

M&P2005 PROGRAM

	Room A	Room B
	MONDAY, June 20	
8:20	Opening Address	
8:30	Otani Memorial Lecture: Macroscopic and Microscopic Scale Effects in Mechanical Behavior of Materials, T. Shioya, The University of Tokyo, (260) Chairperson: M. Asakawa	
9:15	Plenary Lecture I: Composite Materials for the 787, A. Miller & P. Stickler, The Boeing Company, (265) Chairperson: N. Takeda	
10:00	Coffee Break	
	PMC-I: Polymers and Polymer Matrix Composites Chairpersons: S. Ogihara and T. Kosaka	CAS-I: Advanced Casting Chairpersons: P. Kapranos and T. Haga
10:30	PMC-01: Making a Complex Three-dimensional Shape from Bamboo, O. Yamashita, H. Yokochi, Nagoya University; H. Imanishi, K. Kanayama, National Institute of Advanced Industrial Science and Technology, (162)	CAS-01: Semi-Solid Processing of A201 Aluminum Alloy, P. Kapranos, M. Farnsworth, K. Ridgway, University of Sheffield, (183)
10:45	PMC-02: Evaluation of Interfacial Strength Using Model Composites, S. Ogihara, T. Umesaki, Tokyo University of Science, (227)	
11:00	PMC-03: On Statistical Strength Characterizations of Kenaf Bast Fibers with Variable Cross-Sectional Geometries and Mesoscopic Internal Structures (A Preliminary Numerical Investigation from 2-D FEM Approach), K. Suzuki, Chiba Institute of Technology; K. Goda, Yamaguchi University, (207)	CAS-03: High Speed Twin Roll Caster for Aluminum Alloy Thin Strip, T. Haga, Osaka Institute of Technology; H. Watari, Oyama National College of Technology; S. Kumai, Tokyo Institute of Technology, (501)
11:15	PMC-04: Plastic Deformation Ability of High Strength Natural Fiber Green Composites, K. Goda, A. Gomes, T. Kaji, J. Ohgi, Yamaguchi University, (213)	CAS-04: Analysis of Semi-Solid Diecasting Runner-Gate System as a Function of Solid Fraction, A. Pola, R. Roberti, E. Bertoli, D. Furloni, University of Brescia, (223)
11:30	PMC-05: Development and Evaluation of Ramie/Starch FW Composites, T. Kosaka, H. Nakatani, K. Osaka, Y. Sawada, Osaka City University, (216)	CAS-05: Mechanical Properties of Heavy-Sectioned Ferritic Ductile Iron and Its Relation to Microstructural Features, Y. Iwabuchi, Kushiro National College of Technology; H. Narita, O. Tsumura, Japan Steel Works, Ltd., (4)
11:45	PMC-06: Improvement of Interfacial Adhesion in Bamboo Polymer Composite Enhanced with Micro-Fibrillated Cellulose, K. Okubo, T. Fujii, N. Yamashita, Doshisha University, (217)	CAS-06: Study on the Structure and Property of Purity Aluminum Refined with Salt Containing Ti and B Elements, Z. Henghua, T. Xuan, S. Guangjie, X. Luoping, Z. Xiannian, D. Haili, L. Minmin, Shanghai University, (219)
12:00	Lunch	
	PMC-II: Polymers and Polymer Matrix Composites Chairpersons: S. Somiya and V.P.W. Shim	CAS-II: Advanced Casting Chairpersons: P. Kapranos and T. Haga
13:30		CAS-07: Modification Mechanism of Rare-earth Element in Hypereutectic Al-Si Alloy, Z. Henghua, D. Haili, S. Guangjie, X. Luoping, Z. Xiannian, T. Xuan, Shanghai University, (220)
13:45	PMC-07: An Elongated Tetraikadecahedron Cell Idealization of the Microstructure of Rigid Polyurethane Foam, M. Ridha, V. P. W. Shim, L. M. Yang, National University of Singapore, (2361)	CAS-08: Developing Dies for Thixoforming 7075 Wrought Alloy, W. Jirattiticharoean, P. Kapranos, University of Sheffield, (225)
14:00	PMC-09: Influence of Exfoliated and Intercalated Clay Nanoplatelets on Thermophysical Properties of Unsaturated Polyester/Clay Nanocomposites, H. Miyagawa, A. K. Mohanty, R. Burgueño, L. T. Drzal, M. Misra, Michigan State University, (188)	CAS-09: Production of AZ31 Magnesium Alloy Strip in Melt Drag Process with Forming Roll, S. Nishida, T. Yamazaki, N. Ishikawa, M. Motomura, Waseda University, (44)
	Room A	Room B

14:15	PMC-10: Effects of Polycarbosilane Addition on the Mechanical Properties of Single-Walled Carbon Nanotube Solids, G. Yamamoto, M. Omori, Y. Sato, T. Takahashi, K. Tohji, T. Hashida, Tohoku University, (166)	CAS-10: Optimisation of Runner System to Minimise Defects in Aluminium Casting Process, S. Jamroonrat, S. Pitakthapanaphong, King Mongkut's Institute of Technology North Bangkok, (133)
		MEP-I: Mechanical Processing Chairpersons: Y. T. Im and S. Ito
14:30	PMC-11: Effect of Loading Rate on Mechanical Properties of CFRP Laminates, S. Ogihara, T. Mouri, Tokyo University of Science, (228)	MEP-01: A Novel Polishing Method Using Abrasive Dispersion Typed Functional Fluid, Y. Akagami, Akita Pref. Ind. Tech. Center; M. Muraoka, Akita University, (69)
14:45	PMC-12: A Rapid Cure Epoxy Resin for a RTM Process, T. Kamae, G. Tanaka, H. Oosedo, Toray Industries, Inc., (185)	MEP-02: The Effect of Ultrasonic Vibration for the Machining with Non-rotating Tool, S. Ito, National Inst. Adv. Ind. Sci. &Tech., (139)
15:00	PMC-13: Characteristic of Nonlinear Viscoelastic Behavior in Vinylester Resin, F. Ogawa, J. Koyanagi, H. Kawada, Waseda University, (137)	
15:15	PMC-14: Stress Wave Method for Identification of Viscoelastic Material Property Based on Finite-Element Inverse-Analysis, F. E. Gunawan, H. Homma, Y. Kanto, Toyohashi University of Technology; Y. Zhao, University of Washington, (249)	MEP-03: Finite Element Investigation of Multi-Phase Transformation within Carburized Carbon Steel, S. H. Kang, Y. T. Im, Korea Advanced Institute of Science and Technology (KAIST), (210I)

