November 9, Wednesday

Time	Room A (904)	Room B (905)
	Green Composites (GRN)	Polymer Matrix Composites (PMC) -I
	Chair: Y. Shimamura and H. Nakatani	Chair: S. Ogihara and M. Takagi
9:30 9:40	[GRN-1] Mechanical Properties of Silk/PBS Biodegradable Composites: Experiments and Analytical Prediction H. Nakatani (Tokyo Univ. of Science), T. Izaki, T. H. Nam, D. Y. Song, K. Yoshii and S. Ogihara	[PMC-1] Effect of Polyamide Veil layer on Quality and Mechanical Property of VaRTM CFRP Y. Yoshida (Tokyo Univ. of Science), Y. Hirano, Y. Iwahori and Y. Kogo
9:50 10:00	[GRN-2] The Dynamic Compression Properties of Kevlar Fiber-Reinforced Composites Z. Zhu (Harbin Inst. of Tech.), L. Hao and R. Wang	[PMC-2] Evaluation of Fiber/Matrix Interfacial Debonding Behavior using a Model Composite with Multiple Fibers S. Kobayashi (Tokyo Univ. of Science), H. Nakatani and S. Ogihara
10:10 10:20	[GRN-3] Fatigue Properties of Unidirectional Jute Spun Yarn Reinforced Biodegradable Resin Y. Shimamura (Shizukoka Univ.), H. Katogi, K. Tohgo and T. Fujii	[PMC-3] Mechanical Properties of Hybrid Multi-Axial Braided Composites M. Izukura (Kyoto Inst. of Tech.), A. Izukura, N. Yoshikawa, K. Sakoda, Y.Takai, A. Nakai and H. Hamada
10:30 10:40	[GRN-4] Tensile and Bending Properties of Jute Fabric/Mat Reinforced Unsaturated Polyester Matrix Composites E. A. Elbadry (Kyoto Inst. of Tech.), M. S. Aly-Hassan and H. Hamada	[PMC-4] Effect of Stitch and Reinforcement Yarn Types on Tensile Properties of Biaxial Weft Knitted Composites O. Demircan (Kyoto Inst. of Tech.), A. R. Torun, T. Kosui and A. Nakai
10:50- 11:10	**Opening Ceremony: Room C (906)** Anthony J. Vizzini (SAMPE President), T. Ishikawa (Japan Chapter SAMPE President), N. Takeda (JISSE12 Program Chair)	
11:10- 11:50	PL1: I. Verpoest (Katholieke Universiteit Leuven) Nano-Engineered Composites **Room C (906)**, Chair: N. Takeda	
11:50- 12:30	PL2: A. Offringa (Fokker Aerostructures) Development of an Aircraft Torsion Box with an Integrally Stiffened Thermoplastic Skin **Room C (906)**, Chair: Y. Iwahori	
12:30- 13:30	Lunch	
	Student Competition - Oral Presentation (STU) -I	Polymer Matrix Composites (PMC) -II
	Chair: Y. Kogo and S. Kobayashi	Chair: M. Miyauchi and A. Ohtani
13:30 13:40	[STU-1] Mechanical Properties of Pressure Vessel Using Resin Hybrid Braided Composites H. Hatakeyama (Heiwa Chemical Industry Co. Ltd.), K. Sakoda, A. Nakai and H. Hamada	[PMC-5] Effects of Fiber Commingled Ratio in Intermediate Materials on Mechanical Property of CF/PA Composites M. Takagi (Kyoto Inst. of Tech.), D. Hatano, A. Ohtani and A. Nakai

