the US-JAPAN/EU-JAPAN Joint Conference on Composite Materials
Sendai, Japan

Date: July 20-22, 2022

Venue：Conference room 7C , TKP Garden City PREMIUM Sendai West Exit

7 Floor, 1-2-15 Kakyoin, Aoba-ku, Sendai, Miyagi

SCHEDULE

	2022/7/20		2022/7/21		2022/7/22
AM	SIP	AM		AM	
				9:10	11 Yinbo Zhao
		9:30	48 (Seattle) 17:30 Marco Salviato	9:30	35 Xi Yingxiao
9:40	Opening Tomonaga OKABE	10:00	21 (UTC-5) 20:00 Seiichi Nomura	9:50	15 Satoru Yamamoto
10:00	47 Plenary (40 min) Shinji Ogihara	10:30	49 Plenary (40 min) Hyonny Kim	10:10	19 Reiko Saito
				10:30	20 Shinya WATANABE
10:40	break time	11:10	13 (UTC-7) 19:10 Olesya I. Zhupanska	10:50	break time
11:00	6 Toshio OGASAWARA	11:40	45 On-site Y. Swolfs	11:10	23 Hiroki Kurita
11:20	1 Mototsugu TANAKA	12:10	39 ONLINE A. T. Marques	11:30	34 B. Kötter
11:40	30 Toshihiro Kawakatsu				
	Lunch break (12:00~13:00)		Lunch break (12:40~13:30)		Lunch break (11:50~12:50)
PM		PM		PM	
13:00	10 Keiichi Shirasu	13:30	42 Plenary (40 min) ONLINE S. T. Pinho	12:50	31 (30 mins) Namiko Yamamoto
13:20	7 A. Ito			13:20	12 Huachao Deng
13:40	2 Naoki Kishimoto	14:10	break time	13:40	26 Ryoma Aoki
14:00	22 T. Nagashima	14:40	46 (UTC+2) 07:40 I. Verpoest	14:00	33 WANG Chenyu
14:20	break time	15:10	break time	14:20	Closing Tomonaga OKABE
14:40	4 Akinori Yoshimura	15:30	EU 37 (UTC-1) 7:00~ L.E. Asp (UTC+2) 08:30		
15:00	24 Ryo Higuchi	16:00	EU 44 (UTC+2) 09:00 K. Schulte		
15:20	9 M. Nishikawa	16:30	EU 43 (UTC+2) 09:30 Marino Quaresimin		
15:40	8 H. Oguma	17:00	break time		
16:00	break time	17:20	EU 41 (UTC+1) 9:20 S. Pimenta		
16:20	16 Jun KOYANAGI	17:50	EU 38 (UTC+2) 10:50 C. Dransfeld		
16:40	3 Tomohiro Yokozeki				
17:00	17 Hiroshi SUEMASU				
17:20	29 Yuichiro AOKI				
17:40	5 Ryosuke Matsuzaki				
	SIP	USA	EU		JAPAN

PROGRAM

July 20th, 2022

＜Online attend via WebEX＞

URL:https://jisedai.webex.com/jisedai/j.php?MTID=me6a00763e56535844b5ef3b5da0dbcb0

Meeting Number: 2515 977 5272

Password: AMgYXPUE333

Chair: Prof. Jun KOYANAGI, Tokyo University of Science

Plenary Chair: Tomonaga OKABE, Tohoku University

09:40-10:00 Opening (Tomonaga OKABE, Tohoku University)

10:00-10:40 47-Plenary Recent Activity of CAE Advanced Composite Materials and Structures Research Division, TUS (Shinji OGIHARA, Tokyo University of Science)

10:40-11:00 Break Time

11:00-11:20 06-SIP Experimental Studies on Open-Hole Compressive Strengths of Thin-Ply CFRP Laminates (Toshio OGASAWARA, Tokyo University of Agriculture and Technology)

11:20-11:40 01-SIP OHT and OHC Static and Fatigue Behavior of Flame-retardant CFRP Laminates (Mototsugu TANAKA, Kanazawa Institute of Technology)