15:30

Coffee Break

	PMC-III: Polymers and Polymer Matrix Composites Chairpersons: K. Goda and H. Miyagawa	MEP-II: Mechanical Processing Chairpersons: S.N. Melkote and P. Kwon
16:00	PMC-15: Processing of Neat Polycaprolactone and Polycaprolactone-Tricalcium Phosphate Particulate Composites by Selective Laser Sintering for Bone Tissue Engineering Applications, B. Partee, S. Das, S. Hollister, University of Michigan, (258I)	MEP-05: Preliminary Investigation of Laser Assisted Mechanical Micromachining, R. Singh, S. N. Melkote, Georgia Institute of Technology, (173I)
16:15		
16:30	PMC-17: Effect of Water Absorption and Hydrolytic Degradation on Mechanical Properties for Polybutylene Succinate, T. Sakai, S. Somiya, Keio University, (61)	MEP-07: Adaptive Raster Cutter Path Scheduling for Free-form Surface Machining, P. Kayal, A. Ball, University of Birmingham, (59)
16:45	PMC-18: Electrical and Mechanical Properties of CFRP/TP Compound, K. Ogi, T. Nishikawa, Ehime University; Y. Okano, Matsushita Kotobuki Electronics Industries, Ltd., I. Taketa, Toray Industries, Inc., (17)	MEP-08: Dissolution Wear: Decomposition of Tool Material and Concentration Profile into Chip, T. K. Wong, P. Kwon, Michigan State University, (39)
17:00	PMC-19: Evaluation of Damage and Stress of Woven Carbon Fabric Laminates with Piezoelectric Particulate Epoxy Using Electric Properties., K. Kageyama, T. Yoshikawa, H. Kato, Saitama University, (129)	MEP-09: Effect of Cutting Tip Thickness and Friction Coefficient on Load Characteristic of Trapezoidal Edge Indentation to Aluminum Sheet, S. Nagasawa, S. Chaijit, Nagaoka University of Technology; M. Murayama, Iijima Manufactory, Co., Ltd.; Y. Fukuzawa, Nagaoka University of Technology; I. Katayama, Katayama Steel Rule Die Manufactory Co., Ltd., (5)
17:15	PMC-20: Quantitative Evaluation of the Effect of Carbonizing Recycling for Waste-CFRP by Life Cycle Assessment, T. Ishidate, S. Somiya, Keio University, (64)	MEP-10: Critical Depth of Cut and Specific Cutting Energy of a Micro-Scribing Process for Hard and Brittle Materials, J. J. Wang, Y. Y. Liao, National Cheng Kung University, (167)
17:30	PMC-21: Computer Simulation and Design of Deep Drawing Process for Laminated Composites, T. Naik, Z. Hu, South Dakota State University, (234)	MEP-11: Evaluation of Surface Defects of Railway Wheel Using Induced Current Focusing Potential Drop, S. J. Kwon, J. W. Seo, D. H. Lee, C. W. Lee, Korea Railroad Research Institute, (51)
17:45	PMC-22: On the Wavy Crack Propagation Behavior in Internally Pressurized Brittle Tube, K. Fujimoto, T. Shioya, The University of Tokyo, (46)	MEP-12: Development of New Piercing System for Small Holes by Continuous Striking of a Punch Using Ultrasonic Vibration, T. Takemasu, S. Yamasaki, Kyushu University, (23)

18:00

End

19:00

Executive Committee Meeting (Members only)

	Room A	Room B
	TUESDAY, June 21	
8:30	Short Oral Presentation for Posters (I) Chairperson: Y. Saotome	Short Oral Presentation for Posters (II) Chairperson: A. Nakai
9:30	Poster Session and Coffee Break	
10:15	Plenary Lecture II: Manufacturing at Multi-Scales, Jian Cao, Northwestern University, (263) Chairperson: K. Dohda	
11:00	Short Break	
11:15	Keynote-I: Development of High-Strain and Durable Air-Stable Ionomeric Polymer Transducers, D. J. Leo, B. Akle, M. Bennett, Virginia Polytechnic Institute and State University, (256) Chairperson: H. Asanuma	Keynote-II: Testing Epoxy Resins with the Tensile and Torsional Split Hopkinson Bar Techniques, A. Gilat, Ohio State University; R. K. Goldberg, G. D. Roberts, NASA Glenn Research Center, (259) Chairperson: T. Yokoyama
12:00	Lunch	
	SMS-I: Smart Materials and Structures, NDE Chairpersons: D. J. Leo and Y. Furuya	AWB-I: Advanced Welding and Bonding Chairpersons: Y. Suga and A. Suzumura
13:30	SMS-01: Using Photon for Non-destructive Testing of Thick Materials, R. Oishi, H. Nagai, National Institute of Advanced Industrial Science and Technology (AIST), (68)	AWB-01: Effect of Fillet Geometry to Joint Strength of Four-Pipe-Brazed Specimen for Rocket Nozzle Skirt, T. Ikeshoji, A. Suzumura, T. Yamazaki, Tokyo Institute of Technology, (128)
13:45	SMS-02: Measurement of Thin Film Elasticity Using Nanoscopic Contact Resonance of a Flat Tip in Sensitivity-Enhanced Atomic Force Acoustic Microscopy, M. Muraoka, S. Komatsu, Akita University; F. Izumida, Iwate Industrial Research Institute, (177)	AWB-02: Laser Welding of Dissimilar Metals between AZ31B and A5052-O, Y. Miyashita, R. Borrisutthekul, Y. Mutoh, Nagoaka University of Technology, (131)
14:00	SMS-03: Detection of Inclusion in Steel Sheet with Leaky Surface Acoustic Wave, H. Yamamoto, Y. Takishita, Hitachi Construction Machinery Co. Ltd., (141)	AWB-03: The Cleaning Effect of the Interlayer Metal on the Joining Surface during Braze Pressure Welding, Y. Inagaki, A. Suzumura, T. Ikeshoji, T. Yamazaki, Tokyo Institute of Technology, (150)
14:15	SMS-04: Research and Development of Multi-Ferroc Materials and Devices for Smart Systems, Y. Furuya, M. Hasegawa, T. Okazaki, Hiroasaki University; G. C. Lee, Research Institute of Industrial Science and Technology (RIST), Y. C. Park, Dong-A University, (254)	AWB-04: Automatic Welding System Using Speed Controllable Autonomous Mobile Robot, T. Kim, T. Suto, J. Kobayashi, J. Kim, Y. Suga, Keio University, (110)
14:30	SMS-05: Development of High Performance CFRP/Metal Active Laminates, H. Asanuma, O. Haga, M. Imori, Chiba University, (253)	AWB-05: Deformed Behavior on High Speed Welding Bead with Very Thin Aluminum Sheet, T. Masuko, Tokyo Metropolitan Industrial Technology Research Institute; Y. Kita, K. Kokubo, S. Ukita, Kogakuin University, (78)
14:45	SMS-06: Piezoelectric Properties of Sr ₂ -XCaxNb ₅ O ₁₅ (SCNN) Ceramics (0.05<X<0.35) for a Smart Patch, Y. Akimune, T. Sugiyama, K. Matsuo, National Institute of Advanced Industrial Science and Technology (AIST); R. J. Xie, National Institute for Materials Science, (12)	AWB-06: The Influence of the Solid-State Bonding Process on the Mechanical Integrity of Longitudinal Weld Seams, S. P. Edwards, Netherlands Institute for Metals Research (NIMR); A. J. den Bakker, J. L. Neijenhuis, Nedal Aluminium B.V.; W. H. Kool, L. Katgerman, Delft University of Technology, (221)
15:00		AWB-07: Brazing of Stainless Steel to Various Aluminum Alloys in Air, S. Liu, A. Suzumura, T. Ikeshoji, T. Yamazaki, Tokyo Institute of Technology, (157)
15:15	SMS-07: Processing and Characterization of Thin Film Shape Memory Alloys, A. Rabiee, J. W. Lee, North Carolina State University, (252I)	AWB-08: Improving Joint Properties of Friction Welded Joint of High Tensile Steel, M. Kimura, M. Kusaka, K. Seo, University of Hyogo; A. Fuji, National University Corporation-Kitami Institute of Technology, (10)
15:30	Coffee Break	