13:50 14:00	[STU-2] Numerical Analysis on Influence of Material Property for First Peak Load in Bearing Failure of CFRP Bolted Joints T. Nadabe (Univ. of Tokyo) and N. Takeda	[PMC-6] Effects of Nap between Layers on Mechanical Properties of Woven Fabric Composites J. Hirai (Tsudakoma Corp.), M. Takashima, A. Nakai and H. Hamada
14:10 14:20	[STU-3] Mode I Fracture Behavior of the CFRP Adhesive Bonded Joint under Cryogenic Temperature M. Takemoto (Tokyo Univ. of Science), A. Yoshimura, T. Ogasawara, T. Takaki, H. Nakatani and S. Ogihara	[PMC-7] Key to Low-VOC-FRP R. Amano (Kyoto Inst. of Tech.), O. Nishimura, H. Miyamoto,Y. Fujii and H. Nishimura
14:30 14:40	[STU-4] Diagnosis for CFRP Aircraft by Joule Heating Using Lightning Protection System Y. Suzuki (Tokyo Inst. of Tech.), A. Todoroki and Y. Mizutani	[PMC-8] Novel Asymmetric Addition-type Imide Oligomers (TriA-X) with KAPTON®-Type Structures for Carbon Fiber-Reinforced Plastics with High Heat Resistance M. Miyauchi (Kaneka Co.), Y. Ishida, T. Ogasawara and R. Yokota
14:50-15:20	Coffee Break	
15:20-15:50	PL3: J. Takahashi (Univ. of Tokyo) Strategies and Technological Challenges for Realizing Lightweight Mass Production Automobile by Using CFRTP **Room C (906)**, Chair: I. Verpoest	
15:50-16:20	PL4: H. Ohno (Nippon Graphite Fiber Corporation) High Performance Pitch-Based Carbon Fiber and its Applications **Room C (906)**, Chair: S. Iwai	
	Student Competition - Oral Presentation (STU) -II	Industrial Products Session
	Chair: Y. Kogo and S. Kobayashi	Chair: S. Iwai
16:20 16:30	[STU-5] Impact Force Identification of CFRP Stiffened Panels Using Radiated Sound Waves Y. Tanaka (Tohoku Univ.), S. Atobe and H. Fukunaga	(1) Sunwa Trading Corporation (S. Baba), TEPEX Advanced Thermoplastic and Process for Automobile (2) TAJIMA GmbH (R. Sato), Tobias Lembach (3) Kyokuto Boeki Kaisha Ltd. (A. Nogiwa), New Products at Kyokuto Boeki Kaisha (4) Ingersoll Ltd. (Daniele Martani), Modular, Simplified Head and Creel for Fiber Placement of Various Material Types (5) Untracor Inc./Tokyo Technologies Ltd. (S. Wright/S. Iwai), Ultracor Prepreg-Formed Honeycomb: Heritage and Development More presentations are welcomed and expected on site.
16:40 16:50	[STU-6] Magnetorheorogical Fluid Composites for Crashworthiness Applications A. C. Becnel (Univ. Maryland), W. Hu, G. Ngatu, G. J. Hiemenz and N. M. Wereley	
17:00 17:10	[STU-7] Study on Optimal Automotive BIW Structure Made by CFRP X. Zhang (Univ. of Tokyo), T. Goto, J. Takahashi, T. Matsuo and K. Uzawa	
17:20 17:30	[STU-8] Off-Axis Tensile and Compressive Creep Rupture Behavior of Cross-Ply CFRP Laminate at Different Temperatures H. Kawagoe (Univ. of Tsukuba) and M. Kawai	
17:40	End of the Day	

November 10, Thursday

Time	Room A (904)	Room B (905)
	Multi-Functional Materials (MUT) / Textile (Keynote)	Polymer Matrix Composites (PMC) -III
	Chair: A. Nakai and M. S. Aly-Hassan	Chair: M. Kawai and M. Nakada
9:20 9:30	[MUL-1] Crack Growth Analysis of the Interface of the Bonded Composites Functionalized with Imprint Lithography R. Matsuzaki（Tokyo Univ. of Science）, T. Suzuki, A. Todoroki and Y. Mizutani	[PMC-9] Multidimensional Scale Effect on Off-Axis Tensile Strength of Unidirectional CFRP Laminate K. Houda (Univ. of Tsukuba) and M. Kawai
9:40 9:50	[MUL-2] Tensile Properties of Self-healing Epoxy with Epoxy-containing MicroCapsules and Imidazoline Derivatives Curing Agent R. Wang（Harbin Inst. of Tech.）, H. Hu, W. Liu, L. Hao and X. He	[PMC-10] Off-Axis Ratcheting Behavior of Unidirectional Carbon/Epoxy Laminate under Asymmetric Cyclic Loading at High Temperature T. Suzuki (Univ. of Tsukuba) and M. Kawai
10:00 10:10	[MUL-3] Assessment of Manufacturing Limits and Process-Ability for Composite Structures with Embedded Energy Devices F. Gasco (Univ. of Washington) and P. Feraboli	[PMC-11] Evaluation of Viscoelastic Behavior of Matrix Resin for CFRP D. Hatori (Kanazawa Inst. of Tech.), M. Nakada, Y. Miyano and H. Katoh
10:20 10:30	[MUL-4] Tensile and Electromagnetic Properties of 2D Triaxial Braided Hybrid CFRP Composites M. S. Aly-Hassan (Kyoto Inst. of Tech.), Y. Takai, A. Nakai, H. Hamada, Y. Shinyama, Y. Hatsukade and S. Tanaka	[PMC-12] Evaluation of Fatigue Strength in Longitudinal and Transverse Directions of Unidirectional CFRP M. Nakada (Kanazawa Inst. of Tech.), K. Makino, D. Hatori, Y. Miyano and H. Katoh
10:40 10:50	[TEXTILE (Keynote)] Future Preforming with Textle Technologies T. Gries (Aachen Univ.), J. Klingele and M. Linke	[PMC-13] Prediction of OHC Strength for Quasi-isotropic CFRP Laminates by MMF/ATM K. Makino (Kanazawa Inst. of Tech.), D. Hatori, M. Nakada, Y. Miyano and H. Katoh
11:00 11:10		[PMC-14] Identification of Dominant Failure Modes in Off-Axis Notched Specimens Using the Digital Image Correlation Method Y. Li and M. Kawai (Univ. of Tsukuba)
11:25-12:15	PL5-1: M. Wisnom (Univ. Bristol) and K. Potter (NCC, UK) The UK National Composites Centre - Building on the Science Base to Support Industrial Exploitation of Advanced Composites PL5-2: M. Kiyama (METI, Japan) Towards Japanese National Composites Center **Room C (906)**, Chair: T. Ishikawa	
12:15-13:00	Lunch	

