

The 2nd Japan-China-Korea Joint Symposium on Composite Materials
Symposium Timetable

WEB: <https://www2.kanazawa-it.ac.jp/compos/2nd-JCK-joint/index.html>

Kanazawa Chamber of Commerce and Industry
Kanazawa, Japan, October 6-8, 2023

Organized by the Japan Society for Composite Materials (JSCM, <http://www.jscm.gr.jp/>)
in cooperation with the Chinese Society for Composite Materials (CSCM, <http://www.csfc.org.cn>)
and the Korean Society for Composites Materials (KSCM, <http://www.kscm.re.kr/>)

Excursion (Oct 6)

Time	
9:30	Registration
10:00	Leave for excursion
	<u>Kanazawa city excursion</u>
13:30	To the symposium venue
14:00	Lunch (Room A)

Day 1 (Oct 6)

Time	
14:30	Registration
15:00	Opening remarks (Room B)
15:20-17:00	Afternoon 1 session (2 rooms)
17:00-20:00	Welcome reception (Room A)

Day 2 (Oct 7)

Time	
9:30	Registration
10:00-11:00	Plenary lecture 1
11:00-12:00	Plenary lecture 2
12:00-13:00	Lunch time
13:00-14:20	Afternoon 1 session (3 rooms)
14:20-14:40	Break
14:40-15:40	Afternoon 2 session (3 rooms)
15:40-16:00	Break
16:00-17:00	Afternoon 3 session (3 rooms)
17:00	To the symposium banquet
18:00-21:00	Banquet (Kanazawa New Grand Hotel) https://www.new-grand.co.jp/en_about

Day 3 (Oct 8)

Time	
10:00-11:00	Plenary lecture 3
11:00-12:00	Poster session (2 rooms)
12:00-13:00	Lunch time
13:00-14:20	Afternoon 1 session (3 rooms)
14:20-14:40	Break
14:40-16:00	Afternoon 2 session (3 rooms)
16:00	Fairwell remarks (Room A)

The 2nd Japan-China-Korea Joint Symposium on Composite Materials

Symposium Program

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Excursion (Oct 6)

Time	Place
9:30	Registration
	Leave for excursion (by bus) (Meeting place: Kanazawa Chamber of Commerce and Industry (Venue)) *Please complete the registration on-site before the excursion
10:00	Tour Location: Kanazawa city excursion *The fee for the excursion is included in the registration fee.
13:30	To the symposium venue
	Lunch *The lunch box is provided for only the participants of the excursion tour. (Room A)
13:30-14:30	

Day 1 (Oct 6)

Time	Room A (1st floor hall)	Room B (2nd floor)	Room C (2nd floor)
14:30	Registration		
15:00	Opening remarks (Room B)		
Afternoon 1 Chair		Chair: Longbiao Li (Nanjing University of Aeronautics and Astronautics/China)	Chair: Masayuki Nakada (Kanazawa Institute of Technology/Japan)
15:20-15:40		1B01 Electrophoretic Preparation of HAp/collagen Composite Fiber Bundles as Artificial Bone Unit, <u>Mototsugu Tanaka</u> (Kanazawa Institute of Technology), Ken Komatani	1C01 In-situ Thermal Stress Estimation of W/Cu Composite in High Temperatures Cycling by Neutron Diffraction Using Time-of-Flight Method, <u>Masayuki Nishida</u> (Kobe City College of Technology), Stefanus Harjo (Japan Atomic Energy Agency), Takuro Kawasaki
15:40-16:00		1B02 Synergetic Effect of Boron Nitride and Alumina on the Thermal Conductivity of Particle-Filled Polymer Composites, <u>Kazuaki Sanada</u> (Toyama Prefectural University), Koki Hase	1C02 Development of Analysis Technology for Application of Digital Volume Correlation Method to Composite Materials, <u>Makoto Murakoshi</u> (Kyushu University), Shigeki Yashiro, Sota Onodera
16:00-16:20		1B03 Effect of Mesh Interlayers on Damage Accumulation in Angle-plyed CFRP Laminates under Post-impact Fatigue, <u>Havato Nakatani</u> (Osaka Metropolitan University)	1C03 Analysis of AE Characteristic by Fiber Breakage of Single Carbon Fiber Reinforced Composites, <u>Kazuki Yamamoto</u> (Kochi University of Technology), Tatsuro Kosaka
16:20-16:40		1B04 Relationship between Fracture Behavior and Applied Energy to Ultrasonic CFRTWP Welding Joint, <u>Liu Tong</u> (Nagoya University), Akinori Yoshimura, Masahiro Arai, Keita Goto	1C04 Development of Built-in EFPI Sensors For Measuring Small Thermal Strain of CFRP, <u>Hiroki Tanaka</u> (Kochi University of Technology), Tatsuro Kosaka, Yoneta Tanaka
16:40-17:00		1B05 Effect of Surface Pretreatment on Interlaminar Fracture Toughness of Dissimilar Bonding of CF/PEEK laminates and Aluminum Alloys, <u>Kaori Komatani</u> (Waseda University), Kazuki Yokota, Atsushi Hosoi, Hiroyuki Kawada	1C05 Delamination Detection of CFRP Laminates by Rayleigh Scattering-Based Sensor, <u>Seira Nakajima</u> (Kochi University of Technology), Tatsuro Kosaka
17:00-20:00	Welcome Reception (Room A: 1st floor hall)		

