

<b>DAY 1 27/08/2023 – Colombo Theatre A</b>			
9:00 AM	9:30 AM	<b>OPENING CEREMONY</b>	
		<b>Chairs: Prof. Serge Bourbigot, Prof. Liming Dai</b>	
<b>9:30 AM</b>	<b>10:30 AM</b>	<b>Plenary Session 1</b>	<b>INTUMESCENCE IN O<sub>2</sub> RICH ENVIRONMENT: DESIGN OF FIRE RETARDED MATERIALS FOR SPACECRAFT</b>
<b>10:00 AM</b>	<b>10:30 AM</b>	<b>Plenary 2 Prof Liming Dai</b>	<b>INNOVATIVE FIRE-RETARDANT CARBON NANOMATERIALS FOR MULTIFUNCTIONAL APPLICATIONS</b>
10:30 AM	11:00 AM	<b>MORNING REFRESHMENTS</b>	
11:00 AM	11:20 AM	Keynote 1 Prof Yuan Hu	SYNTHESIS OF PHOSPHORUS CONTAINING COMPOUNDS WITH DIFFERENT OXIDATION STATES AND THEIR FLAME RETARDANT APPLICATIONS
11:20 AM	11:40 AM	Keynote 2 Prof Tao Tang	RATIONAL DESIGN OF INTRINSIC HIGH FIRE-SAFE POLYCARBONATE WITH PROCESSABILITY VIA MATERIAL GENOME APPROACH
11:40 AM	12:00 PM	Keynote 3 Prof Jun Ma	TACKLING SMOKE AND FIRE HAZARDS OF THERMOPLASTIC POLYURETHANE BY MECHANOCHEMICAL COMBINATION OF CU <sub>2</sub> O AND NANOSHEETS
12:00 PM	12:15 PM	Oral 1 A/Prof Ye-Tang Pan	DUAL NUCLEATION SITES INDUCED BY ZIF-67 TOWARDS DIMENSIONAL MISMATCH OF POLYPHOSPHAZENES IN FLAME RETARDANT EPOXY
12:15 PM	12:30 PM	Oral 2 Dr Nam Kyeun Kim	INVESTIGATION OF FIRE REACTION BEHAVIOUR OF COMPOSITES FOR AIRCRAFT INTERIOR APPLICATIONS
12:30 PM	1:30 PM	<b>LUNCH</b>	
		<b>Chairs: Prof. Yuzhong Wang, Prof. Baljinder Kaur Kandola</b>	
<b>1:30 PM</b>	<b>2:00 PM</b>	<b>Plenary 3 Prof Yuzhong Wang</b>	<b>FIRE RETARDATION OF POLYMERIC MATERIALS WITHOUT CONVENTIONAL FLAME-RETARDANT ELEMENTS</b>
<b>2:00 PM</b>	<b>2:30 PM</b>	<b>Plenary 4 Prof Baljinder Kaur Kandola</b>	<b>FLAMMABILITY, THERMAL STABILISATION AND CARBONISATION BEHAVIOURS OF LIGNIN- POLYAMIDE BLENDS FOR VALUE ADDED APPLICATIONS</b>
2:30 PM	2:50 PM	Keynote 4 Prof Richard Yuen	ADVANCEMENTS FOR LITHIUM-ION BATTERIES UTILISING MACHINE LEARNING ASSISTED THERMAL MANAGEMENT SYSTEMS INTEGRATING SMART MATERIALS
2:50 PM	3:10 PM	Keynote 5 A/Prof Weiyi Xing	PREPARATION AND APPLICATION OF TRANSPARENT FLAME RETARDANT COATINGS FOR POLY(METHYL METHACRYLATE)(PMMA)
3:10 PM	3:25 PM	Oral 3 Dr Javad Mohammadpour	A PREDICTIVE MODEL FOR HYDROGEN JET FIRE WITHIN TUNNELS <b>(Online)</b>