13:00-13:30	PL6: X. He (Halpin Inst. Tech) Recent Advances of Light-weight Composite Pressure Vessels for Aerospace Application **Room C (906)**, Chair: K. Kageyama	
	Structural Health Monitoring / NDE (SHM) -I	Polymer Matrix Composites (PMC) -IV
	Chair: H. Murayama and S. Sugimoto	Chair: X. He and K. Iwata
13:30 13:40	[SHM-1] Effect of Cyclic Pre-Strain and Behavior of AE Generation in Low Cycle Fatigue Test of 316NG Stainless Steel M. Ohta (Tokyo Inst. of Tech.), Y. Mizutani, A. Todoroki and R. Matsuzaki	[PMC-15] Impact Properties of Carbon Fiber Reinforced Polycarbonate Composite M. Shinohara (Doshisha Univ.), Y. Fukushima, K. Tanaka and T. Katayama
13:50 14:00	[SHM-2] Effect of Temperature Change on Damage Detection of CFRP Laminates Using Electrical Resistance Change method D. Haruyama (Tokyo Inst. of Tech.), A. Todoroki, Y. Mizutani and R. Matsuzaki	[PMC-16] Effect of Homogeneous Low Voltage Electron Beam Irradiation (HLEBI) on Mechanical Properties in GFRP with Short Fibers M. C. Faudree (Tokai Univ.), S. Iizuka and Y. Nishi
14:10 14:20	[SHM-3] Pulse-Phase-Thermographic Non-Destructive Testing for CFRP Sample M. Ishikawa (Grad. Univ. for Adv. Studies), H. Hatta, Y. Habuka, S. Jinnai and S. Utsunomiya	[PMC-17] Impact Value of Sandwich Structural Composite CFRP/Polymer/CFRP Materials Cooled at Low Temperatures N. Tsuchikura (Tokai Univ.), S. Nanba, T. Yamamoto, H. Takei and Y. Nishi
14:30 14:40	[SHM-4] Strain Distribution Monitoring for CFRTP Single-lap Ultrasonic Welding Joint by Optical Fiber Sensor D. Wada (Univ. of Tokyo), H. Murayama, J. Takahashi and K. Uzawa	[PMC-18] Cyclic Hygrothermal Effects on Carbon Fiber Reinforced Epoxy Composites R. Wang (Harbin Inst. of Tech.), L. Jiang, W. Liu, X. Lv, L. Hao and X. He
14:50 15:00	[SHM-5] Damage Monitoring of Indentation Loaded Foam-Core Sandwich Beam Using Fiber-Optic Distributed Sensing J. Siivola (Univ. of Tokyo), T. Uezono, S. Minakuchi and N. Takeda	[PMC-19] Difference of Interfacial Properties of Carbon Fiber/Polyamide Model Composites among Three Kinds of Polyamide Resins S. Enoki (Doshisha Univ.), S. Mizuno, H. Honda, K. Tanaka, T. Katayama and K. Kurashiki
15:10 15:20	[SHM-6] Life Cycle Monitoring of L-Shaped CFRP Parts by Embedded Fiber Bragg Grating Sensors T. Umehara (Univ. of Tokyo), S. Minakuchi, Y. Ito and N. Takeda	[PMC-20] Short Time Surface Strengthening Methods as Final Treatments of Silicate Glasses Utilized for Advanced Technology K. Iwata (Tokai Univ.), S. Nanba, Y. Taira, N. Yamaguchi and Y. Nishi
15:30-15:50	Coffee Break	
15:50-17:30	Panel Discussion on "Energy Saving via Composite Materials" **Room C (906)**, Chair: G. Kimura (GH Craft) A. J. Vizzini (SAMPE Pres.), S. Beckwith (SAMPE Tech Editor), A. Offringa (Fokker Aerostructures), Z. Cui (SAMPE Beijing, Vice Chair)	
18:00-20:00	Banquet (Restaurant "Sosai Patio", Hotel Sun Route 2F)	

