



Polymer Processing Technology for Sustainable Development

List of Oral and Poster Presentations

ID	Title
PS01	<p>WHY DID ZEON CORPORATION BUILD A SUPER-GROWTH CNT MASS PRODUCTION PLANT IN 2015? Kohei Arakawa* <i>Zeon Nano Technology Co.,LTD.</i></p>
KN01	<p>STRUCTURES AND FRACTURE PROGRESS FOR NOVEL POLYMERS AND ITS BLENDS UNDER HIGH-SPEED DEFORMATION Hiroshi Ito*, Yuki Kodama, Ryosuke Tamamura, Paritat Muanchan, Akira Ishigami and Takashi Kurose <i>Yamagata University, Japan</i></p>
KN02	<p>DIE SUPPLY AND DIE MAINTENANCE ACTIVITY OF BURR ZERO WITH THAILAND AS MOTHER PLANT Naoyuki Akita* <i>Denso Tool & Die Thailand</i></p>
KN03	<p>ENGINEERED TOUGH BIOMIMETIC HYDROGELS FOR EMERGING APPLICATIONS Namita Roy Choudhury ^{1*}, R. Balu ¹, N.K.Dutta ¹, Andrew Zannettino², Anita Hill ³, J. Mata ⁴ and L. de Campo ⁴ ¹ RMIT University, AUSTRALIA ² University of Adelaide, AUSTRALIA ³ CSIRO, AUSTRALIA ⁴ ACNS, AUSTRALIA</p>
KN04	<p>BIOMIMETIC AND BIO-BASED PROTEIN POLYMERS: A FAMILY OF UNUSUALLY SMART AND SUSTAINABLE POLYMER MATERIALS Naba K. Dutta ^{*1}, Pramod Dorishetty ¹, Rajkamal Balu ¹, Jitendra Mata ², Agata Rekas ³, Sue Barrett ⁴, Geoff Dumsday ⁴, Anita J. Hill ⁴, Namita Roy Choudhury ¹ ¹ RMIT University, AUSTRALIA ² Australian Centre for Neutron Scattering, ANSTO, AUSTRALIA ³ National Deuteration Facility, ANSTO, AUSTRALIA ⁴ CSIRO Manufacturing, AUSTRALIA</p>

KN05	DEVELOPMENT OF POLYMER MATRIX COMPOSITES CONTAINING PINEAPPLE LEAF MATERIALS FOR LOW CARBON ECONOMY AND SUSTAINABLE SOCIETY Taweechai Amornsakchai* <i>Mahidol University, THAILAND</i>
IN01	ONLINE MULTI-OBJECTIVE OPTIMIZATION OF MELT VISCOSITY COMPENSATION AND CLAMPING FORCE FOR PLASTIC INJECTION MOLDING Pengcheng Xie*, Yuxuan Xu, Gang Liu <i>Beijing University of Chemical Technology, CHINA</i>
IN02	TWIN SCREW EXTRUDER: NEW SIMULATION MODEL AND EXPERIMENTS FOR THE NEXT GENERATION POLYMER PROCESSING Kentaro Taki* <i>School of Mechanical Engineering, Kanazawa University, JAPAN</i>
IN03	DEVELOPMENT OF BIO-BASED POLYMER NANOCOMPOSITES FOR PACKAGING APPLICATIONS: OPPORTUNITIES AND CHALLENGES Nhol Kao* <i>RMIT University, Australia</i>
IN04	PREPARATION AND PROPERTIES THE POLYMER COMPOSITES OF POLYLACTIC ACID COMPOSITE MIXED WITH PALMYRA FRUIT FIBERS W. Cheewawuttipong ^{1*} , R. Burapa ¹ and A. Memon ² ¹ <i>Rajamangala University of Technology Srivijaya, Songkhla, THAILAND</i> ² <i>Rajamangala University of Technology Thunyaburi, Phathumtani, THAILAND</i>
IN05	LIGHT DIFFUSING MATERIALS ON LIGHTING APPLICATION R. Kunanuruksapong ^{1*} , C. Boonyapatipa ¹ , P. Supho ¹ and C. Buaprommee ¹ ¹ <i>PTT Global Chemical Public Company Limited, THAILAND</i>
Polymer Blends and Composites	
