

FIRE RETARDANTS IN PLASTICS 2012

Trends and technical developments in the international flame retardant industry



June 14-15, 2012
Grand Hyatt Denver,
Denver, Colorado, USA

Images courtesy of:
Clariant, GBH International,
and Fire Testing Technology

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Flame retardant additives and plastics are coming under a variety of pressures. On the one hand, they need to meet increasingly stringent fire safety standards and regulations. At the same time, they are facing environmental and health concerns which are leading to the phase out of some widely used technologies.

While these shifts present considerable challenges for flame retardant materials, they also create significant opportunities for companies throughout the supply chain. This conference is designed to address these issues and will appeal to materials suppliers, compounders, processors and end-users.

Building on the considerable success of AMI's Fire Resistance conferences in Europe, this second event for the American market will feature leading experts covering the latest legislative issues, additive technologies, flame retardant compound formulations and applications. Dedicated sessions will address key topics such as improving the fire resistance of engineering plastics, the latest halogen-free technologies, developing replacements for decaBDE, plus standards and testing.

In addition to high-level presentations, the conference will also provide the ideal networking forum to share ideas and discuss new solutions for flame retardant plastics that meet and exceed the performance, environmental and health requirements of the future.

CONFERENCE HOTLINE

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FIVE GOOD REASONS WHY YOU SHOULD ATTEND:

1. Learn about the latest developments in legislation and fire performance standards and hear how new technologies are being developed in response to these rules and regulations.

2. Discover the latest additive technologies that deliver improved levels of flame retardancy and smoke suppression, ensuring real safety benefits for the general public.

3. Network with key players from throughout the polymer supply chain who are developing, formulating, producing, processing and specifying flame retardant plastics.

4. Find out how the industry is responding to environmental concerns with a new raft of flame retardant technologies that are not only green but also deliver high levels of performance.

5. Gain a deeper understanding of formulating flame retardant compounds with the best combinations of different additive options.

C O N F E R E N C E

Thursday, June 14, 2012

8:00 Registration and welcome coffee

9:00 Opening announcements

KEYNOTE PRESENTATION

9:10 **Environmental sustainability strategies for plastics selection during product development in HP**

Dr. Paul Mazurkiewicz, Distinguished Technologist R&D, HEWLETT-PACKARD CORP., United States

SESSION 1 – IMPROVING FIRE RESISTANCE OF ENGINEERING PLASTICS

9:40 **Flame retardants for engineering plastics**

Dr. Martin Klatt, Senior Manager Flame Retardancy, BASF SE, Germany

10:10 **Boehmites - a halogen free co-flame retardant for engineering plastics part 2**

Mr. Kerry Smith, Product Manager – Americas, NABALTEC, Germany

10:40-11:10 Coffee break sponsored by:



SESSION 2 – NON-HALOGENATED FLAME RETARDANT FORMULATIONS

11:10 **Non halogen FR solutions for polyesters in E&E applications – the use of phosphinates**

Dr. Wolfgang Wanzke, Technical Service Manager, CLARIANT PRODUKTE (DEUTSCHLAND) GmbH, Germany

11:40 **Halogen free flame retardants: synthesis, mode of action and application**

Dr. Sabyasachi Gaan, Group Leader (Chemistry), EMPA, Switzerland

12:10 **New intumescent non-halogen fire retardants**

Mr. Douglas Terry, Director of Technology, POLYMER ADDITIVES GROUP, United States

12:40-2:10 Lunch

SESSION 3 – APPLICATION FOCUS

– DEVELOPMENTS TO MEET MARKET DEMANDS

2:10 **New frontiers: FR requirements in electric vehicle charger, photovoltaic, and wind turbine safety standards**

Mr. Daniel O'Shea, Senior Staff Engineer - Plastics, UL LLC, United States

2:40 **Novel additive class for HFFR cable application**

Ms. Kathrin Lehmann, Head Innovation Management Plastics, EVONIK INDUSTRIES AG, Germany

3:10 **Water-based, flame retardant nanocoatings for foam and fabric**

Professor Jaime C. Grunlan, Associate Professor, TEXAS A&M UNIVERSITY, United States

3:40-4:10 Coffee break sponsored by:



SESSION 4 – MOVING THINGS FORWARD: NEW DEVELOPMENTS IN FLAME RETARDANT TECHNOLOGIES

4:10 **Improved metal hydrate FR formulation technology**

Mr. James Innes, President, FLAME RETARDANTS ASSOCIATES INC., United States

4:40 **Halloysite: Reinforcing halogen free fire retardant for plastics from PE to PEEK**

Dr. Chris DeArmitt, CTO, APPLIED MINERALS INC., United States

PROGRAM

5:10 **"Polytriazinyl Synergists" for fire resistance beyond state-of-the-art intumescence, "NOR" technology and gas phase anti-flammability**
Dr. Bansil L. Kaul, CEO,
MCA TECHNOLOGIES GmbH, Switzerland

5:40 Afternoon wrap up and questions

6:00-7:30 Cocktail Reception

Friday, June 15, 2012

8:30 Welcome coffee

9:00 Opening announcements

SESSION 5 – A NEW GENERATION OF BROMINATED FLAME RETARDANTS

9:10 **USEPA decabromodiphenyl ether alternatives assessment: Results and substitution decisions**
Dr. Emma Lavoie, Toxicologist,
US EPA DESIGN FOR THE ENVIRONMENT PROGRAM, United States

9:40 **Characteristics for the selection of sustainable flame retardants**
Dr. Raymond B. Dawson, Global Director, Advocacy,
Ms. Susan D. Landry, Advocacy Advisor II,
ALBEMARLE CORPORATION, United States

10:10-10:40 Coffee break sponsored by:



10:40 **Advances in formulation development with next generation flame retardants**
Mr. Marshall Moore, Director, Technology & Advocacy,
GREAT LAKES SOLUTIONS, A CHEMTURA BUSINESS, United States

11:10 **Low antimony and antimony-free compositions with brominated flame retardants**
Mr. Sergei Levchik, New Product Development, Manager,
ICL-IP, AMERICA, United States

SESSION 6 – FIRE RESISTANCE STANDARDS AND TESTING

11:40 **The evolution of fire tests to accommodate the increased use of plastic materials**
Mr. Tim Earl, Director of Fire Test Engineering,
GBH INTERNATIONAL, United States

12:10-1:40 Lunch

1:40 **Fire retardants and their impact on the safety of furnishings: is CAL TB 117 useful?**
Dr. Matthew Blais, Director Fire Technology Department,
SOUTHWEST RESEARCH INSTITUTE, United States

2:10 **The testing of innovative technologies to reduce the flammability of polyurethane foam**
Dr. Rick Davis, Leader, Flammability Reduction Group,
NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY,
United States

2:40 Afternoon wrap up and questions

3:10 Conference ends

Conference bag sponsored by:



*AMI reserves the right to alter the program without notice.
The latest program including any new speakers or changes to schedules can be viewed on our website www.amiplastics-na.com*

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CONFERENCE VENUE

AMI is pleased to host Fire Retardants in Plastics 2012 in the beautiful city of Denver, Colorado. Join us at the Grand Hyatt Denver, in a convenient location allowing you to make the most of your stay in the "Mile High City":



Image courtesy of: **Visit Denver**

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