



2nd Asia-Oceania Symposium For Fire Safety Materials Science And Engineering (AOFSM 2017)

October 27-29, 2017 Shenzhen, China

PROGRAM

Organized by

Beijing Institute of Technology

Asia-Oceania Association for Fire Safety Materials Science and Engineering

Shenzhen Research Institute, Beijing Institute of Technology

China Flame Retardant Society

National Engineering Research Center of Flame Retardant Materials

Co-organized by

BIT Fire Retardant Technology Co., Ltd.

Supported by

The International Bromine Council (BSEF)



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第二届亚澳火安全材料科学与工程研讨会 (AOFSM 2017)

2017 年 10 月 27-29 日 中国 深圳

会议日程

主办单位

北京理工大学
亚澳火安全材料科学与工程学会
北京理工大学深圳研究院
中国阻燃学会
国家阻燃材料工程技术研究中心

协办单位

北京理工阻燃科技有限公司

支持单位

国际溴工业理事会

SYMPOSIUM COMMITTEES

会议组织机构

Chairman of Organizing Committee (组委会主席): Prof. Rongjie Yang (杨荣杰 教授)

General Secretary (会议秘书长): Prof. Zhengmao Zhou (周政懋 教授)

Secretaries (秘书): Dr. Dinghua Li (李定华), Dr. Wenchao Zhang (张文超)

International Scientific Committee (国际学术委员会)
Serge Bourbigot, Unit éMat ériaux et Transformations, France
Giovanni Camino, Polytechnic of Turin, Italy
Manfred Paul Kurt Döring, Fraunhofer Institute for Structural Durability and System Reliability LBF, Germany
Sabyasachi Gaan, Swiss Federal Lab. for Materials Science and Technology, Switzerland
Yuan Hu, University of Science and Technology of China, China
Terence Richard Hull, University of Central Lancashire, UK
Baljinder Kaur Kandola, University of Bolton, UK
Jinhwan Kim, Sungkyunkwan University, South Korea
Oleg Korobeinichev, ICKC, Russia
Jose-Marie Lopez-Cuesta, Ecole Mines Ales, France
Takafumi Noguchi, University of Tokyo, Japan
Miriam Rafailovich, Stony Brook University (SUNY), USA
P. K. Sahoo, Utkal University, Bhubaneswar, India
Bernhard Schartel, BAM Federal Institute for Material Research and Testing, Germany
Kelvin Kei-wei Shen, Rio Tinto Minerals, USA
Jürgen Troitzsch, Fire and Environment Protection Service, Switzerland
Tsung-Yen Tsai, Chung Yuan Christian University, Taiwan
De-Yi Wang, IMDEA Materials Institute, Spain
Yuzhong Wang, Sichuan University, China
Charles A. Wilkie, Marquette University, USA
Charles Yang, University of Georgia, USA
Rongjie Yang, Beijing Institute of Technology, China
Guan Heng Yeoh, University of New South Wales, Australia
Richard Yuen, City University of Hong Kong, Hong Kong

Local Organizing Committee	地方组委会
Kun. Cao, Zhejiang University	曹堃, 浙江大学
Haobo Cheng, Shenzhen Research Institute, BIT	程灏波, 北京理工大学深圳研究院
Jianhua Dong, National Natural Science Foundation of China	董建华, 国家自然科学基金委
Zhengping Fang, Zhejiang University	方征平, 浙江大学
Changjun Fu, Shanghai Antu Masterbatch Co.Ltd	付常俊, 上海安凸塑料添加剂有限公司
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Jianwei Hao, Beijing Institute of Technology	郝建薇, 北京理工大学
Yuan Hu, University of Science and Technology of China	胡源, 中国科学技术大学
Pingkai Jiang, Shanghai Jiaotong University	江平开, 上海交通大学
Bin Li, North East Forestry University	李斌, 东北林业大学
Jiapeng Li, ICL Group	李家鹏, 以色列化工集团
Jianjun Li, Kingfa Sci. Tech. Co. Ltd	李建军, 金发科技股份有限公司
Daniel Li, Albemarle Co.	李跃, 雅保公司
Kang Shen, Beijing ADD-TECH Co. Ltd	沈康, 北京 ADD-Tech 公司
Meiwu Shi, The Quartermaster Equipment Research Institute of the General Logistics Department of the CPLA	施楣梧, 总后勤部军需装备研究所
Anbin Tang, Sichuan Dongfang Insulating Materials Co. Ltd	唐安斌, 四川东材科技集团股份有限公司
Tao Tang, Changchun Institute of Applied Chemistry Chinese Academy of Sciences	唐涛, 中科院长春应用化学研究所
Qi Wang, Sichuan University	王琪, 四川大学
Yuzhong Wang, Sichuan University	王玉忠, 四川大学
Zhengzhou Wang, Tongji University	王正洲, 同济大学
Yanzhi Xia, Qingdao University	夏延致, 青岛大学
Jian Xu, Institute of Chemistry, Chinese Academy of Sciences	徐坚, 中科院化学所
Jianzhong Xu, Hebei University	徐建中, 河北大学
Guisheng Yang, GENIUS New Mat. Co. Ltd	杨桂生, 杰事杰新材料有限公司
Mingshu Yang, Institute of Chemistry, Chinese Academy of Sciences	阳明书, 中科院化学所
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Sheng Zhang, Beijing University of Chemical Technology	张胜, 北京化工大学
Zhengmao Zhou, China Flame Retardant Society	周政懋, 中国兵工学会阻燃专委会
Jin Zhu, Ningbo Institute of materials science and Engineering, Chinese Academy of Sciences	朱锦, 中科院宁波材料技术与工程研究所

GENERAL INFORMATION

会议须知

Registration desk 登记处

October 27, Friday 10月27日,星期五

8:00-18:30, *Registration* (Kinkey Oriental Regent Hotel Shenzhen) 登记 (深圳京基晶都酒店)

On-site payment by credit card and cash in RMB will be possible during registration. Personal cheques will not be accepted.

现场支持信用卡和现金付款, 不接收个人支票。

Registration room 会务组房间

Room number: No. 2106; Ext. tel.: (0) 2106

房间号: 2106; 分机电话号码: (0) 2106

Name badges 代表证

Please wear your name badge at all times. Badges are required for admission to technical sessions, welcome reception, lunches, dinners, and banquet.