PC01	PROGRESSES IN FILLER COMPOUNDING TECHNOLOGY BY USE OF A TWIN SCREW EXTRUDER Tadamoto Sakai ^{1*} and Natinee Lopattananon ² ¹ <i>Shizuoka University, JAPAN</i> ² <i>Prince Songkla University, THAILAND</i>
PC02 Poster	MODIFICATION OF POLYAMIDE 6 BY ADDITION OF LITHIUM BROMIDE Yusuke Sato ¹ , Asae Ito ¹ , Shuichi Maeda ² , and Masayuki Yamaguchi ^{1*} ¹ <i>Japan Advanced Institute of Science and Technology, JAPAN</i> ² <i>Yamaguchi University, JAPAN</i>
PC03 Poster	EFFECT OF CNT ADDITION ON STRUCTURE OF HDPE Riho NISHIKAWA and Masayuki YAMAGUCHI <i>Japan Advanced Institute of Science and Technology, JAPAN</i>

<p>PC04</p>	<p>MIXING CHARACTERISTICS OF DIFFERENT KNEADING ELEMENTS IN A TWIN-SCREW EXTRUDER: A NUMERICAL STUDY AND AN EXPERIMENTAL VERIFICATION Yasuya Nakayama ¹, Hiroki Takemitsu ¹, Satoshi Esaki ¹, Toshihisa Kajiwara ¹, Kimura Koichi ², Takeuchi Takahide ², Tomiyama Hideki ² ¹ <i>Kyushu University, JAPAN</i> ² <i>Hiroshima Plant, The Japan Steel Works Ltd., JAPAN</i></p>
<p>PC05 Poster</p>	<p>EFFECT OF LITHIUM SALT ADDITION ON THERMAL AND MECHANICAL PROPERTIES FOR POLY(LACTIC ACID) Shota Tomie and Masayuki Yamaguchi <i>Japan Advanced Institute of Science and Technology, JAPAN</i></p>
<p>PC06 Poster</p>	<p>DEVELOPMENT OF CONDUCTIVE COMPOSITES USING SELECTIVE ABSORPTION OF POLYETHYLENE CHAINS ON CARBON NANOTUBES Kakeharu Tamaki and Masayuki Yamaguchi* <i>Japan Advanced Institute of Science and Technology, JAPAN</i></p>
<p>PC07</p>	<p>ENHANCED FLOWABILITY OF POLYCARBONATE BY ADDITION OF POLYSTYRENE Takumi Sako ¹, Jitsuhiro Date ¹, Misaki Hagi ², Tatsuhiro Hiraoka ², Shinji Matsuoka ² and Masayuki Yamaguchi ¹ ¹ <i>Japan Advanced Institute of Science and Technology, JAPAN</i> ² <i>Mitsubishi Chemical Corporation, JAPAN</i></p>
<p>PC08</p>	<p>MECHANICAL AND THERMAL PROPERTIES OF PLA WITH CELLULOSE NANOFIBER MODIFIED BY BPGF OR BPAG(II) Katsuhisa TOKUMITSU ¹, Shinya KATSURADA ¹, Hirokazu SATO ¹, Masahiro YAMADA ² and Masayuki SUGIMOTO ^{1,2} ¹ <i>University of Shiga Prefecture, JAPAN</i> ² <i>Energy technology Laboratories, Osaka Gas Co., Ltd., JAPAN</i></p>
<p>PC09</p>	<p>LARGELY ENHANCED THERMAL CONDUCTIVITY OF POLYMER/HYBRID FILLERS COMPOSITES BASED ON THE MORPHOLOGY-REGULATION STRATEGIES Qiang Fu <i>Sichuan University, CHINA</i></p>
<p>PC10</p>	<p>STUDY ON TIME-TEMPERATURE-SUPERPOSITION OF POLYOXYMETHYLENE/POLY(LACTIC ACID) BLEND J. Boonlertsamut ^{1*}, S. Mathurosemontri ², S. Thumsorn ³, T. Umemura ⁴, H. Hamada ¹ and A. Sakuma ¹ ¹ <i>Kyoto institute of technology, JAPAN</i> ² <i>Rajamangala university of technology thanyaburi, THAILAND</i> ³ <i>Pathumwan institute of technology, THAILAND</i> ⁴ <i>Plaisir Co., LTD., JAPAN</i></p>