	Room A	Room B
	SMS-II: Smart Materials and Structures, NDE Chairpersons: S. L. Dos Santos e Lucato and H. Tobushi	PLF-I: Plastic Forming and Advanced Products Chairpersons: S. Matsuoka and K. Manabe
16:00	SMS-09: Thermomechanical Properties of Shape Memory Composites, H. Tobushi, Aichi Institute of Technology; S. Hayashi, Mitsubishi Heavy Industries, Ltd.; K. Hoshio, Y. Makino, Aichi Institute of Technology; N. Miwa, Churyo Engineering Co., Ltd., (242)	PLF-01: Solubility and Dissolution Rate of Ni Base Alloy to Molten Ag-Cu-Pd Brazing Filler Metal, T. Ikeshoji, Y. Watanabe, A. Suzumura, T. Yamazaki, Tokyo Institute of Technology, (140)
16:15		PLF-02: Finding the Optimum Parameters for Ultrasonic Welding of Aluminum Alloy, H. Imai, S. Matsuoka, Toyama Prefectural University, (26)
16:30	SMS-10: Fabrication, Characterization and Modeling of Porous NiTi Shape Memory Alloy, Y. Zhao, M. Taya, University of Washington; Y. Kang, Tohoku University; H. Izui, Nihon University, (218)	PLF-03: Ultrasonic Welding of Thin Alumina and Aluminum Using Inserts, T. Ishikuro, S. Matsuoka, Toyama Prefectural University, (41)
16:45		PLF-04: Experimental Study of Process Design System for Forward Extrusion of Spur Gear, J. H. Song, Korea Automotive Technology Institute; Y. T. Im, Korea Advanced Institute of Technology, (212)
17:00	SMS-12: Shape Morphing Truss Structure for Aerospace and Marine Applications, S. L. Dos Santos e Lucato, Rockwell International; M. McMeeking, A. G. Evans, University of California, Santa Barbara, (248)	PLF-05: Effect of "Additional Shear Strain Layer" on Mechanical Properties of Fine Drawn Wire, S. Kajino, M. Asakawa, Waseda University; N. Inakazu, Osaka Prefecture University, (89)
17:15	SMS-14: Quantitative Evaluation of Delamination in CFRP Laminates by Ultrasonic Wave Sensing Using Optical Fiber Sensors, Y. Okabe, J. Kuwahara, N. Takeda, The University of Tokyo; S. Kojima, Hitachi Cable Ltd., (262)	PLF-06: Thermoforming Process Simulation of Textile Composite Pipe Fitting by FEM, J. Ozaki, Kobe City College of Technology; K. Manabe, Tokyo Metropolitan University, (22)
18:30	Dinner Cruise Boarding at Pier 55 (Hotel Lobby at 18:00)	
19:00	Dinner Cruise (ends at 22:00)	

	Room A	Room B
WEDNESDAY, June 22		
	SMS-III: Smart Materials and Structures, NDE Chairpersons: A. Rabiei and S. Kishimoto	PLF-II: Plastic Forming and Advanced Products Chairpersons: T. Takemasu and K.T. Han
8:30		PLF-07: Metal Forming Analysis of the Muffler Tube in the Perforating Process, K. T. Han, Pukyong National University, Busan, (179)
8:45	SMS-15: Self Repair of Matrices, C. M. Dry, Natural Process Design. (246I)	PLF-08: Clarification of Twist Occurring in Curved Hat Channel Product of High Strength Steel Sheet, Y. Hirose, M. Asakawa, H. Utugi, H. Kimura, Waseda University; Y. Hujishiro, H. Yano, YUNIPRES Corporation, I. Hayashi, Waseda University, (90)
9:00	SMS-17: (Crack-healing + Proof Test): A New Methodology to Guarantee the Reliability of a Ceramics Component, M. Ono, W. Nakao, K. Takahashi, K. Ando, Yokohama National University; M. Nakatani, NHK SPRING Co., Ltd, (237)	PLF-09: Effect of Force Correction Algorithm Arising from Change of Tool Normal on Sheet Metal Forming Simulation, T. Hama, Waseda University, The Institute of Physical and Chemical Research; M. Asakawa, Waseda University; M. Takamura, A. Makinouchi, C. Teodosiu, The Institute of Physical and Chemical Research, (109)
9:15	SMS-18: [Crack-healing+Proof Test+In-Situ Crack-Healing]: A New Methodology to Guarantee the Structural Integrity of Ceramic Components, K. Ando, K. Takahashi, K. Furusawa, W. Nakao, Yokohama National University, (239I)	PLF-10: Grain-Refining Process of Magnesium Alloy Powder by Hot Roll Compaction, K. Itakura, K. Kaneko, S. Shiozaki, Kurimoto Ltd.; S. Nishigori, Y. Goho, Gohshu Co., K. Kondoh, RCAST, The University Tokyo, (264)
9:30		PLF-11: Stress and Strain Behaviors of Mg Alloy AZ31 in Plane Strain Compression, I. Yarita, T. Naoi, T. Hashizume, Chiba Institute of Technology, (11)
9:45	SMS-20: Effect of Crack-healing Applied Stress on Fracture Strength and Threshold Stress during Crack-healing Treatment, W. Nakao, K. Takahashi, K. Ando, Yokohama National University, (232)	PLF-12: Tensile Straightening of Superfine Wire and Residual Stress Measurement Using Focused Ion Beam, T. Yamashita, K. Yoshida, Tokai University, (83)
10:00	Coffee Break	
	SMS-IV: Smart Materials and Structures, NDE Chairpersons: K. Miyazawa and Y. Okabe	PLF-III: Plastic Forming and Advanced Products Chairpersons: Y. Yoshida and T. Ohashi
10:30	SMS-21: Crack-healing Ability and Behavior of Alumina Strengthened by SiC Particles and SiC Whiskers, T. Osada, K. Yamaue, W. Nakao, K. Takahashi, K. Ando, Yokohama National University, (238)	PLF-13: Deformation Analysis of Surface Crack in Rolling and Wire Drawing, T. Shinohara, K. Yoshida, Tokai University, (124)
10:45	SMS-22: Fabrication of Metallic Micro-Closed Cellular Materials., S. Kishimoto, N. Shinya, National Institute for Materials Science, (233)	PLF-14: FE Simulation on Blank Holder Control Using Friction Reducing Algorithm in Deep Drawing Process, K. Manabe, Y. Yamauchi, T. Yagami, Tokyo Metropolitan University, (127)
11:00	SMS-23: Characterization of the Liquid-phase Synthesized Fullerene Nanotubes and Nanowhiskers, K. Miyazawa, J. Minato, National Institute for Materials Science; T. Mashino, Kyoritsu College of Pharmacy; T. Yoshii, Nippon Sheet Glass Co.,Ltd.; T. Kizuka, R. Kato, University of Tsukuba; M. Tachibana, Yokohama City University; T. Suga, The University of Tokyo, (231)	PLF-15: Development of Sheet Hydroforming Simulation Program by Static Finite Element Method, T. Hama, M. Asakawa, T. Hatakeyama, H. Utsugi, Waseda University; A. Makinouchi, The Institute of Physical and Chemical Research, H. Amino, Y. Lu, Amino Corporation, (144)
11:15		PLF-16: Development of Thread Rolled Anti-loosening Bolts Based on the Double Thread Mechanism and a Performance Evaluation, T. Takemasu, H. Miyahara, Kyushu University, (25)
11:30	SMS-24: Development of a Real-Time Table Tennis Scoring System, W. H. Li, A. A. Mamun, P. B. Kosasih, G. Arndt, University of Wollongong, (247I)	PLF-17: Elastic Deformation of the Deep Drawing Die Supported by Multi Point, T. Ohashi, National Institute of Advanced Industrial Science and Technology (AIST), (114)
11:45	SMS-26: Crack Detection of Filament Wound Tank Using Embedded Small-diameter FBG Sensors, T. Mizutani, K. Hayashi, N. Takeda, The University of Tokyo; F. Namiki, K. Tanaka, IHI Aerospace Co., Ltd., (180)	PLF-18: Springback Control of Sheet Metal Air Bending Process, J. Wang, S. Verma, R. Alexander, Texas A&M University, (215)
12:00	Lunch	