3:25 PM	3:40 PM	Oral 4 Dr Teklebrahan Gebrekrestos Weldemhret	FLAME RETARDANT AND ELECTROMAGNETIC INTERFERENCE SHIELDING COMPOSITE COATINGS ON FLEXIBLE POLYURETHANE FOAM
3:40 PM	4:10 PM	<b>AFTERNOON REFRESHMENTS</b>	
		<b>Chairs: Prof. Debes Bhattacharyya, Prof. Sheng Zhang</b>	
4:10 PM	4:40 PM	Plenary 5 Prof Sheng Zhang	<b>DURABLE FLAME-RETARDANT FABRICS: FABRICATION STRATEGIES AND CHALLENGES</b>
4:40 PM	5:00 PM	Keynote 6 Prof Debes Bhattacharyya	<b>FIRE CHARACTERISTICS OF BIO-BASED COMPOSITES WITH NOVEL FLAME-RETARDANT MATERIALS</b>
5:00 PM	5:15 PM	Oral 5 Mr Tony Xiao	CHEMICALLY ENHANCED WATER MIST SUPPRESSION OF THE SYDNEY TURBULENT BUOYANT FIRE BURNER
5:15 PM	5:50 PM	2-min Poster Presentation Session	

<b>DAY 2 28/08/2023 - Colombo Theatre A</b>			
		<b>Chairs: Prof. Jaime Grunlan, Prof. Yuji Nakamura</b>	
9:00 AM	9:30 AM	Plenary 6 Prof Jaime Grunlan	<b>POLYELECTROLYTE-BASED FLAME RETARDANT SURFACE TREATMENTS FOR POLYMERIC MATERIALS</b>
9:30 AM	10:00 AM	Plenary 7 Prof Yuji Nakamura	<b>DIFFICULTIES AND CHALLENGES TO OBTAIN "UNIQUE" BURNING CHARACTER OF THERMOPLASTIC MATERIALS</b>
10:00 AM	10:15 AM	<b>MORNING REFRESHMENTS</b>	
		<b>Chairs: Prof. Jaime Grunlan, Prof. Yuji Nakamura</b>	
10:15 AM	10:35 AM	Keynote 8 Prof Zhengzhou Wang	FLAME-RETARDANT AND THERMALLY-CONDUCTIVE EPOXY RESIN COMPOSITES CONTAINING METAL PHOSPHINATES/NANOFILLER HYBRIDS WITH GOOD COMPREHENSIVE PROPERTIES
10:35 AM	10:55 AM	Keynote 9 Prof XIAOYU Gu	INTERFACIAL ARCHITECTING OF HIGH-EFFICIENCY AND LONG-ACTING HYPERBRANCHED FLAME RETARDANT TOWARD SMOKE-SUPPRESSED FLEXIBLE POLYURETHANE FOAM
10:55 AM	11:10 AM	Oral 6 A/Prof Yongchun Kan	ULTRA-THIN, ULTRA-LOW FLAME-RETARDANT ADDITION, NONCOMBUSTIBLE SOLID POLYMER ELECTROLYTE FOR HIGHLY SAFE LITHIUM BATTERIES
11:10 AM	11:25 AM	Oral 7 A/Prof Wenwen Guo	ENVIRONMENTALLY BENIGN CARDANOL-DERIVED PRODUCTS AND THEIR APPLICATIONS IN FLAME RETARDANT EPOXY RESINS
11:25 AM	11:40 AM	Oral 8 Dr Jingwen Weng	ALLEVIATING BATTERY THERMAL RUNAWAY PROPAGATION VIA AEROGEL FELT COUPLED WITH FLAME-RETARDED PHASE CHANGE MATERIAL
11:40 AM	11:55 AM	Oral 9 Dr Ao Li	STUDY OF BATTERY THERMAL BEHAVIOUR UNDER ABNORMAL HEAT GENERATION