<p>PC11</p>	<p>PROCESSING AND MECHANICAL PROPERTIES OF GF/CF HYBRID INJECTION MOLDINGS BY DFFIM K. Nishitani ^{1*}, S. Nojima ², Y. Imai ¹, Y. Komaki ¹ and H. Hamada ¹ ¹ <i>Kyoto institute of technology, JAPAN</i> ² <i>Yuho Co., Ltd., JAPAN</i></p>
<p>PC12</p>	<p>PREPARATION OF A THERMALLY CONDUCTIVE BIODEGRADABLE CELLULOSE NANOFIBER/BORON NITRIDE NANOSHEETS FILM: CRITICAL ROLE OF EDGE-HYDROXYLATION Kai Wu ¹, Qiang Fu ^{1*} ¹ <i>Sichuan University, CHINA</i></p>
<p>PC13 Poster</p>	<p>EFFECT OF ROTOR SPEED OF MIXING AND BLEND RATIOS ON PROPERTIES OF PBAT/NR BLENDS AND PBAT/NR VULCANIZATE Kwanchai Buaksuntear ^{1*} and Chanchai Thongpin ¹ ¹ <i>Silpakorn University, THAILAND</i></p>
<p>PC14 Poster</p>	<p>FUNDAMENTAL STUDY OF FLUOROPOLYMER/BN FILLED COMPOSITES WITH HIGHLY THERMAL CONDUCTIVE Takumi Ootoshi ¹, Akira Ishigami ¹, Takashi Kurose ¹, Hirofumi Mukae ², Masaji Komori ², Hideki Kono ² and Hiroshi Ito ¹ ¹ <i>Yamagata University, JAPAN</i> ² <i>DAIKIN INDUSTRIES, Ltd., JAPAN</i></p>
<p>PC15</p>	<p>CHARATERIZATION OF POLYAMIDE REINFORCED BY CELLULOSE NANOFIBER MODIFIED WITH FLUORENE Masayuki SUGIMOTO ^{1,3}, Masahiro YAMADA ¹, Daisaku SHOJO ², Hirokazu SATO ³ and Katsuhisa TOKUMITSU ³ ¹ <i>Energy Technology Laboratories, Osaka Gas Co., Ltd., JAPAN</i> ² <i>New Functional Materials Research Laboratory, KRI Inc., JAPAN</i> ³ <i>University of Shiga Prefecture, JAPAN</i></p>
<p>PC16 Poster</p>	<p>EVALUATION OF MIXING METHODS FOR NANO CELLULOSE / POLYPROPYLENE COMPOSITE FIBERS Kahoko Nogami ^{1*}, Nabila Febriani ¹, KyoungHou Kim ¹ and Yutaka Ohkoshi ^{1, 2} ¹ <i>Faculty of Textile Science and Technology, Shinshu University, JAPAN</i> ² <i>Division of Frontier Fibers, Institute for Fiber Engineering, Shinshu University, JAPAN</i></p>
<p>PC17</p>	<p>SKIN-CORE STRUCTURED FLUORINATED MWCNTS: A NANOFILLER OF EPOXY COMPOSITE TOWARDS BROADBAND HIGH DIELECTRIC CONSTANT AND LOW DIELECTRIC LOSS Yang Liu ^{1*} and Xiangyang Liu ¹ ¹ <i>Sichuan University, CHINA</i></p>

PC18	<p>STUDY ON ACTION MECHANISM OF DIHYDROXYMETHYL 1,4-METHYLPHENOL ON CONDUCTIVITY ENHANCEMENT OF POLY(3,4-ETHYLENEDIOXYTHIOPHENE) DOPED WITH POLY(STYRENE SULFONIC ACID) (PEDOT:PSS)</p> <p>S. Konagaya ^{1*}, K. Sanada ² and Y. Tawara ³ ¹ <i>Nagoya Industrial Science Research Institute, JAPAN</i> ² <i>Toyama Prefectural University, JAPAN</i> ³ <i>Asahi Yukizai Co. Ltd., JAPAN</i></p>
PC19	<p>IN-SITU RADICAL POLYMERIZATION INITIATED BY FLUORINATED GRAPHENE TO SYNTHESIZE GRAPHENE NANOFILLER WITH POLYMER CHAINS COVALENTLY DECORATED</p> <p>Wenchuan Lai ^{1*}, Xu Wang ¹ and Xiangyang Liu ¹ ¹ <i>Sichuan University, CHINA</i></p>
PC20	<p>Laminating Property of Nano-Carbon/Polycarbonate Composite Material</p> <p>Ryuta OHKI ^{1*}, Takashi AMEMIYA ¹ and Toshiyuki YASUHARA ¹ ¹ <i>Nippon Institute of Technology, JAPAN</i></p>