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Symposium Program

Day 2(Oct 7)

Time	Room A (1st floor hall)	Room B (2nd floor)	Room C (2nd floor)
9:30	Registration		
10:00-11:00 (60min)	Plenary Lecture 1: Towards Life-Cycle Structural Health Monitoring of Composites Enabled by Ferromagnetic Fiber	Speaker: Hua-Xin Peng (Zhejiang University, China)	Chair: Jinsong Leng (Harbin Institute of Technology)
11:00-12:00 (60min)	Plenary Lecture 2: Advancements in Natural Fiber Polymer Composites toward Sustainability	Speaker: Jung-il Song (Changwon National University, Korea)	Chair: Jin-Hwe Kweon (Gyeongsang National University)
12:00-13:00	Lunch time		
Afternoon 1 Chair	Chair: Yongbum Choi (Hiroshima University/Japan)	Chair: Fanzhu Li (Beijing University of Chemical Technology/China)	Chair: Shigeki Yashiro (Kyushu University/Japan)
13:00-13:20	2A01 Estimate Thermal Residual Stress in Ceramic-Matrix Composites from Hysteresis Loops, <u>Longbiao Li</u> (Nanjing University of Aeronautics and Astronautics)	2B01 Effect of Ply-Thickness and Interleaf Layer on the Lightning Strike Damage Behaviour to CFRP Laminates, <u>Yu Fuiisawa</u> (Tokyo University of Agriculture and Technology), Yutaro Nishikawa, Yoshiyasu Hirano (JAXA), Shintaro Kamiyama, Kazuyuki Aoki (SUBARU), Toshio Ogasawara (Tokyo University of Agriculture and Technology)	2C01 Improving Fatigue Properties of Composite Ply Drop-off by Ply Curving Termination, <u>Takumu Yoshida</u> (The University of Tokyo), Nao Ohashi, Shu Minakuchi
13:20-13:40		2B02 Giant Flexoelectric Effects of Porous Polymeric Composites: Modelling, Verification, and Applications, <u>Li-Hua Shao</u> (Beihang University), Dongze Yan, Jianxiang Wang (Peking University)	2C02 Evaluation of Thermal Property as a Damage Parameter in CFRP Cross-ply Laminate Subjected to Cyclic Loadings with Different Frequency, Shun Abe (Tokyo University of Science), Natsuko Kudo, Ryohei Fujita (Nagoya University), <u>M. J. Mohammad Fikry</u> (Tokyo University of Science), Huachao Deng, Hosei Nagano (Nagoya University), Jun Koyanagi (Tokyo University of Science), Shinji Ogihara
13:40-14:00	2A03 Friction and Wear Characteristics of C/C Composite Materials with Cellulose Nano Fibers Under Temperature and Electric Current Condition, <u>Yoshihito Ozawa</u> (Fukushima University), Yotsugi Shibuya (Akita University)	2B03 Tribological Performance of PEEK Composites Hybridized by Carbon Fibers and h-BN Nanosheets, Dongyan Liu (Institute of Metal Research, Chinese Academy of Sciences), Fei Yang, <u>Gouxin Sui</u>	2C03 Effect of Gap Location on Impact Damage Behavior of Thin-ply CFRP Laminates, <u>Naoki Takatsuka</u> (Kyoto University), Benedikt Kötter, Kohei Yamada (Industrial Technology Center of Fukui Prefecture), Masaaki Nishikawa (Kyoto University)
14:00-14:20		2B04 Enhancing the Thermal Conductivity of the PITCH-Based Carbon Fiber/Epoxy Composite Structure through a Stitching Process, <u>Hun-Cheol Choi</u> (Gyeongsang National University), Yeong-Deok Noh, Jin-Hwe Kweon, Byeong-Su Kwak	2C04 Time-optimal Motion Planning of Robotic Filament Winding System for Composite Structures, <u>Jianhui Fu</u> (Hefei University of Technology), Lei Zu, Tao Yang, Qian Zhang, Guiming Zhang
14:20-14:40	Break		
Afternoon 2 Chair	Chair: Masaaki Nishikawa (Kyoto University/Japan)	Chair: Yun-Hae Kim (Korea Maritime and Ocean University/Korea)	Chair: Benedikt Koetter (Kyoto University/Japan)
14:40-15:00	2A05 Investigation on the Mechanical Behaviors of Composite Laminates under Biaxial Bending, <u>Junru Li</u> (Beihang University), Shibo Yan, Yiding Li, Weijie Zhang, Ying Yan	2B05 Evaluation of Very High Cycle Fatigue Property of Quasi-isotropic CFRP Laminate Using Ultrasonic Fatigue Testing Machine, <u>Yoshinobu Shimamura</u> (Shizuoka University), Takuya Hayashi, Tomoyuki Fujii, Keiichiro Tohgo	