请随时佩戴您的代表证。

No smoking 禁止吸烟

Smoking is not allowed inside the session rooms and public area.

会议室内和公共场所禁止吸烟。

Internet access 互联网

Hotel has free wireless internet service.

宾馆为您提供免费无线网络。

Coffee breaks 茶歇

Coffee breaks will be provided every morning and afternoon during breaks between technical sessions. Snacks, coffee, tea and water will be served to registered symposium delegates wearing name badge.

茶歇期间将为您提供点心、咖啡、茶以及开水, 与会者可以凭代表证享用。

Breakfasts 6:30-8:30 早餐

Free breakfasts will be provided by the hotel in the Western Restaurant of Music Theme of Hotel. The Western Restaurant of Music Theme is on the 23rd floor of Hotel.

早餐由所住宾馆免费提供, 地点: 23楼音乐主题西餐厅。

Lunches 12:00-13:30 午餐

Free buffet will be served to the registered delegates with lunch tickets in the Jingpengge Hall of Hotel every day. These tickets will be distributed when registration. The Jingpengge Hall of Hotel is on the 3rd floor.

参会者将凭午餐券在三楼晶蓬阁享用自助式午餐。

Welcome reception 18:30-20:30 欢迎招待会

Welcome reception (October 27) will be served to the registered delegates with dinner tickets in the Western Restaurant of Music Theme of Hotel. The Western Restaurant of Music Theme is on the 23rd floor of Hotel.

参会者将凭晚餐券在23楼音乐主题西餐厅享用欢迎招待会（10月27日）。

Dinners 18:30-20:00 晚餐

Buffet dinner (October 28) will be served to the registered delegates with dinner tickets in the Western Restaurant of Music Theme of Hotel. The Western Restaurant of Music Theme is on the 23rd floor of Hotel.

参会者将凭晚餐券在23楼音乐主题西餐厅享用自助式晚餐（10月28号）。

Banquet 18:30-20:30晚宴

Banquet (October 29) will be served to the registered delegates in the Jinbixuan Restaurant (West to the hotel).

参会者将凭代表证享用会后晚宴（10月29日），晚宴地点为金碧轩大酒楼（酒店西边）。

Public transportation 公共交通

The municipal transport services in Shenzhen include bus and metro. The bus prices are according to the number of stops traveled. Air-conditioned buses are priced at 2 RMB per segment (4 stops) and non air-conditioned vehicles cost 1 or 1.5 RMB per segment. Metro rides are priced according to distance travelled, and fares vary from 2 RMB to 14 RMB.

普通公交车起步价为1元或1.5元，空调公交车起步价2元。地铁起步价2元。

Taxis 出租车

Taxies charge 10 RMB for initial 2.0 kilometers and 2.6 RMB for every additional 1 kilometer.

普通出租车起步价为10元/2公里；里程价2.6元/公里。

Emergency 突发情况

In case of any emergency during the Symposium, please ask help at the registration desk, or call 13601038267 (Dr. Dinghua Li), 13811660813 (Dr. Wenchao Zhang). Local staff will offer help 24 hours a day. General emergency call numbers in China: police 110, medical 120, fire 119.

会议期间发生任何突发状况，可以向登记处人员或者拨打电话13601038267（李定华博士），13811660813（张文超博士）寻求帮助。

SCIENTIFIC PROGRAM

学术报告时间安排

Plenary Lectures 大会报告	20+5 minutes discussion 20 分钟报告时间及 5 分钟讨论时间
Keynotes Lectures 主题报告	12+3 minutes discussion 12 分钟报告时间及 3 分钟讨论时间
Oral Presentation 口头报告	8+2 minutes discussion 8 分钟报告时间及 2 分钟讨论时间
Seminar Presentation 专题研讨报告	15+5 minutes discussion 15 分钟报告时间及 5 分钟讨论时间

An assistant to the session chairman will be in the lecture room 60 minutes before each session beginning to help loading presentation material into the computer connected to the multimedia projector.

报告人应在分会开始前的 15 分钟把报告的 PPT 交给会场指定服务人员拷入会议专用的笔记本电脑，以确保不影响会议进程。

Please pay attention, seminar presentations will hold in a separate venue.

请大家注意，专场研讨会将在一个单独的场地举行。

THE SYMPOSIUM PROGRAM (October 27-29)

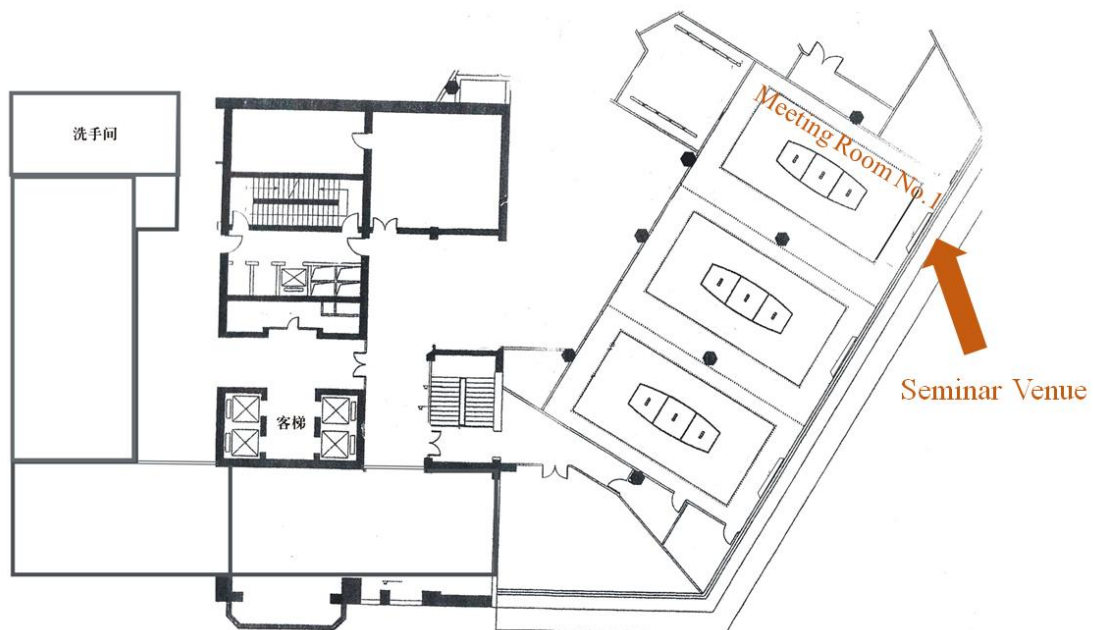
研讨会时间表 (10月27日-10月29日)

