

Program

June 16 (Thursday), 2016

Room A

13:00~13:10

Opening Remarks

13:10~13:55

Keynote lecture K1

Presiding: Takashi Nishino (Kobe University)

Technology Trends and Database of Adhesion and Coating Materials in Korea

(President of the Society of Adhesion & Interface of Korea, Korea Research Institute of Chemical Technology)

Dr. Jae-Heung Lee

13:55~14:40

Keynote lecture K2

Presiding: Hajime Kishi (University of Hyogo)

Some Key Issues on the Structural Design of Polyurethane

(Vice director of Beijing Adhesion Society, Beijing University of Chemical Technology) Prof. Junying Zhang

14:40~15:20

Award lecture AL1 (学会賞受賞講演 1)

Presiding: Kazuya Nagata (Toyama Prefectural University)

Development of Nano-Composites and Applications to Surface Functional Materials

(Technology Research Institute of Osaka Prefecture) Dr. Masaki Kimoto

15:30~17:35

Oral Presentation

Room A

Presiding: (1A01-02) Chang-Sik Ha (Pusan National University), (1A03-05) Takashi Miyata (Kansai University)

15:30 1A01 Current Situation of Bonding Technology in Europe, Jun Que (Sika Technology AG)

15:55 1A02 Surface Patterning Properties of Photo-responsive Polymer Films with Photodimerizable Groups, Takashi Miyata, Nobuhiro Akioka, Takafumi Noguchi, Tomoyuki Kida, Akifumi Kawamura (Kansai University)

16:20 1A03 Modification of Chemically Stable Polymeric Materials 67. Improvement in the Adhesion Property of Polymeric Materials, FRP and CFRPs for Car/Aircraft-use, Hitoshi Kanazawa, Aya Inada (Fukushima University)

16:45 1A04 Polymethylhydrosiloxane Based Hybrid Materials and Applications, Saravanan Nagappan, Sung Soo Park, Chang-Sik Ha (Pusan National University)

17:10 1A05 Preparation, curing behavior and properties of episulfide compounds, Jue Cheng (Beijing University of Chemical Technology)

Room B

Presiding: (1B01-02) Hyun-Joong Kim (Seoul National University), (1B03-05) Chiaki Sato (Tokyo Institute of Technology)

15:30 1B01 Effect of Molecular Weight Distribution on Mechanical Properties and Adhesive Strength of Epoxy Resins, Satoshi Matsuda, Tomohiro Muraoka, Hajime Kishi (University of Hyogo)

15:55 1B02 Strain and Stress Field Measurement in Functionally Graded Adhesive Joints Bonded by Honeymoon Adhesion

Using Two Types of Second Generation Acrylic Adhesives, Shota Kawasaki, Yu Sekiguchi (Tokyo Institute of Technology), Gosuke Nakajima (Denka Co., Ltd.), Haraga Kosuke (HARAGA Adhesion Technology Consulting Co., Ltd.), Chiaki Sato (Tokyo Institute of Technology)

16:20 1B03 Adhesion Behavior of Acrylic PSAs Containing Various Molecular Weights by Curing System, Jung-Hun Lee, Gyu-Seong Shim, Ji-Won Park, Hyun-Joong Kim (Seoul National University)

16:45 1B04 Curing Behavior and Adhesive Properties of the Acrylate Pressure Sensitive Adhesive with Various Types of Curing Agents, Gyu-seong Shim, Jung-Hun Lee, Ji-Won Park, Hyun-Joong Kim (Seoul National University), Yung-Do Kim, So-youn Jung (Samsung Display Co., Ltd.)

17:10 1B05 The Impact of Mineral Oil Plasticisers on the Performance of Hot Melt Adhesives, Peter Kaali (Nynas AB, Sweden)

Room C

Presiding: (1C01-02) Mikio Kajiyama (University of Tsukuba), (1C03-04) Eriko Sato (Osaka City University)

15:30 1C01 In-situ Analysis of Chemical Structure of API Adhesive using FT-NIR Spectroscopy, Zhigang Ling, Naruhito Hori, Tadahisa Iwata, Akio Takemura (The University of Tokyo)

15:55 1C02 Acetal-Protected Acrylic Copolymers for Dismantlable Adhesives with Spontaneous and Complete Removability, Eriko Sato, Keisuke Yamanishi, Tadashi Inui, Takashi Nishiyama, Hideo Horibe (Osaka City University), Akikazu Matsumoto (Osaka Prefecture University)