15:00-15:20	2A06 Buckling and Overstress Competitive Failure of Composite Thin-walled Structures Under Combined Loads, <u>Libin Zhao</u> (Hebei University of Technology), Rong Pian (Beihang University), Fengrui Liu	2B06 Effect of Interlaminar Toughened Layer on Creep and Fatigue OHC Strengths of Carbon Fiber / Benzoxazine Quasi-isotropic Laminates, <u>Masayuki Nakada</u> (Kanazawa Institute of Technology), Yasushi Miyano, Yoko Morisawa, Takayuki Matsumoto (ENEOS Corporation)	2C06 Programmable Shape Memory Composites and 4D Printing: from Aerospace to Biomedical Applications, <u>Jinsong Leng</u> (Harbin Institute of Technology), Yanju Liu
15:20-15:40	2A07 Deployable Subsystem with a Large Folding Rate Based on Shape Memory Polymer Composites, <u>Chengjun Zeng</u> (Harbin Institute of Technology), Liwu Liu, Yanju Liu, Jinsong Leng	2B07 Hydrothermal Effects on Carbon Fiber Reinforced Epoxy Composites, <u>Fang-Liang Guo</u> (Chongqing University), Shao-Yun Fu	2C07 Multifunctional STF-Based Composite Yarn with Impact Resistance and Impact Monitoring, <u>Junshuo Zhang</u> (University of Science and Technology of China), Yu Wang, Xinglong Gong
15:40-16:00	Break		
Afternoon 3 Chair	Chair: Jinsong Leng (Harbin Institute of Technology/China)	Chair: Junji Noda (Kindai University/Japan)	Chair: Yoshinobu Shimamura (Shizuoka University/Japan)
16:00-16:20	2A08 Effect of Ag and FeO Films as a Susceptor on the Thermal and Mechanical Behavior of Induction-welded CF/PEEK Thermoplastic Composites, <u>Ji-Hwan Ha</u> (Gyeongsang National University), Van-Tho Hoang, Jin-Hwe Kweon, Byeong-Su Kwak	2B08 Fabrication and Characterization of PTFE-Based Reactive Materials Reinforced by Open-Cell Nickel Foam, <u>Zheng Li</u> (Beijing Institute of Technology), Tianbao Ma	2C08 High Gas Barrier Properties of Graphene/Elastomer Nanocomposites, <u>Shipeng Wen</u> (Beijing University of Chemical Technology), Long Zheng, Rui Zhang, Li Liu
16:20-16:40	2A09 Implementation of Active Radar Absorbing Composite Based on the Fluted Core Sandwich Structure, <u>Kwon-woo Park</u> (Gyeongsang National University), Won-Ryang Jeong, Jin-Hwe Kweon, Byeong-Su Kwak	2B09 Development of Eucommia Ulmoides Gum-Based Composites with Improved Mechanical and Damping Performances via Crystallization Behavior Regulation, <u>Xiuying Zhao</u> (Beijing University of Chemical Technology), Dexian Yin, Renwei Cao, Qi Wang, Yuhang Dong	2C09 Revealing the Failure Mechanisms of 2D Material Nanocomposites using Raman Spectroscopy, <u>Zheling Li</u> (Chongqing University/ University of Manchester), Mufeng Liu (University of Manchester), Xin Zhao (BTR New Material Group), Ian A. Kinloch (University of Manchester), Shao-Yun Fu (Chongqing University), Robert J. Young (University of Manchester)
16:40-17:00	2A10 Stealth Satellite Composite Structures with Impregnated STF for Hypervelocity Impact Shielding System, <u>Dong-Jun Hong</u> (Korea Aerospace University), Chang-Min Seok, Han-Na Jang, Jae-Won Sim, Shanigaram Mallesh, Young-Woo Nam	2B10 Fabrication of Millable Polyurethane-Based Composites with Superior Mechanical and Damping Performances, <u>Dexian Yin</u> (Beijing University of Chemical Technology), Mengyao Zhai, Ruiheng Jin, Guoqing Fu, Shikai Hu, Xiuying Zhao	2C10 Effect of Stitching and Patterned Graphite Sheet on the Thermal and Mechanical Behavior of Carbon Fiber/Epoxy Composite Laminates, <u>Gyu-beom Park</u> (Gyeongsang National University), Yeong-Deok Noh, Jin-Hwe Kweon, Byeong-Su Kwak
17:00	To the symposium banquet		
18:00-21:00	Banquet (Kanazawa New Grand Hotel, https://www.new-grand.co.jp/en/about)		

