Time						
8:30	Registration					
9:15	Opening remarks / Room S (1st floor: RY103)					
	Plenary Lecture 1 / Room S (1st flo	<u>oor: RY103)</u>	Speaker:		Chair:	
9:20-10:30	Shape Memory Polymer Composite	s: Programmability, 4D Printing	Prof. Jinsong Leng* and Prof. Ya	inju Liu	Prof. Tetsusei Kurashiki	
(70 min)	and Applications		(*Harbin Institute of Technology,	/People's Republic of China)	(Osaka University/Japan)	
10:30-10:45			Break			
	Room A (1st floor: RY107)	Room B (2nd floor: RY207)	Room C (2nd floor: RY208)	Room D (2nd floor: RY204)	Room E (2nd floor: RY203)	
	Keynote Lecture 1:	Functional Composites:	Manufacturing/Processing: 3/4D	Simulation&Testing: Optimization	Joint Session	
	Prof. Mai Yiu Wing	Nanocomposites	Printing and Additive	Design/Modeling and Simulation	Chair: Dr. Hayato Nakatani (Osaka	
	(The Hong Kong Polytechnic	Chair: Prof. Qingbin Zheng (The	Manufacturing	Chair: Prof. Tatsuro Kosaka (Kochi	Metropolitan University/Japan)	
Morning 1	University/Hong Kong, China)	Chinese University of Hong Kong,	Chair: Prof. Xiaoyong Tian (Xi'an	University of Technology/Japan)		
Session:	Chair: Prof. Asami Nakai (Gifu	Shenzhen/China)	Jiaotong University/China)			
10:45-12:00	University/Japan)					
12:00-13:00			Lunch time			
	Plenary Lecture 2 / Room S (1st flo	oor: RY103)	Speaker: Prof. Chun Hui Wang		Chair: Prof. Mai Yiu Wing	
13:00-14:10	Fibre-Reinforced Nanocomposites	for Extreme Environments	(University of New South Wales, Sydney/Australia)		(The Hong Kong Polytechnic	
(70 min)					University/China)	
14:10-14:25		Break	Corporate Exhibition (1st floor: R)	Y102)	I	
	Room A (1st floor: RY107)	Room B (2nd floor: RY207)	Room C (2nd floor: RY208)	Room D (2nd floor: RY204)	Room E (2nd floor: RY203)	
	Keynote Lecture 2:	Functional Composites:	Manufacturing/Processing:	Simulation&Testing: Optimization	Joint Session	
	Prof. He Chaobin	Nanocomposites	Advanced Composites	Design/Modeling and Simulation	Chair: Dr. Masato Sakaguchi (Gifu	
	(National University of	Chair: Prof. Jun Ma(University of	Manufacturing	Chair: Dr. Hanxing Zhao (Harbin	University/Japan)	
	Singapore/Singapore)	South Australia/Australia)	Chair: Prof. Richard Yang (Western	Institute of Techonlogy/China)		
Afternoon 1	Chair: Dr. Masaaki Nishikawa (Kyoto		Sydney University/Australia)			
Session:	University/Japan)					
14:25-15:40						
15:40-15:55			Corporate Exhibition (1st floor: R)	Y102)		
	Room A (1st floor: RY107)	Room B (2nd floor: RY207)	Room C (2nd floor: RY208)	Room D (2nd floor: RY204)	Room E (2nd floor: RY203)	
	Materials Science: Polymer Matrix		Manufacturing/Processing: 3/4D	Simulation&Testing: Optimization	Joint Session on Flame	
	Composites	Nanocomposites	Printing and Additive	Design/Modeling and Simulation	Retardancy and Fireproof	
	Chair: Prof. Akihiro Wada (Osaka	Chair: Prof. Xi Shen (The Hong Kong	Ŭ	Chair: Prof. Keke Tang (Tongji	Chair: Dr. Yasuka Nassho (Toyama	
Afternoon 2	Sangyo University/Japan)	Polytechnic University/ Hong Kong)	Chair: Prof. Masahito Ueda (Nihon	University/China)	Prefectural University/Japan)	
Session:			University/Japan)			
15:55-17:35						

Time							
8:30	Registration						
9:15		Oper	ning remarks / Room S (1st floor: R)	(103)			
	Plenary Lecture 1 / Room S (1st flo	<u>or: RY103)</u>	Speaker:		Chair:		
9:20-10:30	Shape Memory Polymer Composite	s: Programmability, 4D Printing	Prof. Jinsong Leng* and Prof. Ya	inju Liu	Prof. Tetsusei Kurashiki		
(70 min)	and Applications		(*Harbin Institute of Technology,	/People's Republic of China)	(Osaka University/Japan)		
10:30-10:45			Break		•		
	Room F (2nd floor: RY202)	Room G (2nd floor: RY201)	Room H (2nd floor: RY206)	Room I (4th floor: RY405)	Room J (4th floor: RY404)		
	Materials Science: Ceramic Matrix	Functional Composite: Multi-	Manufacturing/Processing:	Simulation&Testing: Testing and	Applications: Emerging		
	Composites	Functional/Smart Composites	Automated Manufacturing /	Evaluations	Applications(Absorption,		
	<mark>Chair: Dr. Masaaki Nishikawa (Kyoto</mark>	Chair: Prof. Sung-Ryong Kim (Korea	Advanced Composites	Chair: Prof. Shengyi Zhong	Shielding, Cloaking, Sensing,		
Morning 1	University/Japan)	National University of	Manufacturing	(Shanghai Jiao Tong	Acutuating etc.)		
Session:		Transportation/Korea)	Chair: Prof. Dong Gi Seong (Pusan	University/China)	Chair: Dr. Qiang Fu (The University		
10:45-12:00			National University/Korea)		of Technology Sydney/Australia)		
12:00-13:00	Lunch time						
	Plenary Lecture 2 / Room S (1st flo	or: RY103)	Speaker: Prof. Chun Hui Wang		Chair: Prof. Mai Yiu Wing		
13:00-14:10	Fibre-Reinforced Nanocomposites	for Extreme Environments	(University of New South V	Vales, Sydney/Australia)	(The Hong Kong Polytechnic		
(70 min)					University/China)		
14:10-14:25		Break	/ Corporate Exhibition (1st floor: R	Y102)			
	Room F (2nd floor: RY202)	Room G (2nd floor: RY201)	Room H (2nd floor: RY206)	Room I (4th floor: RY405)	Room J (4th floor: RY404)		
	Materials Science: Ceramic Matrix	Functional Composite: Multi-	Manufacturing/Processing:	Simulation&Testing: Testing and	Applications: Emerging		
	Composites	Functional/Smart Composites	Advanced Composites	Evaluations	Applications(Absorption,		
	Chair: Dr. Longbiao Li (Nanjing	Chair: Chair: Prof. Seong Su Kim	Manufacturing / Second	Chair: Prof. Zhengyan Yang	Shielding, Cloaking, Sensing,		
	University of Aeronautics and	(Korea Advanced Institute of	Processing / Others	(Jiangnan University/China)	Acutuating etc.)		
Afternoon 1	Astronautics/China)	Science and Technology	Chair: Dr. Daiki Tanabe (Kobe City		Chair: Prof. Sarah Yixia Zhang		
Session:		(KAIST)/Korea)	College of Technology/Japan)		(Western Sydney		
14:25-15:40					University/Australia)		
15:40-15:55			/ Corporate Exhibition (1st floor: R		1		
	Room F (2nd floor: RY202)	Room G (2nd floor: RY201)	Room H (2nd floor: RY206)	Room I (4th floor: RY405)	Room J (4th floor: RY404)		
	Materials Science: Ceramic Matrix	Functional Composites: Natural	Manufacturing/Processing:	Simulation&Testing: Testing and	Applications: Recycling Carbon		
	Composites / Metal Matrix	Fibers/Green Composites	Automated Manufacturing / Out-	Evaluations	Neutrality and Circular Economy /		
	Composites	Chair: Dr. Junji Noda (Kindai	of-Autoclave Process / Others	Chair: Prof. Hiroshi Saito (Kanazawa	, i i i i i i i i i i i i i i i i i i i		
Afternoon 2	Chair: Prof. Yu Zhang (Harbin	University/Japan)	Chair: Chair: Prof. Akio Ohtani	Institute of Technology/Japan)	Chair: Prof. Tatsuro Kosaka (Kochi		
Session:	Institute of Technology/China)		(Kyoto Institute of		University of Technology/Japan)		
15:55-17:35			Technology/Japan)				

Time						
8:30	Registration					
	Plenary Lecture 3 / Room S (1st flo	<u>or: RY103)</u>	<u>Speaker:</u> Prof. Yun-Hae Kim		Chair: Prof. Tatsuro Kosaka	
	Optimization of Thermoplastic and	Thermoset composites : Effects of	(Professor, Korea Maritime	and Ocean University	(Kochi University of	
9:20-10:30	Geometry, Temperature, Moisture a	and Nanotube Reinforcement on	/Republic of Korea)		Technology/Japan)	
(70 min)	Mechanical Performance					
10:30-10:45		Break	Corporate Exhibition (1st floor: R	RY102)		
	Room A (1st floor: RY107)	Room B (2nd floor: RY207)	Room C (2nd floor: RY208)	Room D (2nd floor: RY204)	Room E (2nd floor: RY203)	
	Materials Science: Polymer Matrix	Functional Composites:	Manufacturing/Processing:	Simulation&Testing: Optimization	Keynote Lecture 3:	
	Composites	Nanocomposites	Advanced Composites	Design/Modeling and Simulation	Mr. Katsuyuki Awano	
	Chair: Prof. Toshiaki Natsuki	Chair: Prof. Xu-Ming Xie (Tsinghua	Manufacturing	Chair: Dr. Masato Nishi (JSOL	(HONDA R&D/Japan)	
Morning 1	(Shinshu University/Japan)	University/China)	Chair: Prof. Qi Wu (Nanjing	CORPORATION/Japan)	Chair: Prof. Masayuki Okoshi (Gifu	
Session:			University of Aeronautics and		University/Japan)	
10:45-12:00			Astronautics/China)			
12:00-13:00	Lunch time					
	Plenary Lecture 4 / Room S (1st floor: RY103)		<u>Speaker:</u> Dr. Masahide Kazari (Exe	ecutive, Group Manager,	Chair:	
	Development of Core Technologies	for Hydrogen Aircraft	Hydrogen Aircraft Core Technolog	gy Research Project Group,	Mr. Katsuyuki Kawashima	
13:00-14:10			Aerospace Systems Company, Ka	wasaki Heavy Industries/	(Kawasaki Heavy Industries/	
(70 min)			Japan)		Japan)	
14:10-14:25		Break	Corporate Exhibition (1st floor: R	RY102)		
14:25-15:45			ter Session / Room P (1st floor: RY			
15:45-16:00		Break	a / Corporate Exhibition (1st floor: R	RY102)		
	Room A (1st floor: RY107)	Room B (2nd floor: RY207)	Room C (2nd floor: RY208)	Room D (2nd floor: RY204)	Room E (2nd floor: RY203)	
	Applications: Engineering	Functional Composites: Natural	Manufacturing/Processing:	Simulation&Testing: Optimization	Joint Session on Flame	
	Applications(Aerospace,	Fibers/Green Composites	Advanced Composites	Design / Modeling and Simulation	Retardancy and Fireproof	
	Infrastructure, Transportation,	Chair: Dr. Hayato Nakatani (Osaka	Manufacturing / Second	Chair: Dr. Masaaki Nishikawa (Kyoto	Chair: Prof. Aravind Dasari	
Afternoon 1	Wind Energy)	Metropolitan University/Japan)	Processing	University/Japan)	(Nanyang Technological	
Session:	Chair: Dr. Junji Noda (Kindai		Chair: Prof. Tetsusei Kurashiki		University/Singapore)	
16:00-17:15	University/Japan)		(Osaka University/Japan)			
18:30-20:30			Banquet (Hotel Granvia Kyoto)			