16:20 1C03 Application of alpha-Zirconium Phosphate Intercalation Compounds as a Thermal Latent Catalyst, Osamu Shimomura, Takatoshi Nishisako, Kensuke Tokizane (Osaka Institute of Technology), Shunro Yamaguchi, Junko Ichihara (Osaka University), Atsushi Ohtaka, Ryoki Nomura (Osaka Institute of Technology)

16:45 1C04 Photodetachable Thermosetting Adhesives Composed of a Crosslinkable Poly(olefin sulfone) with a Photobase Generator, Takeo Sasaki (Tokyo University of Science)

June 17 (Friday), 2016

9:45~11:50

Oral Presentation

Room A

Presiding: (2A01-03) Seigo Kawaguchi (Yamagata University), (2A04-05) Shuji Fujii (Osaka Institute of Technology)

09:45 2A01 Peeling Oscillation of Thin Films from Soft Adherend Induced by Elastic-Plastic Buckling, Atsushi Suzuki, Ryo Ichikawa, Yoshiki Sugizaki (Yokohama National University)

10:10 2A02 Study on Adhesion Between Microspheres and Rubber Surface Accompanied by Meniscus Formation and Sedimentation, Shoko Mishima, Toshiaki Ougizawa (Tokyo Institute of Technology)

10:35 2A03 Silicon-Acrylic Pressure Sensitive Adhesives Synthesized by Macro Azo Initiator for Low Surface Energy Substrate, Dong-Hyuk Lim, Sung-Ju Lee, Ji-Won Park, Hyun-Joong Kim (Seoul National University)

11:00 2A04 Strain Energy Release Rate and Work of Adhesion in Adhesive Elastic Contact, Dooyoung Baek, Pasomphone Hemthavy, Kunio Takahashi (Tokyo Institute of Technology)

11:25 2A05 Design and Selection of Polymeric Dispersants for Stable Graphene Dispersion via Adhesion Force Study, In Woo Cheong, Hyang Moo Lee, Suguna Perumal (Kyungpook National University)

Room B

Presiding: (2B01-02) Kimihiro Matsukawa (Osaka Municipal Technical Research Institute), (2B03-05) Akio Takemura (The University of Tokyo)

09:45 2B01 Influence of Mixed Micro and Nano Silica Fillers on Dynamic Stiffness of Epoxy Adhesive, Yohanes, Yasuhisa Sekiguchi (Hiroshima University)

10:10 2B02 Ultra-high Conductive Epoxy-based Adhesives with Silver Micro-filler Loading, Masahiro Inoue, Yoshiaki Sakaniwa, Yasunori Tada (Gunma University)

- 10:35 2B03 Curing and Electrical Properties of Electrically Conductive Adhesive according to Shape of Silver Nanoparticles, Jong-Ho Back, Ji-Won Park, Gyu-Seong Shim, Hyun-Joong Kim (Seoul National University)
- 11:00 2B04 UV Polymerized Pressure Sensitive Adhesives Using In-situ Polymerization System for a Dispersion of New Carbon Filler, Jae-Ho Shin, Ji-Won Park, Hyun-Joong Kim (Seoul National University)
- 11:25 2B05 Development and evaluation of hybrid-curing conductive adhesive, Ji-Won Park, Gyu-Seong Shim, Jong-Ho Back, Hyun-Joong Kim (Seoul National University)

Room C

Presiding: (2C01-02) Shin-ichiro Toumura (Forestry and Forest Products Research Institute), (2C03) Tetsushi Taguchi (National Institute for Materials Science)

- 09:45 2C01 Influence of Pre-drying Treatment of Particles Before Pressing on Physical Properties of Sweet Sorghum Bagasse Particleboard Bonded with Citric Acid, Sukma Surya Kusumah, Kenji Umemura, Kozo Kanayama (Kyoto University)
- 10:10 2C02 Developing a New 100% Bio-based Adhesive Technology for Wood Products: Perspectives on Using Multiple Bio-based Components, Purities and Chemistries to Achieve Adhesive Performance, Warren Grigsby, Armin Thumm, Nancy Garrity, Bernadette Nanayakkara (Scion, New Zealand)
- 10:35 2C03 TAPE: A Medical Adhesive Inspired by a Ubiquitous Compound in Plants, Haeshin Lee (Korea Advanced Institute of Science & Technology), Moon Sue Lee (InnoTherapy Inc.)