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Symposium Program

Day 3(Oct 8)

Time	Room A (1st floor hall)	Room B (2nd floor)	Room C (2nd floor)
10:00-11:00 (60min)	Plenary Lecture 3: Characterization of Transverse Crack and Delamination Propagation in CFRP Laminates Subjected to Cyclic Loading	Speaker: Masahiro Arai (Nagoya University, Japan)	Chair: Mototsugu Tanaka (Kanazawa Institute of Technology)
11:00-12:00	Poster Session (Rooms B, C)		
12:00-13:00	Lunch time		
Afternoon 1 Chair	Chair: Ning Hu (Hebei University of Technology/China)	Chair: Xinglong Gong (University of Science and Technology of China/China)	Chair: Yingdan Zhu (Ningbo Institute of Material Technology and Engineering, Chinese Academy of Sciences/China)
13:00-13:20	3A01 Numerical Simulation for Estimating Compressive Strength of Carbon Fiber / Phenylethynyl Terminated Polyimide, TriA-X Composite, <u>Ryota Kawakami</u> (Tokyo University of Agriculture and Technology), Satoru Yoshikawa, Mio Sato (JAXA), Yuichi Ishida, Toshio Ogasawara (Tokyo University of Agriculture and Technology)	3B01 Integrating Quantum Chemistry and Molecular Dynamics Simulation for Thermosetting Polymers: Thermophysical Properties and Curing Behavior, <u>Yukun Bai</u> (Tohoku University), Naoki Kishimoto, Yingxiao Xi, Gota Kikugawa	3C01 Molecular Simulation and Experimental Studies on Hydroxy Silicone Oil Modified Boron Nitride/ Silicone Rubber Composites for High Thermal Conductivity and Low Dielectric Loss, Caiwei Zhao (Beijing University of Chemical Technology), Xiuying Zhao, Huaqi Wang, <u>Sizhu Wu</u>
13:20-13:40	3A02 (Title change) Deployable Lenticular Tube Structure Based on Shape Memory Polymer Composites, <u>Zhengxian Liu</u> (Harbin Institute of Technology), Liwu Liu, Yanju Liu, Jinsong Leng	3B02 A Crosslinking Kinetic Model Considering Reversion Effect with Verification and Its Application in Thick Rubber Vulcanization Process, <u>Fanzhu Li</u> (Beijing University of Chemical Technology), Meimei Chen, Xiaolin Li, Liqun Zhang	3C02 Study on the Salt Spray Resistance of Silver-Plated SiO ₂ via Self-Assembled Mercapto Inhibitor, <u>Xiaoming Shao</u> (Beijing University of Chemical Technology), Lijie Yin, Liang He, Wencai Wang
13:40-14:00	3A03 Post-Impact Fatigue Simulation of CFRP Laminates, <u>Dongwon Ha</u> (Seoul National University), Taeri Kim, Gun Jin Yun	3B03 Evaluation of Degree of Cure during Post-Curing Process Using Optical Fiber Sensors, <u>Kansei Shiota</u> (Kochi University of Technology), Tatsuro Kosaka, Genko Fujioka (National Institute of Technology, Kagawa College)	3C03 Plasma-Assisted Surface Functionalization of UHMWPE Fiber for Adhesion Improvement with Rubber Matrix, <u>Lijie Yin</u> (Beijing University of Chemical Technology), Xiaoming Shao, Wencai Wang
