injection Molded , S. Thumsorn, J. J. Liu, W. Thodsaratpreeyakul, H. Inoya and M. Okoshi, H. Hamada
10:30-10:45	Oral talk	High efficient halogen-free phosphorous-based flame retardant poly (lactic acid) composite , Xiaomin Zhao , De-Yi Wang
10:45-11:00	Oral talk	Preparation and characterization of flame retarded self-reinforced poly(lactic acid) composites , K. Bocz , D. Vadas and Gy. Marosi

11:00-11:15	Coffee Break	
11:15-11:45	Plenary 2	New Multifunctional Composites for Airframe Structures – Carbon and Metal United, <u>Ulf Breuer</u>, S. Schmeer, B. Hannemann
Session 2	Chairperson: Paul Kiekens	
11:50-12:15	Keynote talk	Some Misused Terms in Fire Retardancy, <u>Charles Wilkie</u>
12:15-12:40	Keynote talk	The effects of environmental conditions on fire performance of intumescent coated glass fibre-reinforced epoxy composites, <u>B.K. Kandola</u>, P. Luangtriratana
12:40-13:00	Invited talk	Antiflammable Nanocoatings for Foam and Fabric Using Renewable and/or Environmentally-Benign Materials, <u>Jaime C. Grunlan</u>
13:00-14:00	Lunch	
14:00-14:30	Plenary 3	The Reinforcement of Polymers by Graphene, <u>Robert J. Young</u>
Session 3	Chairperson: Bernhard Scharrel	
14:35-15:00	Keynote talk	Design of Polymer Systems Flame-Retarded and In-situ Reinforced via Phosphorus-Containing Thermotropic Liquid Crystalline Polymers, <u>Yu-Zhong Wang</u>
15:00-15:25	Keynote talk	Flame retardant epoxy resins and composites, <u>Manfred Döring</u>
15:25-15:45	Invited talk	Improving thermal degradation and flame retardant properties of HDPE/ATH composites with fullerene, L. G. Han, Z. H. Guo, <u>Z. P. Fang</u>
15:45-16:00	Oral talk	Novel Phosphorus Containing Linear Poly (arylene ethers) as flame retardant additives in a Blend with Epoxy Resin, <u>Hirak Satpathia</u>, Doris Pospiecha, Vigneshbabu Heeralalb, De-Yi Wangb and Brigitte Voit
16:00-16:20	Coffee Break	
Session 4	Chairperson: Yu-Zhong Wang	
16:20-16:45	Keynote talk	Developments of low smoke zero halogen compounds for cable applications within the last two decades – a review, <u>G. Beyer</u>
16:45-17:10	Keynote talk	Are fire retardants compatible with sustainability? <u>T Richard Hull</u>

17:10-17:30	Invited talk	Isolated Protective Char layers by Nanoclay Network: Significantly Improved Flame Retardancy and Mechanical Performance of TPV/MH composites by Small amount of Nanoclay , Kai Lu, Yongjin Li
17:30-17:45	Oral talk	Fire Behaviors of Epoxy Nanocomposites containing Multimodified-Intercalated Layered Double Hydroxides , Ehsan Kalali , De-Yi Wang
17:45-18:00	Welcome reception	
18:00-19:00	Visit to IMDEA Materials Institute	

DAY 2: 5th Feb (Thurs)

9:00-9:30	Plenary 4	A new generation of nanocomposite fire retardants , Giovanni Camino
Session 5	Chairperson: Manfred Doering	
9:35-10:00	Keynote talk	Recent Development on Phosphorus Chemistry and Flame Retardant Applications , Khalifah Salmeia, Sabyasachi Gaan
10:00-10:25	Keynote talk	Towards Fire and Flame Retardant Composites , Bernhard Schartel
10:25-10:45	Invited talk	Layer by Layer Assembly of fire proofing coatings for textiles, films and foams , J. Alongi , F. Carosio and G. Malucelli
10:45-11:00	Oral talk	Novel Flame Retardant Polypropylene based Nanocomposites , Dan Xiao , Brigitte Voit, Uwe Gohs and De-Yi Wang
11:00-11:15	Coffee Break	
11:15-11:45	Plenary 5	Self-healing polymeric materials for strength recovery , Ming-Qiu ZHANG , Min-Zhi RONG
Session 6	Chairperson: T Richard Hull	
11:50-12:15	Keynote talk	Phosphorus Ester Flame Retardants from Derivatives of Starch and Castor Oil , Bob A. Howell and Yoseph G. Daniel

12:15-12:40	Keynote talk	Is Halogen-free Fire Retardant low efficiency? De-Yi Wang
12:40-13:00	Invited talk	Carbon Nanotubes For Innovative Eco-Friendly Flame Retardant Solutions , D. Bonduel , M. Brizzi, B. Miani, M. Claes
13:00-14:00	Lunch	
Session 7	Chairperson: Giovanni Camino	
14:00-14:25	Keynote talk	Revealing Why Phosphinate-Based Systems Provide Low Flammability , F. Samyn , S. Bourbigot and A. Naik
14:25-14:45	Invited talk	Flame Retardant Polymer Composites By Electron Induced Reactive Processing , U. Gohs , C. Zschech, U. Wagenknecht, D. Y. Wang, G. Heinrich
14:45-15:05	Invited talk	The European Flame Retardant Association (EFRA) , Willem Hofland
15:05-15:20	Oral talk	Nanospheres Silica Doped With Tin as High Performance Flame Retardant in Flexible Poly (Vinyl Chloride) , Ye-Tang Pan , De-Yi Wang
15:20-15:35	Oral talk	Chemically Bonded Phosphate Ceramics and Wollastonite/APP as Flame Retardants for PMMA , M.Niubó, L.Haurie , J.Formosa, J.M. Chimenos, J-M.Lopez-Cuesta
15:35-16:40	Poster Session	
18:00-20:00	Guided visit to the Old Madrid	
20:30-23:00	Conference Banquet	

