

# The second international conference on eco-friendly flame retardant additives and materials (ECOFRAM)

*Metz, 28-29th March 2018, France*

## Invited speakers:

- **Dr. Manfred Döring:** Fraunhofer Institute, Germany
- **Prof. Jean-Luc Gardette:** Institut de Chimie de Clermont Ferrand, France
- **Prof. Giulio Malucelli:** Giulio Malucelli : Politecnico di Torino, Italy
- **Dr. Anna Stec:** UCLan, Preston, England



## ECOFRAM 2018, Conference Agenda

<b>Wednesday, March 28, 2018</b>	
8:30 pm to 9:00 pm	Registration and Reception
9:00 am to 9:15 am	Opening ceremony
<i>Environmental aspects, fire toxicity and smoke</i>	
9:15 am to 9:50 am	Keynote: <b>Anna Stec</b> Fire effluent toxicity: yields and effects from common materials under different fire conditions
9:50 am to 10:10 am	<b>Rodolphe Sonnier</b> , New Insights into the Investigation of Smoke Production Using a Cone Calorimeter
10:10 am to 10:30 am	<b>Toussaint Barboni</b> , Smoke analysis from forest fuel and effects of toxicity on the organism of the personnel involved
10:30 am to 11:00 am	Break/Poster session
11:00 am to 11:20 am	<b>Carine Chivas-Joly</b> , Behavior and characterization of EVA nanocomposites after incineration process
11:20 am to 11:40 am	<b>Ine De Vilder</b> , FLAREX: Mitigation of environmental impact caused by flame retardant textile finishing chemicals
<i>Regulation, standardization and fire testing</i>	
11:40 am to 12:00 pm	<b>Hans-W. Marx</b> , Thermal conductivity: measurement techniques
12:00 pm to 12:20 pm	<b>Hakan Kanli</b> , Borates - How compliant they are with respect to European Chemicals Policy
12:20 pm to 2:00 pm	Lunch
<i>New and Sustainable flame retardant additives &amp; Bio-based FR additives and polymers</i>	
2:00 pm to 2:35 pm	Keynote: <b>Manfred Döring</b> Green Synthesis of Bio-based Flame Retardants
2:35 pm to 2:55 pm	<b>Valeriia Karaseva</b> , New biosourced flame retardant agents based on gallic and ellagic acids for epoxy resins
2:55 pm to 3:15 pm	<b>Fouad Laoutid</b> , Tannic acid & Phytic acid as building blocks for development of new renewable Flame Retardant agent for Poly(lactic acid)
3:15 pm to 3:35 pm	<b>Benjamin Chollet</b> , Lignin's size and functionalization effects on thermal properties and fire behavior of PLA
3:35 pm to 4:00 pm	Break/Poster session
4:00 pm to 4:20 pm	<b>Séverine Bellayer</b> , Fire Retardant sol-gel coatings for flexible polyurethane foams
4:20 pm to 4:40 pm	<b>Laia Haurie</b> , Radiation grafting of flame retardant resin into wood samples

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<b>Wednesday, March 28, 2018</b>	
4:40 pm to 5:00 pm	<b>Andy Goodwin</b> , Graphene composites toward development of new generation fire-retardant coatings
5:00 pm to 5:20 pm	<b>Osman Emre Özkan</b> , Leaching and Thermal Properties of Fire Retardants Treated Wood
8:00 pm	Gala Dinner

<b>Thursday, March 29, 2018</b>	
<i>Life cycle analysis of flame retardant products (ageing, recycling)</i>	
9:00 am to 9:35 am	Keynote: <b>Jean Luc Gardette</b> Mutual influence of weathering and flame retardancy of polymers
9:35 am to 9:55 am	<b>Rémy Mangin</b> , Impact of ageing on the fire behavior of flame-retarded formulations
9:55 am to 10:15 am	<b>Marc Vanhoomissen</b> , Fire and Ageing Resistant Biocomposite for Transportation industry
10:15 am to 10:35 am	<b>Philippe Salemis</b> , Flame retardants in the BioEconomy and the Circular Economy
10:35 am to 11:00 am	Break
<i>Industrial applications and markets for Eco-FR products</i>	
11:00 am to 11:20 am	<b>Bansi L. Kaul</b> , Fire retardancy beyond gas-phase and condense-phase principles
11:20 am to 11:40 am	<b>José-Marie Lopez Cuesta</b> , Flame-retarded PLA core-skin compositions through FDM additive manufacturing
11:40 am to 12:00 pm	<b>Alexis Chopin</b> , Industrial Radiation Crosslinkable Polyamide Compounds to Comply with Stringent Flammability Requirements and More
12:00 pm to 12:20 pm	<b>Fredrik Westin</b> , Apyrum in soft vinyl
12:20 pm to 1:50 pm	Lunch

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<b>Thursday, March 29, 2018</b>	
<i>Fire retardancy of fibers, textiles and composites</i>	
1:50 pm to 2:25 pm	Keynote: <b>Giulio Malucelli</b> Biomacromolecules as effective “green” flame retardants for textile substrates
2:25 pm to 2:45 pm	<b>Sebastian Rabe</b> , Rummaging through industrial waste: Natural fibers in flame retarded thermoplastic starch biocomposites
2:45 pm to 3:05 pm	<b>Stéphane Giraud</b> , Impact of lignin/zinc phosphinate introduced by melt spinning on the fire retardant properties of bio-source textile structure
3:05 pm to 3:25 pm	<b>Roland El Hage</b> , A flame retarded chitosan binder for insulating miscanthus/recycled textile fibres reinforced biocomposites
3:25 pm to 3:45 pm	<b>Maud Jimenez</b> , Eco-efficient flame retardant self-stratifying coatings for plastics
3:45 pm to 4:05 pm	<b>Raymond Hajj</b> , Phosphorus grafting on flax fabrics to improve their flame retardancy: a comparison between chemical modification and e-beam radiation
4:05 pm to 4:30 pm	Closing Ceremony