11:55 AM	12:10 PM	Oral 10 M. Sc. Daniel Rockel	SAVE YOUR SKIN WITH SKIN – UTILIZING LEATHER WASTE FIBERS IN FLAME RETARDANT BIO COMPOSITES
12:10 PM	1:10 PM	<b>LUNCH</b>	
		<b>Chairs: Prof. Gaelle Fontaine A/Prof. Anthony Yuen</b>	
1:10 PM	1:30 PM	Keynote 10 Prof Gaëlle Fontaine	METALLOSALEN COMPLEXES AS NOVEL FIRE RETARDANTS FOR POLYMERS
1:30 PM	1:50 PM	Keynote 11 Prof Saihua Jiang	ARBITRARILY AND REPEATEDLY PROGRAMMABLE FLAME-RETARDANT SOFT ACTUATORS VIA “STRESS-CACHING” STRATEGY <b>(Online)</b>
1:50 PM	2:05 PM	Oral 11 Prof Sherman CP Cheung	TRANSFERRING FIRE SCIENCES INTO AUGMENTED REALITY
2:05 PM	2:20 PM	Oral 12 Dr Tong Chen	PHORSPHORUS/NITROGEN-HYBRIDIZED MAGNESIUM HYDROXIDE FOR FLAME RETARDANT EPOXY POLYMERS
2:20 PM	2:35 PM	Oral 13 Dr Yunxian Yang	MULTIFUNCTIONAL FLAME RETARDANT FOR HIGH-PERFORMANCE EPOXY RESIN AND ITS FIBER REINFORCED COMPOSITE
2:35 PM	2:45 PM	Y-Oral 14 Mr Jingwen Wang	INTRINSIC IONIC CONFINEMENT DYNAMIC ENGINEERING OF IONOMERS WITH FIRE SAFETY, HIGH HEALING, AND STRETCHABILITY
2:45 PM	2:55 PM	Y-Oral 15 Mr Jinhan Lu	A DURABLE FLAME-RETARDANT PLYWOOD WITH LOW HYGROSCOPICITY AND LEACHING RESISTANCE <b>(Online)</b>
2:55 PM	3:05 PM	Y-Oral 16 Mr Song Gu	NEIGHBOURING MOLECULAR ENGINEERING IN DIELS-ALDER CHEMISTRY TOWARDS RECYCLABLE AND FIRE SAFE THERMOSET AND ITS COMPOSITES
3:05 PM	3:15 PM	Y-Oral 17 Mr Wenmu Yang	ENHANCING FLAME RETARDANCY AND MECHANICAL PROPERTIES OF EPOXY BY FUNCTIONALIZING AMMONIUM POLYPHOSPHATE USING AMINE-BASED HARDENER
3:15 PM	3:25 PM	Y-Oral 18 Ms Jing Liang	DESIGN OF A PEANUT SHELL-BASED IFR SYSTEM AND ITS FIRE PERFORMANCE IN EP
3:40 PM	3:55 PM	<b>AFTERNOON REFRESHMENTS</b>	
		<b>Chairs: A/Prof. Bibo Wang, Prof. Pingan Song</b>	
3:55 PM	4:15 PM	Keynote 12 Prof Pingan Song	STRONG, TOUGH AND SELF-EXTINGUISHING THERMOPLASTIC POLYURETHANE ELASTOMERS
4:15 PM	4:35 PM	Keynote 13 A/Prof Bibo Wang	CONSTRUCTION OF HYBRID FLAME RETARDANTS: AN EFFICIENT STRATEGY FOR FLAME-RETARDANT FLEXIBLE POLYURETHANE FOAM COMPOSITES
4:35 PM	4:50 PM	Oral 19 Dr Kunpeng Song	CONSTRUCTION OF BIRD'S NEST-LIKE CAPSULES FOR PHOSPHOROUS SMALL MOLECULES TOWARDS FLAME RETARDANT POLYUREA COMPOSITES
4:50 PM	5:05 PM	Oral 20 Dr Jingyu Wang	FROM PHYSICAL MIXTURES TO BLOCK COPOLYMER: IMPOSE OUTSTANDINGLY TOUGHENING AND FLAME RETARDANT EFFECT TO POLYPROPYLENE

5:05 PM	5:20 PM	Oral 21 Dr Wang Xi	ALLOYING SYNERGISTIC FLAME RETARDANT EFFECT IMPROVING FIRE RESISTANCE AND MECHANICAL PROPERTIES OF POLYAMIDE 6
5:20 PM	5:35 PM	Oral 22 Dr Imrana Kabir	OPTIMISATION OF ADDITIVES TO MAXIMISE PERFORMANCE OF EXPANDABLE GRAPHITE BASED INTUMESCENT FLAME RETARDANT POLYURETHANE COMPOSITES ( <b>Online</b> )
5:35 PM	5:50 PM	Oral 23 Dr Fukai Chu	EXPLORATION ON STRUCTURAL RULES OF HIGHLY EFFICIENT FLAME RETARDANT UNSATURATED POLYESTER RESINS
6:30 PM	9:30 PM	<b>CONFERENCE BANQUET</b>	