PC21	<p>HOW NUCLEATING AGENTS AFFECT THE NUCLEATION EFFICIENCY OF POLY(L-LACTIC ACID)</p> <p>Thanawat Khwanpipat ^{1*}, Manus Seadan ² and Supakij Suttiruengwong ¹ ¹ <i>Faculty of Engineering and Industrial Technology, Silpakorn University, THAILAND</i> ² <i>Faculty of Science, Silpakorn University, THAILAND</i></p>
PC22	<p>RESEARCH OF ARAMID/CF HYBRID COMPOSITE MATERIAL</p> <p>M. Matsushita ^{1*}, S. Nojima ¹, K. Nishitani ², Y. Komaki ² and H. Hamada ² ¹ <i>Yuho Co., Ltd., JAPAN</i> ² <i>Kyoto institute of technology, JAPAN</i></p>
PC23	<p>POLYPROPYLENE COMPOSITE REINFORCED WITH CELLULOSE FIBER FROM HORSE MANURE</p> <p>Tossapon Ritkumrop ^{1*}, Sumonman Niamlang ¹ and Pimolpun Niamlang ² ¹ <i>Rajamangala University of Technology Thanyaburi, THAILAND</i> ² <i>Rajamangala University of Technology Rattanakosin, THAILAND</i></p>
Injection Molding and Extrusion	
IE01 Poster	<p>SEGREGATION BEHAVIOUR FOR MISCIBLE BLENDS OF POLYCARBONATE AND POLY (METHYL METHACRYLATE) BLENDS</p> <p>Jitsuhiro Date [*], Takumi Sako and Masayuki Yamaguchi <i>Japan Advanced Institute of Science and Technology, JAPAN</i></p>
IE02	<p>INFLUENCE OF TALC AND RUBBER CONTENTS ON SURFACE REPLICATION OF POLYPROPYLENE INJECTION MOLDING APPLICATION TO AUTOMOTIVE PLASTICS</p> <p>Shinichi Kuroda ^{1,2}, Atsushi Mizutani ¹ and Hiroshi Ito ² ¹ <i>Nissan Motor Co., Ltd, JAPAN</i> ² <i>Yamagata University, JAPAN</i></p>

IE03	<p>PHYSICAL PROPERTIES AND HIGHLY--ORDERD STRUCTURE OF THE MODIFIED PGA MOLDINGS</p> <p>Yu Sato ¹, Akihiko Nemoto ¹, Takashi Kurose ¹, Ryo Kato ² and Hiroshi Ito ¹ ¹ <i>Yamagata University, JAPAN</i> ² <i>KUREHA CORPORATION, JAPAN</i></p>
IE04	<p>STUDYING THE RELATION AMONG INJECTION MOLDING CONDITIONS, THE PENETRATION DEPTH AND JOINING STRENGTH FOR INJECTION MOLDED DIRECT JOINING SAMPLES</p> <p>Shuaijie Zhao ¹, Shotaro Kadoya ¹, Fuminobu Kimura ², and Yusuke Kajihara ² ¹ <i>Precision Engineering Department, The University of Tokyo, JAPAN</i> ² <i>Institute of Industrial Science, The University of Tokyo, JAPAN</i></p>
IE05	<p>FLEXURAL ADHESIVE STRENGTH OF CF/PA6 PREPREG INSERT INJECTION MOLDING USING TIME-TEMPERATURE SUPERPOSITION PRINCIPLE</p> <p>B. Pinpathomrat ^{1*}, S. Thumsorn ² and H. Hamada ¹ ¹ <i>Kyoto institute of technology, JAPAN</i> ² <i>Pathumwan institute of technology, THAILAND</i></p>
IE06	<p>EVALUATION OF DISTRIBUTIVE MIXING PERFORMANCE OF FIN TYPE SCREW FOR A SINGLE SCREW EXTRUDER</p> <p>Koichi Kimura ^{1*}, Yasuya Nakayama ², Toshihisa Kajiwara ² ¹ <i>Hiroshima Plant, The Japan Steel Works Ltd., JAPAN</i> ² <i>Kyushu University, JAPAN</i></p>