14:00-14:20	3A04 Progressive Pseudograin Damage Model of Short Fiber-Reinforced Plastics for Predicting Their Fatigue Life, Jae-Hyuk Choi (Seoul National University), Jewook Yang, Hyonwoo Pang, Jeong-Min Cho (Hyundai Motor Company), <u>Woong-Ryeol Yu</u> (Seoul National University)		3C04 Mussel-Inspired Environmentally Friendly Dipping System for Aramid Fiber and Its Interfacial Adhesive Mechanism with Rubber, <u>Wencai Wang</u> (Beijing University of Chemical Technology), Lijie Yin, Xiaoming Shao
14:20-14:40	Break		
Afternoon 2 Chair	Chair: Mototsugu Tanaka (Kanazawa Institute of Technology/Japan)	Chair: Wengcai Wang (Beijing University of Chemical Technology/China)	Chair: Hayato Nakatani (Osaka Metropolitan University/Japan)
14:40-15:00	3A05 Biomimetic Spiral Composite Fiber with Robust Electrical Stability and Strain-Independent Temperature Perception, <u>Jianpeng Wu</u> (University of Science and Technology of China), Shouhu Xuan, Xinglong Gong	3B05 Development of Thermal Fluid/Structure Coupled Analysis on CFRP Flammability, <u>Masaaki Nishikawa</u> (Kyoto University), Ryota Shinohara	3C05 Manufacturing and Application of Flexible Piezoelectric Fiber Composite Actuator Device for Rotor Twist Control, Jiahao Lu (Nanjing University of Aeronautics and Astronautics), <u>Hongli Ji</u> , Chao Zhang, Chongcong Tao, Jinhao Qiu
15:00-15:20	3A06 High-performance Aramid Nanofiber Networks Composite Based on Micro-structure Design for Multi-functional Protection, <u>Jianyu Zhou</u> (University of Science and Technology of China), Sheng Wang, Xinglong Gong		3C06 Composite Film with Electrothermal/Magnetic Dual-mode Actuation, <u>Shouhu Xuan</u> (University of Science and Technology of China)
15:20-15:40	3A07 Effect of Fiber Content, UV-irradiation, and Surface Coating on Tensile properties of Wood Plastic Composites, <u>Wycliffe Ondiek</u> (Yamaguchi University), Masaki Iwamoto, Maki Adachi (Renias), Arnaud Macadre (Yamaguchi University), Koichi Goda		3C07 Magnetorheological Elastomer Composite Based Multi-Functional E-skins with Thermal-Magnetic-Mechanical Monitoring Performance, <u>Shuai Liu</u> (University of Science and Technology of China), Sheng Wang, Xinglong Gong
15:40-16:00	3A08 Laser-induced Graphene enabled Multifunctional Polymeric Composites, <u>Sida Luo</u> (Beihang University), Guantao Wang, Mingguang Han	3B08 Equivalent Elastic Modulus Measurement of Cross-Ply Composite Plates Using Lamb Waves, Youqiang Jiang (Chongqing University), <u>Yaolu Liu</u> (Chongqing Key Laboratory of Heterogeneous Material Mechanics), Ning Hu (Hebei University of Technology)	3C08 Flexible Composite Sensor with a Controllable Piezo-Resistivity for Various Human Motion Detection, <u>Pei Huang</u> (Chongqing University), Yuan-Qing Li, Shao-Yun Fu
16:00	Fairwell remarks (Room A)		