	Room A	Room B
	SMS-V: Smart Materials and Structures, NDE Chairpersons: M.R. Caponero and T. Kosaka	NTM-I: Non Traditional Manufacturing Process Chairpersons: M. Asakawa and A. Manonukul
13:30		NTM-01: Finite Element Study of Effects of a Non-uniform Initial Density Distribution on Powder Forging Process, T. Asawapichayachote, J. Carmai, King Mongkut's Institute of Technology North Bangkok; A. Manonukul, National Metal and Materias Technology Center. (80)
13:45	SMS-27: Environmental Tests on a Reinforced Concrete with Embedded FBG Sensors, A. Brotzu, Univ. Rome, La Sapienza; M. R. Caponero, ENEA CR Frascati; D. Colonna, F. Felli, A. Paolozzi, I. Peroni, Univ. Rome, La Sapienza, (2611)	NTM-02: In-Situ Observation of Solidification and Melting Processes of Aluminum Alloy by Ultrasound, I. Ihara, D. Burhan, Y. Seda, Nagaoka University of Technology, (97)
14:00	SMS-29: Coupling Deformation Properties of Various Anti-Symmetrical Laminate Composites, M. Hojo, R. Hashimoto, A. Ogawa, Japan Aerospace Exploration Agency, (202)	NTM-03: Fabrication of Spiral Micro-Coil Utilizing LIGA Process, O. Shimada, S. Kusumi, SSM Co.,Ltd.; H. Mekaru, University of Hyogo; N. Sato, M. Shimizu, Juken Kogyo Co., Ltd.; M. Yamashita, Hyogo Prefectural Institute of Technology; T. Hattori, University of Hyogo, (142)
14:15	SMS-30: Fabrication of Highly Reliable Advanced Grid Structure, H. Takeya, T. Ozaki, Mitsubishi Electric Corporation; N. Takeda, The University of Tokyo, (184)	NTM-04: Newly Developed Manufacturing System of Pallets from Waste Plastics, T. Hiraba, R. Ebara, K. Shinagawa, K. Takeda, Kagawa Univ.; M. Hirai, Yamamoto Engineering Works Co. Ltd.; T. Nonomura, I. Morimoto, Tokushima Prefectural Industrial Technology Center, (171)
14:30	SMS-31: Damage Identification in CFRP Grid Structures by Strain Measurement with FBG Sensors, I. Takahashi, M. Amano, Y. Okabe, N. Takeda, The University of Tokyo; H. Ishii, Mitsubishi Electric Corporation, (187)	NTM-05: Twin-Roll Strip Casting and Structure-Control Rolling of AZ61 Magnesium Alloy, Y. Tanno, M. Asakawa, D. Lee, Waseda University; K. Matsuzaki, National Institute of Advanced Industrial Science and Technology; M. Kobayashi, Nagaoka University of Technology, (115)
14:45	SMS-32: Development of Fiber Optic Strain and Vibration Sensors, T. Kosaka, S. Komatsu, K. Osaka, Y. Sawada, Osaka City University, (176)	NTM-06: Nanofabrication of Micro-structures of Polymer Using Atomic Force Microscopy, N. Kawasegi, N. Takano, D. Oka, N. Morita, S. Yamada, Toyama University; K. Kanda, S. Takano, NACHI-FUJIKOSHI CORP.; T. Obata, Toyama Industrial Technology Center; K. Ashida, AIST, (87)
15:00	Closing Address	