November 11, Friday

Time	Room A (904)	Room B (905)
	Structural Health Monitoring / NDE (SHM) -II	Polymer Matrix Composites (PMC) -V
	Chair: A. Todoroki and S. Takeda	Chair: H. Katoh and Y. Hirano
9:20 9:30	[SHM-7] Detectability of Impact Damage in Composite Pressure Vessels by Acoustic Emission Testing S. Sugimoto (Tokyo Inst. of Tech), M. Kobayashi, Y. Mizutani and A. Todoroki	[PMC-21] Damping Property of 0-3 Piezoelectric composites with Conducting Phase H. Zhang (Harbin Ins. of Tech.), X. He, R. Wang and L. Hao
9:40 9:50	[SHM-8] Resin Flow Monitoring for VaRTM Combining Electrical Measurementand Numerical Analysis M. Murata (Tokyo Inst. of Tech), R. Matsuzaki, A. Todoroki and Y. Mizutani	[PMC-22] Effect of Long Term Isothermal Aging on the Carbon/BMI Composites H. Katoh (JAXA), D. Lévêque, K. Hasegawa and J. Cinquin
10:00 10:10	[SHM-9] Cure Monitoring of CFRP Laminate by Optical-Fiber-Based Distributed Strain and Temeprature Sensing Technique Y. Ito (Univ. of Tokyo), K. Fujimoto, S. Minakuchi, T. Mizutani and N. Takeda	[PMC-23] Mechanical and Thermal Properties of Three-Dimensional Hollow Knitted Fabric Composite A. Ohtani (JAXA), S. Okumura, K. Hirobe, M. Kitamura, A. Nakai and K. Goto
10:20 10:30	[SHM-10] Wireless Strain Gage for Testing and Health Monitoring of Carbon Fiber Composites F. Gasco (Univ. Washington), P. Feraboli, J. Braun, J. Smith, P.Stickler and L. DeOto	[PMC-24] Study on Ultra-high-speed In-situ Observation Method of Interfacial Debonding in Tensile Fracture Behavior of UD Model Composite T. Hama (Kanazawa Inst. of Tech.), Y. Seto, M. Tanaka, H. Kusano, Y. Hirano, Y. Aoki, H. Saito and I. Kimpara
10:40 10:50	[SHM-11] Tire-Road Friction Estimation Based on the Tire Interior Surface Displacement K. Kohno (Tokyo Inst. of Tech), R. Matsuzaki, A. Todoroki and Y. Mizutani	[PMC-25] Capillary Fow Condition to Reduce the Micro-Void Formation during Resin Impregnation of Filaments Y. Mitsuyama (Kyoto Univ.), K. Yamaguchi, Y. Inoue, M. Hojo and M. Nishikawa
11:00 11:10	[SHM-12] Frequency Characteristics of Ultrasonic Response Detected by a Fiber Bragg Grating Sensor K. Kumakura (Tokyo Univ. of Science), A. Toyama, H. Tsuda, H. Nakatani and S. Ogihara	[PMC-26] Experimental Characterization of Polypropylene Non-Woven Fabric Composites K. Suna (Tokyo Metropolitan Univ.), S. Kobayashi and T. Yasuda
11:20- 11:50	PL7: N. Kawamura (Toyota Motor Co.) The Light Weight Body Structure Technologies of Lexus LFA **Room C (906)**, Chair: S. Beckwith	
11:50- 12:20	PL8: R. Schütz (BMW) Challenge for Introduction of Carbon Fibre into Mass-production Vehicle **Room C (906)**, Chair: Y. Yamaguchi	
12:20- 13:20	Lunch	

13:20-13:50	PL9: P. Ferabolli (Univ. of Washington) Carbon Fiber Strategy at Automobili Lamborghini: from Manual Lay-up to Automated Higher Volume Processes **Room C (906)**, Chair: T. Morimoto	
13:50-14:20	PL10: G. Kimura (GH Craft) Composite Structure, Design, Engineering & Manufacture Since 1970 **Room C (906)**, Chair: T. Ozaki	
14:20-14:40	Coffee Break	
	Structural Health Monitoring / NDE (SHM) -III	Polymer Matrix Composites (PMC) -VI
	Chair: K. Enomoto and Y. Okabe	Chair: Y. Ishida and J. A. Satterwhite
14:40 14:50	[SHM-13] R&D of Impact Damage Detection for Composite Airframe Structures Using Optical Fiber Sensors N. Hirano (Kawasaki Heavy Industries, Ltd.), H. Tsutsui, J. Kimoto, T. Itoh, T. Akatsuka, H. Sashikuma, N. Takeda and Y. Koshioka	[PMC-27] New Low Temperature/Short Curing Cycle Out-of-Autoclave Composite System J. C. Hughes (Toray Composites America, Inc.), N. Arai, A. P. Haro and J. A. Satterwhite
15:00 15:10	[SHM-14] Damage Detection of Composite Airframe Structures by Strain Mapping Using FBG Sensors through Life Cycles I. Takahashi (Mitsubishi Electric Corporation), K. Sekine, M. Kume, H. Takeya, Y. Iwahori, S. Minakuchi, N. Takeda and K. Enomoto	[PMC-28] Development of “TriA-SI” Polyimide / Carbon Fiber Composites Prepared From Highly Soluble Addition-type Imide Oligomer Y. Ishida (JAXA), T. Ogasawara and R. Yokota
15:20 15:30	[SHM-15] Overview of BOCDA-SHM System Development T. Yari (Mitsubishi Heavy Industries, LTD.), N. Saito, K. Hotate and K. Enomoto	[PMC-29] A New Measurement Method for Fick's Diffusion Coefficient on CFRP Water Absorption T. Morimoto (JAXA), T. Ikeshoji and T. Aoki
15:40 15:50	[SHM-16] Detection of Impact Strain Waves in CFRP Laminates by Smart Ultrasonic System with FBG Sensor and AWG Filter Y. Okabe (The University of Tokyo), N. Watanabe, M. Shimazaki, H. Soejima and T. Ogisu	[PMC-30] A Fundamental Study on Eectric Resistance Welding of CF/PEI M. Kawagoe (Tokyo Inst. of Tech), Y. Mizutani and A. Todoroki
16:00 16:10	[SHM-17] Development of the Damage Dagnosis Technology by Lamb Wave Evaluation K. Takahashi (Fuji Heavy Industries Ltd.), H. Soejima, T. Ogisu, Y. Okabe, N. Takeda and Y. Koshioka	[PMC-31] Effect of Fiber Discontinuity on Mechanical Properties in CFRP Laminates K. Nakaya (Tokyo Univ. of Science), H. Nakatani, A. Matsuba and S. Ogihara
16:20 16:30	[SHM-18] Delamination Detection Method for CFRP Based on Dispersion Change of Broadband Lamb Waves Considering Temperature Effect Y. Gorai (Tokyo Univ. of Science), Y. Okabe, M. Shimazaki, S. Ogihara, H. Soejima and T. Ogisu	[PMC-32] Evaluation of Interfacial Debonding Behavior in a Single Fiber Composite S. Iwata (Tokyo Univ. of Science), H. Nakatani and S. Ogihara
16:40	End of the Day	

