

Chair of COST MP1105:

Prof. Paul KIEKENS

Participating countries: 27

AT, BE, BG, CH, CZ, DE, DK, EL, ES, FI, FR, HR, IL, IT, LT, LV, MK, NL, PL, PT, RO, RS, SE, SI, SK, TR, UK, ZA (non-COST country)



COST MP1105 FLARETEX scientific workshop entitled *Characterisation of flame retardant textile and related materials* is the meeting place for academics, other researchers and chemical producers for discussing the old problem of characterization of flame retardant textiles, plastics and composites in different systems and material states. There are so many instruments for this purpose, but nowadays the most important point is to find a good way and theory for explanation the flame retardancy with the final goal of reaching the high protection. The study of the detailed behaviour of protected material in gas and condensed phase, and of the quantity of residue can clarify some important things in this field. It is also important to find a good relationship between a real fire and all details obtained by precise instruments. A special issue in the characterization of flame retardant materials is the toxicity that can actually cause more problems than a fire itself in reality. The high thermal energy present in the combustion processes is necessary to be considered. All these are relevant for both traditional and new fire retardant compounds and technologies as this subject was of great interest from long ago.

<http://www.cost.eu/mpns>

<http://www.flaretex.eu/>

ORGANIZER

COST Action MP1105 - FLARETEX

Grant holder:

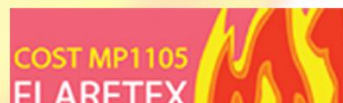
**Ghent University
Department of Textiles**

e-mail:

COST.MP1105@UGent.be

website:

<http://www.flaretex.eu/>



LOCAL ORGANIZER

**University of Zagreb
Faculty of Textile Technology**
Prilaz baruna Filipovica 28a
10000 Zagreb, CROATIA

Prof. Ana Marija Grancaric
COST MP1105 MC member

e-mail: amgranca@ttf.hr

Prof. Sandra Bischof
Dean

e-mail: sbischof@ttf.hr



COST MP115 FLARETEX

2012-2016

Sustainable flame retardancy for textiles and related materials based on nano-particles substituting conventional chemicals

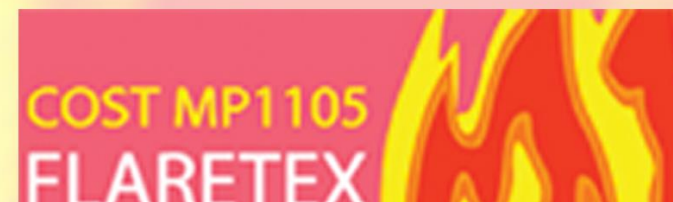
Scientific Workshop

Characterisation of Flame Retardant Textiles and Related Materials

Tuesday 7th October 2014

Location:

Centre for Advanced Academic Studies,
Dubrovnik, CROATIA



Organized by
COST Action MP1105 FLARETEX

in cooperation with
**7th International Textile, Clothing
& Design Conference**
(ITC&DC 2014)



<http://itcdc.ttf.unizg.hr/>

Location:

<http://www.caas.unizg.hr/reach.html>

Centre for Advanced Academic Studies (CAAS)
Don Frane Bulica street 4
Dubrovnik, CROATIA



Travel:

http://itcdc.ttf.unizg.hr/travel_info.htm

Accommodation:

http://itcdc.ttf.unizg.hr/booking_form.htm

PROGRAMME

09:00 – 09:15 Registration

09:15– 09:50

A. M. Grancarić (*University of Zagreb, Faculty of Textile Technology, HR*): Welcome

S. Bischof (*University of Zagreb, Faculty of Textile Technology, HR*): Dean's word

P. Kiekens (*Ghent University, BE*):
Opening by the Chair of COST Action MP1105

09:50 – 10:10

C. Q. Yang (*University of Georgia Athens, USA*):
Characterization of Flame Retardant Textiles using Micro-scale Combustion Calorimetry

10:10 – 10:30

J. Alongi (*Politecnico di Torino, IT*): How Different Techniques can be Combined for Understanding the Thermal Degradation

10:30 – 10:50

G. Marosi (*Budapest University of Technology and Economics, HU*): New Methods in the Characterization of Flame Retardant Polymeric Materials

10:50 – 11:10

A. A. Stec (*University of Central Lancashire, UK*):
Identification of Volatile Organic Compounds in Early Stages of Fire from Fire Retarded Polymeric Materials

11:10 – 11:40 Coffee break

11:40 – 12:00

K. Bordacsne Bocz (*Budapest University of Technology and Economics, HU*): Synthesis and Application of Multifunctional Flame Retardants Additives

12:00 – 12:20

R. R. Piticescu (*IMNR & ICPI, RO*): DSC Characterization of Doped TiO₂-based Nanomaterials Obtained by Hydrothermal Procedure and Application as Flame Retardant in Leather Treatment

12:20 – 12:40

D. Mikucioniene (*Kaunas University of Technology, LT*): Influence of Knitted Structure Flammability and Confortability of Knits

12:40 – 13:00

D. Y. Wang (*IMDEA Materials, ES*): Layer-by-Layer Assembly of Multilayered Coatings Made from Natural Polysaccharides for Improving Fire Resistance of Poly(ethylene terephthalate) Fabrics

13:00 – 14:30 Lunch - 20 € fee

14:30 – 14:50

M. Malikova (*Slovak Academy of Sciences, SK*): Flammability of Smart Textiles Based on Expanded Graphite-Polymeric Nanocomposites

14:50 – 15:10

W. Hofland (*EFRA, NL*): Flame Retardants an Integral Part of Fire Safety

15:10 – 15:30

M. Delichatsios (*FireSERT, University of Ulster, UK*): Fire Tests for the Performance Property Characterisation of Protective Clothing Fabrics

15:30 – 15:50

C. Larosa (*University of Genova, IT*): Flame Retardant Aspects of Polycarbonate Ceria Nanoparticles Composite

15:50 – 16:10

Z. Draczynski (*Lodz University of Technology, PL*): Preliminary Investigation of Flame Resisted Composites Based on Natural Ceramic and Biodegradable Polyesters

09:00 – 16:10 POSTER Session

J. Ebdon (*University of Bolton, UK*):
Towards Flame-retardant Acrylic Fibers: Modification of PAN with FR Co-monomers and FR Additives

W. Gieparda (*Institute of Natural Fibers and Medicinal Plants, PL*): Flame Retardant Compounds Based on Expanded Graphite for Textile

M. Omastova (*Slovak Academy of Sciences, SK*):
Stability and Surface Properties of Conductive Textiles

16:10 – 16:30 Coffee break

16:30 – 17:30 Round table discussion

Moderator: A. M. Grancarić

17:30 Closing remarks

20:30 ITC&DC Conference Dinner - 60 € fee