M&P2005 PROGRAM

	Room C	Room D
	MONDAY, June 20	
8:20		
8:30		
9:15		
10:00	Coffee Break	
	ICS-I: Interfaces and Contact Surface Mechanics Chairpersons: Y. Mutoh and M. Iwasa	MMC-I: Metals and Metal Matrix Composites Chairpersons: T. Shioya and I. Fukumoto
10:30	ICS-01: Fretting Fatigue Strength and Life Estimation Considering the Fretting Wear Process, T. Hattori, M. Yamashita, N. Nishimura, Gifu University, (56)	MMC-01: Determining the Forming Limit Diagram of a Porous Tantalum Foam, P.S. Nebosky, S. R. Schmid, University of Notre Dame, (209)
10:45	ICS-02: 3-Dimensional Analysis of Deformation of Disk Wheel and Bolt Shaft Right-Angled Force of Wheel Bolt, T. Kagiwada, H. Harada, Hokkaido University, (77)	MMC-02: Kinetic Study on Boronized Duplex Stainless Steel, R. Hasan, I. Jauhari, Rafidah, University Malaya; H. Ogiyama, Ehime University; S. M. Yunus, R. D. Ramdan, N. R. N. Masdek, University Malaya, (31)
11:00	ICS-03: Effects of Humidity and Contact Material on Fretting Fatigue Behavior of an Extruded AZ61 Magnesium Alloy, A. Saengsai, S. Ishiniwa, Y. Satoh, Y. Miyashita, Y. Mutoh, Nagaoka University of Technology, (130)	MMC-03: Anodic Bonding and Its Interfacial Reaction between Metals and Ionic Conductor, G. Sasaki, K. Matsugi, O. Yanagisawa, Hiroshima University, (153I)
11:15	ICS-04: Joint Forces in Riveting of Plates, H. Kinoshita, K. Kaizu, University of Miyazaki, (198)	
11:30	ICS-05: Effect of Hydrogen Gas Environment on Fretting Fatigue Strength, M. Kubota, N. Noyama, C. Sakae, Y. Kondo, Kyushu University, (208)	MMC-05: Anisotropic Mechanical Properties of Extruded AZ System Magnesium Alloys, T. Takahashi, T. Murai, Sankyo Aluminum Industry Co., Ltd.; S. Matsuoka, Toyama Prefectural University, (106)
11:45	ICS-06: Fretting Fatigue Degradation Characterization in 7075-T6 Aluminum Alloy, S. R. Shinde, D. W. Hoepfner, University of Utah, (175)	MMC-06: Simulation of Infiltration of Molten Alloy to Porous Preform by Low Pressure, Y. B. Choi, G. Sasaki, Hiroshima Pref. Inst. Ind. Sci. Tech.; K. Matsugi, Hiroshima University; N. Sorida, S. Kondoh, Kolbenschmidt K..K.; T. Fujii, Hiroshima Pref. Inst. Ind. Sci. Tech.; O. Yanagisawa, Hiroshima University, (148)
12:00	Lunch	
	ICS-II: Interfaces and Contact Surface Mechanics Chairpersons: T. Hattori and T. Sawa	MMC-II: Metals and Metal Matrix Composites Chairpersons: G. Sasaki and S. Kobayashi
13:30	ICS-07: An Analysis on Singular Fields around an Interface Edge of Ceramic/Metal Joints Using Moire Interferometry Technique, S. L. Kumar, Y. Arai, E. Tsuchida, Saitama University, (42)	MMC-07: Effect of Oxide Film on the Reduction of Hydrogen Permeation Rate in Stainless Steel, T. Yamazaki, T. Ikesyoji, A. Suzumura, T. Naito, Tokyo Institute of Technology, (156)
13:45	ICS-08: Finite Element Stress Analysis and Strength Evaluation of Stepped-lap Adhesive Joint under Static Bending Moments, T. Sawa, Hiroshima University; K. Ichikawa, Yamanashi University; I. Higuchi, Kofu Josai High School, (85)	MMC-08: Fabrication of Composite Material Using Alumina Agglomerated Sludge and Aluminum Powder by Spark Plasma Sintering, I. Fukumoto, S. Mekaru, S. Shibata, K. Nakayama, University of the Ryukyus, (21)
14:00	ICS-09: Axisymmetric Stress Analysis and Strength of Bonded Shrink-fitted Joints of Solid Shafts Subjected to Torsional Loads, T. Sawa, Hiroshima University; M. Yoneno, Henkel Loctite (Japan) Corp., (93)	MMC-09: Tensile Strength of Aluminum Borate Whisker / AZ91D Magnesium Alloy Composites Prepared by Comp-casting Process, G. Sasaki, T. Shinoda, Hiroshima University; N. Fuyama, Western Hiroshima Pref. Industrial Res. Inst.; K. Matsugi, O. Yanagisawa, Hiroshima University, (152)
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14:15	ICS-10: Study on the Strength of GFRP/Stainless Steel Adhesive Joints Reinforced with Glass Mat, M. Iwasa, Hitachi Ltd., (98)	MMC-10: Effect of Fiber Surface Structure on Interfacial Reaction Between Carbon Fiber and Aluminium, K. C. Chang, K. Matsugi, G. Sasaki, O. Yanagisawa, Hiroshima University, (121)
14:30	ICS-11: Identification of Debond Size in Adhesively Bonded Lap Joint by Inverse Method, Y. Nakano, Suzuka National College of Technology; M. Katsuo, Shonan Institute of Tehnology, (101)	MMC-11: Evaluation of Design Strength and Residual Stress in Ceramic/Metal Joint, S. C. Huh, W. J. Park, S. H. Park, Gyeongsang National University, (103)
14:45	ICS-12: Bonding Dissimilar Materials by Exposure to an H ₂ O Ion Beam, Y. Setomoto, S. Yamashita, University of Hyogo; H. Ueda, K. Itoigawa, Tokai Rika Co., Ltd.; T. Hattori, University of Hyogo, (250)	MMC-12: Residual Stress and Its Effect on Yielding in SiC/Ti Plate, F. Zhou, Johns Hopkins University; R. Hashimoto, A. Ogawa, Y. Sofue, Japan Aerospace Exploration Agency, (244I)
15:00	ICS-13: Thermal Stress Analysis of Multi-Layered Electronic Assemblies, M. Katsuo, Shonan Institute of Technology; Y. Nakano, Suzuka National College of Technology, (119)	
15:15	ICS-14: Mechanical Properties of Dismantlable Adhesive Including Expansion Agents, C. Sato, Y. Nishikawa, M. Sugiura, Tokyo Institute of Technology, (168)	MMC(CMC)-13: The Effect of Pressure during Sintering on the Mechanical Properties of Hydroxyapatite, S. Kobayashi, W. Kawai, S. Wakayama, Tokyo Metropolitan University, (136)