November 9, Wednesday

[Note: Room D (907) is used as Tutorial Session. See the details at the Poster Session / Tutorial Session Program.]

Room C (906)	Room E (902)	Time
Automobile Applications (AUT) -I	Traditional Crafts (TRA) -I	
Chair: K. Uzawa and A. Sasaki	Chair: H. Hamada and Y. Takai	
[AUT-1] Basic Study on Joint Strength of Welding Joint for Carbon Fiber Reinforced Thermoplastics Y. Orito (Univ. of Tokyo), K. Uzawa, H. Murayama, J. Takahashi, K. Kageyama, T. Matsuo, I. Demachi, I. Ohsawa and M. Kanai	[TRA-1] Surface Shape Characteristics of Shellfish Pieces Used for Urushi Products Y. Shimode (Kyoto Inst. of Tech.), Y. Takahashi, A. Endo, C. Narita, Y. Takai, H. Nishimoto, K. Yamada, A. Goto H. Yasunaga and H. Hamada	9:30 9:40
[AUT-2] Vibration Welding of Carbon Fiber Reinforced Polypropylene A. Sasaki (Mitsubishi Rayon), T. Hayashi and K. Akiyama	[TRA-2] Wide Angle Reflection Properties of Urushi (Japanese Lacquer) Products and Black Injection Molded Article Y. Shimode (Kyoto Inst. of Tech.), Y. Takahashi, A. Endo, C. Narita, M. MurakamiI, Y. Takai, K. Yamada, A. Goto, H. Yasunaga and H. Hamada	9:50 10:00
[AUT-3] Study on Welding Joint Method for CF/PP T. Goto (Univ. of Tokyo), K. Uzawa, I. Ohsawa, K. Nagata, T. Matsuo and J. Takahashi	[TRA-3] Optical Characteristics of Shellfish Pieces Used for Urushi Products Y. Shimode (Kyoto Inst. of Tech.), Y. Takahashi, A. Endo, C. Narita, Y. Takai, H. Nishsimoto, K. Yamada, A. Goto, H. Yasunaga and H. Hamada	10:10 10:20
[AUT-4] Thunder Resistance of CFRTP for Automotive Body Y. Murakami (Univ. of Tokyo), A. Morita, I. Ohsawa, T. Matsuo, K. Uzawa and J. Takahashi	[TRA-4] Optical Characteristic of Gold Powder Processed by Traditional *Maki-e* Technique Y. Shimode (Kyoto Inst. of Tech.), Y. Takahashi, A. Endo , C. Narita, Y. Takai, K. Yamada, A. Goto, H. Yasunaga and H. Hamada	10:30 10:40
Opening Ceremony: Room C (906) Anthony J. Vizzini (SAMPE President), T. Ishikawa (Japan Chapter SAMPE President), N. Takeda (JISSE12 Program Chair)		10:50-11:10
PL1: I. Verpoest (Katholieke Universiteit Leuven) Nano-Engineered Composites **Room C (906)**, Chair: N. Takeda		11:10-11:50
PL2: A. Offringa (Fokker Aerostructures) Development of an Aircraft Torsion Box with an Integrally Stiffened Thermoplastic Skin **Room C (906)**, Chair: Y. Iwahori		11:50-12:30
Lunch		12:30-13:30
Automobile Applications (AUT) -II	Traditional Crafts (TRA) -II	
Chair: J. Takahashi and N. Hirano	Chair: H. Hamada and Y. Fukami	
[AUT-5] High Cycle Hot Press Process by CFRP with Rapid Curing Epoxy Resin M. Kobayashi (Honda Engineering Co., Ltd.) and Y. Tange	[TRA-5] Development of Stiffness Evaluation Method for Transporting Brush Y. Fukami (Murata Machinery.Ltd.), S. Kawabata and H. Hamada	13:30 13:40