11:40-12:00 30-SIP Density functional theories for thermoplastic/thermosetting resins (Toshihiro KAWAKATSU, Tohoku University)

12:00-13:00 Lunch Break

Chair: Akinori YOSHIMURA, Nagoya University

13:00-13:20 10-SIP Thermal and mechanical properties and curing characteristics of TGDDM and DGEBA with different amount of DDS (Keiichi SHIRASU, Tohoku University)

13:20-13:40 07-SIP Mechanical properties of flame-retardant resin from multicomponent epoxy using molecular dynamics simulations (Akihito ITO, Toray Industries, Inc.)

13:40-14:00 02-SIP Quantum Chemical Calculations Combined with Molecular Reaction Simulations for Multiscale Modeling of Composite Materials (Naoki KISHIMOTO, Tohoku University)

14:00-14:20 22-SIP Damage propagation analyses of OHT specimens of CFRP laminate by stress analysis system using XFEM (Toshio NAGASHIMA, Sophia University)

14:20-14:40 Break Time

Chair: Keiichi SHIRASU, Tohoku University

14:40-15:00 04-SIP Damage simulation of CFRP laminates under low velocity impact (Akinori YOSHIMURA, Nagoya University)

15:00-15:20 24-SIP Evaluation of effect of ply thickness of on notched strength of composite laminates (Ryo HIGUCHI, The University of Tokyo)

15:20-15:40 09-SIP Multiphysics Modeling for CFRP Flammability Using FDS-FEM (Masaaki NISHIKAWA, Kyoto University)

15:40-16:00 08-SIP Experimental investigation on the strength properties and fracture mechanism of flame retardant CFRP (Hiroyuki OGUMA, National Institute for Materials Science)

16:00-16:20 Break Time

Chair: Ryo HIGUCHI, The University of Tokyo

16:20-16:40 16-SIP Numerical simulation for Fatigue Damage Behavior for CFRP laminates (Jun KOYANAGI, Tokyo University of Science)

16:40-17:00 03-SIP Meso-scale numerical simulation for efficient structural design of CFRP structures (Tomohiro YOKOZEKI, The University of Tokyo)

17:00-17:20 17-SIP Effect of interaction of gaps on compressive strength of automated-fiber-placement manufactured laminates (Hiroshi SUEMASU, JAXA)

17:20-17:40 29-SIP Effect of Gaps and Overlaps on the strength of thin-ply CFRP laminates manufactured by AFP (Yuichiro AOKI, JAXA)

17:40-18:00 05-SIP Optimization of curvilinear fiber trajectory and thickness for automated fiber placement (Ryosuke MATSUZAKI, Tokyo University of Science)

July 21st, 2022

＜Online attend via WebEX＞

URL: https://jisedai.webex.com/jisedai/j.php?MTID=m51c8c8a47813fbfe4d53124dbc831dfb

Meeting Number: 2510 230 0250

Password: Vxr2XMmpw33

Chair: Tomohiro YOKOZEKI, The University of Tokyo

Plenary Chair: Tomonaga OKABE, Tohoku University

09:30-10:00 48-USA A Novel Discrete, Mesoscale Modeling Framework for the Simulation of the Damaging and Fracturing Behavior of Composites (Marco SALVIATO, University of Washington)

10:00-10:30 21-USA Micromechanics of Functionally Graded Materials (Seiichi NOMURA, The University of Texas at Arlington)

10:30-11:10 49-Plenary Length and Time Scale Considerations for Impact Damage to Composite Structures (Hyonny KIM, UC San Diego)

11:10-11:40 13-USA Effective Properties of Carbon Fiber Polymer Matrix Composites Undergoing Thermal Decomposition (Olesya I. ZHUPANSKA, The University of Arizona)

11:40-12:10 45-EU Correlation of local microstructural features to fibre break development during longitudinal tensile failure (Yentl SWOLFS, KU Leuven)