Room A

14:40~15:20

Award lecture AL2 (学会賞受賞講演 2)

Presiding: Akio Takemura (University of Tokyo)

Studies on UV-curable PSAs

(Seoul National University) Prof. Hyun-Joong Kim

15:20~16:00

Award lecture AL3 (学会賞受賞講演 3)

Presiding: Yasunori Hatano (Forestry and Forest Products Research Institute)

Studies on Interfacial Structure of Polymer Alloys and its Adhesion

(Tokyo Institute of Technology) Prof. Toshiaki Ougizawa

16:10~17:40

Poster Presentation

Room B

Obligation time: 16:10 ~ 17:10 (Odd number, P01, P03, P05...), 16:40 ~ 17:40 (Even number, P02, P04, P06...)

(Poster numbers with (*) symbol are the candidates for poster award.)

- P01 Design of Adhesive Polymer Materials and Debonding Processes for Quick Dismantlable Adhesion System, Yusuke Fukamoto, Haruyuki Okamura (Osaka Prefecture University), Eriko Sato, Hideo Horibe (Osaka City University), Akikazu Matsumoto (Osaka Prefecture University)
- P02* Development of the New Thermal Sealing Technique Which Achieves "Non Leakage Closing" and "Easy Opening" in a heat bonded surface with a stack step at the same time, Kazuo Hishinuma, (Hishinuma Gijyutsu-shi Jimusho)
- P03* Effect of Adhesive Thickness on Peel Strength and Stringiness Length for Crosslinked Polyacrylic Pressure-sensitive Adhesives, Kazuki Takakura, Masayo Noda, Syuji Fujii, Yoshinobu Nakamura (Osaka Institute of Technology), Yoshiaki Urahama (University of Hyogo)
- P04* Crosslinking and Decrosslinking of Maleic Anhydride/Diene Copolymers Using Polyfunctional Crosslinkers, Limin

- Lou, Kenta Nomura, Haruyuki Okamura, Akikazu Matsumoto (Osaka Prefecture University)
- P05* Effect of Alkyl Chain Length and Film Thickness on Dynamic Wettability of Poly(alkylacrylate)s, Mizuki Matsuoka, Shinya Takahashi, Akiyoshi Takeno (Gifu University)
- P06* Effect of Deformation Rate on the Mechanical Properties and Tack of Crosslinked Polyacrylic Pressure-sensitive Adhesives, Masayo Noda, Kazuki Takakura, Syuji Fujii, Yoshinobu Nakamura (Osaka Institute of Technology), Yoshiaki Urahama (University of Hyogo)
- P07* Metal-Resin Bonding by Polymer Coating with Bicontinuous Structures, Fai Uehara, Haruyuki Okamura, Akikazu Matsumoto (Osaka Prefecture University)
- P08* Effect of Surface Phase Structure and Migration Behavior on the Difference of the Coating Method of Pressure Sensitive Adhesive based on Polyacrylic-Block-Copolymer/Tackifier, Takahiro Doi (Nichiban Co., Ltd.)
- P09* Development of Physical Characteristic Evaluation System of Fiber Optic Layer via Scratch Test, Omar Shafiq Suhaimi, Zenichi Miyagi (Meiji University)
- P10* Fabrication of Hierarchical Structure by Thermal Nanoimprint and Polymer Brushes, Tomohiro Ozaki, Kazuo Yamaguchi, Motoyasu Kobayashi (Kogakuin University)
- P11* Formation of Different Structure of Polyacrylates at the Interface with Alumina Nanoparticles, Kazuki Matsuura, Minoru Matsushita, Yasuhiro Matsuda, Shigeru Tasaka (Shizuoka University)
- P12* Graphene filled Polyethylene/Polypropylene composites Compatibilized by Ethylene-Butylene Copolymer and Their Electrical, Mechanical, and Morphology Characterization, Ce Tu, Kenji Nagata, Masahiro Higuchi (Nagoya Institute of Technology)
- P13* Interfacial Structure of Sol-Gel Hard-Coating at Room Temperature, Masaki Nakazawa, Hideyo Ando, Yasuhiro Matsuda, Shigeru Tasaka (Shizuoka University)
- P14* Laplace-pressure Exerted on the Craze Phase and Mechanical Properties of the Porous Polypropylene, Yui Horiguchi, Ryo Mitani, Shinya Takahashi, Akiyoshi Takeno (Gifu University)
- P15* Morphology Control of Poly(ionic liquid) Composite Particles, Takuto Ouchi, Ryuma Nakamura, Toyoko Suzuki, Hideto Minami (Kobe University)
- P16* Adsorption Property of Fiber/Polymeric Materials 20. Adsorption of Organic Compounds to Polymer Films, Aya Inada, Hitoshi Kanazawa (Fukushima University)
- P17* Modification of Chemically Stable Polymeric Materials 68. Improvement in the Adhesion Property of Polyolefins, FRP and CFRPs, Hitoshi Kanazawa, Aya Inada, Takuto Tanaka (Fukushima University)
- P18 Powdered Pressure-sensitive Adhesives: Morphological Characterization and Elucidation on Expression Mechanism of Adhesive Function, Syuji Fujii, Junki Yamane (Osaka Institute of Technology), Masami Edahiro, Satoshi Yoshimi (Global Application Development Center, Shimadzu Co.), Akinori Kogure (Shimadzu Techno-Research, Inc.), Yoshinobu Nakamura (Osaka Institute of Technology)
- P19* Reactivity of Silane Coupling Agent on Silica Surface Analyzed by TG Analysis, Ryota Tsutsumi, Kazuki Takakura, Syuji Fujii, Yoshinobu Nakamura (Osaka Institute of Technology)
- P20* Structure and Property of Poly- α -olefin / Polysilane Adhesive Interface, Yutaka Godai, Takuya Matsumoto, Chizuru Hongo, Takashi Nishino (Kobe University)
- P21* Study of the Functionally for Fabrication of the Adhesive Thin Films, Keiko Kondo, Nobuhiro Ishikawa, (Soken Chemical & Engineering Co., Ltd.)
- P22* Surface Modification and Adhesion of Poly(ether ether ketone), Akira Miyagaki, Takuya Matsumoto, Chizuru Hongo, Takashi Nishino (Kobe University)