**DAY 2 28/08/2023 - Colombo Theatre B**

9:00 AM	10:00 AM		
10:00 AM	10:15 AM	<b>MORNING REFRESHMENTS</b>	
		Chairs: <b>Prof. Eric Lee, Dr Nam Kyeun Kim</b>	
10:15 AM	10:35 AM	Keynote 14 Prof Eric Wai Ming Lee	DEVELOPMENTS IN BUILDING EVACUATION MODELS BY IMPLEMENTING PSYCHOLOGICAL THEORIES
10:35 AM	10:55 AM	Keynote 15 A/Prof Kate Nguyen	POST-FIRE INTEGRITY AND DAMAGE OF BUSHFIRE EXPOSED CROSS-LAMINATED TIMBER
10:55 AM	11:10 AM	Oral 24 Dr Hengrui Liu	NUMERICAL INVESTIGATION OF THE INTERACTION BETWEEN THIN WATER MIST SHEET AND HORIZONTAL HYDROGEN JET FLAME
11:10 AM	11:25 AM	Oral 25 Mr Ivan Miguel De Cachinho Cordeiro	THE ATOMISTIC INSIGHTS INTO THE FLAME RETARDANCY MECHANISM OF PHOSPHOROUS-BASED INTUMESCENT COATING ON POLYETHYLENE
11:25 AM	11:40 AM	Oral 26 Mr Sensen Xing	IMPACT OF LOCAL PEDESTRIAN DYNAMICS ON EXIT CHOICE IN FLOOR-FIELD EVACUATION SIMULATIONS
11:40 AM	11:55 AM	Oral 27 Mr Zhongwei Chen	USING MACHINE LEARNING FOR GUIDING THE DESIGN OF ORGANIC FLAME RETARDANTS FOR EPOXY RESIN COMPOSITES <b>(Online)</b>
11:55 AM	12:10 PM	Oral 28	TBC
12:10 PM	1:10 PM	<b>LUNCH</b>	
		Chairs: <b>Prof. Jixin Zhu, Dr Timothy Chen</b>	
1:10 PM	1:30 PM	Keynote 16 Prof Jixin Zhu	LITHIUM BATTERIES STORAGE AND FIRE SAFETY
1:30 PM	1:50 PM	keynote 17 Dr Tariq Nazir	FLAME RETARDANCY AND ELECTRICAL TRACKING RESISTANCE PERFORMANCE OF SILICONE RUBBER FOR HIGH VOLTAGE INSULATION
1:50 PM	2:05 PM	Oral 29 Dr Timothy Chen	REACTIVE MOLECULAR DYNAMICS IN PYROLYSIS MODELLING OF FLAME RETARDANT POLYMER
2:05 PM	2:20 PM	Oral 30 Dr Esmaeel Eftekharian	NUMERICAL SIMULATION ON THE EFFECTS OF FIRE-WIND ENHANCEMENT ON BUILDINGS
2:20 PM	2:35 PM	Oral 31 Mr Tarun Grover	UNDERSTANDING THE DYNAMICS OF FIRE AND ITS EVALUATION METHODS IN TEXTILES <b>(Online)</b>
2:35 PM	2:45 PM	Y-Oral 32 Mr Qian Chen	INVESTIGATING THERMAL OXIDATION AND FLAME-RETARDANT POTENTIALS OF GRAPHYNE-TYPE CARBON NANO MATERIALS BY REACTIVE MOLECULAR DYNAMICS
2:45 PM	2:55 PM	Y-Oral 33 Mr Maksym Li	RESEARCH ON ECO-FLAME RETARDANT LIQUID FOR NATURAL FIBERS UTILIZED FOR THE PREPARATION OF GREEN COMPOSITES
2:55 PM	3:05 PM	Y-Oral 34 Mr Longfei Han	NON-FLAMMABLE SANDWICH-STRUCTURED TPU GEL POLYMER ELECTROLYTE FOR HIGH PERFORMANCE LITHIUM ION BATTERIES