IE07	<p>EXPERTS SKILL OF SET UP ON INJECTION MOLDING PARAMETERS</p> <p>Y. Nagao ¹, S. Nojima ², Y. Imai ³, K. Nishitani ³, and H. Hamada ^{3*} ¹ <i>Yamamoto Co., Ltd. , JAPAN</i> ² <i>Yuho Co., Ltd., JAPAN</i> ³ <i>Kyoto Institute of Technology, JAPAN</i></p>
Rheology	
RH01	<p>NONLINEAR VISCOELASTIC RHEOLOGY OF SODIUM ALGINATE AND CELLULOSE NANOFIBER HYDROGELS UNDER LARGE AMPLITUDE OSCILLATORY SHEARING</p> <p>Clare Maristela Galon ¹, Shingo Matsukawa ² and Rommel Bacabac ¹ ¹ <i>University of San Carlos, PHILIPPINES</i> ² <i>Tokyo University of Marine Science and Technology, JAPAN</i></p>
RH02 Poster	<p>MODIFICATION OF RHEOLOGICAL RESPONSE UNDER ELONGATIONAL FLOW FOR POLYPROPYLENE</p> <p>Yoko Fujii and Masayuki Yamaguchi <i>Japan Advanced Institute of Science and Technology, JAPAN</i></p>
RH03	<p>THE EFFECT OF DIBENZOYLHYDRAZIDE NUCLEATING AGENT ON CRYSTALLIZATION OF PLA</p> <p>Sugimoto Masataka, Umenaka Kazuhiro, Takahashi Kohei and Koyama Kiyohito <i>Yamagata University, JAPAN</i></p>

RH04	<p>FOAMING BEHAVIOR OF POLY(VINYLDENE FLUORIDE) / HIGH MOLECULAR WEIGHT ACRYLIC COPOLYMER BLENDS USING SUPERCRITICAL CARBON DIOXIDE</p> <p>Kei Yamaguchi ^{1*}, Shigehiro Watanabe ², Sathish K Sukumaran ², Masataka Sugimoto ²</p> <p>¹ <i>Kureha Corporation Polymer Processing Research Laboratories, JAPAN</i> ² <i>Yamagata University, JAPAN</i></p>
Morphology and Structural Development	
MS01 Poster	<p>STRUCTURAL REORGANIZATION OF HDPE DURING HEAT TREATMENT USING IN-SITU RAMAN SPECTROSCOPY</p> <p>Misato Nabata*, Takumitsu Kida and Koh-hei Nitta</p> <p><i>Kanazawa University, JAPAN</i></p>
Fibers, Films and Membrane	
FFM01 Poster	<p>CONTROL OF ORIENTATION BIREFRINGENCE OF CELLULOSE ACETATE</p> <p>Kazuya Hatamoto and Yamaguchi masayuki</p> <p><i>Japan Advanced Institute of Science and Technology(Jaist), JAPAN</i></p>
FFM02	<p>PROPERTIES OF POLYACRYLONITRILE NANOFIBERS FROM SOLUTION PLUNGER SPINNING TECHNIQUE</p> <p>C. lumsrivun ^{1*}, J. Boonlertsamut ¹, S. Thumsorn. ², A. Tada. ³, H. Inoyai. ⁴ and H. Hamada ¹</p> <p>¹ <i>Kyoto institute of technology, JAPAN</i> ² <i>Pathumwan institute of technology, THAILAND</i> ³ <i>Ohgi technological creation co., LTD, JAPAN</i> ⁴ <i>Kobe University School of Medicine, JAPAN</i></p>
FFM03	<p>CHALLENGE AND EFFORTS OF YUHO CO., LTD.</p> <p>M. Matsushita * and S. Nojima</p> <p><i>Yoho Co., Ltd., JAPAN</i></p>
FFM04 Poster	<p>EFFECT OF SCREW SPEED ON MORPHOLOGY AND PROPERTIES OF IN-SITU FIBRILLATION PLA/LDPE BLEND</p> <p>Kantapong Samleekaew * and Chanchai Thongpin</p> <p><i>Silpakorn University, THAILAND</i></p>