[AUT-6] New Stampable CFRTP Sheet with Excellent Mechanical Properties N. Hirano (Toray Industries, inc.), A. Tsuchiya, T. Okabe, H. Sasaki, M. Hashimoto and M. Honma	[TRA-6] Highly Cultured Brush Manufactured by Traditional Brush Mixing Technique “KEMOMI” S. Kawabata (Kyoto Inst. of Tech.), T. Kamada, M. Nasu, K. Nakahara, H. Tsukuda and H. Hamada	13:50 14:00
[AUT-7] An Estimation of the Potential of Carbon Fiber Reinforced Thermoplastics for Car Weight Reduction K. Goto (Univ. of Tokyo), K. Uzawa, H. Murayama, K. Kageyama, K. Nagata, T. Matsuo, and J. Takahashi	[TRA-7] Mechanical Properties of Solder Welded Products by Traditional Metal Forming Process M. Nishina (Kyoto Inst. of Tech.), G. Sasaki, Y. Takai, A. Goto and H. Hamada	14:10 14:20
[AUT-8] Repair of Carbon Fiber Reinforced Polypropylene for Mass Production Automobile M. Tamaru (Univ. of Tokyo), T. Kin, I. Ohsawa, T. Matsuo, K. Uzawa and J. Takahashi	[TRA-8] Manufacturing Process of Japanese “Hatakanagu” Flag Ornament Based on Human Movement Analysis M. Nishina (Kyoto Inst. of Tech.), A. Goto and H. Hamada	14:30 14:40
Coffee Break		14:50-15:20
PL3: J. Takahashi (Univ. of Tokyo) Strategies and Technological Challenges for Realizing Lightweight Mass Production Automobile by Using CFRTP **Room C (906)**, Chair: I. Verpoest		15:20-15:50
PL4: H. Ohno (Nippon Graphite Fiber Corporation) High Performance Pitch-Based Carbon Fiber and its Applications **Room C (906)**, Chair: S. Iwai		15:50-16:20
Poster Session - Short Oral Presentation	Poster + Coffee	
Chair: S. Minakuchi	Chair: S. Minakuchi	
Two minutes' talk by each presentator See a separate list of presentators	Each poster presentator is requested to stay in front of his/her poster for discussion. Coffee will be served.	16:20 16:30 16:40 16:50 17:00 17:10 17:20 17:30
	End of the Day	17:40

November 10, Thursday

Room C (906)	Room D (907)	Time
Automobile Applications (AUT) -III	UK-Japan Session **(Closed)** -I	
Chair: C. Chang and H. Matsutani	Chair: M. Wisnom and T. Ogasawara	
[AUT-9] Investigation about Strain-Rate Dependence of the Flexural Behavior of Carbon Fiber Reinforced Polypropylene T.Matsuo (Univ. of Tokyo), J. Takahashi, K. Uzawa, M. Tamaru, T. Asakawa, and K. Kiriyama	9:00-9:10 Registration 9:10-9:20 Greetings, Introduction 9:20-9:50 Investigating the Toughness of CFRP Composites, P. Robinson (Imperial College), E. S. Greenhalgh, L. Iannucci, M. Laffan, C. A. McCarroll, S. T. Pinho and C. Rogers 9:50-10:10 Fatigue Delamination of Zanchor-Reinforced CF/Epoxy Laminate, M. Hojo (Kyoto University), T. Kusaka, T. Fukuoka and M. Ishibashi 10:10-10:40 Use of Micro-fasteners in Localized Reinforcement of Composite Structures, I.Partridge (Cranfield University) 10:40-11:00 Mechanical properties of composite laminates fabricated from aligned multi-walled CNT/epoxy prepreg, T. Ogasawara (JAXA), Y. Inoue and Y. Shimamura	9:20 9:30 9:40 9:50 10:00 10:10 10:20 10:30 10:40 10:50 11:00 11:10
[AUT-10] Recycling of CFRP for Mass Production Application T. Kirihara (Univ. of Tokyo), T. Kawashima, I. Ohsawa, T. Matsuo, K. Uzawa and J. Takahashi		
[AUT-11] Flow Simulation of Long-fiber Compound Using Particle Method H. Matsutani (Toray Industries, Inc.)		
[AUT-12 (Keynote)] Accelerating the Use of Composites in Automotive: Leveraging the Latest Design, Analysis, and Manufacturing PLM Technology S. Françoise (DASSAULT SYSTEMES)		
[AUT-13 (Keynote)] Next Generation Designs and Manufacturing Processes with Innovative Chemistries for an Electric Concept Car C. Chang (Huntsman Advanced Materials)		
PL5-1: M. Wisnom (Univ. Bristol) and K. Potter (NCC, UK) The UK National Composites Centre - Building on the Science Base to Support Industrial Exploitation of Advanced Composites PL5-2: M. Kiyama (METI, Japan) Towards Japanese National Composites Center **Room C (906)**, Chair: T. Ishikawa		11:25-12:15
Lunch		12:15-13:00