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Symposium Program**

Poster Session (Day 3(Oct 8) 11:00-12:00)

Room B (2nd floor)	Room C (2nd floor)
B-1: Effect of Ultrasonic Application on Wettability of Carbon and Mg Alloy and Application to Metal Matrix Composite, <u>Taiki Takashina</u> (Hiroshima University), Hongxin Chen, Yongbum Choi, Gen Sasaki	C-1: Rubber Composite Nanoparticle Modified Polyester Resin Powder Coatings with Low Curing Temperature and High Toughness, <u>Haosheng Wang</u> (Institute of Process Engineering, Chinese Academy of Sciences), Jingkun Zhang, Yunfa Chen
B-2: Residual Stress Estimation of C/C Composite by X-ray Diffraction, <u>Kota Tsukahara</u> (Kobe City College of Technology), Masayuki Nishida	C-2: Development of Fabrication Method for CNT Block Reinforced Cu Matrix Composite and Their Thermal Property, <u>Bohan Li</u> (Hiroshima University), Yongbum Choi, Kazuhiro Matsugi, Kenjiro Sugio
B-3: Study on the Intensity Change of FRP-Concrete Interface of High and Low Temperature Circulating Sulphuric Acid Erosion, <u>Qu Li</u> (Ningxia University), Li Jin, Zhou Chunlin	C-3: Additive Manufacturing of Carbon Fiber Reinforced ZrB ₂ -SiC Ceramic Composites, Yehong Cheng (Hebei University of Technology), <u>Ning Hu</u>
B-4: Evaluation of Tensile Fracture Locations of Chopped Carbon Fiber Tape Reinforced Thermoplastic Resin with Different Fiber Lengths by X-ray Talbot-Lau Interferometry, <u>Atsumi Nishida</u> (Mitsui Chemicals), Kazuya Mizumoto, Takehiro Shirai (Kanazawa Institute of Technology), Takahiro Doki (Shimadzu Corporation), Kazutoshi Fujihara (Mitsui Chemicals)	C-4: A Study on the Possibility of Bulk Graphite Manufacturing Using Craft Black Liquor as a Binder, <u>Gibeop Nam</u> (Kumoh National Institute of Technology), Youngmin Hwang, Jae-Seung Roh
B-5: Enhanced Electrical and Thermal Performance of Alumina Filler Filled Silicone Rubber Composites for Cable Accessory, <u>Yang Xue</u> (Institute of Process Engineering, Chinese Academy of Sciences), Donghai Zhang, Yunfa Chen	C-5: Multibody Dynamics Analysis of Lightweight Manipulators for Automated Ropeway Structure Inspection, <u>Geun-Su Song</u> (Hanbat National University), Yeong-Hwan Jeon, Jae-Youl Lee (Korea Institute of Robotics & Technology Convergence), Kwang-Bok Shin (Hanbat National University)
B-6: Flexural Characteristics of 3D Printed Continuous Carbon Fiber Reinforced Composite Sandwich Structures with Corrugated Folder Cores under Quasi-Static Load, <u>Xin Liu</u> (Xi'an Jiaotong University), Jin Zhou, Ben Wang, Yugang Duan	C-6: Effect of the Number of Laminations on Tensile and Flexural Properties of Woven Fabric Composite, <u>Ryo Miyakawa</u> (Kanazawa Institute of Technology), Keishiro Yoshida