Time						
8:30	Registration					
	Plenary Lecture 3 / Room S (1st flo	<u>or: RY103)</u>	Speaker: Prof. Yun-Hae Kim		<u>Chair:</u> Prof. Tatsuro Kosaka	
	Optimization of Thermoplastic and	Thermoset composites : Effects of	(Professor, Korea Maritime	and Ocean University	(Kochi University of	
9:20-10:30	Geometry, Temperature, Moisture a	and Nanotube Reinforcement on	/Republic of Korea)		Technology/Japan)	
(70 min)	Mechanical Performance					
10:30-10:45		Break	Corporate Exhibition (1st floor: R	Y102)		
	Room F (2nd floor: RY202)	Room G (2nd floor: RY201)	Room H (2nd floor: RY206)	Room I (4th floor: RY405)	Room J (4th floor: RY404)	
	Speech Session for Best Student	Speech Session for Best Student	Materials Science: Carbon	Functional Composites: Adhesive	Simulation&Testing: Testing and	
	Poster Award 1	Poster Award 2	Composites / Metal Matrix	and Interface	Evaluations	
	Chair: Prof. Hideaki Katogi (Jissen	Chair: Dr. Daiki Tanabe (Kobe City	Composites	Chair: Prof. Wendi Liu (Fujian	Chair: Prof. Leijiang Yao	
Morning 1	Women's University/Japan)	College of Technology/Japan)	Chair: Dr. Shuai Wang (Harbin	Agriculture and Forestry	(Northwestern Polytechnical	
Session:			Institute of Technology/China)	University/China)	University/China)	
10:45-12:00						
12:00-13:00			Lunch time			
	Plenary Lecture 4 / Room S (1st flo	<u>or: RY103)</u>	<u>Speaker:</u> Dr. Masahide Kazari (Exe	ecutive, Group Manager,	Chair:	
	Development of Core Technologies	for Hydrogen Aircraft	Hydrogen Aircraft Core Technolog	gy Research Project Group,	Mr. Katsuyuki Kawashima	
13:00-14:10			Aerospace Systems Company, Ka	wasaki Heavy Industries/	(Kawasaki Heavy Industries/	
(70 min)			Japan)		Japan)	
14:10-14:25		Break	Corporate Exhibition (1st floor: R	Y102)		
14:25-15:45		Pos	ster Session / Room P (1st floor: RY)	101)		
15:45-16:00		Break	Corporate Exhibition (1st floor: R	Y102)		
	Room F (2nd floor: RY202)	Room G (2nd floor: RY201)	Room H (2nd floor: RY206)	Room I (4th floor: RY405)	Room J (4th floor: RY404)	
	Materials Science: Carbon	Functional Composites: Adhesive	Simulation&Testing: Testing and	Materials Science: Thermoplastic	Applications: Biomedical	
	Composites	and Interface	Evaluations	Composites / Textile-Based	Applications	
	Chair: Prof. Xiaohui Song (Hefei	Chair: Prof. Atsushi Hosoi (Waseda	Chair: Dr. Norio Iwashita (National	Composites	Chair: Dr. Dou Zhang (Harbin	
Afternoon 1	University of Technology/China)	University/Japan)	Institute of Advanced Industrial	Chair: Prof. Chao Wang (Harbin	Institute of Technology/China)	
Session:			Science and Technology	Institute of Technology/China)		
16:00-17:15			(AIST)/Japan)			
18:30-20:30			Banquet (Hotel Granvia Kyoto)			

Time						
8:30	Registration					
9:20-10:30 (70 min)	<u>Plenary Lecture 5 / Room S (1st flo</u> "Synthesis from Materials to Proce Environmental Impact and Circular ICC Research into the Realization o	sses for Composites with Reduced Economy"		•		
10:30-10:45		Breal	<pre>< / Corporate Exhibition (1st floor: R)</pre>	Y102)		
	Room A (1st floor: RY107)	Room B (2nd floor: RY207)	Room C (2nd floor: RY208)	Room D (2nd floor: RY204)	Room E (2nd floor: RY203)	
Morning 1 Session: 10:45-12:00	Keynote Lecture 4: Prof. Hairon Chen (Ningbo University/China) Chair: Prof. Toshiaki Natsuki (Shinshu Univerity/Japan)	Functional Composites: Natural Fibers/Green Composites Chair: Prof. Akihiro Wada (Osaka Sangyo University/Japan)	University/Japan)	Simulation&Testing: Micromechanics Chair: Dr. Masaaki Nishikawa (Kyoto University/Japan)	Joint Session on Flame Retardancy and Fireproof Chair: Prof. Akio Ohtani (Kyoto Institute of Technology/Japan)	
12:00-13:00			Lunch time			
	Room A (1st floor: RY107)	Room B (2nd floor: RY207)	Room C (2nd floor: RY208)	Room D (2nd floor: RY204)	Room E (2nd floor: RY203)	
Afternoon 1 Session: 13:00-14:40	Materials Science: Metal Matrix Composites / Others Chair: Prof. Lujun Huang (Harbin Institute of Technology/China)	Functional Composites: Natural Fibers/Green Composites Chair: Prof. Renhui Qiu (Fujian Agriculture and Forestry University/China)	Manufacturing/Processing: 3/4D Printing and Additive Manufacturing / Others Chair: Dr. Masaaki Nishikawa (Kyoto University/Japan)	Simulation&Testing: Failure Criteria and Verification / Others Chair: Dr. Hideaki Katogi (Jissen Women's University/Japan)	Joint Session on Flame Retardancy and Fireproof Chair: Ms. Shiho Kuwashiro (Osaka Research Institute of Industrial Science and Technology/Japan)	

Time						
8:30	Registration					
	Plenary Lecture 5 / Room S (1st flo	or: RY103)	Speaker:		Chair:	
	"Synthesis from Materials to Proce	sses for Composites with Reduced	Prof. Kiyoshi Uzawa		Dr. Hayato Nakatani	
9:20-10:30	Environmental Impact and Circular	Economy"	(Director, Innovative Composite	Center (ICC),	(Osaka Metropolitan	
(70 min)	ICC Research into the Realization o	f Sustainable Composites	Kanazawa Institute of Technolo	gy/Japan)	University/Japan)	
10:30-10:45		Break	A / Corporate Exhibition (1st floor: R	Y102)	1	
	Room F (2nd floor: RY202)	Room G (2nd floor: RY201)	Room H (2nd floor: RY206)	Room I (4th floor: RY405)	Room J (4th floor: RY404)	
	Materials Science: Ceramic Matrix	Materials Science: Others	Functional Composite: Multi-	Functional Composites:	Applications: Engineering	
	Composites / Carbon Composites	Chair: Prof. Yun-Hae Kim (National	Functional/Smart Composites	Thermal/Fire Retardant	Applications(Aerospace,	
	Chair: Dr. Junji Noda (Kindai	Korea Maritime and Ocean	Chair: Prof. Xingyi Zhu (Tongji	Composites	Infrastructure, Transportation,	
	University/Japan)	University/Korea)	University/China)	Chair: Prof. Yue Hou (Wuhan	Wind Energy)	
Morning 1				University/China)	Chair: Prof. Hiroshi Saito (Kanazawa	
Session:					Institute of Technology/Japan)	
10:45-12:00						
12:00-13:00			Lunch time		•	
	Room F (2nd floor: RY202)	Room G (2nd floor: RY201)	Room H (2nd floor: RY206)	Room I (4th floor: RY405)	Room J (4th floor: RY404)	
	Journal Session	Materials Science: Polymer Matrix	Functional Composite: Multi-	Functional Composites:	Applications: Engineering	
	Chair: Prof. Hao Wang	Composites	Functional/Smart Composites	Thermal/Fire Retardant	Applications(Aerospace,	
	(University of Southern	Chair: Prof. Kazushi Yamada (Kyoto	Chair: Prof. Kazuya Okubo	Composites / Multi-	Infrastructure, Transportation,	
	Queensland/Australia)	Institute of Technology/Japan)	(Doshisha University/Japan)	Functional/Nanocomposites	Wind Energy) / Composites,	
				Chair: Prof. Cong Deng (Sichuan	Repair, Self-healing	
Afternoon 1				University/China)	Chair: Prof. Mototsugu Tanaka	
Session:					(Kanazawa Institute of	
13:00-14:40					Technology/Japan)	

Time						
8:30	Registration					
9:15	Opening remarks / Room S (1st floor: RY103)					
	Plenary Lecture 1 / Room S (1st flo	<u>oor: RY103)</u>	Speaker:		Chair:	
9:20-10:30	Shape Memory Polymer Composite	s: Programmability, 4D Printing	Prof. Jinsong Leng* and Prof. Ya	anju Liu	Prof. Tetsusei Kurashiki	
(70 min)	and Applications		(*Harbin Institute of Technology	/People's Republic of China)	(Osaka University/Japan)	
10:30-10:45			Break			
	Room A (1st floor: RY107)	Room B (2nd floor: RY207)	Room C (2nd floor: RY208)	Room D (2nd floor: RY204)	Room E (2nd floor: RY203)	
	Keynote Lecture 1	Functional Composites	Manufacturing/Processing	Simulation&Testing	Joint Session	
Morning 1	Chair: Prof. Asami Nakai (Gifu	Chair: Prof. Qingbin Zheng (The Chinese	Chair: Prof. Xiaoyong Tian (Xi'an	Chair: Prof. Tatsuro Kosaka (Kochi	Chair: Dr. Hayato Nakatani (Osaka	
Session	University/Japan)	University of Hong Kong, Shenzhen/China)	Jiaotong University/China)	University of Technology/Japan)	Metropolitan University/Japan)	
	Keynote Lecture 1 (45min):	1B01 Comparative Study of	1C01 3D Printing of ABS/MWCNT	1D01 Research on Energy Finite	1E01 Analytical investigation of	
		Elastomer Nanocomposites	nanocomposites Using Fused	Element Analysis for Carbon Fiber	matrix chain orientation inside the	
	Prof. Mai Yiu Wing	Respectively Containing SWCNTs	Filament Fabrication:	Composite Honeycomb Sandwich	thread of tricalcium phosphate /	
	(The Hong Kong Polytechnic	and MWCNTs	Functionlisation, Fabrication,	Structure	poly(lactic acid) composite screws	
	University/Hong Kong, China),	Jun Ma (University of South	Testing and Charaterisation	Xiuyan Cheng (Beijing Institute of	formed by hot forging	
	Dr. Helezi Zhou	Australia)	Phan Quoc Khang Nguyen (Western	Technology), <u>Yuchen Qiu</u> , Jili Rong	Masato Sakaguchi (Gifu University)	
	(Huazhong University of Science		Sydney University), Nima Zohdi, Y.X.			
10:45-11:10	and Technology),		Zhang, <u>Richard Yang</u>			
	Dr. Hong-Yuan Liu (The University of Sydney),	1B02 Highly Conductive and Tough	1C02 Solidification mechanism and	1D02 Numerical study on wave	1E02 Resistance welding of glass	
	Prof. Huamin Zhou	Polysiloxane Elastomers cross-	performance of 3D-printed carbon	response characteristics of	fiber reinforced thermoplastic	
	(Huazhong University of Science	linked by functionalized Carbon	fiber reinforced polyether-ether-	composite plate structures under	composite: Experimental	
	and Technology)	Nanotubes	ketone composites in vacuum	damaged low-velocity impact	investigation and process parameter	
		<u>Xu-Ming Xie</u> (Tsinghua University),	environment	Deshuang Deng (Dalian University	optimization	
	Interleave Microstructure	Yi Wei	<u>Tengfei Liu</u> (Xi'an Jiaotong	of Technology)	Bing Du (Chongqing University of Science and	
	Design for Enhanced Properties		University), Xiaoyong Tian, Haojie		Technology / Chongqing University), Guiyang Su	
	of Fiber Composites		Zhang, Xinhan Liu, Manyu Zhang		(Chongqing University of Science and Technology), Wanling Long, Liming Chen	
11:10-11:35					(Chongqing University)	
		1B03 Next-Generation Lightning	1C03 Sound absorption, insulation,	1D03 An indirect non-contact	1E03 Effect of printing forces on	
		Strike Protection via Nano-Carbon	and load-bearing of 3D printed	method for characterizing the	compressive strength in a 3D	
		Materials	continuous flax fiber reinforced PLA	thermal expansion and chemical	printed continuous carbon fiber	
		Zhong Zhang (University of Science	composites	shrinkage of the highly viscous	reinforced thermoplastic	
		and Technology of China)	Zhixiong Bi (Tongji University), Qian	epoxy resin BA9916	<u>Naruki Ichihara</u> (Nihon University),	
			Li, Yukun Wang, Qianfan Chen,	Weizhao Zhang (The Chinese	Shinnosuke Ohno, Masahito Ueda	
			Yang Gao	University of Hong Kong), <u>Meiyu Liu</u>		
11:35-12:00						