15:30

Coffee Break

	APP-I: Advanced Powder Processing Technique Chairpersons: H. Miura and K. Maekawa	CMC-I: Ceramics and Ceramic Matrix Composites Chairpersons: Y. Matsuo and S. Wakayama
16:00	APP-01: A Numerical Study on Stresses in Graded Multilayers during Sintering and Cooling, K. Shinagawa, Kagawa University, (8)	CMC-01: A Theoretical Analysis of the Surface Strengthening of Ceramics and Glasses, Y. Matsuo, T. Shiota, K. Yasuda, Tokyo Institute of Technology, (192I)
16:15	APP-02: Laser Sintering of Low Alloy and Tool Steel Powders, M. Otsu, T. Fukunaga, Kumamoto University; M. Uemura, Kumamoto Industrial Research Institute; T. Takemasu, H. Miura, Kyushu University, (20)	
16:30	APP-03: The Effect of in-situ Formation of Al ₂ O ₃ or Fe ₃ AlC on the Structural and Mechanical Properties of FeAl Intermetallic Alloys, K. Isonishi, Shiga University; M. Hashii, Nagoya Municipal Ind. Res. Inst.; K. Ameyama, Ritsumeikan University, (30)	CMC-03: AE Monitoring of Microdamages in Bioceramics for Artificial Joints Under Simulated Body Environment, S. Wakayama, Y. Suzuki, T. Oshima, S. Kobayashi, Tokyo Metropolitan University, (94)
16:45	APP-04: Consolidation at Low Heat in Mechanically Alloyed Ti-Al Powders, T. Okabe, T. Kanameda, Hiroshima Institute of Technology, (67)	CMC-04: Strength Estimation with Weibull Statistics for Near-Stoichiometric SiC Monofilaments, T. Morimoto, JAXA; S. Ogihara, Tokyo University of Science, (205)
17:00	APP-05: The Selective Laser Sintering Method Using Titanium Powder Sheet Toward Fabrication of Porous Bone Substitutes, T. Hayashi, K. Maekawa, M. Tamura, K. Hanyu, Ibaraki University, (74)	CMC-05: Transient Creep Behavior of a Plain Woven SiC Fiber / SiC Matrix Composite, T. Bessho, University of Electro-Communications; T. Ogasawara, T. Aoki, T. Ishikawa, JAXA; Y. Ochi, University of Electro-Communications, (81)
17:15	APP-06: Experimental Analysis of Flow, Stress and Strain Distribution in Powder Compaction by Flat Rolling, Y. Murata, Meiji University; E. Yuasa, Musashi Institute of Technology, (99)	CMC-06: Synthesis and Characterization of SiC Ceramics for High Temperature Resistant Coatings and Matrix, H. Watanabe, S. Kobayashi, M. Fukushima, S. Wakayama, Tokyo Metropolitan University, (134)
17:30	APP-07: Bonding of Mechanically Alloyed Powder and Magnesium Alloy by Compressive Deformation, H. Sagawa, R. Shimpo, E. Yuasa, Musashi Institute of Technology; Y. Oki, Sankyo Aluminum Industry Co. Ltd., (107)	CMC-07: Stress Analysis of Sapphire Wafers Subjected to Thermal Shocks, T. Vodenitcharova, L. C. Zhang, I. Zarudi, Y. B. Yin, The University of Sydney; H. Domyo, T. Ho, Peregrine Semiconductor Australia, (200)
17:45	APP-08: Shape Memory Characteristics of Ti-Ni Alloy Fabricated by Mechanically-Alloyed Powder, H. Kyogoku, Kinki University; A. Terayama, Seibu Industrial Research Institute of Hiroshima Prefecture; S. Komatsu, Kinki University, (118)	CMC-08: Synthesis and Characterization of Microwave and Conventional Combustion Synthesized Alumina – Titanium Carbide Powders, M. Kitiwan, S. Jiemsirilers, Chulalongkorn University; D. Atong, National Metal and Materials Technology Center, (255)

18:00

End

19:00

	Room C	Room D
	TUESDAY, June 21	
8:30		
9:30		
10:30		
	Short Break	
11:15	<p>Keynote III: The Current Status of Superplastic Forming Manufacturing in the United States, D. G. Sanders, The Boeing Company, (95) Chairperson: K. Higashi</p>	<p>Keynote IV: Past, Present and Future of Semi-Solid Forming of High Temperature Alloys, P. Kapranos, The University of Sheffield, (266) Chairperson: T. Haga</p>
12:00	Lunch	
	<p>SUP-I: Superplastic Forming Chairpersons: E.M. Taleff and Y. Motohashi</p>	<p>IMP-I: Impact Behavior of Materials and Structures Chairpersons: F. Zhou and T. Kusaka</p>
13:30		IMP-01: Vibration Analysis of a Disk Drive Spindle System, T. C. Hsu, A. L. Lopatukhin, Yuan Ze University, (189)
13:45	SUP-01: The Potential of Superplastic Materials in Manufacturing: The Case of Al-Mg Alloys, E. M. Taleff, The University of Texas at Austin, (240l)	IMP-02: Micro-Impact Damage Caused by Mercury Bubble Collapse, M. Futakawa, Japan Atomic Energy Research Institute; T. Naoe, Ibaraki University; H. Kogawa, Japan Atomic Energy Research Institute; H. Date, Tohoku Gakuin University; Y. Ikeda, Japan Atomic Energy Research Institute, (76)
14:00	SUP-03: Low-temperature Superplastic Forming in Zn-22mass%Al Alloy and its Application on Maintenance Free Seismic Damper, T. Tanaka, S. W. Chung, L. F. Chaing, Osaka Prefecture University; K. Makii, Kobe Steel Ltd.; A. Kushibe, Takenaka Corporation; M. Kohzu, Y. Takigawa, K. Higashi, Osaka Prefecture University, (62)	IMP-03: A New Method for Making Surface Composite Layer by Diamond Particles on an Aluminum Plate through Underwater Shock Compression, K. Hokamoto, S. Tanaka, S. Torii, M. Touge, S. Itoh, Kumamoto University, (70)
14:15	SUP-04: Cavitation Behavior in Low-temperature Superplastic Zn-22mass%Al Alloy, T. Tanaka, M. Kohzu, Y. Takigawa, K. Higashi, Osaka Prefecture University, (63)	IMP-04: A Method of Designing Uniformly Distributed Underwater Shock Pressure for Controlling the Condition of Explosive Welding of a Thin Plate -Effect of Inclined Angle of Explosive to Get Uniform Pressure Distribution, K. Hokamoto, A. Mori, Kumamoto University; M. Fujita, Sojo University, (71)
14:30	SUP-05: Flat Cavities Formed in Superplastically Deformed 3Y-TZP and Their Effect on Elongation, Y. Motohashi, M. Kikuchi, T. Ito, Ibaraki University; T. Shibata, M. Ishihara, K. Sawa, Japan Atomic Energy Research Institute, (126)	IMP-05: Numerical Evaluation of Measurement Accuracy of Non-coaxial Hopkinson Bar Method, T. Umeda, H. Umeki, K. Mimura, Osaka Prefecture University, (34)
14:45	SUP-06: Texture and Superplasticity Study of 5083 Al Alloy after Equal Channel Angular Extrusion, Y. L. Yang, S. Lee, National Central University; J. Y. Wang, National Dong Hwa University, (243)	IMP-06: Microscopic Observation of the Side Surface of Dynamically-Tensile-Fractured 6061-T6 and 2219-T87 Aluminum Alloys with Pre-Fatigue, M. Itabashi, S. Nakajima, H. Fukuda, Tokyo University of Science, (47)
15:00	SUP-07: Hollow Structural Components Made by Process Fusion, J. Ziegelheim, S. Hiraki, H. Ohsawa, Hosei University, (52)	IMP-07: Prediction of Mechanical Behaviour of Low Carbon Steel at High Strain Rate Using Thermal Activation Theory and Static Data, K. Ogawa, Kyoto University; H. Kobayashi, Osaka University; F. Sugiyama, Kyoto University; K. Horikawa, Osaka University, (54)
15:15	SUP-08: Some Changes in Superplastic Behavior of 3Y-TZP Caused by Neutron Irradiation, T. Shibata, Japan Atomic Energy Research Institute; Y. Motohashi, Ibaraki University; M. Ishihara, K. Sawa, S. Baba, Japan Atomic Energy Research Institute; T. Ito, Ibaraki University; J. Sumita, Japan Atomic Energy Research Institute, (82)	IMP-08: Effects of Bake Hardening Property on Dynamic Yield Strength of Ultra High Strength Sheet Steels, T. Masuda, S. Ikeda, K. Makii, Kobe Steel Ltd.; S. Miyake, Kobelco Research Institute; K. Ogawa, Kyoto University, (172)
15:30	Coffee Break	