- P23* Repeatable Adhesion Using a Hydrogen-bonding Interaction of Poly(2-vinylpyridine) Brush, Chiharu Izumi, Hayato Yoshioka, Motoyasu Kobayashi (Kogakuin University)
- P24* Synthesis and Surface Property of Silsesquioxane Nanoparticles Having Fluoroalkyl Groups by Condensation and Thiol-ene Click Reaction, Tetsuya Kimura, Kazuhiro Nakabayashi, Hideharu Mori (Yamagata University)
- P25* Synthesis of Light-sensitive Liquid Marble Towards Remote Delivery and Release System, Hisato Kawashima (Osaka Institute of Technology), Hiroyuki Mayama (Asahikawa Medical University), Yoshinobu Nakamura, Syuji Fujii, (Osaka Institute of Technology)
- P26 Trialkylborane-initiated Graft Polymerization of Acrylate Monomers onto a Surface of a Polypropylene Plate, Haruhisa Akiyama (National Institute of Advanced Industrial Science and Technology, AIST), Atsuko Tabata (Innovative Structural Materials Association), Shin Horiuchi (AIST), Chiaki Sato (Tokyo Institute of Technology, AIST)
- P27* Twin Pack Adhesive Powder, Kohei Kido, Yoshinobu Nakamura, Syuji Fujii (Osaka Institute of Technology)
- P28* Analyses of Internal Structure of Silicone PSA Using Pulsed NMR and AFM, Takuya Nakamura, Seitaro Hagiwara, Yoshiaki Urahama, Hajime Kishi (University of Hyogo)
- P29 Analysis of Adhesive by Using Temperature Rising-Direct Analysis in Real Time-Mass Spectrometry (TR-DART-MS), Chikako Takei, Kazuma Kinoshita (BioChromato, Inc.), Yoshio Shimoura (SEKISUI Chemical Co., Ltd.), Yasuo Shida (University of Yamanashi)
- P30* Evaluation of Adhesion Properties on Polymer Surfaces by Using Scanning Probe Microscopy (SPM), Yoshimichi Namai, Chieko Hino (Mitsui Chemical Analysis & Consulting Service, Inc.)
- P31* Quantitative Analysis of Phase-separated Structure and Mechanical Properties of Acrylic Copolymer/Epoxy Thermosetting Resin Composite, Isao Ichikawa, Yoshiaki Takamatu (LINTEC Corporation), Shuichi Akasaka, Shigeo Asai (Tokyo Institute of Technology)
- P32* Characterization of Hybrid Adhesive Using Modified Silicon Polymer and Polyacrylate Containing Alkoxysilyl Group, Makoto Konno (CEMEDINE Co., Ltd)
- P33* Control of Failure Modes of Acrylic Dismantlable Adhesives, Shusei Iki, Eriko Sato, Takashi Nishiyama, Hideo Horibe (Osaka City University), Akikazu Matsumoto (Osaka Prefecture University)
- P34* Effect of Filler Size on Electrical Conductivity of an Epoxy-based Adhesive Containing Silver Particles, Masaki Iida, Yoshiaki Sakaniwa, Yasunori Tada, Masahiro Inoue (Gunma University)
- P35* Microwave-assisted Peeling of the Adhesive Contained Ionic Liquid, Mirei Usuba, Takuya Matsumoto, Chizuru Hongou, Takashi Nishino (Kobe University)
- P36* Polymerization of Protected 2-(Hydroxymethyl)acrylate and Insolubilization / Water-solubilization by Acid-hydrolysis, Yasuhiro Kohsaka (Shinshu University), Yusuke Matsumoto, Kazuki Yamamoto, Kazuha Suzawa, Tianyi Zhang (Osaka University), Yosuke Matsuhashi (Shinshu University), Tatsuki Kitayama (Osaka University)
- P37 Precise Synthesis of Branched- Poly(lactic acid)s by a New Organocatalyst and its Adhesion Property, Joji Kadota, Akinori Okada, Hiroshi Hirano, Yasuyuki Agari (Osaka Municipal Technical Research Institute)
- P38* Adhesive Properties and Curing Behavior of the Acrylate Pressure Sensitive Adhesive with Aziridine Hardener Contents, Gyu-Seong Shim, Tae-Hyung Lee, Hyun-Joong Kim (Seoul National University), Yung-Do Kim, So-Youn Jung (Samsung Display Co., Ltd.)
- P39* Birefringence of Stretched Elastomers and Their Fracture, Masatoshi Tosaka, (Kyoto University)
- P40* Development of Ultra-rapidly Curable System Using Isocyanate Microcapsule, Kazuki Yoshino (Nagase ChemteX Co.)
- P41* Difference on Adhesion Performance of Acrylic and Silicone PSAs with Various Coating Thickness, Jung-Hun Lee,