12:00-13:00		Lunch time							
	Plenary Lecture 2 / Room S (1st flo	oor: RY103)	Speaker: Prof. Chun Hui Wang		Chair: Prof. Mai Yiu Wing				
13:00-14:10	Fibre-Reinforced Nanocomposites	for Extreme Environments	(University of New Sout	h Wales, Sydney/Australia)	(The Hong Kong Polytechnic				
(70 min)					University/China)				
14:10-14:25			< / Corporate Exhibition (1st floor: R		1				
	Room A (1st floor: RY107)	Room B (2nd floor: RY207)	Room C (2nd floor: RY208)	Room D (2nd floor: RY204)	Room E (2nd floor: RY203)				
	Keynote Lecture 2	Functional Composites	Manufacturing/Processing	Simulation&Testing	Joint Session				
Afternoon 1	Chair: Dr. Masaaki Nishikawa (Kyoto	Chair: Prof. Jun Ma(University of	Chair: Prof. Richard Yang (Western	Chair: Dr. Hanxing Zhao (Harbin	Chair: Dr. Masato Sakaguchi (Gifu				
Session	University/Japan)	South Australia/Australia)	Sydney University/Australia)	Institute of Techonlogy/China)	University/Japan)				
	Keynote Lecture 2 (45min):	1B04 Coiled hold-release	1C04 Evaluation on Hybrid-Joining	1D04 Machine learning-based	1E04 Relationship between Fiber				
		mechanism based on shape memory	Process of CF/PEEK Laminates	mechanical metamaterials for full-	Orientation inside Thread and				
	Prof. He Chaobin	polymer composites for aerospace	Combining Ultrasonic Welding and	band vibration isolation with	Mechanical Properties of CFRP				
	(National University of Singapore	application	CF/PEEK Rivet Fastening	adaptable payload	Bolts Fabricated by Machining				
	/Singapore)	Dou Zhang(Harbin Institute of	<u>Haruto Himeno</u> (Kindai University),	Lingling Wu (Xi'an Jiaotong University), <u>Xinyu</u>	<u>Riku Ouchi</u> (Osaka Metropolitan				
		Technology), Liwu Liu, Xin Lan,	Daiki Tanabe (Kobe City College of	Song, Dichen Li, Ji Zhou (Tsinghua University),	University), Hayato Nakatani,				
	Entropy Driven Miscibility: An	Yanju Liu, Jinsong Leng	Technology), Takeshi Eguchi (Kindai	Hanqing Jiang (Westlake University), Sen Yan	Hiromichi So (SJJ), Taiei Kusuhara,				
14:25-14:50	Strategy for Toughening		University), Kazuaki Nishiyabu	(Tsinghua University), Yong Wang (Zhejiang University)	Koji Ishizaki (BigFireworks)				
	Polymers	1B05 Boron nitride/polymer	1C05 Investigation on Fixation and	1D05 A data-driven way of	1E05 Manufacturing of a recycled				
		nanocomposite aerogels and	Impregnation Behavior of Powder in	discovering the laminate design	long carbon fiber spun yarn				
		hydrogels for sub-ambient passive	Semi-preg CF/PPS Sheet	rules considering the process-	reinforced polyamide filament and				
		cooling	<u>Seiran Murata</u> (Kindai University),	induced deformation	the 3D printing				
		<u>Xiuli Dong</u> (The Hong Kong	Hayato Higashiyama, Mana	Cheng Qiu (Institute of Mechanics,	Masahito Ueda (Nihon University),				
		Polytechnic University), Xi Shen,	Watanabe, Kazuaki Nishiyabu	Chinese Adademy of Sciences),	Keigo Sato, Naruki Ichihara				
		Kit-Ying Chan		Yizhuo Gui					
14:50-15:15		-							
		1B06 Anisotropic nanocomposites	1C06 Additive manufacturing and	1D06 Multimodal Data Fusion	1E06 Applications of shape memory				
		by freeze-casting for tailored	innovative design of continuous	Enhanced Deep Learning Prediction	materials and 4D printing in				
		thermo-optical properties	fiber reinforced composite	of Crack Path Segmentation in	biomedical field				
		<u>Xi Shen</u> (The Hong Kong	structures with multifunctions	CFRP Composites	<u>Yanju Liu</u> (Harbin Institute of				
		Polytechnic University)	<u>Xiaoyong Tian</u> (Xi'an Jiaotong	Keke Tang (Tongji University), <u>Peng</u>	Technology)				
			University)	<u>Zhang</u> , Jiangfeng Li					
15.15 15.40									
15:15-15:40		Proof	/ < / Corporate Exhibition (1st floor: R	V102)					
15:40-15:55		Dreak	Corporate Exhibition (1St noor: R	1102)					

	Room A (1st floor: RY107)	Room B (2nd floor: RY207)	Room C (2nd floor: RY208)	Room D (2nd floor: RY204)	Room E (2nd floor: RY203)
	Materials Science	Functional Composites	Manufacturing/Processing	Simulation&Testing	Flame Retardancy and Fireproof
Afternoon 2	Chair: Prof. Akihiro Wada (Osaka	Chair: Prof. Xi Shen (The Hong Kong	Chair: Prof. Masahito Ueda (Nihon	Chair: Prof. Keke Tang (Tongji	Chair: Dr. Yasuka Nassho (Toyama
Session	Sangyo University/Japan)	Polytechnic University/ Hong Kong)	University/Japan)	University/China)	Prefectural University/Japan)
	1A07 Transparent Polymer	1B07 Designs of graphene-based	1C07 Additive Manufacturing of	1D07 Development of Process	
	Composite Films for Energy	nanocomposites with high thermal	Lightweight Curved Sandwich	Windows and Design Rules for the	
	Conservation	conductivity, EMI shielding	Structures with Continuous Fiber	Thermoforming of Carbon Fibre	
	<u>Xianhu Liu</u> (Zhengzhou University)	effectiveness, and electrical	Reinforced Composites	Reinforced Plastics	
		insulation	<u>Wudan Li</u> (Xi'an Jiaotong	Long Bin Tan (Agency for Science,	
		<u>Sung-Ryong Kim</u> (Korea National	University), Xiaoyong Tian, Yiming	Technology and Research (A*STAR)),	
		University of Transportation)	Huang, Tengfei Liu, Kai Miao	Zhen Yang Loh (National University of	
15:55-16:20				Singapore (NUS)), Vincent Beng Chye	
15.55-10.20	1A08 Research on Mechanical	1B08 Stable and Sensitive Carbon	1C08 Bionic 3D Multi-Scale Anti-	Tan 1D08 Study on ablation response	1E08 Dispersion of silica-coated
	Properties of Resin Matrix	Nanotube-Coated Fiber Sensors for	Salt Solar Evaporator Achieving	prediction method of C/SiC ceramic	carbon nanotubes and thermal and
	Composite Bolted Connection	Strain Monitoring of Composites	Long-Term Salt Resistance for	matrix composites	electrical properties of their epoxy
	Structures in Low Temperature	Min Li (Beihang University), <u>Zilan</u>	High-Salinity Brine Via Additive	Jiaxue Li (Beijing University of	composites
	Environment		Manufacturing		Hironari Fukuta (Toyama Prefectural
			0	Aeronautics and Astronautics),	
	Meiying Zhao (Northwestern	Gu	<u>Luncao Li</u> (Tongji University)	Zhidong Guan, Xiaodong Wang,	University), Kazuaki Sanada, Yasuka
	Polytechnical University), <u>Xiaoyang</u>			Zengshan Li, Xiangyu Liu	Nassho
16:20-16:45	<u>Ren</u>				
10:20-10:45	1A09 Development and Dynamic	1B09 Carbon Nanocomposites for	1C09 Rotary 3D Printing and	1D09 Physical Fields Leading	1E09 Thermal conductivity and self-
	Mechanical Analysis of High-	Soft Sensors	Buckling Analysis of Continuous	Structure Design Strategy for Meta-	healing under thermal cycling of
	Strength PET Fiber Reinforced	Qingbin Zheng (The Chinese	Carbon Fiber Composite Grid	Fiber Reinforced Hydrogel	alumina/epoxy resin composites
	9	<u> </u>			
	Polypropylene	University of Hong Kong, Shenzhen)	Stiffened Cylindrical Shell	Composites by Deep Learning	containing microcapsules
	Jung-Il Song (Changwon National		<u>Mingliang Liu</u> (Xi'an Jiaotong	Xingyu Zhang (Beijing University of	Yasuka Nassho (Toyama Prefectural
	University), <u>Dong-Woo Lee</u> ,		University), Xiaoyong Tian	Technology), Chuanzhi Liu, Xia Liu,	University), Kazuaki Sanada, Hiroki Kayama, Kaki Tarada
	Zolbayar Orkhonbaatar, Prabhakar M.N.			Qingsheng Yang	Koyama, Koki Terada
16:45-17:10	101.10.				
10.40-11.10	1A10 Metal Reinforcement Effect	1B10 Enhancing Quality Control and	1C10 Achieving ultrahigh fatigue	1D10 Study on the mechanisms of	
	on the Impact Damage Behavior of	Monitoring of FRP Composites	resistance in nano-TiB2-decorated	ultra-low temperature impact	
	Thin-Ply CFRP Laminates with		AlSi10Mg composites by additive	damage and temperature rise in	
	Process-Induced Defects	Integration	manufacturing	epoxy resin	
	Masaaki Nishikawa (Kyoto University),	Anchalee Duongthipthewa	<u>Zhe Chen</u> (Shanghai Jiao Tong	Runze Zhang (Dalian University of	
	Naoki Takatsuka, Benedikt Koetter, Kohei	(Southern University of Science and		Technology), <u>Lei Yang</u>	
	Yamada (Industrial Technology Center of	Technology), Limin Zhou	University)		
	Fukui Prefecture)				
17:10-17:35					