	Room C	Room D
	APP-II: Advanced Powder Processing Technique Chairpersons: E. Yuasa and K. Isonishi	IMP-II: Impact Behavior of Materials and Structures Chairpersons: K. Hokamoto and M. Itabashi
16:00	APP-09: A Study on Silicon-Nitride Bonding Using Superplastic Ceramics Powders as Interlayer, K. Waseda, Kobe City College of Technology; Y. Motohashi, Ibaraki University, (143)	IMP-09: Dynamic and Quasi-Static Tensile Properties of Welded Butt Joint Subjected to Pre-Fatigue, H. Kobayashi, Osaka University, M. Daimaruya, Muroran Institute of Technology; H. Tsuda, Y. Sunayama, Suzuki Motor Co. Ltd., (55)
16:15	APP-10: A Novel Processing Technique to Minimize the Residual Stress- Induced Camber in Fabricating Multi-Layered Ceramics and FGMs, T. Franklin, P. Kwon, Michigan State University, (40)	IMP-10: Probabilistic Strength of Ceramics under Dynamic Loading, F. Zhou, J. F. Molinari, Johns Hopkins University, (245)
16:30	APP-11: Mechanical Alloying of Mg-Al-Zn Powder Mixture Using Magnesium Alloy Turning Chips, H. Oginuma, E. Yuasa, Musashi Institute of Technology, (125)	IMP-11: Determination of Interlaminar Shear Strength of a Unidirectional Carbon/Epoxy Laminated Composite Under Impact Loading, T. Yokoyama, K. Nakai, Okayama University of Science, (36)
16:45	APP-12: Injection Moulding of Wood Powder with Low Binder Content, T. Miki, N. Takakura, T. Iizuka, K. Yamaguchi, Kyoto Institute of Technology; H. Imanishi, K. Kanayama, National Institute of Advanced Industrial Science and Technology, (145)	IMP-12: Effect of Strain Rate on the Interlaminar Fracture Toughness of Zanchor Reinforced Composites, T. Kusaka, Ritsumeikan University; M. Hojo, Kyoto University; T. Fukuoka, Mitsubishi Heavy Industries, Ltd.; M. Ishibashi, Shikibo, Ltd., (66)
17:00	APP-13: Development of High Performance Ti Products by Micro Metal Injection Molding, T. Osada, S. Tanaka, Taisei-Kogyo Co., Ltd.; M. Uemura, Kumamoto Industrial Research Institute; K. Nishiyabu, Osaka Prefectural College of Technology; H. Miura, Kyushu University, (169)	IMP-13: Energy Absorption Characteristics of Carbon Fiber Reinforced Textile Composite Tubes, Y. Yang, A. Nakai, H. Hamada, Kyoto Institute of Technology, (214)
17:15	APP-14: Effects of Powder Size and Initial Arrangement on Cold Compaction, W. Tanwongwan, A. Manonukul, National Metal and Materials Technology Center, Thailand; J. Carmai, King Mongkut's Institute of Technology North Bangkok, (88)	IMP-14: Study on Impact Property of Honeycomb Core and Roll Core Sandwich Panels by Drop Weight Test, O. Itoh, T. Ohtsuka, H. Tamura, Y. Kobayashi, Musashi institute of technology, (45)
17:30	APP-15: Effect of Lubrication on the Improvement of Uniformity in Uniaxial Powder Compaction, Y. Taniguchi, K. Dohda, Z. Wang, Gifu University, (159)	
18:30	Dinner Cruise Boarding at Pier 55 (Hotel Lobby at 18:00)	
19:00	Dinner Cruise (ends at 22:00)	