B-7: Optimization of Interleaved CFRP Composites Pipes with Amorphous Halloysite Nano-tubes for Superior Performance in Varying Environmental Conditions, <u>Yun-Hae Kim</u> (Korea Maritime and Ocean University), Sanjay Kumar	C-7: Microstructure and Characteristics Evaluation of TiB/Ti Composites by Using TiB Sheet, <u>Daisuke Umemoto</u> (Hiroshima University), Yongbum Choi, Tomoki Yamahata, Kazuhiro Matsugi
B-8: Progressive Fatigue Damage Analysis of Composite Laminates Using LaRC Criteria, <u>Taeri Kim</u> (Seoul National University), Dongwon Ha, Gun Jin Yun	C-8: The Protective Material Effect of the 66 kV Submarine Cable under Sea Waves and Currents Effect, <u>SungWoong Choi</u> (Gyeongsang National University), Sung-Kwon Lee
B-9: Ultrasonic Joining Behavior of UD-CF/Epoxy laminates and Al Plate using Phenoxo Energy Director, <u>Hiroto Morimoto</u> (Kobe City College of Technology), Daiki Tanabe, Kazuaki Nishiyabu (Kindai University)	C-9: Evaluation Method for Coupling Characteristics of Asymmetric U-shaped CFRP Structures, <u>Ayumi Yamamoto</u> (Kindai University), Junji Noda
B-10: CuCo ₂ S ₄ @MoS ₂ Core-shell Heterostructure Supported on 3D Framework as an Efficient, Cost-effective, and Durable Bifunctional Electrocatalyst for Overall Water Splitting, Xinfeng Zhu (Jeonbuk National University), Dinh Chuong Nguyen, <u>Nam Hoon Kim</u> , Joong Hee Lee	C-10: Mechanical Properties of Twisted Flax/PP UD Laminates, <u>Katsushi Honda</u> (Kindai University), Yui Kawai, Kisumi Tanaka, Junji Noda
B-11: Ni(II)-doped Fe ₃ O ₄ Pillared Ti ₃ C ₂ T _x Integrated Polypyrrole Composite for High Energy Density All-Solid Flexible Supercapacitors, Somesh T E (Jeonbuk National University), Duy Thanh Tran, Wansu Son, <u>Nam Hoon Kim</u> , Joong Hee Lee	C-11: Effect of MAPP Concentrations on the PP/PET Hybrid Composites, <u>Dong-Woo Lee</u> (Changwon National University), Orkhonbaatar Zolbayar, Jung-il Song
B-12: Ultra-flexibility Sodium-ion Secondary Batteries with High Energy/Power Density and Durability via Strategic Implementation of Inter-networked Nanofiber Architectures, Sambedan Jena (Jeonbuk National University), <u>Duy Thanh Tran</u> , Sehwi Park, Muhaiminul Islam, Nam Hoon Kim, Joong Hee Lee	C-12: Estimation on Bending Property of Twisted CF/PEEK Rod for Grid Structure, <u>Chihiro Nagai</u> (Kindai University), Mioha Tadano, Junji Noda, Kazuaki Nishiyabu
B-13: Implanting Single Sites of Niobium into Two-Dimensional Siloxene Nanosheets as An Effective Immobilization Host for Lithium Sulfur Batteries, <u>Kang Won Seo</u> (Jeonbuk National University), Thanh Tuan Nguyen, Rongrong Chu, <u>Nam Hoon Kim</u> , Joong Hee Lee	C-13: Bio-inspired Structural Coloration of Carbon Fiber Based on Cyclomatrix-type Polyphosphazene Thin Film Interference: Synergistically Enhancing Tensile Strength and Interface Properties of Colored Fiber, <u>Haibing Xu</u> (Ningbo Institute of Material Technology and Engineering, Chinese Academy of Sciences), <u>Yingdan Zhu</u> , Chun Yan, Dong Liu