- Jong-Ho Back, Tae-Hyung Lee, Hyun-Joong Kim (Seoul National University)
- P42 Evaluation of Effective Thermal Conductivity of Epoxy-based Adhesives Containing Silica Fillers Bonded on a Copper Substrate, Kazunari Teshigawara, Masahiro Inoue, Yasunori Tada (Gunma University)
- P43* Fracture Behavior Visualization of Adhesives in Fracture Toughness Test Using Digital Image Correlation Method, Masatomo Mikuni, Koji Kamiyama (Mitsubishi Electric Corporation)
- P44* Hotmelt Adhesive for the Textiles, Myung Cheon Lee, Jin Kyung Kim (Dongguk University)
- P45* Mechanical Properties and Solvent Resistance of Carbon Fiber Reinforced Acrylic Copolymers, Shiho Kuwashiro, Nozomu Nakao, Satoshi Matsuda, Hajime Kishi, (University of Hyogo)
- P46* Mechanical, Optical, Thermal and Interfacial Adhesion Strength of Poly Vinyl Alcohol (PVA)/Hallosite/Calcium Carbonate Composite Films, T. Ranjeth Reddy, Hyun-Joong Kim (Seoul National University)
- P47* Peel Behavior of Adhesive Tapes from Soft Adherend by Changing Experimental Conditions, Yoshiki Sugizaki (Yokohama National University)
- P48* Peeling Property of Pressure-Sensitive Adhesive with Nanodiamond, Kota Mizutani, Takuya Matsumoto, Chizuru Hongou, Takasi Nishino (Kobe University)
- P49* Synthesis and Evaluation of Silicon Material Having a Flexible Structure, Ji-Won Park, Gyu-Seong Shim, Hyun-Joong Kim (Seoul National University), Seung-Han Shin (Korea Institute of Industrial Technology)
- P50 Temperature Dependence of Young's Modulus of Densified Inorganic Adhesives, Kiyomi Mori, Jun Hasegawa, Shan Wu (Takushoku University), Hisashi Nakane (Asahi Chemical Co., Ltd.)
- P51* High Strength of the Adhesive with the use of Chitin Nanofibers, Hiroki Kawahara (Sharp Chemical Ind. Co., Ltd.), Yoshihiko Omura (OMURATORYO Co., Ltd.)
- P52* Synthesis and Properties of the Polyurethane According to the Soft Segment Structure, Boo Young Jeong, Jung Mi Cheon, Jae Hwan Chun (Korea Institute of Footwear and Leather Technology)
- P53 Inclusion and Release of Reagents in Gel Particles, Masaki Kimoto, Kouji Kita, Hirokazu Hayashi (Technology Research Institute of Osaka Prefecture), Toshio Tani (EFLIGO Co., Ltd.)
- P54 68kDa-Protein of Barnacle Underwater Cement, Kei Kamino, Tatsuya Tomo, Akiharu Satake, Shin Aoki (Tokyo University of Science)
- P55* Bond Strength & Surface Analysis of 3D Printed Structure for Bio-Screw on Rotate Cuff Tear, Jong-Chan Kim, Pan-SeokKim, Ji-Won Park, Hyun-Joong Kim (Seoul National University)
- P56* Development of Tackifier Dispersion for Water-Borne Polychloroprene Adhesives, Hisako Iwahashi (Arakawa Chemical Industries Ltd.)
- P57* Functionalization of Cellulose Using Ionic Liquid Mixture, Satoshi Nakamura, Takeshi Kakibe, Hajime Kishi (University of Hyogo)
- P58* Preparation and Properties of Keratin-based Copolymer from Feather via ATRP, Sikai Chen, Mikio Kajiyama (University of Tsukuba)
- P59* Fabrication of Periodic Ordered Structure with Large Domain Spacing and Control of Morphology by Using Diblock Copolymer Containing Fluorinated Side Chain, Shiki Nojima, Yuji Higaki, Makoto Kido, Tomoyasu Hirai, Atsushi Takahara (Kyushu University)
- P60* Improvement of Thermal Conductivity and Adhesive Properties of Pressure Sensitive Adhesives Using Hybrid Fillers of SiC Microparticle and SiC Nanoparticle Grafted Graphene Oxide, Sung-Ryong Kim, Minh Canh Vu, Gyu-Dae Park (Korea National University of Transportation)
- P61 Asymmetric-shaped Bending of Adhesively Bonded Sheet Metals, Taro Tokuda (National Institute of Technology,