	Room C	Room D
WEDNESDAY, June 22		
	CSW-I: Coating, Surface Modification and Wear Chairpersons: Y. Harada and N. Ohtake	CMC-II: Ceramics and Ceramic Matrix Composites Chairpersons: Y. Kogo and T. Morimoto
8:30		CMC-09: Hybrid Bonding between C/C Composites Using Si Infiltration, K. Ishii, Kogakuin University; M. Koyama, The Graduate University for Advanced Studies; H. Hatta, JAXA; I. Shiota, Kogakuin University, (235)
8:45	CSW-01: On Wear and Tool Life of Tungsten Carbide, PCBN and PCD Cutting Tools, J. A. Arsecularatne, L. C. Zhang, The University of Sydney; C. Montross, Ringwood Superabrasives Pty. Ltd., (197)	CMC-10: Rotational Strength of a C/SiC Composite Blistk Model, R. Hashimoto, M. Hojo, A. Ogawa, JAXA; F. Zhou, Johns Hopkins University, Y. Sofue, JAXA, (203)
9:00	CSW-02: Material Surface Treatment Process Using High Pressure and High Sonic Wave by Cloud - Cavitation Phenomenon, T. Ohgawara, J. Ozono, G. Hirota, M. Kageyama, Toshiba Plant Systems & Services Co. Ltd.; Y. Itoh, H. Andoh, Toshiba Co. Ltd., (7)	CMC-11: Tensile Strength of Two-dimensional C/C Composite with Its Microstructure for Nuclear Application, T. Shibata, J. Sumita, S. Baba, M. Yamaji, M. Ishihara, K. Sawa, T. Iyoku, Japan Atomic Energy Research Institute, (155)
9:15	CSW-03: Improvement of Surface Layer Characteristics by Shot Lining, Y. Harada, University of Hyogo, (6)	CMC-12: Fracture Toughness Tests on Carbon Fibers Notched by Focused Ion Beam, Y. Kogo, M. Komori, Tokyo University of Science, (224)
9:30	CSW-04: Surface Texturing of CoCr by Nd:YAG Laser, Y. Li, S. R. Schmid, University of Notre Dame; G. Stalcup, Nemcomed Ltd., (190)	CMC-13: The Shape Effects of Silicon Nanowires – A Molecular Dynamics and Density Functional Theory Study, K. Mylvaganam, L. C. Zhang, The University of Sydney, (199)
9:45	CSW-05: Evaluation of Mechanical Properties and Microstructure in Ion-irradiated Surface Layer, T. Naoe, Ibaraki University; M. Futakawa, A. Naito, H. Kogawa, Y. Ikeda, Japan Atomic Energy Research Institute; Y. Motohashi, Ibaraki University, (73)	CMC-14: Strength Improvement on an Imaginary SiC Fiber of Ideal Diameter and Reduced Internal Defects Estimated from the Weibull Scaling of Tyranno ZMI Fiber, T. Morimoto, JAXA; K. Yamamoto, S. Ogihara, Tokyo University of Science, (206)
10:00	Coffee Break	
	CSW-II: Coating, Surface Modification and Wear Chairpersons: Y. Kogo and M. Fukumoto	PMC-IV: Polymers and Polymer Matrix Composites Chairpersons: M. Nakada and K. Suzuki
10:30	CSW-06: Preparation of Amorphous Carbon Films from Radical Species Using Surface Wave Plasma, H. Akasaka, M. Furukawa, N. Ohtake, Tokyo Institute of Technology, (18)	PMC-23: Bias in the Weibull Strength Estimation of a SiC Fiber for the Small Gauge Length Case, T. Morimoto, JAXA; S. Nakagawa, S. Ogihara, Tokyo University of Science, (204)
10:45	CSW-07: Application of DLC Coating to Ironing Die, K. Dohda, H. Kubota, Gifu University; Y. Tsuchiya, Toyota Central R&B Labs., INC, (163)	PMC-24: Stress Analysis of Single Fiber Composites Using Elastoplastic Shear-lag Approach, S. Ogihara, Tokyo University of Science, (230)
11:00	CSW-08: Wear Resistance of Segment-Structured DLC Films under Large Tensile Strain Conditions, Y. Aoki, N. Ohtake, Tokyo Institute of Technology, (38)	PMC-25: Evaluation of Initiation of the Interfacial Debonding in Single Fiber Composite, S. Kimura, J. Koyanagi, H. Kawada, Waseda University, (132)
11:15	CSW-09: Estimation of the Interface Temperature Rise for Polishing PCD Compacts, Y. Chen, L. C. Zhang, J. A. Arsecularatne, The University of Sydney; C. Montross, Ringwood Superabrasives Pty. Ltd., (193)	PMC-26: Relationship Between Delayed Failure of Glass Fiber and Surface Condition Under Water Environment, A. Kobiki, S. Shioda, H. Kawada, Waseda University, (123)
11:30	CSW-10: Surface Modification of Magnesium Alloy by Mg ₂ Si Coating Technology, K. Kondoh, RCAST, The University of Tokyo; T. Yamaguchi, Gifu Prefectural Science and Technology Promotion Center; T. Serikawa, H. Oginuma, RCAST, The University of Tokyo, (11)	PMC-27: Experimental Evaluation of Thermal Conductivity of Carbon Fiber Reinforced Plastics, S. Ogihara, M. Okita, Tokyo University of Science; J. Shimizu, M. Hayashida, Nippon Steel Corporation; Y. Okabe, N. Takeda, The University of Tokyo, (229)
11:45		PMC-28: Numerical Simulation for Interlaminar Damage Growth of Composite Laminate under Transverse Loading with Cohesive Zone Model, M. Nishikawa, The University of Tokyo; T. Okabe, Tohoku University; N. Takeda, The University of Tokyo, (182)
12:00	Lunch	

	Room C	Room D
	CSW-III: Coating, Surface Modification and Wear Chairpersons: L.C. Zhang and K. Kondoh	PMC-V: Polymers and Polymer Matrix Composites Chairpersons: K. Okubo and K. Ogi
13:30	CSW-12: Laser Surface Alloying of SUS316 Stainless Steel with Al-Si - Effect of Substrate Temperature on Structure and Properties of Modified Layer -, S. Zharebtsov, K. Maekawa, T. Hayashi, Ibaraki University; M. Futakawa, Japan Atomic Energy Research Institute, (65)	PMC-29: Damage for Notched Plates of Glass Cloth/Epoxy Laminate Under Static and Cyclic Loading, T. Yamamoto, H. Hyakutake, Fukuoka University, (102)
13:45	CSW-13: Synthesis of Diamond-like Carbon Films by Nanopulse Plasma Chemical Vapor Deposition at Subatmospheric Pressure, Y. Kondo, T. Saito, NGK Insulators, LTD.; M. Saito, N. Ohtake, Tokyo Institute of Technology, (9)	PMC-30: Design Procedure of CFRP Rotors for Durability Part 1- Material Design and Fundamental Rotor Design -, T. Okuya, Shinkawa Sensor Technology, Inc.; M. Nakada, Y. Miyano, Kanazawa Institute of Technology, (170)
14:00	CSW-14: High-rate Synthesis of Diamond-like Carbon Films by Bipolar Nanopulse Chemical Vapor Deposition Method, T. Saito, Y. Kondo, T. Terazawa, NGK Insulators, LTD.; N. Ohtake, Tokyo Institute of Technology, (19)	PMC-31: Effect of Water Absorption on Interaction between Matrix Cracking and Fiber Bridging for Stress Corrosion Cracking of PMC, A. Kobiki, H. Kawada, Waseda University, (122)
14:15	CSW-15: Effect of Substrate Surface Topography Change due to Heating on Flattening Behavior of Thermal Sprayed Particles, M. Fukumoto, I. Ohgitani, H. Nagai, T. Yasui, Toyohashi University of Technology, (2)	PMC-32: Long-Term Durability of Plain-Woven CFRP Laminates under Water Conditions, M. Nakada, J. Ichimura, Y. Miyano, Kanazawa Institute of Technology, (154)
14:30	CSW-16: High Temperature Fatigue Strength of Yttria-Stabilized Zirconia Sprayed Stainless Steel, H. Waki, Osaka Electro-Communication Univ.; I. Nishikawa, Osaka Institute of Technology; A. Ohmori, Osaka University, (158)	PMC-33: Analysis of Matrix Cracking in CFRP Angle-ply Laminates, S. Ogihara, T. Yoshida, Tokyo University of Science, (226)
14:45	CSW-17: Influence of Heat Treatment on Mechanical Properties of DLC Deposited by FIB-CVD, N. Sakamoto, Iwaki Meisei University; Y. Kogo, Tokyo University of Science; T. Yasuno, Iwaki Meisei University; J. Taniguchi, I. Miyamoto, Tokyo University of Science, (49)	PMC-34: Numerical and Experimental Study of Compression after Impact Strength of Stitched CFRP Laminates, A. Yoshimura, K. Bae, N. Takeda, The University of Tokyo, (174)
15:00		