27 October, Friday, 10月27日, 星期五, 8:00-18:30 On-Site Registration (现场注册)		29 October, Sunday, Morning, 星期日 上午		
		08:00-08:25	Plenary05	
		08:25-08:50	Plenary06	
27 October, Friday, 10月27日, 星期五, 18:30-20:00, Welcome Reception (欢迎招待会)		08:50-09:05	Keynote14	
		09:05-09:20	Keynote15	
28 October, Saturday, Morning, 星期六 上午		09:20-09:35	Keynote16	
		09:35-10:00	Coffee Break (会间茶歇)	
08:00-08:20	Opening Ceremony (开幕式)	10:00-10:15	Keynote17	
08:20-08:45	Plenary01	10:15-10:30	Keynote18	
08:45-09:10	Plenary02	10:30-10:45	Keynote19	
09:10-09:25	Keynote01	10:45-10:55	Oral18	
09:25-09:40	Keynote02	10:55-11:05	Oral19	
09:40-09:55	Keynote03	11:05-11:15	Oral20	
09:55-10:20	Coffee Break (会间茶歇)	11:15-11:25	Oral21	
10:20-10:35	Keynote04	11:25-11:35	Oral22	
10:35-10:50	Keynote05	11:35-11:45	Oral23	
10:50-11:05	Keynote06	11:45-11:55	Oral24	
11:05-11:15	Oral01	11:55-12:05	Oral25	
11:15-11:25	Oral02	Seminar	29 October, Sunday, Morning, 星期日 上午	
11:25-11:35	Oral03		10:00-10:10	Welcome
11:35-11:45	Oral04		10:10-10:30	Seminar01
11:45-11:55	Oral05		10:30-10:50	Seminar02
11:55-12:05	Oral06		10:50-11:10	Seminar03
12:05-13:30	Lunch (午餐)		11:10-11:30	Seminar04
28 October, Saturday, Afternoon, 星期六 下午			11:30-11:50	Seminar05
			11:50-12:05	Final remarks
13:30-13:55	Plenary03	12:05-13:30	Lunch (午餐)	
13:55-14:20	Plenary04	29 October, Sunday, Afternoon, 星期日下午		
14:20-14:35	Keynote07	13:30-13:40	Oral26	
14:35-14:50	Keynote18	13:40-13:50	Oral27	
14:50-15:05	Keynote09	13:50-14:00	Oral28	
15:05-15:20	Keynote10	14:00-14:10	Oral29	
15:20-15:35	Keynote11	14:10-14:20	Oral30	
15:35-16:00	Coffee Break (会间茶歇)	14:20-14:30	Oral31	
16:00-16:15	Keynote12	14:30-14:40	Oral32	
16:15-16:30	Keynote13	14:40-14:50	Oral33	
16:30-16:40	Oral07	14:50-15:00	Oral34	
16:40-16:50	Oral08	15:00-15:10	Oral35	
16:50-17:00	Oral09	15:10-15:35	Coffee Break (会间茶歇)	
17:00-17:10	Oral10	15:35-15:50	Keynote20	
17:10-17:20	Oral11	15:50-16:05	Keynote21	
17:20-17:30	Oral12	16:05-16:20	Keynote22	
17:30-17:40	Oral13	16:20-16:35	Keynote23	
17:4017:50	Oral14	16:50-17:05	Keynote25	
17:50-18:00	Oral15	17:05-17:30	Plenary07	
18:00-18:10	Oral16	17:30-17:55	Plenary08	
18:10-18:20	Oral17	17:55-18:20	Plenary09	
18:20-19:15	Dinner (晚餐)	18:20-18:30	Closing Ceremony (闭幕式)	
19:15-20:30	Excellent poster selection (海报评比)	18:30-20:30	Banquet (晚宴)	

Top view of the third floor in Kinkey Oriental Regent Hotel



Top view of the forth floor in Kinkey Oriental Regent Hotel



Route map from the venue to banquet location



Symposium venue: Kinkey Oriental Regent Hotel Shenzhen

会议地点：深圳京基晶都酒店

27 October, Friday 周五	
08:00-18:30	Registration 注册, Hotel Lobby
18:30-20:30	Welcome Reception 欢迎招待会, Western Restaurant of Music Theme on the 23rd floor of Hotel 23 楼音乐主题西餐厅

28 October, Saturday, Afternoon, 星期六 上午 Jinggong Hall 三层晶宫厅	
08:00-08:20	Opening Ceremony (开幕式)
Chairman: Prof. Jian Xu	
08:20-08:45	Plenary 01 Fire Retardant Polymer Materials From Renewable Resources 来自可再生资源的阻燃聚合物材料 Giovanni Camino* , Polytechnic University of Turin, Italy
08:45-09:10	Plenary 02 Halogen-free Flame Retardant Poly(vinyl alcohol) Foams Prepared through Thermal Processing Q. Wang* , L. Li, S.B. Bai, Sichuan University 通过热塑加工制备无卤阻燃聚乙烯醇泡沫材料 王英* , 李莉, 白时兵, 四川大学
Chairman: Prof. Baljinder K. Kandola and Prof. Sheng Zhang	
09:10-09:25	Keynote 01 Flame Retardant Finishing of the Cotton Blend Fabrics for Fire Protective Clothing 针对棉混纺织物防火服的阻燃整理研究 Charles Yang , The University of Georgia, USA
09:25-09:40	Keynote 02 Molecular Design And Functionalization Of Nano-Hybrid: An Important Way To New Generation Flame Retardant 新一代阻燃剂：纳米杂化材料的分子设计和功能化 De-Yi Wang* , IMDEA Materials Institute, Spain.
09:40-09:55	Keynote 03 Flame Retardancy Properties Of Poly(Ethylene-Co-Vinyl Acetate)/Expandable Graphite/Synthetic Phosphonium Sulfonates Composites Shijie Hou, Yong Jian Zhang*, Pingkai Jiang* , Shanghai Jiao Tong University 江平开* , 上海交通大学
09:55-10:20	Coffee Break (会间茶歇) –PINFA, Entrance of Jinggong Hall 晶宫厅前过厅
10:20-10:35	Keynote 04 Investigation Of Thermolysis Pathways Of Organophosphorus Compounds: Key To Understanding The Gas Phase Flame Inhibition 有机磷化合物热解途径的研究：研究气相阻燃的关键 Shuyu Liang and Sabyasachi Gaan* , Swiss Federal Lab. for Materials Science and Technology, Switzerland
10:35-10:50	Keynote 05 Influence of alkaline earth ions on flame retardance of cellulose fibers D.M. Xu, Q. Ji*, Y.Z. Xia* , Z.X. Xue, Qingdao University 碱土金属离子对纤维素纤维阻燃性能的影响 徐冬梅, 纪全*, 夏延致* , 薛志欣, 青岛大学