DAY 3: 6th Feb (Fri)		
9:00-9:30	Plenary 6	Elastomer Nanocomposite Sensors in Flexible Electronics, K K Sadasivuni, D Ponnamma, <u>Sabu Thomas</u>
Session 8	Chairperson: Sabyasachi Gaan	
9:35-10:00	Keynote talk	Phosphorus modified biophenols: a brick for biobased flame-retardant polymers, <u>L. Ferry</u> , R. Menard, R. Sonnier, C. Negrell-Guirao, G. David
10:00-10:15	Oral talk	Phosphate-based Compounds Containing Additional Elements as Flame Retardants on Cellulose-based Cotton Fabrics, <u>J. E. Low</u> and J. Levalois-Grützmacher
10:15-10:30	Oral talk	Flammability of Rigid PU/PIR Foam Thermal Insulation from Renewable Resources with Passive Flame Retardants, <u>M. Kirpluks</u> , A. Avots, I. Sevastyanova and U. Cabulis
10:30-10:45	Oral talk	Peculiar Flame Retardant Behavior of Nanocellulose and Nanocellulose-Clay Materials, <u>F. Carosio</u> , A Bergfelt, J. Kochumalayil, G. Camino, L. Berglund
10:45-11:00	Oral talk	Influence of Organo-Modified MgZnAl-LDH on the Char Formation and Smoke Suppression of Intumescent Flame Retardant Polypropylene Composites, <u>Xin Wang</u> , Yvonne Spörer, Andreas Leuteritz, Ines Kuehnert, De-Yi Wang
11:00-11:15	Coffee Break	
11:15-11:45	Plenary 7	Internal temperatures in composite laminates submitted to fire, <u>A. Güemes</u> , A. Lozano and A. Fernandez-Lopez
Session 9	Chairperson: Laurent Ferry	
11:50-12:15	Keynote talk	Advancements in bio-based flame retarded polymer composites, <u>Gy. Marosi</u> , K Bocz, B Szolnoki, D. Vadas, Zs. Rapi, P. L. Sóti, T. Vígh
12:15-12:40	Keynote talk	Pyrolysis studies of fire retarded materials and products, <u>Anna A Stec</u> , Kathryn Dickens, Fiona Hewitt and Rihab Ben Cheikh
12:40-12:55	Oral talk	Fire behaviors of bio-based barium alginate film, <u>Yun Liu</u> , Zhong-Fang Li, Xiaomin Zhao, Ping Zhu, De-Yi Wang
13:00-14:00	Lunch	

Session 10	Chairperson: György Marosi	
14:00-14:25	Keynote talk	Fire Safety Regulations and Tests: New International Developments and Trends , J.H. Troitzsch
14:25-14:45	Invited talk	Nanohybrid Networks of Pristine Multi-Wall Carbon Nanotube / Benzoxazine Exhibiting Outstanding Thermomechanical, Electrical and Fire Properties , L. Bonnaud , L. Dumas, M. Poorteman, M. Olivier, Ph. Dubois
14:45-15:00	Oral talk	Synergistic effect of sepiolite in intumescent flame retardant polypropylene composites , Jun-Hao Zhang , Sergio de Juan, Antonio Esteban-Cubillo, Julio Santarén, De-Yi Wang
15:00-15:15	Oral talk	Synthesis and fire retardant effects of a novel oligomeric zinc chelate in LDPE , Yan Zhang , Zhenhu Cao, Zhengping Fang, T Richard Hull, Anna A Stec
15:15-15:30	Oral talk	Thermal Properties of Birch Plywood Panels Reinforced by PP/GF Fabrics , A. M. Grancarić , I. Jerković, K. Kalniņš, W. Trümper
15:30-15:45	Oral talk	Effect of Ammonium Polyphosphate on the Flammability and Mechanical Properties of Epoxy/Glass Fabric Composites , M. Rajaei , D. Bhattacharyya
15:50-16:05	Coffee Break	
Session 11	Chairperson: Baljinder Kandola	
16:05-16:30	Keynote talk	The Influence of Silanized Hemp Fibres and Halogen-Free Fire Retardants on the Composites Flammability , M. Wladyka-Przybylak, D. Wesolek, Sz. Rojewski , R. Gąsiorowski, W. Gieparda, K. Bujnowicz, H. Maciejewski, R. Wójcik
16:30-16:50	Invited talk	Phosphorus based Flame Retardants for Composite Applications in the Transportation Sector , A. Beard , F. Osterod
16:50-17:05	Oral talk	Influence of the morphology on the fire behavior in a binary polymer blend PC/PBT and in a filled polymer blend PE/PBT/MDH", A. VIRETTO , A. TAGUET, R. SONNIER, J.-M. LOPEZ-CUESTA
17:05-17:30	Closing	

SPONSORS

We wish to thank the following for their contribution to the success of this conference:

