

JISSE-17 Program

JISSE-17 Conference : Tokyo Big Site, West Exhibition Halls Atrium
 JISSE-17 Exhibition : Tokyo Big Site, West Exhibition Halls Atrium
 SAMPE Japan Exhibition 2021 : Tokyo Big Site, West Exhibition Hall

Dec. 1, 2021			
Room	A	B	West Exhibition Hall
9:00 -	Registration		10:00 - 17:00 SAMPE Japan Exhibition 2021
9:35 - 9:40	Opening address		
9:40 - 10:30	Plenary Lecture (PL-01) Chair: Masahito Ueda, Chikara Kawamura		
	(PL-01) CFRP Applications for Vehicle Body Atsushi Mikuni (Toyota Motor Corporation)		
10:30 - 11:00	Coffee Break @ JISSE-17 Exhibition Room (in West Exhibition Halls Atrium)		
11:00 - 11:50	Plenary Lecture (PL-02) Chair: Masahito Ueda, Chikara Kawamura		
	(PL-02) Production problems and technological development for CFRP Application in Automobiles Atsushi Mizutani (Nissan Motor Corporation)		
11:50 - 13:00	Lunch		
	Thermoplastic Composites Chair: Akiko Hirabayashi	Student Session	
13:00 - 13:20	(1A-01) 3D PRINT PATH GENERATION BASED ON PERIODIC PATTERN FORMATION SYSTEM Naruki Ichihara (Nihon University), Masahito Ueda	13:00 - 13:55 Student Presentation (S01-S11) 13:55 - 14:05 Company Introduction 1 Teijin limited (in Japanese) 14:05 - 14:15 Company Introduction 2 Maruhachi Co., Ltd (in Japanese) 14:15 - 14:55 Coffee Break/Student Poster Session @JISSE-17 Exhibition Room 14:55 - 15:05 Company Introduction 3 Fudow Co., Ltd (in Japanese) 15:05 - 16:10 Student Presentation (S12-S24) 16:10 - 16:20 Company Introduction 4 UCHIDA Co., Ltd. (in Japanese) 16:20 - 16:30 Company Introduction 5 IHI Corporation (in Japanese) 16:30 - 17:10 Coffee Break/Student Poster Session @JISSE-17 Exhibition Room	
13:20 - 13:40	(1A-02) ENHANCEMENT OF INJECTION MOLDING METHOD CONSIDERING DIMENSIONAL STABILITY Kana Sakon (Mitsubishi Heavy Industries, LTD.), Ryoji Okabe, Hitoshi Tamaki, Takuma Yamashita, Kosuke Ikeda		
13:40 - 14:00	(1A-03) VACUUM-ASSISTED PRESS FORMING FOR WOVEN CARBON FIBER REINFORCED PLASTICS Yuki Asano (Nihon University), Masahito Ueda		
14:00 - 14:20	(1A-04) NANOFIBER VEIL APPLIED IN TOUGHNESS ENHANCEMENT OF CFRTP Shi Mingjun (Gifu University), Takahashi Shinya, Takeno Akiyoshi, Nakai Asami		
14:20 - 14:40	(1A-05) PULTRUSION OF THERMOPLASTIC COMPOSITE USING PARTIALLY CONSOLIDATED YARNS Louis Laberge Lebel (Polytechnique Montreal, Gifu University), Kazuki Hyodo, Masaki Ohishi, Asmai Nakai		
14:40 - 15:10	Coffee Break @ JISSE-17 Exhibition Room (in West Exhibition Halls Atrium)		
	MMC, CMC, C/C, High-Temperature Applications Chair: Louis Laberge Lebel		
15:10 - 15:30	(1A-06) EFFECT OF COPPER-PLATED CARBON FIBER ORIENTATION DISTRIBUTION ON THERMAL CONDUCTIVITY OF FE MATRIX COMPOSITE Di Wu (Hiroshima University), Kenjiro Sugio, Yan Zhao, Lu Yang, Yujiao Ke, Gen Sasaki		
15:30 - 15:50	(1A-07) MICROSTRUCTURAL CLASSIFICATION OF UNMODIFIED AND STRONTIUM MODIFIED AL-SI-MG CASTING ALLOYS WITH MACHINE LEARNING TECHNIQUES Zixiang Qiu (Hiroshima University), Kenjiro Sugio, Gen Sasaki		
15:50 - 16:10	(1A-08) EFFECT OF ZINC CONTENT AND TEMPERATURE ON MICROSTRUCTURE, WETTABILITY BEHAVIOR OF MAGNESIUM ALLOY Kwangmo Park (Hiroshima University), Gen Sasaki, Kenjiro Sugio		

Dec. 2, 2021			
Room	A	B	West Exhibition Hall
9:00 -	Registration		10:00 - 17:00 SAMPE Japan Exhibition 2021
	Plenary Lecture (PL-03) Chair: Tetsuo Yasuoka		
9:40 - 10:30	(PL-03) Composite R&D in the Boeing Company Dylan Jones (Boeing Japan)		
10:30 - 11:00	Coffee Break @ JISSE-17 Exhibition Room (in West Exhibition Halls Atrium)		
	Numerical Modeling and Structural Design Chair: Ryo Higuchi	Automotive and Aerospace Application Chair: Tatsuro Kosaka	
11:00 - 11:20	(2A-01) CHARACTERIZATION OF DAMAGE BEHAVIOR IN THINPLY COMPOSITES WITH VARIOUS PLY THICKNESS UNDER IN-PLANE TENSILE LOADING Xiawan Hua (The University of Tokyo), Ryoma Aoki, Yayoi Kobayashi, Ryo Higuchi, Tomohiro Yokozeki	(2B-01) INVESTIGATION OF HEAT RATE AND PERMEATION BETWEEN CARBON FIBER AND MATRIX RESIN OF TANKS IN FCEV Shinji Miyoshi (SOKEN, Inc.)	
11:20 - 11:40	(2A-02) EVALUATION OF HEAT CONDUCTION PROPERTIES OF THERMOSET CFRP WITH DIFFERENT LAMINATE CONFIGURATIONS DURING COMBUSTION Ryota Shinohara (Kyoto University), Masaaki Nishikawa, Akihiko Ito, Naoki Matsuda, Masaki Hojo	(2B-02) ENERGY ABSORPTION PROPERTIES OF GFRP AND GFRTP CYLINDERS UNDER IMPACT LOAD Hsiangchi Fan (Nihon University), Hayato Abe, Kazuhiro Sakata, Norio Hirayama, Yoshio Aoki, Yuichi Mizushima, Kazunori Sano	
11:40 - 12:00	(2A-03) FIBER KINKING OF UNIDIRECTIONAL CFRP WITH CLUSTERED FIBER ARRANGEMENT Takuya Takahashi (Tokyo Institute of Technology), Akira Todoroki, Masahito Ueda	(2B-03) INFLUENCE OF GAP/OVERLAP BY AFP ON THE MECHANICAL PROPERTIES OF THIN-PLY CFRP Sho Miyashita (JAXA), Yuichiro Aoki, Sunao Sugimoto, Toshiya Nakamura	
12:00 - 12:20	(2A-04) FAILURE MODE TRANSITION IN ADHESIVELY BONDED CFRP JOINTS UNDER MIXED-MODE LOADING Ryo Wakayama (Nagoya University), Akinori Yoshimura, Masahiro Arai, Keita Goto	(2B-04) EFFECTIVENESS OF MULTISCALE ANALYSIS IN EVALUATING CRASHWORTHINESS OF UAM Masahiko Matsuhashi (The University of Tokyo, Skyward of Mobilities Inc. (SOM)), Ryo Higuchi, Tomohiro Yokozeki	
12:20 - 13:20	Lunch		
	Plenary Lecture (PL-04) Chair: Shu Minakuchi		
13:20 - 14:10	(PL-04) To expand the application of composites materials in automobile parts aiming at reducing environmental load Ichiro Kitano (Teijin limited)		
14:10 - 14:40	Coffee Break @ JISSE-17 Exhibition Room (in West Exhibition Halls Atrium)		
	Structural health monitoring, Nondestructive Evaluation Chair: Akihisa Tabata	Additive manufacturing Chair: Keisuke Iizuka	
14:40 - 15:00	(2A-05) ANALYSIS OF ANISOTROPIC LAMB WAVES PROPAGATION IN COMPOSITE LAMINATES Lea A.C. Lecointre (The University of Tokyo), Fumiko Mori, Tomohiro Yokozeki, Naoki Hosoya, Shinichi Takeda	(2B-05) TESTING METHOD OF MECHANICAL PROPERTIES OF 3D PRINTED CFRP WITH A CURVED SECTION Hirohide Shiratori (Tokyo Institute of Technology), Akira Todoroki, Masahito Ueda, Ryosuke Matsuzaki, Yoshiyasu Hirano	
15:00 - 15:20	(2A-06) NON-CONTACT AND NON-DESTRUCTIVE LAMB WAVE GENERATION IN COMPOSITES USING A SHOCK WAVE GENERATED BY LASER PLASMA Shota Tonegawa (Shibaura Institute of Technology), Masakatsu Mita, Lea A.C. Lecointre, Ryo Higuchi, Tomohiro Yokozeki, Shinichi Takeda, Naoki Hosoya	(2B-06) THE MOLDING TECHNOLOGY OF CFRTP 3DP Masayuki Okoshi (Gifu University), Masahito Ueda	
15:20 - 15:40	(2A-07) ULTRASONIC PROPAGATION CHARACTERISTICS OF GFRP MOLDED PLATES WITH AN UNCURED LAYER ON ONE SIDE Akihiro Wada (Osaka Sangyo University), Eiji Kitagawa	(2B-07) PULL-OUT LOAD OF INTERNAL THREAD PRINTED BY COMPOSITE AM Kohei Yoshida (Mitsubishi Heavy Industries, Ltd.), Kazuhiro Miura, Takeshi Fujita, Makoto Inomoto	
15:40 - 16:00	(2A-08) IMPROVED ACTIVE THERMOGRAPHIC NONDESTRUCTIVE INSPECTION OF CFRPS USING CYCLIC HEATING AND FOURIER TRANSFORMATION Takuto Miura (Tokushima University), Masashi Ishikawa, Hideo Nishino, Takeo Kato, Tetsuya Ohtsuki	(2B-08) SIMULATION INTRODUCTION - MATERIAL, PROCESS AND EFFECT OF DEFECTS ON ADDITIVE MANUFACTURED PART PERFORMANCE Ryuichi Hirade (ADVANCED TECHNOLOGIES CO.,LTD.), Arshi Sagati	
16:00 - 16:20	(2A-09) MONITORING OF IMPREGNATION PROCESS OF VARTM BY RAYLEIGH SCATTERING OPTICAL FIBER SENSORS Tatsuro Kosaka (Kochi University of Technology), Genko Fujjoka	(2B-09) PROCESS INNOVATION: H2 COMPOSITE TANK DOME REINFORCEMENTS WITH FIBER PATCH PLACEMENT Florian Lenz (Cevotec GmbH, Fuji Industries Co. Ltd.)	
16:20 - 16:40	Coffee Break @ JISSE-17 Exhibition Room (in West Exhibition Halls Atrium)		
	Plenary Lecture (PL-05) Chair: Tomohiro Yokozeki		
16:40 - 17:30	(PL-05) Overview and critical comparison of various NonDestructive Testing (NDT) methods for inspection of composite components and 3D printed parts Wim VAN PAEPEGEM (Ghent University)		

Dec. 3, 2021			
Room	A	B	West Exhibition Hall
9:00 -	Registration		
9:40 - 10:30	Plenary Lecture (PL-06) Chair: Akinori Yoshimura (PL-06) Innovative thermoplastics composite materials and manufacturing processes to realize the next-generation infrastructure systems Kiyoshi Uzawa (Kanazawa Institute of Technology)		
10:30 - 11:00	Coffee Break @ JISSE-17 Exhibition Room (in West Exhibition Halls Atrium)		
	KIT-COI Session (I) Chair: Kiyoshi Uzawa	Polymer Matrix Composites (I) Chair: Ryosuke Matsuzaki	10:00 - 17:00 SAMPE Japan Exhibition 2021
11:00 - 11:20	(3A-01) PREDICTION OF LONG-TERM CREEP AND FATIGUE STRENGTHS OF UNIDIRECTIONAL CFRP USING THERMOPLASTIC EPOXY RESIN AS MATRIX M. Nakada (Kanazawa Institute of Technology), Y. Miyano, Y. Morisawa, H. Nishida, Y. Hayashi, K. Uzawa	(3B-01) EFFECT OF RIGIDITY AND MASS DENSITY ON THE GENERATION CHARACTERISTICS OF THE PIEZOELECTRIC CYLINDRICAL SHELL WIND ENERGY HARVESTING FLAG Chisuzu Oda (Kindai University), Tsutomu Nishigaki	
11:20 - 11:40	(3A-02) STATISTICAL LIFE PREDICTION OF CF/PP UD UNDER CREEP TENSION AND BENDING LOADS FROM VISCOELASTIC PROPERTIES OF MATRIX POLYMER Takeharu Isaki (Mitsui Chemicals, Inc.), Masayuki Nakada, Yasushi Miyano, Yoko Morisawa, Taiki Hirano, Kiyoshi Uzawa	(3B-02) SIMULATED LIGHTNING STRIKE INVESTIGATION OF CFRP COMPRISING A NOVEL CONDUCTIVE MATRIX Yu Zhou (The University of Tokyo), Tomohiro Yokozeki	
11:40 - 12:00	(3A-03) INVESTIGATION OF PREFORM DEFORMATION AND PERMEABILITY CHANGE DURING COMPRESSION RESIN TRANSFER MOLDING Yoshihiro Aono (ESI Japan Ltd.), Takuya Suzuki, Katsuhiko Nunotani, Yuta Urushiyama, Kiyoshi Uzawa	(3B-03) MATERIAL DESIGN OF HEAT- AND IMPACT-RESISTANT PREPREG AS CARBON FIBER INTERMEDIATE MATERIAL Miki Horikawa (TEIJIN LIMITED), Takaya Suzuki, Toru Kaneko	
12:00 - 13:00	Lunch		
	KIT-COI Session (II) Chair: Kazuhiro Sakata	Polymer Matrix Composites (II) Chair: Yu Zhou	
13:00 - 13:20	(3A-04) EVALUATION OF BOND STRENGTH BETWEEN SOME FRP RODS AND CONCRETE Shinichi Miyazato (Kanazawa Institute of Technology), Atsushi Hokura, Hisai Ueda, Satoru Kobayashi	(3B-04) BRIDGE SECTION PRINT FOR 4D PRINTING OF NATURAL CONTINUOUS FIBER COMPOSITES Masafumi Kurihara (Tokyo University of Science), Thomas Fruleux, Antoine Le Duigou, Ryosuke Matsuzaki	13:00-17:00 IHI/SAMPE Japan Student Bridge Contest
13:20 - 13:40	(3A-05) INNOVATIVE WORKS IN RESIN TECHNOLOGY FOR FRP MATRIX Hirofumi Nishida (Kanazawa Institute of Technology), Kiyoshi Uzawa	(3B-05) X-RAY COMPUTED TOMOGRAPHY-BASED AUTOMATIC FIBER TRACKING OF UNIDIRECTIONAL CARBON FIBER REINFORCED PLASTIC BY DIGITAL IMAGE CORRELATION METHOD Shiryu Morita (Nihon University), Masahito Ueda	
13:40 - 14:00	(3A-06) HIGH RATE MANUFACTURING OF THICK ORGANO-SHEET USING FIXED ROLLERS DOUBLE BELT PRESS IN COMBINATION WITH INDUCTION HEATING Osuke Ishida (Kanazawa Institute of Technology), Junichi Kitada, Kiyoshi Uzawa		
14:00 - 14:30	Coffee Break @ JISSE-17 Exhibition Room (in West Exhibition Halls Atrium)		
14:30 - 15:20	Plenary Lecture (PL-07) Chair: Yuichiro Aoki (PL-07) 3D-printed composite lattice structures: benefits and challenges Fedor Antonov (ANISOPRINT)		
15:20 - 15:50	Break		
	KIT-COI Session (III) Chair: Akio Ohtani		
15:50 - 16:10	(3A-07) HIGH TEMPERATURE ENVIRONMENT TEST FOR LARGE SCALE PANEL STRUCTURE FOR FIRE RESISTANCE EVALUATION Masanori Nakajima (Kanazawa Institute of Technology), Kiyoshi Uzawa, Katsuhiko Nunotani, Yuya Takaiwa, Satoshi Nagoh		
16:10 - 16:30	(3A-08) EFFECT OF MOLDING TIME ON MECHANICAL PROPERTIES OF CF/RTMP ORGANO-SHEETS WITH MATRIX RESIN OF IN-SITU POLYMERIZABLE THERMOPLASTIC EPOXY Wataru Okumura (Industrial Research Institute of Ishikawa), Hirofumi Nishida, Nunotani Katsuhiro, Etsuro Sugimata, Hiroyuki Hasebe, Daisuke Mori, Kiyoshi Uzawa		
16:30 - 16:50	(3A-09) STUDY OF MELT VISCOSITY OF DISCONTINUOUS FIBER THERMOPLASTIC CFRP DURING PRESS MOLDING Takehiro Shirai (Kanazawa Institute of Technology), Kiyoshi Uzawa		

Student Session	
Students have 5min presentations in the Room B on December 1. The Student poster session will also be held in Exhibition Room on the same day.	
13:00 - 13:55	S01 STRUCTURAL PERFORMANCE EVALUATION OF WOODEN FRAME WITH CFRTP REINFORCEMENT H. Takizawa, H. Matsumoto, N. Sakurai, K. Uzawa, Y. Takaiwa
	S02 EFFECT OF RESIN VISCOELASTICITY ON FATIGUE STRENGTH OF UNIDIRECTIONAL CFRP UNDER BENDING LOAD Y. Yoshikoshi, M. Nakada, Y. Miyano
	S03 EFFECT OF WATER ABSORPTION ON THE TENSILE STRENGTH OF CF/PP UD-TAPE T. Nonaka, M. Nakada, Y. Miyano, Y. Morisawa, T. Isaki, T. Hirano, K. Uzawa
	S04 EVALUATION OF CORNER STRENGTH OF A CARBON FIBER REINFORCED POLYAMIDE FABRICATED BY HOT-PRESS MOULDING OF CHOPPED TAPES Y. Goto, M. Ueda
	S05 INVESTIGATION OF FRACTURE BEHAVIOR OF 3D PRINTED MATERIALS WITH VARIOUS INTERLAYER STRENGTHS R. Nakao, K. Iizuka, S. Yoneyama
	S06 SIMULATION OF CFRTP-SMC COMPRESSION MOLDING: PARAMETER SETTING AND MODULUS VALIDATION Z. Zhao, Y. Zhang, J. Takahashi
	S07 PREDICTION OF TENSILE STRENGTH DISTRIBUTION OF CFRTP-SMC BY MONTE CARLO SIMULATION R. Xu, H. Wei, Y. Wan, J. Takahashi
	S08 PRELOAD RELAXATION IN BOLTED CARBON FIBER REINFORCED THERMOPLASTICS JOINTS X. Tong, L. Meng, B. Xiao, Y. Wan, J. Takahashi
	S09 THE EFFECT OF CF/PA TAPE QUALITY ON BENDING PROPERTY OF THE LAMINATES FABRICATED BY AUTOMATED TAPE PLACEMENT S. Yamamoto, M. Ueda, T. Sugawara
	S10 PREDICTION OF TENSILE FAILURE OF CARBON FIBER MAT REINFORCED THERMOPLASTICS BY NUMERICAL ANALYSIS Q. Gao, H. Wei, Y. Wan, J. Takahashi
	S11 IN-LINE REMOVAL METHOD OF UNREACTED MONOMER FROM CFRTP USING IN-SITU POLYMERIZED PA6 T. Yamashina, A. Hirabayashi, N. Hirayama, M. Terada, Y. Kimoto
13:55 - 14:05	Company Introduction 1 Teijin limited (in Japanese)
14:05 - 14:15	Company Introduction 2 Maruhachi Co., Ltd. (in Japanese)
14:15 - 14:55	Coffee Break/Student Poster Session @JISSE-17 Exhibition Room
14:55 - 15:05	Company Introduction 3 Fudow Co., Ltd. (in Japanese)
15:05 - 16:10	S12 MULTI-TIMESCALE SIMULATIONS OF ULTRASONIC WELDING FOR CFRP USING ENERGY DIRECTOR M. Takamura, K. Uehara, S. Takeda, J. Koyaangi
	S13 COMPARISON OF ENTROPY VALUES OBTAINED FROM MECHANICAL AND THERMAL MEASUREMENTS AND MOLECULAR DYNAMICS SIMULATION N. Takase, J. Koyanagi, T. Sakai
	S14 FUNDAMENTAL STUDY ON ELECTROMAGNETIC INDUCTION TESTING WITH DRIVER FIELD LENS (DFL) TO DETECT CRACKS IN GFRP AND IDENTIFY THE DIRECTIONS W. Matsunaga, K. Mizukami, Y. Mizutani, A. Todoroki
	S15 DEVELOPMENT OF HIGH ACCURATE EFPI STRAIN SENSORS FOR MEASURING THERMAL STRAIN OF CFRP A. Itaya, T. Kosaka, Y. Tanaka
	S16 IMPROVEMENT OF MEASUREMENT ACCURACY OF FRESNEL TYPE OPTICAL FIBER SENSOR BY PATH DESIGN USING EMBEDDING LOSS PREDICTION T. Ohnishi, T. Kosaka, G. Fujioka
	S17 WAVELET ANALYSIS OF AE INDUCED BY FIBER BREAKAGE OF SINGLE FIBER COMPOSITE K. Ishihara, T. Kosaka
	S18 CURE AND STRUCTURAL HEALTH MONITORING OF CFRP LAMINATE USING MULTI-FUNCTIONAL TILTED-FBG SENSOR S. Fujii, M. Kikuchi, S. Takeda, T. Ogasawara
	S19 IDENTIFICATION AND PREDICTION OF NONLINEAR MATERIAL BEHAVIOR FOR UNIDIRECTIONAL CFRTP USING NUMERICAL MATERIAL TEST M. Somemiya, N. Hirayama, K. Yamamoto, S. Matsubara, K. Terada
	S20 MECHANICAL PROPERTIES AND FRACTURE BEHAVIOR OF C-FRTP HYBRID JOINT USING ULTRASONIC WELDING PROCESS S. Nakasuji, A. Ohtani
	S21 CRACK RESTRAINT OF CFRTP PIPE IN HEATING TAPE WRAPPING MOLDINGS T. Mutoh, A. Nakai, A. Ohtani
	S22 APPLICATION OF FATIGUE DAMAGE PARAMETERS TO THE EVALUATION OF CRACK PROPAGATION ON CFRP LAMINATES BY HP-RTM S. Okada, A. Nakai
	S23 CONTROL OF FIBER ORIENTATION ON C-FRTP BY TFP T. Iwata, A. Nakai
	S24 REDUCTION OF FIBER FRICTION DURING MOLDING OF CFRTP PIPES WITH HIGH ELASTIC MODULUS K. Yamaguchi, A. Nakai
16:10 - 16:20	Company Introduction 4 UCHIDA Co., Ltd. (in Japanese)
16:20 - 16:30	Company Introduction 5 IHI Corporation (in Japanese)
16:30 - 17:10	Coffee Break/Student Poster Session @JISSE-17 Exhibition Room