	UK-Japan Session **(Closed)** -II	
	Chair: K. Potter and M. Hojo	
PL6: X. He (Halpin Inst. Tech) Recent Advances of Light-weight Composite Pressure Vessels for Aerospace Application **Room C (906)**, Chair: K. Kageyama	13:00-13:30 The Role of Composite Architecture on Damage Tolerance and Fatigue, P. Hogg (Univ. of Manchester) and P. Potluri	13:00-13:30
Aerospace Applications (AER) -I	13:30-13:50 Multiscale Modeling and Simulation of Fiber Reinforced Polymer Matrix Composites, T. Okabe (Tohoku Univ.), M. Nishikawa, S. Yashiro and N. Takeda	13:30 13:40
Chair: P. Feraboli and S. Murase		
[AER-1] Damage of Carbon/Epoxy Composite Plates Subjected to Mechanical Impact and Simulated Lightning Strike P. Feraboli (Univ. of Washington) and H. Kawakami	13:50-14:20 Virtual Testing of Composites, M. Wisnom (Univ. of Bristol) and S. R. Hallett	13:50 14:00
[AER-2] Numerical Evaluation of Foreign Object Damage in SiC Fiber/Titanium Composite K. Yoshida (Univ. of Tokyo), T. Yokozeki, K. Fujiwara and T. Sato	14:20-14:40 The Impact Damage and the Low Compressive Strength of Composite Laminates, H. Suemasu (Sophia University) and M. Ichiki	14:10
[AER-3] High-Speed Projectile Impact Characteristic aginst Cantilever CFRP Laminates K. Nagakura (Tokyo Univ. of Science), A. Yoshimura, T. Ogasawara, H. Nakatani and S. Ogihara	(Short Break) 14:50-15:20 Modelling of Processing and Performance for Textile Composites, A. Long (Univ. of Nottingham), M. J. Clifford, I. A. Jones, L. Brown, A. Endruweit, F. Gommer, H. Lin,	14:20
[AER-4] Creep Deformation Behavior of an Orthogonal 3-D Woven SiC Fiber/SiC Matrix Composite at Elevated Temperature S. Chikamatsu (Tokyo Univ. of Science), T. Ogasawara, T. Aoki, H. Nakatani and S. Ogihara	M. Matveev and X. Zeng	14:30 14:40
[AER-5] The Effects on Tensile Strength by Adding Attachments in Conventional Composite Hybrid Joints P. H. Wang (Purdue Univ.) and R. Sterkenburg	15:20-15:40 Life Cycle Monitoring of CFRP Structures by Embedded Optical Fiber Sensor, S. Minakuchi (Univ. of Tokyo) and N. Takeda	14:50 15:00
[AER-6] High Performance Composite Reflectors for Telecom Space Antennas in MELCO S. Murase (Mitsubishi Electric Co.), H. Ohmine and K. Nakano	15:40-16:10 Approaches to the Automation of Composite Manufacture, K.Potter (Univ. of Bristol), D. Lukaszewicz, B. C. Kim and C. Ward	15:10 15:20
Coffee Break	16:10-16:30 Void Formation and Removal in an Anisotropic Woven Fiber during Resin Transfer Molding, R. Matsuzaki (Tokyo Univ. of Science) and A. Todoroki	15:30-15:50
Panel Discussion on "Energy Saving via Composite Materials" Room C (906), Chair: G. Kimura (GH Craft) A. J. Vizzini (SAMPE Pres.), S. Beckwith (SAMPE Tech Editor), A. Offringa (Fokker Aerostructures), Z. Cui (SAMPE Beijing, Vice Chair)	16:30-17:15 Summary Discussion	15:50-17:30
Banquet (Restaurant "Sosai Patio", Hotel Sun Route 2F)		18:00-20:00