Time						
8:30	Registration					
9:15						
	Plenary Lecture 1 / Room S (1st flo	<u>oor: RY103)</u>	Speaker:		Chair:	
9:20-10:30	Shape Memory Polymer Composite	es: Programmability, 4D Printing	Prof. Jinsong Leng* and Prof. Ya	anju Liu	Prof. Tetsusei Kurashiki	
(70 min)	and Applications		(*Harbin Institute of Technology	/People's Republic of China)	(Osaka University/Japan)	
10:30-10:45			Break			
	Room F (2nd floor: RY202)	Room G (2nd floor: RY201)	Room H (2nd floor: RY206)	Room I (4th floor: RY405)	Room J (4th floor: RY404)	
	Materials Science	Functional Composite	Manufacturing/Processing	Simulation&Testing	Applications	
Morning 1	Chair: Dr. Masaaki Nishikawa (Kyoto		Chair: Prof. Dong Gi Seong (Pusan	Chair: Prof. Shengyi Zhong (Shanghai Jiao	Chair: Dr. Qiang Fu (The University	
Session	University/Japan)	University of Transportation/Korea)	National University/Korea)	Tong University/China)	of Technology Sydney/Australia)	
	1F01 High-Temperature Mechanical	1G01 Low-k Porous Polyimide	1H01 X-ray CT observation of AFP	1101 Damage Evolution and Failure	1J01 Machine Learning Assisted	
	Behavior of Ceramic-Matrix	composite Films for Microelectronic	gap consolidation process in	Warning Analysis of Ceramic Matrix	Omnidirectional Flexible Strain	
	Composites: Strength, Lifetime and	Applications	composite laminate	Composites Bolted Joints	Sensor for Strain Direction and	
	Reliability	Jun-Wei Zha (University of Science	Masato Sato (The University of	Jinpeng Yang (Northwestern	Amplitude Perception	
	Longbiao Li (Nanjing University of	and Technology Beijing), Xiaodi	Tokyo), Shu Minakuchi	Polytechnical University), Xiaoyan	Bin Yang (Tongji University), <u>Lulu</u>	
	Aeronautics and Astronautics)	Dong		Tong, Leijiang Yao, Bin Li	<u>Yang</u> , Chaojie Hu, Wenlong Hu, Yu	
					Cang	
10:45-11:10						
	1F02 Mechanical Properties of In-	1G02 Development of photo-	1H02 Ultrasonic Imaging of Out-of-	1102 A damage physics-guided	1J02 Detection of delamination in	
	situ Grown Si3N4nw Synergistic	crosslinkable fluoran dye-based	plane Fiber Orientations for	approach to acoustic emission	CFRP laminates by measuring strain	
	Defective-Graphene Reinforced	stretchable electrochromic	Thickness-Tapered Composites	signals identification in composite	distribution	
	Alumina Ceramics	organogels for wearable electronics	<u>Haorun Xu</u> (Tongji University),	materials	Seira Nakajima (Kochi University of	
	Yameng Jiao (Northwestern	Woong-Ryeol Yu (Seoul National	Xiwen Tan, Zhen Zhang, Qian Li	Fan Dong (Northwestern	Technology), Tatsuro Kosaka	
	Polytechnical University), Qiang	University), <u>Chan Young Kim</u>		Polytechnical University), Yazhi Li,		
	Song, Fei Zhao, Xu Yang, Liyuan			Biao Li, Xiaopeng Li		
	Han, Caixiang Xiao, Hejun Li					
11:10-11:35						
	1F03 The superior synergistic	1G03 Constitutive theory and finite	1H03 Multi-parameter monitoring of	1103 Composite Micro-Crack	1J03 Ionic Hydrogel Composite for	
	oxidation resistance of medium-	element implementation of	composite forming using optical	Feature Recognition Based on	High Electricity Generation Induced	
	entropy carbide ceramic powders	photosensitive hydrogels	fiber sensor	Deformable Attention Unet	by Sustainable Moisture in Air	
	rather than multi-phase carbide	considering the photoisomerization	<u>Qi Wu (</u> Nanjing University of	<u>Zhengyan Yang</u> (Jiangnan	<u>Su Yang</u> (The Hong Kong	
	ceramic powders	process	Aeronautics and Astronautics),	University)	Polytechnic University)	
	<u>Jiachen Li</u> (Northwestern	Xinyu Liu (Beijing University of	Hanqi Zhang, Changhao Chen, Yuxi			
	Polytechnical University), Yulei	Technology), Qingsheng Yang	Zhang, Baocun Fan, Xiangrong Su			
11:35-12:00	Zhang					

12:00-13:00		Lunch time						
	Plenary Lecture 2 / Room S (1st floor: RY103)		Speaker: Prof. Chun Hui Wang		Chair: Prof. Mai Yiu Wing			
13:00-14:10	Fibre-Reinforced Nanocomposites	for Extreme Environments	(University of New Sout	h Wales, Sydney/Australia)	(The Hong Kong Polytechnic			
(70 min)					University/China)			
14:10-14:25	Break / Corporate Exhibition (1st floor: RY102)							
	Room F (2nd floor: RY202)	Room G (2nd floor: RY201)	Room H (2nd floor: RY206)	Room I (4th floor: RY405)	Room J (4th floor: RY404)			
	Materials Science	Functional Composite	Manufacturing/Processing	Simulation&Testing	Applications			
Afternoon 1	Chair: Dr. Longbiao Li (Nanjing University of Aeronautics and Astronautics/China)	Chair: Prof. Seong Su Kim (Korea Advanced Institute of Science and Technology (KAIST)/Korea)	Chair: Dr. Daiki Tanabe (Kobe City	Chair: Prof. Zhengyan Yang	Chair: Prof. Sarah Yixia Zhang (Western			
Session	Aeronautics and Astronautics/China)	of science and recinitionsy (KAIST)/ Korea)	College of Technology/Japan)	(Jiangnan University/China)	Sydney University/Australia)			
	1F04 Multicomponent ultra-high		1H04 Enhancing Polymer Impact	1104 In-situ mechanical testing	1J04 Research on electromechanical			
	temperature ceramic boride coating		and Fracture Toughness for	technique and its applications in 2D	behavior of biomimetic tactile			
	for ablation resistance of		Automotive Applications with	nanomaterials	sensors with high dielectric and			
	carbon/carbon composites		Advanced Carbon Nanotube	<u>Chao Sui</u> (Harbin Institute of	controllable Poisson's ratio polymer			
	<u>Junshuai Lv</u> (Northwestern		Dispersions	Technology), Chao Wang, Xiaodong	composites microstructures			
	Polytechnical University), Yulei		<u>Ryota Sekiguchi</u> (CARBON FLY),	Не	Weidong Yang (Tongji University),			
	Zhang		Stephen C. Hawkins, Fei Deng		Wenxuan Ding			
14:25-14:50								
	1F05 Effect of SiCnw/PyC on	1G05 Multi-Field Swelling	1H05 Conductive Film and Magnetic	1105 Study on the Load-Bearing	1J05 Ballistic Performance Analysis			
	mechanical and ablation behavior of	Performance of Porous Hydrogel	Film as Susceptors for Induction	Performance of Asymmetric Foam	and Optimization Design of			
	FBCVI-C/C-HfC-SiC composites	Laminate Composites and Their	Welding of Non-conductive	Sandwich Structures Considering	Ceramic/FRP Laminated Structures:			
	with Si/SiC coatings	Application in Microrobots	Thermoplastic Composites	Residual Stress	Numerical and Experimental Study			
	<u>Yi Cao</u> (Northwestern Polytechnical	Zhesu Yu (Beijing University of	Jihwan Ha (Gyeongsang National	Lingxiao Yang (Beijing University of	Zhonghai Xu (Harbin Institute of			
	University), Jinhua Lu	Technology), Xingyu Zhang,	University), Byeongsu Kwak	Aeronautics and Astronautics),	Technology), <u>Shibao Wu</u> , Xiaodong			
		Qingsheng Yang		Zhidong Guan, Xiaodong Wang,	He			
14:50-15:15		Suigonoug Laug		Zengshan Li				
	1F06 Machine learning based multi-	1G06 Leaf-inspired COF composite		1106 Acoustic field characteristics	1J06 Energy efficient water			
	scale homogenization model for	actuator for smart devices		and damage imaging method of	production through composite			
	radiation induced volume expansion	Cheng Gong (Harbin Institute of		ultrasonic phased array for carbon	hydrogels			
	of CERCER composite fuels	Technology), Chao Wang, Chao Sui,		fiber reinforced plastics	Qiang Fu (The University of			
	Zhenyue Chen (Tongji University),	Yushun Zhao		Hongjuan Yang (Dalian University of	Technology Sydney)			
	Yunmei Zhao, Xiaobin Jian			Technology), Guang Tian, Lei Yang,				
				Zhanjun Wu				
15:15-15:40								
15:40-15:55		Break	Corporate Exhibition (1st floor: R	Y102)				

	Room F (2nd floor: RY202)	Room G (2nd floor: RY201)	Room H (2nd floor: RY206)	Room I (4th floor: RY405)	Room J (4th floor: RY404)
	Materials Science	Functional Composites	Manufacturing/Processing	Simulation&Testing	Applications
Afternoon 2	Chair: Prof. Yu Zhang (Harbin	Chair: Dr. Junji Noda (Kindai	Chair: Prof. Akio Ohtani (Kyoto	Chair: Prof. Hiroshi Saito (Kanazawa	Chair: Prof. Tatsuro Kosaka (Kochi
Session	Institute of Technology/China)	University/Japan)	Institute of Technology/Japan)	Institute of Technology/Japan)	University of Technology/Japan)
	1F07 Study on compression-shear	1G07 Development of Plant Oil-	1H07 Near-zero Energy Curing	1107 Unsupervised and Supervised	1J07 Towards a greener composite
	behavior and failure mechanisms of	based Adhesives for Bamboo-based	Process for High-performance	Pattern Recognition of Acoustic	industry
	needled SiC/C-SiC composites	Composites	Thermosets and CFRPs via	Emission Data from Stress Rupture	<u>Chris Rudd</u> (Yangtze River Delta
	under high temperature	<u>Renhui Qiu</u> (Fujian Agriculture and	Ultrasonic Frontal Polymerization	of C/SiC	Carbon Fiber and Composites
	<u>Qipeng Xu</u> (Xi'an Jiaotong	Forestry University), Wendi Liu,	<u>Jinglei Yang</u> (The Hong Kong	Leijiang Yao (Northwestern Polytechnical	Technology Innovation Center),
	University), Jingjing Yang, Xueling	Liyuan Zhang, Yizhen Chen	University of Science and	University), Peng Lyu (Northwestern Polytechnical University/Xi'an Institute of Space	Ziqian Liu, Siqi Hao, Dongyuan Hu,
	Fan, Xiaochao Jin		Technology), Sepideh Sadat	Radio Technology), Bin Li (Northwestern	Lu Tong, Xiaosu Yi
15:55-16:20			Hosseini , Patrick Ryan Galligana	Polytechnical University), Xiaoyan Tong	
	1F08 Anti ablation high-entropy	1G08 Impact of Thin Film Surface	1H08 High-efficiency manufacturing		1J08 Optimized Recyclable
	oxides, carbides and borides	Bonding on the Mechanical	of epoxy resins through multi-point		Separation and Recovery of Carbon
	coatings on C/C composites	Properties of Injection Molded Wood	initiation of frontal polymerization		Fibers from CFRP Composites Using
	Lingxiang Guo (Northwestern	Plastic Composites	<u>Tingting Luo</u> (Tongji University)		Chemical Swelling and
	Polytechnical University), Jia Sun,	Wycliffe Odhiambo Ondiek (Yamaguchi			Electrochemical Oxidation in
	Qiangang Fu, Hejun Li	University), Yuga Takagi, Yoh Kataoka (Ehime			Dimethyl Sulfoxide
		University), Arnaud Macadre (Yamaguchi University), Koichi Goda, Hirokazu Ito (Ehime			Ji-Hua Zhu (Shenzhen University),
		University), Koleni Goda, Hirokazu ito (Enime University)			<u>Chun Pei</u>
16:20-16:45					
	1F09 Ablation resistant C/C-HfC-		1H09 Consolidation deformation	1109 Numerical Analysis on	1J09 Hygroscopic internal stress of
	ZrC-TaC-SiC composites prepared		suppression of composite	Thermoforming of Thermoplastic	plant fiber composite based on XCT
	by reactive melt infiltration		gap/overlap sections by changing	cross-plied UHMWPE lamina for	Ning Jiang (Shandong University of
	Menglin Zhang (Northwestern		autoclave curing conditions	Ballistic Helmet	Technology)
	Polytechnical University)		<u>Yuichiro Mori</u> (The University of	Mohit Garg (Indian Institute of	
			Tokyo), Shu Minakuchi	Technology Delhi), Hrishikesh	
				Purohit, Rajesh Punia, Hemant	
				Chouhan, Puneet Mahajan, Naresh	
16:45-17:10				Bhatnagar	
		1G10 Reinforcement of shape	1H10 Evaluation on Thermo-lateral	1110 High resolution cold neutron	1J10 Degradation of CFRP against
		memory effects of polylactic acid via			Laser Beam Through Advanced
		blending with three-dimensional	CF/PEEK Rods for Grid-Skin Bonded	analysis of engineering materials	Characterization Techniques
		multi-hierachical collagen fibers	Structures	<u>Shengyi Zhong</u> (Shanghai Jiao Tong	Sarah Yixia Zhang (Western Sydney
		<u>Weixing Xu</u> (Sichuan University),	<u>Mioha Tadano</u> (Osaka University),	University)	University), Richard (Chunhui) Yang,
		Chao Lei, Yunhang Zeng, Bi Shi	Takeshi Eguchi (Kindai University),		Jojibabu Panta, Max Mammone, John Wang (Defence Science and Technology
			Kazuaki Nishiyabu, Tetsusei		Group)
17:10-17:35			Kurashiki (Osaka University)		

Time					
8:30			Registration		
	Plenary Lecture 3 / Room S (1st flo	oor: RY103)	Speaker: Prof. Yun-Hae Kim		Chair: Prof. Tatsuro Kosaka
	Optimization of Thermoplastic and	Thermoset composites : Effects of	(Professor, Korea Mariti	me and	(Kochi University of
9:20-10:30	Geometry, Temperature, Moisture	eometry, Temperature, Moisture and Nanotube Reinforcement on		ıblic of Korea)	Technology/Japan)
(70 min)	Mechanical Performance				
10:30-10:45			Corporate Exhibition (1st floor: R		
	Room A (1st floor: RY107)	Room B (2nd floor: RY207)	Room C (2nd floor: RY208)	Room D (2nd floor: RY204)	Room E (2nd floor: RY203)
	Materials Science	Functional Composites	Manufacturing/Processing	Simulation&Testing	Keynote Lecture 3
Morning 1	Chair: Prof. Toshiaki Natsuki	Chair: Prof. Xu-Ming Xie (Tsinghua	Chair: Prof. Qi Wu (Nanjing University of	Chair: Dr. Masato Nishi (JSOL	Chair: Prof. Masayuki Okoshi (Gifu
Session	(Shinshu University/Japan)	University/China)	Aeronautics and Astronautics/China)	CORPORATION/Japan)	University/Japan)
	2A01 Investigating the Block	2B01 Scale-span Biomimetic	2C01 Optimizing Ultrasonic Welding	2D01 Multiscale Modeling and	Keynote Lecture 3 (45min):
	Copolymer Deposition on Au	Structural designs, Mechanics and	Process for CFRTP with CNT-Added	Application of Strain-Dependent	
	Nanoparticle Surface via Graphene	Multi-functional Applications of	Energy Directors by Electrical	Piezoresistive Behavior in Porous	Mr. Katsuyuki Awano
	Liquid Cell	Advanced MXene-based composites	Resistance Monitoring	MWCNTs/Polymer Nanocomposites	(HONDA R&D/Japan)
	Xiaohui Song (Hefei University of	Chao Wang (Harbin Institute of	Soma Nishimura (Osaka University)*, Daiki	Zefu Li (Tongji University), Weidong	
	Technology), Xingyu Zhang (Beijing	Technology)	Tanabe (Kobe City College of Technology),	Yang	Demand for weight reduction in
	University of Technology)		Kazuaki Nishiyabu (Osaka University / Kindai University), Tetsusei Kurashiki (Osaka		automobile development and
10:45-11:10			University), retsuser Kurashiki (Osaka		expectations for FRP with flame
	2A02 Numerical Prediction and		2C02 Fabrication of fiber reinforced	2D02 Moving Particle Simulation of	retardant properties
	Experimental Analysis of the		composites with the customized	Flow Front Confluence in Injection	
	Buckling Loads of SMPC Cylindrical		functions via drop filling process	Molded Short Fiber Reinforced	
	Shells		<u>Dong Gi Seong</u> (Pusan National	Plastics	
	Hanxing Zhao (Harbin Institute of		University)	Masahiro Yonekura (Osaka University),	
	Technology), Xin Lan, Liwu Liu,			Naoyuki Inoue, Fumikazu Miyasaka, Kazutaka	
	Yanju Liu, Jinsong Leng			Mukoyama, Tetsusei Kurashiki, Masahiro Seto (Kanazawa Institute of Technology), Masashi	
11:10-11:35				Yamabe	
	2A03 Aramid nanofiber composite	2B03 Electrospun Ion-Selective	2C03 Evaluation on Hybrid Insert	2D03 Simulation of the forming	
	separators for lithium battery	Nanofiber Composites for	Injection Molding Process	quality of the composite T-joint with	
	Hui Nie (Huazhong University of	Electrochemical Applications	Reinforced by Grid Structure of	different deltoid fillings	
	Science and Technology), Xingping	Yue-E Miao (Donghua University)	CF/PP Pultruded Rods	Qi Wu (Nanjing University of	
	Zhou, Xiaolin Xie, Yiu-Wing Mai		<u>Togo Tsurusaki</u> (Kindai University),	Aeronautics and Astronautics),	
			Takeshi Eguchi, Kazuaki Nishiyabu	Yanfeng Wang, Ran Huo, Xingchen	
				Xie	
11:35-12:00					
12:00-13:00			Lunch time		

	Plenary Lecture 4 / Room S (1st flo	or: RY103)	Speaker: Dr. Masahide Kazari (Exe	ecutive, Group Manager,	Chair: Mr. Katsuyuki Kawashima
13:00-14:10	Development of Core Technologies	for Hydrogen Aircraft	Hydrogen Aircraft Core Technolog	gy Research Project Group,	(Kawasaki Heavy
(70 min)			Aerospace Systems Company, Ka	awasaki Heavy Industries/Japan)	Industries/Japan)
14:10-14:25	Break / Corporate Exhibition (1st floor: RY102)				•
14:25-15:45		Pos	ster Session / Room P (1st floor: RY)	101)	
15:45-16:00		Break / Corporate Exhibition (1st floor: RY102)			
	Room A (1st floor: RY107)	Room B (2nd floor: RY207)	Room C (2nd floor: RY208)	Room D (2nd floor: RY204)	Room E (2nd floor: RY203)
	Applications	Functional Composites	Manufacturing/Processing	Simulation&Testing	Flame Retardancy and Fireproof
Afternoon 1	Chair: Dr. Junji Noda (Kindai	Chair: Dr. Hayato Nakatani (Osaka	Chair: Prof. Tetsusei Kurashiki	Chair: Dr. Masaaki Nishikawa (Kyoto	
Session	University/Japan)	Metropolitan University/Japan)	(Osaka University/Japan)	University/Japan)	Technological University/Singapore)
	2A04 Multi-dimensional	2B04 3D-printed interconnected	2C04 A strategy to improve	2D04 Topological design and	2E04 Advanced Halogen-Free
	collaborative design of composite	composite aerogel for highly	interlaminar performance of all-	experimental characterisation of	Intumescent Type Flame Retardant
	pressure vessel via progressive	efficient solar evaporation	CFRTP sandwich structure	continuous fibre-reinforced auxetic	Technology for Glass Fiber
	failure modeling	<u>Xiaomeng Zhao</u> (The Hong Kong	leveraging ultrasonic welding via	composites	Reinforced Polypropylene
	Lichuan Zhou (Hefei University of	Polytechnic University), Yunfei	CNTs films	Yuan Chen (Southern University of	<u>Hisashi Sakurai</u> (ADEKA
	Technology), Lei Zu	Yang, Kit-Ying Chan, Xi Shen	Junxian Xiang (Nanjing University of	Science and Technology), Lin Ye	corporation), Daiki Takahashi,
			Aeronautics and Astronautics), Jie Tao, Huaguan		Atsushi Sakai, Yutaka Yonezawa,
			Li (Nanjing Institute of Technology), Xi Chen (Nanjing University of Aeronautics and		Shinichi Ishikawa
16:00-16:25			Astronautics)		
	2A05 Bending Deformation Analyses	2B05 Influence of Hole Making	2C05 Bending Process Using	2D05 Machine learning-based	2E05 Thermal-triggered Eco-friendly
	of Twisted CFRTP Round Bars for	Techniques on Open-Hole Tensile	Electrical-heating of CF/PEEK	method for Customizable Poisson's	Fire-extinguishing Microcapsules for
	Grid Structures	Behaviour of Sustainable Composite	Round Rods Manufactured by	ratio design coupling additive	Fire Prevention
	Chihiro Nagai (Kindai University),	Laminates	Slitless Prepreg Sheet Thermal-	manufacturing constraints	Dan Li (The Hong Kong University of
	Junji Noda	<u>Binaz Varikkadinmel</u> (Indian	Pultrusion Forming	Jiacheng Xue (Xi'an Jiaotong	Science and Technology), Jiaqiang Huang
		Institute of Technology Roorkee),	<u>Daichi Arikawa</u> (Kindai University),	University), Haojie Zhang	(The Hong Kong University of Science
		Karri Santhosh Kumar, Inderdeep	Takeshi Eguchi, Kazuaki Nishiyabu		and Technology (Guangzhou)), Jinglei
		Singh			Yang (The Hong Kong University of Science and Technology)
16:25-16:50					Science and recimology)
	2A06 Theoretical verification and	2B06 Water Hyacinth as an Ideal	2C06 Titanium Matrix Composites	2D06 Machine Learning Based	2E06 Combustion behavior of
	design of high-performance 3D	Feasible Alternative for Developing	Fabricated by Hot Isostatic Pressing	Mechanical Metamaterials Design	CFRP/CFRTP
	glass sponge-like truss lattice based	Sustainable Composites	<u>Shuai Wang</u> (Harbin Institute of	<u>Lingling Wu</u> (Xi'an Jiaotong	<u>Masayuki Okoshi</u> (Gifu University)
	on machine learning	Inderdeep Singh (Indian Institute of	Technology), Lujun Huang, Lin Geng	University), Xinyu Song, Jiacheng	
	Yuna Sang (Harbin Institute of	Technology Roorkee), Pinki Kumari,		Xue, Tengfei Liu, Kai Miao,	
	Technology), Chao Wang, Chao Sui,	Bibhuti Ranjan Bhattacharjya		Xiaoyong Tian, Hanqing Jiang	
	Yushun Zhao			(Westlake University)	
16:50-17:15					
18:30-20:30			Banquet (Hotel Granvia Kyoto)		

Time					
8:30			Registration		
	Plenary Lecture 3 / Room S (1st floor: RY103)		Speaker: Prof. Yun-Hae Kim		<u>Chair:</u> Prof. Tatsuro Kosaka
	Optimization of Thermoplastic and	Thermoset composites : Effects of	(Professor, Korea Mariti	me and	(Kochi University of
9:20-10:30	Geometry, Temperature, Moisture a	and Nanotube Reinforcement on	Ocean University/Repu	blic of Korea)	Technology/Japan)
(70 min)	Mechanical Performance				
10:30-10:45			Corporate Exhibition (1st floor: R)		
	Room F (2nd floor: RY202)	Room G (2nd floor: RY201)	Room H (2nd floor: RY206)	Room I (4th floor: RY405)	Room J (4th floor: RY404)
	Speech Session	Speech Session	Materials Science	Functional Composites	Simulation&Testing
Morning 1	Chair: Prof. Hideaki Katogi (Jissen	Chair: Dr. Daiki Tanabe (Kobe City	Chair: Dr. Shuai Wang (Harbin	Chair: Prof. Wendi Liu (Fujian Agriculture and Forestry University/China)	Chair: Prof. Leijiang Yao (Northwestern Polytechnical University/China)
Session	Women's University/Japan)	College of Technology/Japan)	Institute of Technology/China)	Torestry Oniversity/ China)	
			2H01 Thermal/moisture expansion	2101 Optimizing Bonding	2J01 Hybrid DOA-TDOA method for
			behavior of ultra-high stability	Performance of CF/PEKK	impact localization of aircraft
			honeycomb sandwich structures	Composites: Enhancing Surface	composite structure using sensor
		based on carbon/carbon composites	Energy and Adsorption Capacity	clusters	
		Xi Chen (Nanjing University of Aeronautics	with A-HNT Modified PEI Films	Xu Zeng (Dalian University of	
		and Astronautics), Jie Tao, Huaguan Li (Nanjing	Kang-Min Kim (Ocean Advanced	Technology), Shuang De Deng, Lei	
			Institute of Technology), Junxian Xiang (Nanjing University of Aeronautics and Astronautics)	Materials Convergence Engineering)	Yang, Jun Zhan Wu
10:45-11:10					
			2H02 Nanoconfinement effect of	2102 Effect of Interface	2J02 Ply Curving Termination for
			polymer in the nanocomposites	Microstructure on Interlaminar	Strength Enhancement of Tapered
	Speech Session for	Speech Session for	Youngseok Oh (Korea Institute of	Fracture Toughness in Dissimilar	Composites: Effect of Curving
	Best Student Poster	Post Chudont Doston	Materials Science), <u>Hye Kyeong</u>	Joints of CFRTP and Aluminum	Geometry on Tensile Strength
	Best Student Poster	Best Student Poster	<u>Jang</u> , Byeongho Park	Alloys	<u>Nao Ohashi</u> (The University of
	Award 1	Award 2		<u>Atsushi Hosoi</u> (Waseda University),	Tokyo), Shu Minakuchi
				Kaori Kometani, Hiroyuki Kawada	
11:10-11:35					
			2H03 Improving High Temperature	2103 Friction stir spot welding of	2J03 A combined loop/torsion test
			Performance of Titanium Matrix	aluminum alloy to carbon fiber	method for characterizing the anti-
			Composites with Tailored Multi-	-	twisted performance of the carbon
			scale Architecture	tools with different surface shapes	fibres
			Lujun Huang (Harbin Institute of	<u>Yuki Nagae</u> (Doshisha University),	Min Li (Beihang University), Qidan
			Technology), Lin Geng	Kazuto Tanaka, Masataka	<u>Wang</u> , Shaokai Wang, Yizhuo Gu
				Kawaguchi, Kimitaka Watanabe	
11:35-12:00					
12:00-13:00			Lunch time		