- Hiroshima College), Takeshi Uemori (Okayama University), Tetsuya Yoshida, Michihiro Takiguchi (National Institute of Technology, Hiroshima College), Fusahito Yoshida (Hiroshima University)
- P62* Research for the Strength of Honeycomb Sandwich Panel and Adhesive Fracture with Acoustic Emission, Koji Kamiyama, Masatomo Mikuni, Takeshi Matsumoto (Mitsubishi Electric Corporation)
- P63* Inorganic-organic Hybrid Coating Materials Prepared Using Various Alkoxysilane-functionalized Polymer Precursors, Juyoung Kim, Na-hae Kim (Kangwon National University)
- P64* Viscoelasticity Mapping of Pressure Sensitive Adhesive Surface Using Atomic Force Microscopy, Yukinori Taniguchi (Oxford Instruments Asylum Research Inc.), Ryosuke Kaneko, Seiichi Shimizu, Akemi Shiraishi (Soken Chemical & Engineering Co., Ltd.), Marta Kocun, Aleksander Labuda, Irene Revenko, Roger Proksch (Oxford Instruments Asylum Research Inc.)
- P65 Application of Self-crosslinkable Waterborne Polyurethane Dispersion for Fabric Adhesive, Atsushi Iida (Konishi Co., Ltd.)

June 18(Saturday), 2016

9:45~11:50

Oral Presentation

Room A

Presiding: (3A01-02) Naruhito Hori (The University of Tokyo), (3A03-04) Hajime Kishi (University of Hyogo)

- 09:45 3A01 Effect on Dispersion Status of Agglomerate Nanoparticles of Calcium Carbonate in Sealing Compounds Regarding Sealant Properties, Nobuyoshi Murakami, Yoshisada Kayano (Shiraishi Kogyo Kaisha, Ltd.)
- 10:10 3A02 Control of Nano-phase Structures of Epoxy / Acrylic Block Copolymer Blends Using a Small Amount of Catalyst, Hajime Kishi, Kazuyoshi Yamada, Jin Kimura (University of Hyogo)
- 10:35 3A03 Metal-Resin Adhesion by Fabrication of Porous Surface Structure, Akikazu Matsumoto, Fai Uehara, Haruyuki Okamura (Osaka Prefecture University)
- 11:00 3A04 Structure and Adhesion Property of Isotactic Polypropylene / Olefin-based Hot Melt Adhesives Interface, Yosuke Shimizu, Chizuru Hongo, Takashi Nishino (Kobe University)

Room B

Presiding: (3B01-02) Peter Kaali (Nynas AB), (3B03-04) Zen-ichi Miyagi (Meiji University)