November 11, Friday

Room C (906)	Room D (907)	Time
Aerospace Applications (AER) -II / Design & Analysis (DES) -I	Nano Composites (NAN) -I	
Chair: A. Offringa and H. Suemasu	Chair: N. Hu and A. Yoshimura	
[AER-7] Damage Behavior of CFRP Laminates with a Blind Fastener Subjected to Lightning Current Y. Hirano (JAXA), C. Reurings and Y. Iwahori	[NAN-1] Mechanical Properties of Composite Laminates Fabricated from Aligned Multi-Walled CNT/Epoxy Prepreg Kengo Nakamoto (Aoyama-Gakuin Univ.), T. Ogasawara, T. Tsuda, Y. Shimamura, Y. Inoue and T. Ogawa	9:20 9:30
[AER-8] Fatigue Behavior of Impact-Damaged Carbon Fiber/Toughened Epoxy Composites under Compressive Loading T. Ogasawara (JAXA), H. Katoh, S. Sugimoto and T. Ishikawa	[NAN-2] Prediction of Thermal Expansion Properties of Carbon Nanotubes Using Molecular Dynamics Simulations Alamusi（Chiba Univ.) and N. Hu	9:40 9:50
[AER-9] The Impact Damage and the Low Compressive Strength of Composite Laminates H. Suemasu (Sophia Univ.), M. Ichiki and Y. Aoki	[NAN-3] Interfacial Shear Strength Cryogenic Properties of Carbon Fiber Reinforced Nano-Silica Modified Epoxy/Composites Under Cryogenic Condition R. Wang (Harbin Inst. of Tech.), C. Zhang, L. Hao, W. Liu and X. He	10:00 10:10
[DES-1] Surrogate Model for Prediction of Fracture of Laminated CFRP for Structural Optimization A. Todoroki (Tokyo Inst. of Tech.) and T. Shinoda	[NAN-4] Numerical Simulation for Tensile Tests of Aligned Multi-Wall Carbon Nanotube/Epoxy Composites Processed Using a Hot-Melt Prepreg Method T. Tsuda (Univ. of Tokyo), T. Ogasawara, M. Nishikawa, K. Nakamoto, Y. Inoue, Y. Shimamura and N. Takeda	10:20 10:30
[DES-2] Lamborghini “Forged Composite®” Technology for the Suspension Arms of the Sesto Elemento P. Feraboli (Univ. Washington), F. Gasco, B. Wade, S. Maier, R. Kwan, A. Masini, L. DeOto and M. Reggiani		10:40 10:50
[DES-3] Finite Element Analysis of Delamination Growth Considering the Dependence of Fracture Resistance on Mixed-mode Ratio and Growth Direction A. Kondo (Sophia Univ.), H. Suemasu and Y. Aoki		11:00 11:10
PL7: N. Kawamura (Toyota Motor Co.) The Light Weight Body Structure Technologies of Lexus LFA **Room C (906)**, Chair: S. Beckwith		11:20- 11:50
PL8: R. Schütz (BMW) Challenge for Introduction of Carbon Fibre into Mass-production Vehicle **Room C (906)**, Chair: Y. Yamaguchi		11:50- 12:20
Lunch		12:20- 13:20

PL9: P. Ferabolli (Univ. of Washington) Carbon Fiber Strategy at Automobili Lamborghini: from Manual Lay-up to Automated Higher Volume Processes **Room C (906)**, Chair: T. Morimoto		13:20- 13:50
PL10: G. Kimura (GH Craft) Composite Structure, Design, Engineering & Manufacture Since 1970 **Room C (906)**, Chair: T. Ozaki		13:50- 14:20
Coffee Break		14:20- 14:40
Design & Analysis (DES) -II	Metal Innovation (MET)	
Chair: W. Jiao and T. Matsuda	Chair: R. Wang and Y. Watanabe	
[DES-4] Analysis of Elastic-Viscoplastic Properties of Ultra-Fine Plate-Fin Structures with Random Laminate Misalignment N. Yamamoto (Univ. of Tsukuba) and T. Matsuda	[MET-1] A Density Functional Theory Study of Hydrogen Adsorption on Rare-Earth Metal Decorated Graphene W. Liu (Harbin Inst. of Tech.), Y. Liu, R. Wang and L. Hao	14:40 14:50
[DES-5] Comparison and Discussion about Out-of-Pane Tensile Strength for UD-CFRP Laminate Obtained by 3-Point Bending Test Method and Direct Loading Test Method E. Hara (IHI Jet Service), T. Yokozeki, Y. Iwahori, H. Hatta and T. Ishikawa	[MET-2] Effect of Training Treatments on Damping Capacity in Mn-Cu Alloy Y. Suga (Nagoya Inst. of Tech.). Y. Watanabe, H. Sato, E. Miura-Fujiwara and Y. Nishino	15:00 15:10
[DES-6] Optimal Design of Lightweight Composite Pressure Vessel Using Artificial Immune Algorithm W. Jiao (Harbin Inst. of Tech.), R. Wang, W. Liu, F. Yang, X. Chen and X. He	[MET-3] Spark Free Cu/Al-Joing Reinforced by Caron Fibers Bundle S. Ishii (Tokai Univ.), A. Kasai, N. Harigae, N. Miwa and Y. Nishi	15:20 15:30
[DES-7] Study on Stacking Sequence Optimization of Stiffened Composite Panel with Constrain of Thermal Deformation T. Ozawa (Tokyo Inst. of Tech), A. Todoroki, Y. Mizutani and R. Matsuzaki		15:40 15:50
[DES-8] Homogenization Model for Thin CFRP Laminate Which Contains Microscopic Damage A. Yoshimura (JAXA)		16:00 16:10
[DES-9] Microscopic Stress Analysis at Free Edges of CFRP Laminates Based on a Homogenization Theory K. Goto (Univ. of Tsukuba) and T. Matsuda		16:20 16:30
	End of the Day	16:40