	Plenary Lecture 4 / Room S (1st flo	or: RY103)	Speaker: Dr. Masahide Kazari (Exe	ecutive, Group Manager,	Chair: Mr. Katsuyuki Kawashima
13:00-14:10	Development of Core Technologies	for Hydrogen Aircraft	Hydrogen Aircraft Core Technolog	gy Research Project Group,	(Kawasaki Heavy
(70 min)			Aerospace Systems Company, Ka	wasaki Heavy Industries/Japan)	Industries/Japan)
14:10-14:25		Break	Corporate Exhibition (1st floor: R	Y102)	•
14:25-15:45	Poster Session / Room P (1st floor: RY101)				
15:45-16:00		Break	Corporate Exhibition (1st floor: R	Y102)	
	Room F (2nd floor: RY202)	Room G (2nd floor: RY201)	Room H (2nd floor: RY206)	Room I (4th floor: RY405)	Room J (4th floor: RY404)
	Materials Science	Functional Composites	Simulation&Testing	Materials Science	Applications
Afternoon 1	Chair: Prof. Xiaohui Song (Hefei	Chair: Prof. Atsushi Hosoi (Waseda	Chair: Dr. Norio Iwashita (National Institute of Advanced Industrial Science and Technology (AIST)/Japan)	Chair: Prof. Chao Wang (Harbin	Chair: Dr. Dou Zhang (Harbin
Session	University of Technology/China)	University/Japan)	industrial ocience and recimology (nor)/supany	Institute of Technology/China)	Institute of Technology/China)
	2F04 Biaxial Stress Fatigue Test of	2G04 Effect of molding pressure on	2H04 Delamination Detection of	2104 Optimizing Performance:	2J04 Evaluation of Hydrostatic
	unidirectional CFRP Laminates	crystal formation and interfacial	CFRP Laminates by Rayleigh	Characterizing CFRP Composites	Change in Mechanical Properties of
	<u>Masahiro Arai</u> (Nagoya University),	properties of c-FRTP	Scattering-Based Sensor	Across Various Environmental and	Hybrid-interface-controlled
	Masato Shirai, Keita Goto, Akinori	<u>Shota Takimoto</u> (Kyoto Institute of	Tatsuro Kosaka (Kochi University of	Loading Condition	HAp/PLA Composite Materials
	Yoshimura	Technology), Akio Ohtani	Technology), Fumiya Tajiri (Yamaha	<u>Yun-Hae Kim</u> (National Korea	Prepared Using Biodegradable
			Motor)	Maritime and Ocean University),	Modification Polymers
				Sanjay Kumar	<u>Mototsugu Tanaka</u> (Kanazawa
					Institute of Technology), Takumi
16:00-16:25					Yoshida, Takumi Ishida
	2F05 Rate-dependent mechanical	2G05 Development of Soybean Oil-	2H05 Anisotropic Evaluation of	2105 Super-Toughness and Stiffness	2J05 Design and application of
	and self-monitoring behavior of 3D	based Adhesives with Excellent	Mechanical Properties of Carbon	Balanced PLA/PBAT/CaCO3	composite patch with negative
	printed continuous carbon fiber	Flame Retardance and Recyclability	Fibers	Nanocomposites through Dynamic	Poisson's ratio mimicking cardiac
	composites	<u>Wendi Liu</u> (Fujian Agriculture and	Norio Iwashita (National Institute of	Vulcanization	mechanical properties
	Yinggang Miao (Northwestern Polytechnical	Forestry University)	Advanced Industrial Science and	Jie Feng (Zhejiang University of	<u>Heyuan Huang</u> (Northwestern
	University), Lanting Liu, Xiaobin Hu (Ningbo Yutu		Technology (AIST)), Hideki Nagai,	Technology), Kai Cai	Polytechnical University)
	Aviation Technology), Yu Zhang (Northwestern Polytechnical University), Qiong Deng, Yiuwing		Kazuhiro Fujita		
	Mai (The Hong Kong Polytechnic University)				
16:25-16:50					
	2F06 High-efficient preparation of	2G06 Effects of Bio-base phenolic	2H06 Damage Pattern Recognition	2106 Insight into the enhanced	2J06 Polyimide Aerogel Fibers for
	biomass-derived hierarchical porous	resin on Deformability of Solid Wood	of Fiber Breakage Based on Mel-	interfacial adhesion of carbon fiber	Personal Thermal Management
	carbon for supercapacitors	<u>Yutaka Yoshifuji (</u> Kanazawa Institute	frequency Cepstral Coefficients of	reinforced composites: a facile ferric	<u>Wei Fan</u> (Jiangnan University)
	<u>Yao Li</u> (Shanghai Jiaotong		AE Signal	ion and tannic acid self-assembly	
	University), Yanyu Li, Di Zhang	Composite Center in Kanazawa Institute	<u>Xuejiao Chen</u> (Northwestern	strategy	
		of Tecnology), Tsunehisa Miki (National	Polytechnical University), Xiaoyan	<u>Hu Wenlong</u> (Tongji University),	
		Institute of Advanced Industrial Science and Technology), Masashi Horikawa	Tong, Leijiang Yao, Bin Li	Yang Lulu, Cang Yu, Yang Bin	
		(Innovative Composite Center in			
16:50-17:15		Kanazawa Institute of Tecnology)			
18:30-20:30		1	Banquet (Hotel Granvia Kyoto)	ł	·

Time					
8:30			Registration		
	Plenary Lecture 5 / Room S (1st floor: RY103) Speaker:			Chair:	
	"Synthesis from Materials to Proc	esses for Composites with Reduced	Prof. Kiyoshi Uzawa		Dr. Hayato Nakatani
9:20-10:30	Environmental Impact and Circula	r Economy"	Economy" (Director, Innovative Composite Center (ICC),		(Osaka Metropolitan University/
(70 min)	ICC Research into the Realization	of Sustainable Composites	Kanazawa Institute of Technolo	ogy/Japan)	Japan)
10:30-10:45		Break	<pre>/ Corporate Exhibition (1st floor: R</pre>	Y102)	•
	Room A (1st floor: RY107)	Room B (2nd floor: RY207)	Room C (2nd floor: RY208)	Room D (2nd floor: RY204)	Room E (2nd floor: RY203)
	Keynote Lecture 4	Functional Composites	Materials Science	Simulation&Testing	Flame Retardancy and Fireproof
Morning 1	Chair: Prof. Toshiaki Natsuki	Chair: Prof. Akihiro Wada (Osaka	Chair: Prof. Atsushi Hosoi (Waseda	Chair: Dr. Masaaki Nishikawa (Kyoto	Chair: Prof. Akio Ohtani (Kyoto
Session	(Shinshu Univerity/Japan)	Sangyo University/Japan)	University/Japan)	University/Japan)	Institute of Technology/Japan)
	Keynote Lecture 4 (45min):	3B01 Ultrasonic guided wave-based	3C01 Effect of nano-dispersed	3D01 The influences of initial fibre	3E01 Synthesis of Sago Starch-
		damping behavior monitoring for	CNT/CF on mechanical properties	waviness and voids on kinking	based Intumescent Passive Fire
	Prof. Hairon Chen,	hierarchical flax fiber reinforced	of CFRTP braided pipes	formation of UD composites under	Protection with Borax and Rice Husk
	Mr. Mingjiang Ren,	composite laminates	<u>Riki Oishi</u> (Gifu University), Asami	longitudinal compression	Fillers
	Dr. Hongying Ma	Yan Li (Tongji University), <u>Songli</u>	Nakai, Maki Onizuka (NITTA	<u>Lei Wan</u> (University of Hull)	Nur 'Izzati Rafa'ee (Universiti
	(Ningbo University/China)	<u>Tan</u> , Zhen Zhang, Qian Li	Corporation), Takuji Komukai		Teknologi Brunei), Fethma M Nor
					(Curtin University), <u>Denni</u>
	Soft piezoelectric composite				<u>Kurniawan</u> (Universiti Teknologi
10:45-11:10	microstructures for clinical				Brunei/Curtin University)
	respiratory sensing	3B02 Evaluating Sustainable	3C02 Enhanced Triboelectric and	3D02 Preliminary studies on the test	3E02 Enhancing Thermal and
		Polymeric Composite Films for Food	Flame-Retardant Properties through	standardization of interface shear	Mechanical Properties of Phenolic
		Packaging using Multi-Criteria	Self-Assembled Interfacial Design of	strength in thermoplastic	Resin Composites via Epoxy
		Decision Making	Conjugated Polymers	composites	Integration
		Aditi Mahajan (Indian Institute of	Yong Tae Park (Myongji University),	Xiao-Jun Wang (Sichuan University),	<u>Zhao Sha</u> (The University of New
		Technology Roorkee), Inderdeep	<u>Nebiyou Tadesse Debele,</u>	<u>Yuan Dong</u> , Jia-Cao Yang, Mei-Lin	South Wales (UNSW), Sydney),
		Singh, Navneet Arora	Alemtsehay Tesfay Reda	Zhang, Gang Zhang, Jie Yang	Chen Sang, Chun Hui Wang, Jin
11:10-11:35					Zhang, Sonya A. Brown
		3B03 Bioinspired and Responsive	3C03 Design and Construction of	3D03 Multiscale theory of MEMS	3E03 Lightweight and Eco-friendly
		Structural-Color Cellulose	Functional Polymers and Their	microbeam structures	Fireproof Graphene Aerogels
		Nanocrystal Materials	Composites for Fire/Thermal-Safety	<u>Shuo Wang</u> (Tongji University)	<u>Junjiao Li</u> (Harbin Institute of
		Fei Song (Sichuan University)	and High-Performance Lithium		Technology), Chao Wang, Chao Sui,
			Batteries		Yushun Zhao
			<u>Gang Wu</u> (Sichuan University)		
11:35-12:00					