- 09:45 3B01 Fracture Toughness of Adhesively Bonded CFRP/Aluminum Joints Bonded with an Acrylic and Epoxy Adhesives, Keisuke Hara (National Institute of Technology, Yonago College), Makoto Imanaka (Osaka University of Education), Toru Ikeda (Kagoshima University), Yousuke Kouno (Hiroshima Prefectural Technology Research Institute)
- 10:10 3B02 Creep Rupture of Adhesively Bonded Butt Joints Subjected to Variable Loading, Teruaki Negishi, Binti Ramli Mizah, Yu Sekiguchi, Chiaki Sato (Tokyo Institute of Technology)
- 10:35 3B03 Experimental Investigation of Mode I Fracture Toughness of Adhesively Bonded Joints under Impact Loading Conditions Using a High-speed Camera, Xi Lu, Yuki Yamagata, Yu Sekiguchi, Chiaki Sato (Tokyo Institute of Technology)
- 11:00 3B04 Shear Creep Behaviors of Acrylic Pressure Sensitive Adhesive for Flexible Display, Tae-Hyung Lee, Ji-Won Park, Jung-Hun Lee, Hyun-Joong Kim (Seoul National University)

Room C

Presiding: (3C01-02) Naoe Hosoda (National Institute for Materials Science), (3C03) Tetsushi Taguchi (National Institute for Materials Science)

- 09:45 3C01 Mussel-Inspired Adhesive Catecholamine Reactions at Various Interfaces, Joseph Paul Park, Haeshin Lee (Korea Advanced Institute of Science & Technology)

10:10 3C02 Enhanced Interfacial Bonding Strength of Hydrophobically-modified Gelatin-based Tissue Adhesives, Tetsushi Taguchi, Ryo Mizuta (National Institute for Materials Science)

10:35 3C03 Effect of Tip Structure on Adhesion Strength of Gecko Inspired Adhesive Devices, Yu Sekiguchi, Chiaki Sato (Tokyo Institute of Technology)

Afternoon

(A会場：くらまえホール)

技術賞受賞講演 13:00~13:20

座長：佐藤 千明 (東工大)

住宅用木質接着複合パネル短時間接着システムの開発と実用化(Developments of Fast-setting Adhesion System for Wooden Adhesive Composite Panels for House and the Practical Use of the System)

(元ミサワホーム総研) 池上 則明氏、(ミサワホーム総研) 関口 洋嗣氏

進歩賞受賞講演 13:20~13:40

座長：松本 章一 (大阪府大院工)

ネットワーク構造の立体制御と無機物フィラーとの複合化による高性能エポキシ樹脂の開発(Development of High Performance Epoxy Resins by 3D Structure Control of Network Chains and Combination with Inorganic Fillers)

(関西大院工) 原田 美由紀氏

(A会場：くらまえホール)

討論発表 (3AJ-1~6) 13:50~15:50

座長：(3AJ-1~3) 堀内 伸 (産総研)、(3AJ-4~6) 小林元康 (工学院大)

3AJ-1 (13:50~14:10)

かご型シルセスキオキサンの動的共有結合化学を基盤としたポリメタクリル酸エステル類の架橋と解架橋 (Crosslinking and De-crosslinking of Polymethacrylates Based on Dynamic Covalent Chemistry of Caged Silsesquioxane)

(神奈川大工) ○亀山 敦、土屋 康佑、石田 良仁、新井 仁

3AJ-2 (14:10~14:30)

タッキファイヤの偏析技術を利用した新規アクリル系粘着剤の開発(Novel Acrylic PSA based on Tackifier Segregation Onto the Surface)

(東亜合成) ○中村 賢一、竹谷 伸幸、

3AJ-3 (14:30~14:50)

ポリマーブラシの熱接着における分子量分布の影響(Effect of Molecular Weight Dispersity on the Thermal Adhesion of Polymer Brushes)

(工学院大) ○小林 元康、青木 優人、沼澤 健人

3AJ-4 (14:50~15:10)

固体界面におけるポリアルキルメタクリレート分子の運動特性(Molecular Motion of Poly(alkylmethacrylate)s at Solid Interfaces)

(九大院工) シム チェヒョン、吉弘 一貴 (九大分子国際教育セ) ○川口 大輔 (九大院工) 田中 敬二

3AJ-5 (15:10~15:30)

基板に対して固定したポリメタクリル酸メチルを利用した界面創製に基づく機能性付与(Preparation of Functional Surface on the Basis of Formation of Novel Interface Using Polymer Brush)

(九大先導研) ○平井 智康、佐藤 雅尚、高原 淳

3AJ-6 (15:30~15:50)

電子顕微鏡による金属/接着剤界面の解析(Analysis of Metal/Adhesive Interfaces by Electron Microscopy)

(産総研接着ラボ) ○堀内 伸、伯川 秀樹、秋山 陽久、宮前 孝行

(B会場：ロイヤルブルーホール)