10:50-11:05	Keynote 06 The Flammability Comparison of Novolac Epoxy Nanocomposites Doped with Different Carbon Family Tsung-Yen Tsai , Chung Yuan Christian University, 中国台湾中原大学
Chairman: Dr. Kelvin K. Shen and Prof. Zhengping Fang	
11:05-11:15	Oral 01 Fire Retardancy In Highly Filled Plastics 高填充塑料阻燃研究 A. Frache* , M. Franzoso, F. Cuttica, M. Lombardi, Polytechnic of Turin, Italy
11:15-11:25	Oral 02 Preparation, structure and performance of halogen-free flame retardant polyethylene foam materials Xingyou Chen, Yinghong Chen* , Sichuan University 无卤阻燃聚乙烯泡沫材料的制备、结构与性能 陈英红* , 陈星佑, 四川大学
11:25-11:35	Oral 03 Impact Of Expandable Graphite On The Flame Retardancy And Mechanical Properties Of Rigid Polyurethane Foams With Varied Density 膨胀型石墨对不同密度的硬质聚氨酯泡沫的阻燃性能及力学性能的影响 Pablo Acuña , De-Yi Wang*, IMDEA Materials Institute, Spain
11:35-11:45	Oral 04 “One Pot” Flame Retardant And Weathering Resistant Coatings For Plastics 一锅法制备用于塑料的阻燃耐候涂料 M.Jimenez* , A. Beaugendre, S. Degoutin, S. Bellayer, C. Pierlot, S. Duquesne and M. Casetta, Univ. Lille, France
11:45-11:55	Oral 05 Reactive Molecular Dynamics Simulations on Flame Retarded Polyethylene with Melamine Phosphate and Pentaerythritol Y.Z. Fu* , Y.H. Lan, R.Z. Miao, Z.J. Guo, North University of China 聚丙烯/磷酸三聚氰胺/季戊四醇阻燃机理反应分子动力学研究 付一政* , 兰艳花, 苗瑞珍, 郭志婧, 中北大学
11:55-12:05	Oral 06 Flame Retardant Rigid Polyurethane Foam Modified By Phosphonate Polyols T. Zeng, H. Y. Liu, H. Y. Yang* , Chongqing University 膦酸酯多元醇阻燃改性硬质聚氨酯泡沫 曾婷, 刘泓吟, 杨宏宇* , 重庆大学
12:05-13:30	Lunch (午餐) Jingpengge Hall 三层晶蓬阁
28 October, Saturday, Afternoon, 星期六 下午, Jinggong Hall 三层晶宫厅	
Chairman: Prof. Giovanni Camino	
13:30-13:55	Plenary 03 Study on novel functional additives with organic-inorganic molecular hybrid Jian Xu , Institute of Chemistry, Chinese Academy of Sciences 徐坚 , 中国科学院化学研究所
13:55-14:20	Plenary 04 Organophosphorus and organo-inorganic hybrid fire retardant coatings for polymers 用于聚合物的有机膦系与其无机复合阻燃涂料 B. K. Kandola , J. R. Ebdon and K. V. Williams, University of Bolton, UK
Chairman: Prof. Sergei Levchik and Prof. De-Yi WANG	
14:20-14:35	Keynote 07 Technical Challenges Of Flame Retardant Polymer In Commercial Applications Polymer Foams As Rf/Microwave Absorber 阻燃聚合物在商业应用中的技术挑战-聚合物作为 RF / Microwave 吸波材料 Kelvin K. Shen , FR Consulting - 9372 Darrow Dr., Huntington Beach, California, USA
14:35-14:50	Keynote 08 Recent advances on toughening phenolic foams