FFM05	<p>STRUCTURE AND PROPERTIES OF POLY(ETHYLENE TEREPHTHALATE) FIBER WEBS PREPARED THROUGH LASER-HEATED ELECTROSPINNING AND BIAXIAL STRETCHING PROCESSES</p> <p>Midori Takasaki ^{1*}, Tomoki Tokuda ¹, Takuya Hara ¹, Tsukasa Ito ¹, Sotaro Nanbu ¹, Haruki Kobayashi ¹, Katsufumi Tanaka ¹, Wataru Takarada ², and Takeshi Kikutani ²</p> <p>¹ <i>Kyoto Institute of Technology, JAPAN</i> ² <i>Tokyo Institute of Technology, JAPAN</i></p>
FFM06	<p>BIAXIAL STRETCHABILITY AND THICKNESS UNIFORMITY CONTROL OF POLYOLEFINS</p> <p>Toshitaka Kanai *</p> <p><i>KT Poymer, JAPAN</i></p>

FFM07 Poster	<p>STRUCTURE AND PHYSICAL PROPERTIES OF NONWOVEN FABRICS PREPARED BY PP/PET MIXED MELT BLOWING</p> <p>Ryoko SUGITA ^{1*}, Yujiro ISHII ¹, Tatsuya ISHIKAWA ¹, Yutaka OHKOSHI ^{1,2}, KyoungHou KIM ¹</p> <p>¹ Faculty of Textile Science and Technology, Shinshu University, JAPAN ² Division of Frontier Fibers, Institute for Fiber Engineering, Shinshu University, JAPAN</p>
FFM08	<p>TIME DEPENDENCE ON POLYIMIDE FILM PROPERTY USING SELF-ASSEMBLY</p> <p>Yuhei kawabata*, Sho hirai, Hiroshi sekiguchi, Ryouko nakano and Shigeru yao Fukuoka University, JAPAN</p>
FFM09	<p>TEMPERATURE DEPENDENCE OF BIREFRINGENCE AND STRESS-OPTICAL COEFFICIENT IN POLY(METHYL METHACRYLATE) FILM</p> <p>Kensuke Nemoto, Wataru Takarada * and Takeshi Kikutani Tokyo Institute of Technology, JAPAN</p>
FFM10	<p>COORDINATION OF IRON (III) ON ARAMID FIBER SURFACE TO SIMULTANEOUSLY IMPROVE ITS UV RESISTANCE AND INTERFACIAL PROPERTIES</p> <p>Zheng Cheng * and Xiangyang Liu Sichuan University, CHINA</p>
FFM11	<p>ANALYSIS ON UNSTABLE FIBER FORMATION BEHAVIOR IN MELTBLOWING PROCESS</p> <p>Sho Hatano, Wataru Takarada and Takeshi Kikutani * Tokyo Institute of Technology, JAPAN</p>
FFM12	<p>HIGH SPEED MELT SPINNING OF BICOMPONENT FIBERS CONSISTING OF PLLA AND PDLA</p> <p>Nanjanorn Roungpaisan, Wataru Takarada and Takeshi Kikutani * Tokyo Institute of Technology, JAPAN</p>
Rubber and Elastomer	
RE01 Poster	<p>TRANSFER PHENOMENON OF LOW-MOLECULAR-WEIGHT COMPOUNDS BETWEEN IMMISCIBLE POLYMERS</p> <p>Kaede Morita and Masayuki Yamaguchi Japan Advanced Institute of Science and Technology, JAPAN</p>
RE02	<p>DEVELOPMENT OF A POLYURETHANE ELASTOMER CROSSLINKED BY A MONOAMINOCYCLODEXTRIN-BASED POLYROTAXANE</p> <p>Hiroto Murakami and Hajime Sasano Nagasaki University, JAPAN</p>
RE03 Poster	<p>PREPARATION OF BIO-BASED THERMOPLASTIC VULCANIZATES FROM NATURAL RUBBER AND POLYBUTYLENE SUCCINATE BLEND</p> <p>Jedtarin Charoenta * and Chanchai Thongpin Silpakorn University, THAILAND</p>

RE04	MOTION ANALYSIS OF RUBBER CUTTING PROCESS ON TWO ROLL MILL RUBBER MIXING MACHINE Ladda Mowong *, Porakoch Sirisuwan and Sivakorn Angthong <i>Rajamangala University of Technology Thanyaburi, THAILAND</i>
Novel Processing and Advanced Materials	
NA01	EVALUATION OF ADHESIVE STRENGTH ON HIGH DENSITY POLYETHYLENE BY SURFACE MODIFICATION USING SIDE-CHAIN CRYSTALLINE BLOCK COPOLYMER Sho Hirai, Shoichi Ishimoto, Hideaki Obuchi and Shigeru Yao <i>Fukuoka University, JAPAN</i>