12:00-13:00			Lunch time		
	Room A (1st floor: RY107)	Room B (2nd floor: RY207)	Room C (2nd floor: RY208)	Room D (2nd floor: RY204)	Room E (2nd floor: RY203)
	Materials Science	Functional Composites	Manufacturing/Processing	Simulation&Testing	Flame Retardancy and Fireproof
Afternoon 1	Chair: Prof. Lujun Huang (Harbin	Chair: Prof. Renhui Qiu (Fujian Agriculture and	Chair: Dr. Masaaki Nishikawa (Kyoto	Chair: Dr. Hideaki Katogi (Jissen	Chair: Ms. Shiho Kuwashiro (Osaka Research
Session	Institute of Technology/China)	Forestry University/China)	University/Japan)	Women's University/Japan)	Institute of Industrial Science and Technology/Japan)
	3A04 Enhancing cryogenic	3B04 Tensile Responses and	3C04 Pre-consolidation Process	3D04 A damage coupled	3E04 A Novel Flame-Retardant
	mechanical properties of epoxy	Mechanisms of Natural Palm	Towards the In-plane Mechanical	accumulation model of EB-PVD	Polycarbonate with Low Smoke and
	resins by incorporating mesoporous	Bamboo under Wide Strain Rate	Test of Uncured UD Prepregs	thermal barrier coatings under	Heat Release
	SiO2	Loading	<u>Shaomeng Jin</u> (Xi'an Jiaotong	isothermal oxidation, thermal fatigue	Zini Wang (Sichuan University),
	<u>Shichao Li</u> (Jiangnan University),	Yinggang Miao (Northwestern	University), Xinyu Hui, Jin Zhou	and creep conditions	Bowen Liu, Li Chen, Yuzhong Wang
	Shan Chen	Polytechnical University), <u>Chenxu</u>		Ziang Li (Xi'an Jiaotong University),	
		<u>Zhang</u> , Ruoheng Sun		Dongxu Li, Jingjing Yang, Xueling	
13:00-13:25				Fan	
	3A05 Development of network	3B05 Tough and strong surface-	3C05 Additive Manufacturing of	3D05 The failure modes of	3E05 Scientific Discovery
	TiBw/Ti2AINb intermetallic matrix	grafted cellulose nanofiber one-	Continuous Carbon Fiber reinforced	carbon/glass hybrid double-double	Framework Accelerating Flame-
	composites	component nanocomposites	composites with Ultra-high	laminates and pseudo-ductility	Retardant Materials Design
	Yu Zhang (Harbin Institute of	<u>Sikai Chen</u> (Southwest Jiaotong	Interlaminar Shear Strength	<u>Chenlong Ruan</u> (Zhejiang	<u>Teng Fu</u> (Sichuan University)
	Technology), Lujun Huang, Lin Geng	University)	Lei Yang (Wuhan University of	University), Bowen Gong, Huan	
			Technology)	Wang, Huaxin Peng	
10.05 10.50					
13:25-13:50					
		3B06 An elastic-viscoplastic	3C06 Deformation behavior of	3D06 Application of Nonlocal	3E06 Closed-Loop Chemically
	promoting homogeneous	constitutive model of nonlinear	metal/thermoplastic CFRP	Toughening Strategy in Lattice	Recyclable High-Performance Fire-
	deformation in aluminum alloy	tensile behaviors of twisted flax	laminates during press forming	Materials	Safe Polycarbonate
	studied via in situ micropillar		Miumi Naito (Kochi University of	Wanlu Wang (Beijing University of	Bo-Wen Liu (Sichuan University),
		cyclic loading and unloading	Technology), Tatsuro Kosaka	Technology), Junjie Liu, Qingsheng	Xiang-Xin Xiao, Yu-Zhong Wang
	Yuchi Cui (Shanghai Jiao Tong	conditions		Yang	
	University)	<u>Bo Wen</u> (Tongji University), Qian Li,			
13:50-14:15		Zhen Zhang, Yan Li			
		3B07 Green and intelligent strategy	3C07 4D printing continuous fiber	3D07 An Estimation Method for S-N	
	, ,	for the preparation of flame	reinforce liquid crystal elastomer	Curve of Composite Materials	materials
	the orientations of short fiber	retardant plant fiber reinforced	composites soft robot with	Takuya Yamamoto (Itochu Techno-	<u>Hai-Bo Zhao</u> (Sichuan University)
	reinforcements as indicator		programmable thermal actuation	Solutions), Yoshihiro Ohnishi,	
	Rui Zhang (Harbin Institute of		Daokang Zhang (Xi'an Jiaotong	Tatsuo Sakakibara, Masaru Zako	
	Technology), Lujun Huang, Fei Yang	Wei, Yanfang Zhu	University), Xiaoyong Tian	(Osaka University)	
	(The University of Waikato)				
14:15-14:40					

Time					
8:30			Registration		
	Plenary Lecture 5 / Room S (1st floor: RY103) Speaker:			Chair:	
	"Synthesis from Materials to Proce	sses for Composites with Reduced	Prof. Kiyoshi Uzawa		Dr. Hayato Nakatani
9:20-10:30	Environmental Impact and Circular	Economy"	(Director, Innovative Composite	Center (ICC),	(Osaka Metropolitan University/
(70 min)	ICC Research into the Realization of	of Sustainable Composites	Kanazawa Institute of Technolo	ogy/Japan)	Japan)
10:30-10:45		Breal	Corporate Exhibition (1st floor: R	Y102)	
	Room F (2nd floor: RY202)	Room G (2nd floor: RY201)	Room H (2nd floor: RY206)	Room I (4th floor: RY405)	Room J (4th floor: RY404)
	Materials Science	Materials Science	Functional Composite	Functional Composites	Applications
Morning 1	Chair: Dr. Junji Noda (Kindai	Chair: Prof. Yun-Hae Kim (National Korea	Chair: Prof. Xingyi Zhu (Tongji	Chair: Prof. Yue Hou (Wuhan	Chair: Prof. Hiroshi Saito (Kanazawa
Session	University/Japan)	Maritime and Ocean University/Korea)	University/China)	University/China)	Institute of Technology/Japan)
	3F01 Structural designs, Mechanical	3G01 Investigation and optimization	3H01 Quasi-hyperbolic framework	3101 Design, preparation, and	3J01 Interlayer toughened and
	and Thermal Properties of	of composite plate subjected to bird	graphite foam-based composites	performance of microsphere shaped	interfacial enhanced mxene
	Continuous Zirconia Ceramic fibers	strike	with high thermal conductivity and	fire-safety phase change composite	composites are used for in-situ
	and their nanocomposites	Liu Jun (Northwestern Polytechnical	electromagnetic shielding properties	materials	damage sensing and
	Chao Wang (Harbin Institute of	University), Liu Zong Xing, Zhang	fabricated by electrochemical	Cong Deng (Sichuan University)	electromagnetic interference
	Technology)	Chun Yang	expansion method		shielding
			Rong Zhang (Hubei University of		<u>Zhongwen Hu</u> (Central South
			Technology)		University), Tiantian Wang, Jinsong
10:45-11:10					Yang
	3F02 Structural Design, Mechanics,	3G02 Demonstration of a resilient	3H02 Improving Thermal	3102 Phosphorus-Containing Diels-	3J02 Thermal Insulating and Fire
	and Applications of Carbon	conductive CNT network for Si	Conductivity of PAN/PITCH Hybrid	Alder Chemistry for Repairable,	Retardant Si3N4 Nanowires
	Nanotube Fibers	anodes in Li Ion batteries	Carbon Fiber Composite through	Remoldable, Recyclable, Fire Safety	Membranes Resistant to High-
	Yushun Zhao (Harbin Institute of	<u>Genki Odahara</u> (CARBON FLY), Fei	Stitching Process	Epoxy Resins and Their Carbon-	Temperatures up to 1300 °C
	Technology)	Deng	<u>Hun-Cheol Choi</u> (Gyeongsang	Fiber Composites	Yeye Liu (Northwestern Polytechnical
			National University), Min-Ju Lee,	<u>Li Chen</u> (Sichuan University), Song	University), Leilei Zhang, Ruonan Zhang,
			Byeong-Su Kwak	Gu, Yu-Zhong Wang	Siqi Shao, Lina Sun, Xinyi Wan, Tiantian
11:10-11:35					Wang
	3F03 Improved oxidation resistance	3G03 Characteristics of Urushi	3H03 Exploitation of Life-cycle	3103 Understanding the parameters	3J03 Compression Behavior of
	of CVD-SiC coating at 1300 °C by Ti	Composite Films by Thermosetting	structural health monitoring	influencing the interlaminar shear	Composites Laminates With A Hole
	addition	Reaction	technique based on magnetic fibers	strength and flammability properties	Zhao Junqing (Harbin Institute of
	Bing Liu (Northwestern	<u>Kazushi Yamada</u> (Kyoto Institute of	Faxiang Qin (Zhejiang University)	of polyamide/carbon fiber	Technology), Ge Yong
	Polytechnical University), Jia Sun,	Technology), Chieko Narita (Kyoto		composites	
	Qiangang Fu	Sangyo University)		<u>Aravind Dasari</u> (Nanyang	
				Technological University)	
11:35-12:00					

12:00-13:00			Lunch time		
-	Room F (2nd floor: RY202)	Room G (2nd floor: RY201)	Room H (2nd floor: RY206)	Room I (4th floor: RY405)	Room J (4th floor: RY404)
Afternoon 1 Session	Journal Session Chair: Prof. Hao Wang (University of Southern Queensland/Australia)	Materials Science Chair: Prof. Kazushi Yamada (Kyoto Institute of Technology/Japan)	Functional Composite Chair: Prof. Kazuya Okubo (Doshisha University/Japan)	Functional Composites Chair: Prof. Cong Deng (Sichuan University/China)	Applications Chair: Prof. Mototsugu Tanaka (Kanazawa Institute of Technology/Japan)
13:00-13:25		3G04 Design, Preparation and Properties of Absorption-dominated Electromagnetic Shielding Polymer Composites <u>Meng Ma</u> (Zhejiang University of Technology), Wenqin Shao, Xiao Liang, Qiang Peng, Xu Wang	3H04 Stackable and Deployable Laser-Induced Graphene Layers toward the Flexible Manufacturing of Smart Honeycomb Composites with Multifunctional Performance <u>Sida Luo</u> (Beihang University), Yan Gao, Mingguang Han	3104 ML-Based Prediction of Morphological Configuration and Mechanical Behavior of Thermo- Active Composites Keke Tang (Tongji University), <u>Yinglong Liu</u> , Ruizheng Zhang, Yujie Xiang	3J04 Multi-source response study on vibration and fatigue of composite connectors <u>Ding Hao</u> (Tongji University), Li Qian, Zhang Zhen, Shi Wei Ye
13:25-13:50		3G05 Effect of Localized Interlaminar Toughening on Damage Behavior in Unidirectional CFRP Laminates with Fiber Discontinuities <u>Hayato Nakatani</u> (Osaka Metropolitan University), Keisuke Hara (National Institute of Technology, Wakayama College)	3H05 Multifunctional nanocomposite conductive PF-127 hydrogels: Synthesis, Experiment, and Wearable application Xiaopeng Wan (Northwestern Polytechnical University), <u>Zhicheng</u> <u>Dong</u>	3105 Long lasting heat dissipation of flexible heat sink for wearable thermoelectric device based on phase change composite material <u>Yue Hou</u> (Wuhan University), Ziyu Wang, Qianfeng Ding	3J05 Research on the ablative behaviors of CVD-TaC/SiC multilayer coatings influenced by the thickness ratio of different TaC sublayers Jing'An Kong (Northwestern Polytechnical University), Yulei Zhang, Hejun Li
13:50-14:15	Journal Session	3G06 Fabrication of circuit boards with low dielectric loss, low thermal expansion coefficient and high thermal conductivity for high- frequency communication <u>Wenhong Ruan</u> (Sun Yat-sen University (Zhongshan University)), Linyuan Liao, Minqiu Zhang	3H06 Carbon-based Nanocomposite Aerogels for Highly Efficient Solar Steam Generation <u>Dan Liu</u> (The Chinese University of Hong Kong)	3106 Triboelectric Nanogenerator based Self-Powered vehicle- infrastructure collaborative perception <u>Xingyi Zhu</u> (Tongji University), Yafeng Pang	3J06 Low-velocity impact and compression after impact behaviors of composite bonded repair <u>Wen Zhao</u> (Xi'an Jiaotong University), Jin Zhou, Zhongwei Guan (Advanced Materials Research Centre, Technology Innovation Institute, Abu Dhabi)
14:15-14:40		3G07 Pseudo-Ductility due to Micro-damage Accumulation Initiated at Fiber Discontinuities in CFRP Laminates with Mesh Interlayers <u>Shinsuke Imura</u> (Osaka Metropolitan University), Shunya Matsui, Hayato Nakatani	3H07 Effect of Application of Frictional Stir Drilling (FSD) Technique for Opening Hole on CFRTP(Carbon Fiber Reinforced Thermo-Plastic) for Fastening with Aluminum plate by Conventional Screw Bolt <u>Kazuya Okubo</u> (Doshisha University), Kiyotaka Obunai, Riko Minami	3107 Development of Zinc Basic Salt-Infused PVA-PEI Composite for Antimicrobial and Triboelectric Applications Yong Tae Park (Myongji University), <u>Alemtsehay Tesfay Reda</u>	