12:10-12:40 39-EU Durability of composite systems: Modelling of Mechanical Relaxation Process (Antonio. T. MARQUES, the University of Porto)

12:40-13:30 Lunch Break

Chair: Tomonaga OKABE, Tohoku University

Plenary Chair: Tomonaga OKABE, Tohoku University

13:30-14:10 42-Plenary Multiscale analysis of very large composite structures (Silvestre. T. Pinho, Imperial College London)

14:10-14:40 Break Time

14:40-15:10 46-EU The invention of carbon fibres: an exciting history asking for further exploration (Ignaas VERPOEST, KU Leuven)

15:10-15:30 Break Time

Chair: Toshio NAGASHIMA, Sophia University

15:30-16:00 37-EU On a structural battery composite electrode – effects of state of lithiation on mechanical performance (Leif E. ASP, Chalmers University of Technology)

16:00-16:30 44-EU Combining Nano and Fibre Reinforcement in Polymer Matrix Composites (Karl Schulte, Hamburg University of Technology)

16:30-17:00 43-EU A comprehensive framework for the design and monitoring of composite structures under cyclic loadings (Marino QUARESIMIN, University of Padova)

17:00-17:20 Break Time

17:20-17:50 41-EU The role of constituents on the compressive strength of composites (Soraia PIMENTA, Imperial College London)

17:50-18:20 38-EU Deconvoluting microstructural organisation in unidirectional composites (Clemens DRANSFELD, Delft University of Technology)

July 22nd, 2022

＜Online attend via WebEX＞

URL: https://jisedai.webex.com/jisedai/j.php?MTID=mc0b018b63068602b0a5c888f8c91b91a

Meeting Number: 2516 998 5745

Password: Mu8Bmmhrs33

Chair: Mototsugu TANAKA, Kanazawa Institute of Technology

09:10-09:30 11-JAPAN Constructing crosslinked epoxy resins and investigation of mechanical properties with molecular dynamics simulations (Yinbo ZHAO, Tohoku University)

09:30-09:50 31-JAPAN Analysis of crosslinking reaction process of network polymers using quantum chemical calculation and its application to reaction simulation (Yingxiao XI, Tohoku University)

09:50-10:10 15-JAPAN Molecular Shape-Driven Segregation in Epoxy Resin (Satoru YAMAMOTO, Kyushu University)

10:10-10:30 19-JAPAN Effect of Si-O-C bond formation on cycloaliphatic epoxy-thiol-silica nanocomposites provided from perhydropolysilazane (Reiko SAITO, Tokyo Institute of Technology)

10:30-10:50 20-JAPAN Organic-silica composites with homogeneously dispersed silica nanodomains in a polymer matrix without covalent bonding between silica and polymer (Shinya WATANABE, Tokyo Institute of Technology)

10:50-11:10 Break Time

11:10-11:30 23-JAPAN Titanium Carbide Particle Reinforced Titanium Matrix Composites via Cellulose Nanofiber Precursor (Hiroki KURITA, Tohoku University)

11:30-11:50 34-JAPAN Bearing strength of high performance Thin-Ply fibre metal laminates (B. KOETTER, Kyoto University)

11:50-12:50 Lunch Break

Chair: Prof. Jun KOYANAGI, Tokyo University of Science

12:50-13:20 31-USA An out-of-autoclave method for manufacturing composite laminates with interlaminar nanofiller reinforcement aligned by magnetic fields (Namiko YAMAMOTO, The Pennsylvania State University)

13:20-13:40 12-JAPAN Curvilinear smoothed particle hydrodynamics for elasticity problem (Huachao DENG, Tohoku University)

13:40-14:00 26-JAPAN Numerical evaluation of intra-laminar fatigue damage of CFRP laminates considering the effects of ply thickness (Ryoma AOKI, The University of Tokyo)

14:00-14:20 33-JAPAN Compression-after-impact test analysis of CFRP laminate by FEM using a zig-zag type cohesive zone model (Chenyu WANG, Sophia University)

14:20-14:40 Closing (Tomonaga OKABE, Tohoku University)