3:05 PM	3:15 PM	Y-Oral 35 Mr Yuze Zhang	DESIGN, SYNTHESIS AND APPLICATION OF MAGNESIUM BASED LAYERED DOUBLE HYDROXIDES FLAME RETARDANT
3:15 PM	3:25 PM	Y-Oral 36 Mr Heng Yu	SANDWICH STRUCTURED ULTRA-STRONG-HEAT-SHIELDING AEROGEL/COPPER COMPOSITE INSULATION BOARD FOR SAFE LITHIUM-ION BATTERIES MODULES
3:25 PM	3:35 PM	Y-Oral 37 Mr Zhoumei Xu	HYDROPHOBIC SiO <sub>2</sub> /ADP COATED PU FOAM FOR EFFICIENT OIL SPILLS REMEDIATION AND EXCEPTIONAL FLAME-RETARDANT PERFORMANCE
3:35 PM	3:55 PM	<b>AFTERNOON REFRESHMENTS</b>	
		<b>Chairs: Prof. Bin Yu, Dr Wei Wang</b>	
3:55 PM	4:15 PM	Keynote 18 Prof Bin Yu	HIGH-PERFORMANCE BIO-INSPIRED FLAME RETARDANT NANO-COATINGS
4:15 PM	4:35 PM	Keynote 19 Dr Wei Wang	MXENE NETWORKS DESIGN AND PREPARATION FOR ADVANCED POLYMER COMPOSITES
4:35 PM	4:50 PM	Oral 38 Sebastian Goller	AVOIDING ANTIMONY – EFFECT OF Ca(H <sub>2</sub> PO <sub>4</sub> ) <sub>2</sub> ON SMOKE EMISSION AND FIRE BEHAVIOR IN BROMATED ABS
4:50 PM	5:05 PM	Oral 39 Shenghe Zhang	HIGH-PERFORMANCE FLEXIBLE POLYURETHANE FROM RENEWABLE CASTOR OIL: PREPARATION, PROPERTIES AND MECHANISM
5:05 PM	5:20 PM	Oral 40 Mr Haoxin Niu	SYNTHESIS OF A VANILLIN-DERIVED BISDOPO CO-CURING AGENT FOR THE PREPARATION OF TRANSPARENT FLAME-RETARDANT EPOXY THERMOSETS
5:20 PM	5:35 PM	Oral 41 Mr MD DELWAR Hossain	LIMITATIONS OF CURRENT FIRE TESTING APPROACH OF COMPOSITE CLADDING PANELS
6:30 PM	9:30 PM	<b>CONFERENCE BANQUET</b>	

**DAY 3 29/08/2023 - Colombo Theatre A**

		<b>Chairs: Dr Sabyasachi Gaan, Dr Maryam Ghodrat</b>	
<b>9:00 AM</b>	<b>9:30 AM</b>	<b>Plenary 8</b> Dr Sabyasachi Gaan	<b>FIRE SAFE RECYCLABLE EPOXY THERMOSETS FROM PHOSPHORUS BASED MONOMERS</b>
<b>9:30 AM</b>	<b>10:00 AM</b>	<b>Plenary 9</b> Prof Guan Heng Yeoh	<b>MULTISCALE OF MODELING FLAME RETARDANT MATERIALS</b>
<b>10:00 AM</b>	<b>10:20 AM</b>	<b>MORNING REFRESHMENTS</b>	
		<b>Chairs: Dr Sabyasachi Gaan, Dr Maryam Ghodrat</b>	
<b>10:20 AM</b>	<b>10:40 AM</b>	Keynote 20 Prof Bin Fei	SUSTAINABLE COMPOSITES WITH FLAME RETARDANTS FROM BIOMASS
<b>10:40 AM</b>	<b>11:00 AM</b>	Keynote 21 Prof Juan Li	FLAME RETARDING AND STRENGTHENING POLY (ETHYLENE 2,5-FURANDICARBOXYLATE-CO-ETHYLENE TEREPHTHALATE) USING PHOSPHINATES
<b>11:00 AM</b>	<b>11:20 AM</b>	Keynote 22 A/Prof Xin Wang	BIO-BASED, ANTI-FLAMMABLE AND RECYCLABLE EPOXY THERMOSETS AND FIBER-REINFORCED COMPOSITES
<b>11:20 AM</b>	<b>11:40 AM</b>	Keynote 23 Dr Siqi Huo	THE FLAME-RETARDANT EPOXY RESINS VIA INTRODUCING A BIO-BASED, PHOSPHORUS-PHOSPHORUS, HYPERBRANCHED OLIGOMER
<b>11:40 AM</b>	<b>12:00 PM</b>	Keynote 24 Dr Maryam Ghodrat	NUMERICAL MODELING OF FIRE INTENSITY EFFECT ON WILDFIRE INTERACTION WITH MULTIPLE BUILDINGS IN WILDLAND-URBAN INTERFACE
<b>12:00 PM</b>	<b>12:20 PM</b>	Keynote 25 A/Prof Anthony Yuen	DEVELOPING DEEPER UNDERSTANDING VIA ATOMISTIC REALISATION OF MOLECULAR BREAKDOWN OF CARBON-BASED NANOMATERIAL FLAME-RETARDANT POLYMER COMPOSITES
<b>12:20 PM</b>	<b>12:50 PM</b>	<b>CLOSING CEREMONY</b>	
<b>12:50 PM</b>	<b>1:40 PM</b>	<b>LUNCH</b>	