	L. LIU, X.Y. LI, Z. Z. Wang*, Tongji University 酚醛泡沫增韧研究进展 刘磊, 李晓艳, 王正洲*, 同济大学
14:50-15:05	Keynote 09 Layer-By-Layer Assembled Brucite Flame Retardants And Its Catalytic Graphitization Mechanism For Ethylene-Vinyl Acetate Resin Y. L. Wang, Y. G. Yang, X. M. Yang, J. Y. Wang, Z. P. Li, J. W. Hao*, Beijing Institute of Technology 层层自组装水镁石阻燃剂及其催化成炭阻燃 EVA 机理 王义亮, 阳运国, 杨晓梅, 王靖宇, 李志鹏, 郝建薇*, 北京理工大学
15:05-15:20	Keynote 10 Preparation of Multifunctional Polypropylene/Carbon Material Composites and Flame Retardancy Hongfan Yang, Xin Wen, Tao Tang*, Changchun Institute of Applied Chemistry, Chinese Academy of Sciences, China 多功能聚丙烯/碳材料复合材料的制备及阻燃性能研究 杨鸿帆, 闻新, 唐涛*, 中国科学院长春应用化学研究所
15:20-15:35	Keynote 11 How REACH, environmental control, safety supervision affect Chinese fire retardant industry Kang Shen*, Jie Wang, Hao Zhou, Beijing ADD-TECH Consulting Co., Ltd REACH 法规、环评、安监对中国阻燃剂行业的影响 沈康*, 王洁, 周昊, 北京艾迪泰克技术咨询有限公司
15:35-16:00	Coffee Break (会间茶歇) –PINFA, Entrance of Jinggong Hall 晶宫厅前过厅
Chairman: Prof. Sabyasachi Gaan and Prof. Alberto Frache	
16:00-16:15	Keynote 12 Recent Progress on the application of bio-based materials to improve the fire performance of textiles Aijuan Wang, Wenhui Zang, Yuying Yang, Jun Sun, Hongfei Li, Xiaoyu Gu, Sheng Zhang*, Beijing University of Chemical Technology, China 生物基材料阻燃纺织品研究进展 王雪飞, 杨玉莹, 王爱娟, 臧文慧, 孙军, 李洪飞, 谷晓昱, 张胜*, 北京化工大学
16:15-16:30	Keynote 13 Flame retardant effect of a novel compound containing silicon and phosphorus on polycarbonate Pei Ni, Lijun Qian*, Yajun Chen, Youyou Fang, Beijing Technology and Business University, China 磷杂菲/环四硅氧烷双基化合物阻燃聚碳酸酯行为的研究 倪沛, 钱立军*, 陈雅君, 房友友, 北京工商大学, 中国
16:30-16:40	Oral 07 A Novel Melamine/O-Phthalaldehyde Covalent Organic Frameworks Nanaosheets: Enhancement Flame Retardant And Mechanical Performances Of Thermoplastic Polyurethanes Xiaowei Mu, Weizhao Hu, Lei Song*, Yuan Hu*, University of Science and Technology of China 新型三聚氰胺/邻苯二甲醛共价有机框架纳米片: 增强热塑性聚氨酯的阻燃和机械性能 牧小卫, 胡伟兆, 宋磊*, 胡源*, 中国科学技术大学
16:40-16:50	Oral 08 Preparation Of Durable Flame Retardant Pan Fabrics Through Amidoximation And Phosphorylation Y.L. Ren*, Y. Zhang, Y.T. Gu, Q. Zeng, Tianjin Polytechnic University, China 基于肟化及磷酸化的耐久阻燃聚丙烯腈织物的制备 任元林*, 张悦, 谷叶童, 曾倩, 天津工业大学
16:50-17:00	Oral 09 The Situation of Halogen-free Flame-retardant PCM PET Eddy Chen*, SHINKONG SYNTHETIC FIBERS CORP. 无卤阻燃 PCM PET 的产品及应用现状 陈炳析*, 新光合成纤维股份有限公司
17:00-17:10	Oral 10 Synthesis and modification of 4A zeolite by kaolinite and its effect on the flammability of polypropylene S. Chen*, W.F. Tang, X.H. Peng, X.Y. Gu, S. Zhang, Shenzhen Beauty Star Co., Ltd. China 4A 分子筛制备及其对聚丙烯复合材料阻燃性能影响 陈寿*, 唐武飞, 彭晓华, 谷晓昱, 张胜, 深圳市通产丽星股份有限公司
17:10-17:20	Oral 11

	Fabrication of Fe decorated C60 and its effect on the thermal stability and flammability of high-density polyethylene Yanqun Pan, Zhenghong Guo, Shiya Ran, Zhengping Fang*, Ningbo Institute of Technology, Zhejiang University, China 铁修饰富勒烯的合成及其对高密度聚乙烯的热稳定性和阻燃性能的影响 潘燕群, 郭正虹, 冉诗雅, 方征平*, 浙江大学宁波理工学院
Chairman: Prof. Richard K. K. Yuen and Prof. Pingkai Jiang	
17:20-17:30	Oral 12 Thermally exfoliated hexagonal boron nitride/polyaniline hybrids: in situ construction and properties enhancement on polymeric materials 原位制备聚苯胺/热剥离的六方氮化硼杂化物及其增强聚合物性能的研究 B. Fei*, B. Yu, The Hong Kong Polytechnic University
17:30-17:40	Oral 13 Borate crosslinking in enhancing the stability and flame retardancy of LbL deposited film for Polyamide 66 fabrics 硼酸盐交联层层自组装膜提高尼龙 66 织物的阻燃性能和热稳定性 C.K. Kundu, Yuan Hu*, University of Science and Technology of China
17:40-17:50	Oral 14 Bi₂Se₃ nanosheets: advanced nanofillers for reinforcing and flame retarding polyethylene nanocomposites Yanbei Hou, Weizhao Hu, Zhou Gui*, Yuan Hu*, University of Science and Technology of China Bi₂Se₃ 纳米片: 先进纳米填料用于增强和阻燃聚乙烯纳米复合材料 侯雁北, 胡伟兆, 桂宙*, 胡源*, 中国科学技术大学
17:50-18:00	Oral 15 Synthesis And Characterization Of Flame Retardant Thermoset Poly (Lactic Acid) (PLA) Tao Yu*, Fei Sun, Tongji University, China 阻燃热固性聚乳酸的合成与表征 于涛*, 孙菲, 同济大学
18:00-18:10	Oral 16 Synthesis Of Polyaniline-Graphene/Metal Nanohybrids And Their Application In Improving The Fire Safety Of Epoxy Resin Wenwen Guo, Xin Wang, Lei Song, Yuan Hu*, University of Science and Technology of China 聚苯胺联接的石墨烯/金属纳米杂化物的制备及其在阻燃环氧树脂复合材料中的应用 郭文文, 王鑫, 宋磊, 胡源*, 中国科学技术大学
18:10-18:20	Oral 17 Study on Performance of Flame Retardant Reinforced Foamed Urethane Ning Zhu *, Zhen-feng Lai, Wan-jin Wang, Jingpeng Wu, Tao Kong, Beijing Building Construction Research Institute Co.Ltd. China 增强聚氨酯泡沫材料阻燃性能研究 朱宁*, 赖振峰, 王万金, 吴敬朋, 孔涛, 北京市建筑工程研究院有限责任公司
18:20-19:15	Dinner (晚餐) Western Restaurant of Music Theme 23 楼音乐西餐厅
19:15-20:30	Excellent poster selection (优秀海报评比) Entrance of Jinggong Hall 晶宫厅前过厅

29 October, Sunday, Morning, 星期日 上午, Jinggong Hall 三层晶宫厅	
Chairman: Prof. Serge Bourbigot	
08:00-08:25	Plenary 05 题目: Fire behaviour of cladding materials: lessons from the Grenfell Tower Fire 包层材料的火灾行为: 从格伦费尔塔火灾中吸取教训 Terence Richard Hull*, University of Central Lancashire, UK

08:25-08:50	Plenary 06 Biodegradable flame retardant and FDM printable polymer nanocomposites 可生物降解阻燃剂和可 FDM 打印聚合物纳米复合材料 Miriam Rafailovich , Stony Brook University (SUNY), USA
<i>Chairman: Prof. Manfred P. K. Döring and Mr. Daniel Li</i>	
08:50-09:05	Keynote 14 Interfacial characterization of hybrids and flame retardant polymeric composites Yuan Hu* , University of Science and Technology of China, China 胡源* , 中国科学技术大学, 中国
09:05-09:20	Keynote 15 A novel durable flame retardant cotton fabric produced by surface chemical grafting of phosphorus and nitrogen-containing compounds Ziyi Liu, Miaojun Xu, Bin Li* , Northeast Forestry University, China 表面化学接枝改性耐久阻燃棉织物的制备及性能 刘子怡, 许苗军, 李斌* , 东北林业大学
09:20-09:35	Keynote 16 The preparation and application of several kinds of inorganic salt flame retardants Jianzhong Xu* , Hebei University 徐建中* , 河北大学
9:35-10:00	<i>Coffee Break (会间茶歇) – MOTIS, Entrance of Jinggong Hall 晶宫厅前过厅</i>
10:00-10:15	Keynote 17 Impact Of Flame Retardants On The Flame Structure Of Polymers – A New Approach To The Study Of Flame Retardancy 阻燃剂对聚合物火焰结构的影响——一种阻燃研究的新方法 O.P. Korobeinichev , M.B. Gonchikzhapov*, A.G. Shmakov, A.A. Paletsky, I.E. Gerasimov, A.G. Tereshchenko, A.I.Karpov, Shaklein, A.A., Y.Hu, X.Wang, Institute of Chemical Kinetics and Combustion, Russia
10:15-10:30	Keynote 18 Application and synthesis of the flame retardants for bio-based polyurethane materials Jinfei Yang , Nanjing Normal University 杨锦飞* , 南京师范大学
10:30-10:45	Keynote 19 The study of dynamic skin-core theory and highly spinnable flame retardant polyamide fibers Liju Yuan, Ouli Fu, Ling Zhao, Changjun Fu* , Shanghai Antu FR Fibers Co.,Ltd. China 动态皮芯理论和高可防性阻燃聚酰胺纤维的研究 袁丽菊*, 付欧丽, 赵岭, 付常俊* , 上海安凸塑料添加剂有限公司
<i>Chairman: Prof. P. K. Sahoo and Prof. Mingshu Yang</i>	
10:45-10:55	Oral 18 Smouldering Combustion Of A Bio-Based Corn Pith Insulation Material 一种生物基玉米穗隔热材料的阴燃现象研究 L. Haurie* , M. Palumbo, P. Giraldo, A.M. Lacasta, Universitat Politècnica de Catalunya UPC, Spain
10:55-11:05	Oral 19 Synthesis of partially caged silsesquioxane (T7-POSS) compounds via a new and versatile approach Miaofen Ye , Wenchao Zhang, Rongjie Yang*, Beijing Institute of Technology, China 一种新型通用的不完全缩合硅倍半氧烷 (T7-POSS) 的合成方法 叶妙芬 , 张文超, 杨荣杰*, 北京理工大学
11:05-11:15	Oral 20 Effect Of Zeolite /App On Wood Pyrolysiszeolite/APP Shaodi Zhang , Mingzhi Wang*, Beijing Forestry University, China 分子筛/APP 对木材热解的影响 张少迪 , 王明枝*, 北京林业大学
11:15-11:25	Oral 21 Applications Of Polyphosphonates In Flame Retardant Polyethylene Terephthalate (PET) 聚膦酸酯在阻燃聚对苯二甲酸乙二酯 (PET) 中的应用 X. Sun , Y. Jeong, J.P. Lens, FRX Polymers®, USA

11:25-11:35	Oral 22 Bio-Based Composite With Good Mechanical Properties And Flame Retardancy 聚乙二醇增韧聚乳酸/天然纤维复合材料的性能研究 Yunxian Yang, Laia Haurie, De-Yi Wang*, Universitat Politècnica de Catalunya UPC, Spain
11:35-11:45	Oral 23 Polyimide Aerogels Cross-linked through Polyamine Functionalized Polysilsesquioxanes Yiwei Wu, Miaofen Ye, Wenchao Zhang, Rongjie Yang *, Beijing Institute of Technology, China 多氨基苯基硅倍半氧烷交联聚酰亚胺气凝胶 吴义维, 叶妙芬, 张文超, 杨荣杰*, 北京理工大学
11:45-11:55	Oral 24 Functionalization Of Graphene With Hyperbranched Polymeric Flame Retardant For Acrylonitrile-Butadiene-Styrene Nanocomposites: Synthesis, Flammability And Mechanism Ningning Hong*, Lijing Zhang, Yongjin Han, Jianshe Shi, Yanhong Lu, Jinmin Lu, Shanghai Electrical Cable Research Institute Co.,Ltd. China 超支化阻燃剂改性石墨烯/丙烯腈-丁二烯-苯乙烯纳米复合材料: 合成、阻燃性能和机理 洪宁宁*, 张李晶, 韩永进, 史建设, 陆燕红, 鲁进敏, 上海电缆研究所有限公司
11:55-12:05	Oral 25 Numerical Simulation And Hazard Analysis of Smoke Distribution In A Fatal Fire Xiaoqi Shao*, Zhibin Wang *, Ji Wang *, Zhongjun Shu *, The Chinese People's Armed Police Forces Academy, China 某亡人火灾中烟气分布数值模拟与危害分析 邵晓齐*, 王志滨, 王霁, 舒中俊, 中国人民武装警察部队学院,
12:05-13:30	Lunch (午餐) Jingpengge Hall 三层晶蓬阁

Seminar, 29 October, Sunday, Morning, 星期日 上午 Meeting room No. 1 on 4th floor, 四层会议厅1	
Chairman: Dr. Jürgen Troitzsch	
10:00-10:10	Welcome and introductory remarks 欢迎词和介绍 Jürgen Troitzsch, FEPS, Switzerland
10:10-10:30	Flame retardants, modes of action, trends to polymeric flame retardants 阻燃剂、阻燃模式及聚合物阻燃发展趋势 Sergei Levchik, ICL-IP, USA
10:30-10:50	Fire safety regulations and tests. Status and trends 消防安全条例和实验: 现状及发展趋势 Jürgen Troitzsch, FEPS, Switzerland
10:50-11:10	Fire safety of furniture and E&E equipment: The benefits of flame retardants shown in real-scale testing 家具、电子、电器设备的防火安全: 在实际尺寸测试中阻燃的优势 Matt Blais, SwRI, USA
11:10-11:30	Transition to a Polymeric Flame retardant for Polystyrene foams – BLUEEDGE™ flame retardant technology 聚苯乙烯泡沫阻燃剂: BLUEEDGE™ 阻燃技术 Christine Lukas, Dow, PRC
11:30-11:50	Fire Safety, Flame Retardants and Printed Wiring Boards Fire safety of printed wiring boards: A comparison of additive and reactive flame retardants 火安全、阻燃剂与印刷电路板 Alun Morgan, EIPC, The Netherlands
11:50-12:05	Final remarks and closure 总结 Jürgen Troitzsch, FEPS, Switzerland
12:05-13:30	Lunch (午餐) Jingpengge Hall 三层晶蓬阁

29 October, Sunday, Afternoon, 星期日下午, Jinggong Hall 三层晶宫厅	
Chairman: Prof. Tsung-Yen Tsai and Prof. Charles Yang	
13:30-13:40	Oral 26 Counter-Flow Flames Of Polymers 聚合物燃烧时的对流火焰研究 O.P. Korobeinichev, M.B. Gonhikzhapov*, Glaznev R.K., A.G. Shamkov, A.A. Paletsky, I.E. Gerasimov, Institute of Chemical Kinetics and Combustion, Russia
13:40-13:50	Oral 27 Phosphorylated cellulose Applied for the Exfoliation of LDH: An Advanced Reinforcement for Polyvinyl Alcohol Wei Wang, K. M. Liew, Yuan Hu*, University of Science and Technology of China 磷化纤维素剥离层状双氢氧化物及其在聚乙烯醇中的应用 王伟, K. M. Liew, 胡源*, 中国科学技术大学
13:50-14:00	Oral 28 Synthesis Of Cardanol Derived Flame Retardants And Their Application In Epoxy Composites X. Wang*, W.Y. Xing, E.N. Kalali, D.Y. Wang, W.Z. Hu, L. Song, Y. Hu, University of Science and Technology of China 腰果酚衍生物的合成及其阻燃环氧树脂的应用 王鑫*, 邢伟义, E.N. Kalali, 王德义, 胡伟兆, 宋磊, 胡源, 中国科学技术大学
14:00-14:10	Oral 29 Synthesis and Application Study of a Novel P-N Containing Flame Retardant and Curing Agent for Epoxy Resin Shan Huang, Jiaojiao Li, Xiujuan Tian, Qing Yu, Zhongwei Wang*, College of Materials Science and Engineering, China 一种新型磷氮阻燃固化剂的合成及其在环氧树脂中的应用 黄山, 李娇娇, 田秀娟, 于青, 王忠卫*, 山东科技大学
14:10-14:20	Oral 30 Fabrication Of Cu₂P₂O₇ Hierarchical Structure On Brucite Surface For Enhanced Flame Retardant Behaviours Of Ethylene-Vinyl Acetate Copolymer Z. P. Li, X. M. Yang, Y. L. Wang, J. W. Hao*, Beijing Institute of Technology, China Cu₂P₂O₇包覆水镁石阻燃剂制备及阻燃 EVA 研究 李志鹏, 杨晓梅, 王义亮, 郝建薇*, 北京理工大学
14:20-14:30	Oral 31 Epoxy resin composites based on 2, 6, 14-triaminotriptycene@phytic acid organic rigid compound with low flammability and high mechanical property Fang Fang, Peiren Liu, Shiya Ran, Zhengping Fang*, Institute of Polymer composites of Zhejiang University, China 2, 6, 14-三氨基三蝶烯与植酸自组装对环氧树脂阻燃性能与机械性能的影响 方芳, 刘培人, 冉诗雅, 方征平*, 浙江大学高分子复合材料研究所
14:30-14:40	Oral 32 The Effects Of Graphene On The Flammability And Fire Behavior Of Intumescent Flame Retardant Polypropylene Composites At Different Flame Scenarios Bihe Yuan*, Xianfeng Chen, Ao Fan, Wuhan University of Technology, China 石墨烯对膨胀型阻燃聚丙烯复合材料在不同火灾场景下的可燃性和燃烧行为的影响 袁必和*, 陈先锋, 樊傲, 武汉理工大学
14:40-14:50	Oral 33 Study of low smoke flame retarded PVC cable Tianshen Kuang, FR Cable R&D Center, Shanghai Shenghua Cable Group, China 低烟阻燃 PVC 电缆护套塑料特点 旷天申, 上海胜华电缆股份有限公司阻燃电缆研发中心
14:50-15:00	Oral 34 Unsaturated Polyester with Enhanced Thermal Stability and Flame Retardancy Dan Zhao, Xiu-Li Wang, Yu-Zhong Wang*, Sichuan University, China 具有良好热稳定性和阻燃性的不饱和聚酯 赵丹, 汪秀丽, 王玉忠*, 四川大学