Poster Session: Day 2(Aug 28) afternoon, Room P (1st floor: RY101) / Speech Session : Day 2 morning

	Speech Session for Best Student Poster Award 1	Speech Session for Best Student Poster Award 2
	/ Room F (2nd floor: RY202)	/ Room G (2nd floor: RY201)
Time	Chair: Prof. Hideaki Katogi (Jissen Women's University/Japan)	Chair: Dr. Daiki Tanabe (Kobe City College of Technology/Japan)
	PF-01: Delamination Characterization for Thick Composites Structures with Variable	PG-01: Evaluation of High-Temperature Electromagnetic Performance of Radar
	Fiber Angles Using Ultrasonic Through Transmission Inspection	Absorbing Material using Arc Plasma
	Zhen Zhang (Tongji University), <u>Zitong Nie</u> , Zehua Li, Hengkun Zhao, Ziyu Zhang,	Jongkwang Lee (Hanbat National University), <u>Byungwoo Choi</u> , Taewoong Kang,
10:45-10:50	Rongyao Li, Bo Li, Andong Cao	Sangmin Baek (Agency for Defense Development)
	PF-02: Fracture Properties and Strength Evaluation of PAN-based Carbon Fiber and	PG-02: Rational Tuning Electronic Structure of High-Entropy Layered Double
	Micro-sized CFRP under Biaxial Tensile-Torsional Loading	Hydroxide for Robust and Durable Water Splitting
	Mikiyasu Hashimoto (Yamaguchi University), Siti Farhanah, Arnaud Macadre, Koichi	Joong Hee Lee (Jeonbuk National University), <u>Khoa Dang Tran</u> , Hoang Tuan Nguyen,
10:50-10:55	Goda	Duy Thanh Tran, Nam Hoon Kim
	PF-03: Clearance dependence on measured shear modulus of elasticity from double-	PG-03: Surface Modification of Nickel Molybdenum Oxide Hydrate via Cation/Anion
	wrap joint test	Substitution to Promote Water Splitting
	<u>Kisumi Tanaka</u> (Kindai University), Katushi Honda, Junji Noda	Joong Hee Lee (Jeonbuk National University), Nguyen Tram Anh Duong, <u>Woo Sung</u>
10:55-11:00		Jung, Duy Thanh Tran, Nam Hoon Kim
	PF-04: Reconstruction of RVEs for non-orthogonal composite fabrics from micro-CT	PG-04: Bending properties of CFRP-GC hybrid beam with U-shape cross-section
	scanning via deep learning	Kei Arauchi (Graduate School of Kindai University), Junji Noda (Kindai University)
	Weizhao Zhang (The Chinese University of Hong Kong), <u>Chongrui Tang</u> , Deyong Sun,	
	Yuncong Feng (University of Bristol), Yifeng Xiong (Northwestern Polytechnical	
11:00-11:05	University)	
	PF-05: Experimental and numerical characterization of thin woven fabrics compaction	PG-05: Development of a patch-type EFPI sensor using CFRP
	response accounting for the influence of yarn angle variation	<u>Hiroki Tanaka</u> (Kochi University of Technology), Tatsuro Kosaka, Yoneta Tanaka
	Deyong Sun (The Chinese University of Hong Kong), Wanrui Zhang, Jianchao Zou,	(ADTEC ENGINEERING)
	Yifeng Xiong (Northwestern Polytechnical University), Chongrui Tang (The Chinese	
11:05-11:10	University of Hong Kong), Weizhao Zhang	
	PF-06: Covalent Triazine Framework Hollow Nanospheres-Modified Separators for	PG-06: Microstructural evolution and failure mechanism of twisted carbon nanotube
	High-Energy Lithium Metal Battery	fibers with hierarchical structure
	Yufei Yang (Huazhong University of Science and Technology), Hui Nie, Xingping Zhou,	Yangfan Wu (University of Science and Technology of China)
11:10-11:15	Xiaolin Xie	

Poster Session: Day 2(Aug 28) afternoon, Room P (1st floor: RY101) / Speech Session : Day 2 morning

	Speech Session for Best Student Poster Award 1	Speech Session for Best Student Poster Award 2
Time	/ Room F (2nd floor: RY202)	/ Room G (2nd floor: RY201)
	PF-07: Evaluation of Mechanical Properties for Carbon-Fiber Strand Specimen under	PG-07: Flame-retardant, thermally conductive, mechanically strong epoxy composites
	Operating Environment	with phenylphosphonic acid-functionalized boron nitride nanosheets
	Dae-Han Cheon (Hanbat National University), Kwang-Bok Shin, Seong-Yeon Kim, Da-	Xingping Zhou (Huazhong University of Science and Technology), <u>Hongru Zhou,</u>
	Bin Lim, Yeong-Hwan Jeon	Yingfeng Wen, Zhigang Xue (Huazhong University of Science and Technology), Xiaolin
11:15-11:20		Xie
	PF-08: withdraw	PG-08: Bending and Impact Properties of Hybrid Glass Fiber Clothes Composite with
		Substituted Sheets of Alkali Treated Cotton Scrap in Core
		Shunya Yamamoto (Doshisha University Graduate School), Kazuya Okubo (Doshisha
		University), Kiyotaka Obubai
11:20-11:25		
	PF-09: AE Characteristics in Pseudo-ductility of CFRP Laminates with Mesh	PG-09: Effect of girder thickness on on-axis load-displacement relationship of full-
	Interlayers	scale tsunami evacuation shelter
	<u>Shunya Matsui</u> (Osaka Metropolitan University), Shinsuke Imura, Hayato Nakatani	<u>Yui Kawai</u> (Kindai Universuty), Junji Noda, Katsushi Honda
11:25-11:30		
	PF-10: Characteristics of AE Induced by Single Fiber Breakage in CFRP in Time-	PG-10: Effect of Localized Bending Stiffness on Joint Strength between CFRTP
	Frequency Domain	Laminates and Self-piercing and Clinch Nut
	Kazuki Yamamoto (Graduate School of Kochi University of Technology), Tatsuro	Taichi Kiyokawa (Osaka Metropolitan University), Hayato Nakatani, Rikiya Nishimura
11:30-11:35	Kosaka (Kochi University of Technology)	(Shinjo Manufacturing), Daisuke Naka, Yuichi Hatanaka
	PF-11: Improvement of measurement system of degree of cure of resin during cure	PG-11: Optimum molding conditions for high-speed pultrusion of CFRTP pipes
	and post-cure processes	<u>Kento Yamada</u> (Gifu University), Masaki Ohishi (Satoh Machinery Works), Asami
	Kansei Shiota (Graduate School of Kochi University of Technology), Tatsuro Kosaka	Nakai (Gifu University)
11:35-11:40	(Kochi University of Technology)	
	PF-12: Multiscale analysis of cure effects on Z-pinned composites	
	Yingjie Xu (Northwestern Polytechnical University), <u>Jisiyuan Cheng,</u> Weihong Zhang,	
	Weiwei Liu	
11:40-11:45		

Poster Session: Day 2(Aug 28) afternoon, Room P (1st floor: RY101)

	Posters by full delegates	Posters by full delegates
	P-01: Improvement of Interfacial Electrical Contact Resistance Between Carbon	P-02: Research on the correlation mechanism of multi-scale brain injury under impact
	Composite Bipolar Plate and Copper Current Collector for Battery and Fuel Cell	load
	Applications	Jing Wang (Aerospace Center Hospital), Yiming Guan (Beijing Institute of
	Jun Woo Lim (Jeonbuk National University), <u>Jaeheon Choe</u> (Korea Railroad Research Institute)	Technology), Jingran Ge, Jun Liang
	P-03: Ruthenium-Doped Co-Ni Nanoparticles in N-Doped CNTs: A Robust Catalyst	P-04: Rational Integration of 1T – Mo – VTe2 and NiTe2 as A Hierarchical 1T – Mo –
	for Hydrogen Evolution in Diverse Media	VTe2@NiTe2 Heterostructure on Carbon Cloth for Water Splitting
	Abhisek Majumdar (Jeonbuk National University), Keshav Raj, Naresh Raut, Duy	Joong Hee Lee (Jeonbuk National University), Purna Prasad Dhakal, Ganesh
	Thanh Tran, <u>Nam Hoon Kim</u> , Joong Hee Lee	Bhandari, Duy Thanh Tran, Nam Hoon Kim
	P-05: Kirigami-inspired composite metamaterials with quasi-zero stiffness	P-06: Effect of the methods of pulp surface treatment on the mechanical properties of
Poster	characteristics for vibration isolation	pulp reinforced polymer composite materials
	Seong Su Kim (Korea Advanced Institute of Science and Technology (KAIST)),	Yoh Kataoka (Ehime University), Hirokazu Ito, Masafumi Kambara (AIPA), Yasuhiro
Session	Hyunsoo Hong, Samuel Kim, Wonvin Kim, Wonki Kim, Jae-Moon Jeong	Tsuzuki (Ehime Institute of Industrial Technology Paper Technology Center)
	P-07: Fabrication of Inorganic Inverse Opal Photonic Balls for Environmental	P-08: Construction of chitosan-based drug/gene dual delivery system and study on its
	Applications	synergistic anti-tumor effect
	Wonmok Lee (Sejong University), Yong Seok Kim, Hyun Min Jung (Kumoh National	Jing Chang (Ocean University of China)
	Institute of Technology)	
	P-09: Sustainable Radiative Cooling Films from Upcycled Oyster Shells	P-10: Optimizing Lay-up Methods for Enhanced Performance of Bistable Piezoelectric
	Youngjae Yoo (Chung-Ang University), Byung-II Choi (Korea Testing & Research	Wind Energy Harvesters
	Institute)	<u>Fuhong Dai</u> (Harbin Institute of Technology)
	P-11: Withdraw	P-12: Mechanical properties and solvent resistance of carbon fiber reinforced ionic
		cross-linked methacrylate composites
		Shiho Kuwashiro (Osaka Research Institute of Industrial Science and Technology),
		Nozomu Nakao (University of Hyogo), Satoshi Matsuda, Keitaro Kago (Osaka
		Research Institute of Industrial Science and Technology), Hajime Kishi (University of
		Hyogo)

Poster Session: Day 2(Aug 28) afternoon, Room P (1st floor: RY101)

	Posters by full delegates	Posters by full delegates
	P-13: Chitosan Nanocomposite-based Self-Healing Hydrogel Flexible Films for	P-14: Artificial neural network-based homogenization model for predicting multiscale
	Triboelectric Nanogenerators and Self-Powered Sensors	mechanical properties of woven composites
	<u>Yong Tae Park</u> (Myongji Univeristy), Hai Anh Le	<u>Bing Wang</u> (Harbin Institute of Technology), Menglei Li
	P-15: Trial manufacturing of composite material using waste polymer and grass fiber	P-16: Conjugated Coordination Polymer as A New Platform for Electrochemical
Poster	<u>Hideaki Katogi</u> (Jissen Women's University)	Synthesis of Ammonia
Session		Longsheng Zhang (Jiangnan University)
	P-17: The effects of MMT on the crystallization behavior of PA6/GF/MMT composites	P-18: Study on the evolution of microstructure and mechanical properties of ultra-
	and the mechanisms	high temperature carbon fibre
	Yanqin Shi (Zhejiang University of Technology), Xutao Zhang, Xu Wang, Meng Ma,	<u>Weihua Xie</u> (Harbin Institute of Technology), Zheng Wang
	Yulu Zhu, Si Chen, Huiwen He	