討論発表 (3BJ-1~6) 13:50~15:50

座長：(3BJ-1~3) 森きよみ (拓殖大)、(3BJ-4~6) 松田 聡 (兵庫県立大学)

3BJ-1 (13:50~14:10)

圧縮とせん断荷重が同時に作用する場合の高延性接着剤の強度特性(Strength of Highly Ductile Acrylic Adhesive under Combined Compression and Shear Load)

(広島商船高専) ○吉田 哲哉、徳田 太郎、(岡山大) 上森 武(広島商船高専) 瀧口三千弘 (広島大) 吉田 総仁

3BJ-2(14:10~14:30)

接着接合部固有の引張りせん断強度を合理的に評価する試験法の提案(Proposal on Reasonable Evaluation Method of Intrinsic Tensile Shearing Strength for Adhesive Joint)

(九工大院工) ○野田 尚昭、佐野 義一

3BJ-3 (14:30~14:50)

異方性降伏関数を考慮した高延性接着積層板の有限要素解析(Finite Element Analysis of High Ductile Adhesive Bonding Sheet Metal with Consideration of Anisotropic Yield Function)

(岡山大) ○上森 武、東濱 航平(広島商船高専) 徳田 太郎、吉田 哲哉、瀧口三千弘 (岡山大) 中田 隼矢、多田 直哉

3BJ-4 (14:50~15:10)

エポキシ樹脂で接合した単純重ね合せ接着継手の被着体形状と寸法が接着強度に及ぼす影響(Effects of Shapes and Dimensions of Adherends on the Strength of Single Lap Joints Bonded with Epoxy Resin,)

(拓殖大) ○吉田 瞬、清水 健汰、高橋 毅、松澤 拓也、木原幸一郎、杉林 俊雄、

3BJ-5 (15:10~15:30)

低・高温環境下における接着管継手の強度評価(Strength Evaluation of Cylindrical Tubular Bonded Joints with Epoxy Resin under Various Temperature Conditions)

(拓殖大) ○高田 彩花、橘田 卓弥、高木 唯人、高橋 拓也、吉田 瞬、杉林 俊雄

3BJ-6 (15:30~15:50)

単純重ね合せ継手を用いたシアノアクリレート系接着剤の強度評価(Strength Evaluation of Single Lap Joint Bonded with Cyanoacrylate Resin)

(東京都産技研セ) ○古杉 美幸 (拓殖大) 泉谷 光俊、権頭 生波 (元)、中山 将太 (元)、吉田 瞬、杉林 俊雄

(C会場：手島精一記念会議室)

討論発表 (3CJ-1~6) 13:50~15:50

座長：(3CJ-1~3) 山辺 秀敏 (住友金属鉱山)、(3CJ-4~6) 笠原 尚子 (関西ペイント)

3CJ-1 (13:50~14:10)

薄いフィルムのソフトな界面からの振動を伴う剥離(Unsteady Peeling of Thin Films From Soft Adherend)

(横浜国大) ○市川 諒

3CJ-2 (14:10~14:30)

プラスチック材の熱接着(ヒートシール)技法論理の非合理性原因の検討(Consideration of the Illogical Cause of the Logic of a Thermobonding (Heat Sealing) Technique of the Plastic Material)

(菱沼技術士事務所) ○菱沼 一夫

3CJ-3 (14:30~14:50)

ポリオレフィン用アクリル系反応型接着剤の開発(Development of the Reactive Acrylic Adhesive for Polyolefin)

(綜研化学) ○小山 雄司、(近畿大分子工学研究所) 遠藤 剛

3CJ-4 (14:50~15:10)

CFRP/金属間の接触界面で流れるガルバニック電流に及ぼすCFRP材料組成の影響(Effect of Material Composition on Galvanic Corrosion Current Between CFRP and Metals)

(JFEテクノロジー) ○久富志穂子

3CJ-5 (15:10~15:30)

CFRPのクリープ特性に及ぼす測定環境および繊維/樹脂界面密着性の影響(The Effect of the Measurement Environment and Resin/ Fiber Adhesion on the Creep Properties of CFRP)

(JFEテクノロジー) ○尾形 浩行

3CJ-6 (15:30~15:50)

プリント基板材料としての液晶ポリマーフィルム応用に関する検討(The Liquid Crystal Polymer Film Application as

a New Print Circuit Board Material.)

(住友金属鉱山) ○宮内 恭子、渡邊 寛人、山辺 秀敏 (東京理科大理工) 湯浅 真

(Chair : under a request)