15:00-15:10	Oral 35 Synthesis and Thermostability of 2,2,4,6-Tetraphenoxy-4,6-di-p-carboxyphenoxycyclophosphonite Lipeng Yang, Qinggong Meng, Ximei Cai, Xiufen Wang, Beijing University of Chemical Technology, China 2,2,4,6-四苯氧基-4,6-二对羧基苯氧基环三磷腈的合成及热性能研究 杨立鹏, 孟庆功, 蔡喜梅, 王秀芬*, 北京化工大学
15:10-15:35	Coffee Break (会间茶歇) – MOTIS, Entrance of Jinggong Hall 晶宫厅前过厅
Chairman: Prof. Terence Richard Hull and Prof. Miriam Rafailovich	
15:35-15:50	Keynote 20 Development Of Novel Biodegradable Polysaccharide-Based Polymer Nanocomposite Fire Retardants 新型可生物降解多糖基聚合物纳米复合材料阻燃剂的开发 Prafulla Kumar Sahoo*, DHARMENDRA KUMAR JENA, Utkal University, India
15:50-16:05	Keynote 21 Study on Flame Retardant & Anti-Dripping Technology and Application of Polyester Fabric An-bin Tang*, Qian-qian Liang, Xue-ming Wu, Xue-jian Xiao, Sichuan EM Technology Co.,Ltd. 聚酯织物阻燃抗熔滴技术及其应用研究 唐安斌*, 梁倩倩, 吴学明, 肖学建, 四川东材科技集团股份有限公司
16:05-16:20	Keynote 22 Modification of intumescent flame-retardant agent and its application in the foamed polypropylene Z. Yao, Y. Hu, W.L.Yang, S.L. Wu, A. Shukla, F. Zhu, K Cao*, Zhejiang University, China 膨胀型阻燃剂及其在聚丙烯泡沫中的应用 姚臻, 胡燕, 杨文龙, 吴水良, A. 舒克拉, 朱峰, 曹堃*, 浙江大学
16:20-16:35	Keynote 23 Recent Advances on Improving the Fire Performance of Unsaturated Polyesters Yuan Cao, Xiu-Li Wang*, Dan Zhao, Yu-Zhong Wang*, Sichuan University, China 阻燃不饱和聚酯的研究进展 曹媛, 汪秀丽*, 赵丹, 王玉忠*, 四川大学, 中国
16:35-16:50	Keynote 24 Flame retardant properties and mechanism of polypropylene/IFR/nanosilica composites Mingshu Yang*, Institute of Chemistry, Chinese Academy of Sciences 阳明书*, 中科院化学所
16:50-17:05	Keynote 25 Vanillin-Derived High-Performance Flame Retardant Epoxy Resins: Facile Synthesis and Properties Sheng Wang, Songqi Ma, Xiaoqing Liu, Jin Zhu*, Ningbo Institute of Materials Technology and Engineering, Chinese Academy of Sciences, China 高阻燃性香草醛环氧树脂的合成与性能 王胜, 马松琪, 刘小青, 朱锦*, 中科院宁波材料技术与工程研究所
Chairman: Prof. Yuan Hu	
17:05-17:30	Plenary 07 Functionalized carbon nanotubes with phosphorus and nitrogen containing agents: Effective reinforcer for thermal, mechanical and flame retardant properties of polystyrene nanocomposite 以含磷、氮试剂功能化改性碳纳米管, 有效提高聚苯乙烯纳米复合材料的热性能、机械性能和阻燃性能 Richard K.K. Yuen, Wei Yang, City University of Hong Kong
17:30-17:55	Plenary 08 Flame retardancy in polystyrene and polyester foams 聚苯乙烯和聚酯纤维的阻燃性研究 Manfred P. K. Döring, Fraunhofer Institute for Structural Durability and System Reliability LBF, Germany
17:55-18:20	Plenary 09 PRIVATE CONFESSIONS OF INTUMESCENCE: NOVEL METHODS OF CHARACTERIZATION 膨胀炭层的非公开研究: 一种新型的表征方法 S. Bourbigot*, G. Okyay, P. Tranchard, F. Samyn and M. Jimenez, Unit éMat ériaux et Transformations, France
18:20-18:30	Closing Ceremony (闭幕式)
18:30-20:30	Banquet (晚宴) Jinbixuan Restaurant 金碧轩大酒楼

Poster list (海报列表) Entrance of Jinggong Hall 晶宫厅前过厅	
1	Flame-retardant epoxy resin modified with novel flame retardant containing diphenylphosphoryl and triazine group Xiao Hou, Xu Dong, Xiujuan Tian, Qing Yu, Zhongwei Wang * (Shandong University of Science and Technology) 含磷三嗪基阻燃剂的合成及其在环氧树脂中的应用 侯肖, 董旭, 田秀娟, 于青, 王忠卫* (山东科技大学)
2	Flame retardant pan fabric prepared by organic-inorganic hybrid silicon coating via sol-gel technique Y.L. Ren*, Y. Zhang , Y.T. Gu , Q. Zeng (Tianjin Polytechnic University) 基于溶胶-凝胶技术的有机-无机杂化硅涂层制备阻燃聚丙烯腈织物 任元林*, 张悦, 谷叶童, 曾倩 (天津工业大学)
3	Study on Thermal Oxidation Aging of Ammonium Polyphosphate Based on TGA/SDTA/DSC Z.B. Chen , S.S. Yang*, C.L. Wang (Chinese People's Armed Police Force Academy) 基于 TG/SDTA/DSC 的聚磷酸铵热氧老化研究 陈振邦, 杨守生 *,王春霖 (武警学院研究生部)
4	Fabrication of P, N-containing compounds decorated graphene towards flame-retarded polylactic acid nanocomposites Shiya Ran*, Fang Fang, Zhenghong Guo, Zhengping Fang (Zhejiang University) 磷氮型阻燃剂修饰石墨烯的制备及其阻燃聚乳酸 冉诗雅*, 方芳, 郭正虹, 方征平 (浙江大学宁波理工学院)
5	A convenient and effective pathway to enhance the thermal stability of nitrocellulose by grafting vposs X. M. YANG, Z. P. Li, J. W. HAO* (Beijing Institute of Technology) VPOSS 接枝改性硝化纤维素热稳定性能的研究 杨晓梅, 李志鹏, 郝建薇 (北京理工大学)
6	Study on thermal aging properties of stannate flame retardant PVC ZhaoYanyan, FuJinyu, LiJiekang, XuJianzhong, XieJixing* (Hebei University) 锡酸盐基阻燃剂阻燃 PVC 的热老化性能研究 赵岩岩, 符金玉, 李杰康, 徐建中, 谢吉星* (河北大学)
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