NA02	GRADIENT POLYDOPAMINE COATING - A VERSATILE APPROACH TO MULTI-SHAPE MEMORY EFFECT Yuan Wei and Qiang Fu <i>Sichuan University, JAPAN</i>
NA03	ENGINEERING PLASTIC COMPOSITES REINFORCED BY NOVEL HEATPROOF CELLULOSE NANO-FIBER PART2 -PC, PPE, PET, PA66- Takeshi SEMBA ¹ , Akihiro ITO ¹ , Kazuo Kitagawa ¹ and Hiroyuki YANO ² ¹ <i>Kyoto municipal institute of industrial technology and culture, JAPAN</i> ² <i>Kyoto university, JAPAN</i>
NA04	METAL-POLYMER DIRECT JOINING VIA POLYMER REPLICATION INTO NANOSCALE METAL SURFACE STRUCTURES Shotaro KADOYA, Fuminobu KIMURA and Yusuke KAJIHARA <i>The University of Tokyo, JAPAN</i>
NA05	Fundamental of Wiring on Three-dimensional Shape Surfaces Obtained by Imprinting Process Shogo ota, Akihiko Nemoto, Takashi Kurose and Hiroshi Ito <i>Yamagata University, JAPAN</i>
NA06	STRUCTURAL FORMATION OF ONE-DIMENSIONAL POROUS NANOSTRUCTURES FABRICATED BY NANOIMPRINTING AND CO2 FOAMING PROCESSES P. Muanchan *, T. Kurose and H. Ito <i>Yamagata University, JAPAN</i>
NA07	IMPROVEMENT OF THERMAL CONDUCTIVITY OF COMPOSITE MATERIAL BY FORCED ORIENTATION OF CARBON FIBER Takushi Saito *, Satoshi Ihara, Tatsuya Kawaguchi and Isao Satoh <i>Tokyo Institute of Technology, JAPAN</i>
NA08	MODIFICATION OF CHEMICALLY-STABLE POLYMERIC MATERIALS 108. IMPROVEMENT IN THE ADHESION OF DISSIMILAR MATERIALS Hitoshi Kanazawa ¹ and Aya Inada ² ¹ <i>Yamagata University, JAPAN</i> ² <i>Fukushima University, JAPAN</i>

Rotational Molding	
RM01	<p>POLYPROPYLENE/POLYETHYLENE TWO-LAYERED ROTATIONAL MOLDING PRODUCTS</p> <p>Ektinai Jansri ^{1*}, Narongchai O-Charoen ¹ and Hiroyuki Hamada ² ¹ <i>Rajamangala University of Tecnology Thanyaburi, THAILAND</i> ² <i>Kyoto Institute of Technology, JAPAN</i></p>
RM02	<p>RECYCLED POLYETHYLENE FROM PLASTIC WASTE FOR ROTATIONAL MOLDING PRODUCTS</p> <p>Narongchai O-Charoen ^{1*}, Ektinai Jansri ¹ and Hiroyuki Hamada ² ¹ <i>Rajamangala University of Tecnology Thanyaburi, THAILAND</i> ² <i>Kyoto Institute of Technology, JAPAN</i></p>
Pultrusion	
P01	<p>EXPERIMENTAL STUDY OF THE PULTRUSION OF CFRTP COMPOSITES</p> <p>Patcharat Wongsriraksa ^{1*} and Asami Nakai ² ¹ <i>Gu Composite Research Center, Gifu University, JAPAN</i> ² <i>Department of Mechanical Engineering, Gifu University, JAPAN</i></p>
P02	<p>THE DESIGNING AND FABRICATION OF THE PULTRUSION CACHINE FOR FORMING UNIDIRECTIONAL THERMOPLASTIC COMPOSITES</p> <p>Anin Memon ^{1*}, Supaaek Pramoonmak ¹, Srirai Jarupinyo ¹, Ponlapath Tipboonsri ¹, Montip Lowsuriyonta ² and Jirawat Jai-u ³ ¹ <i>Department of Industrial Engineering, Faculty of Engineering, Rajamangala University of Technology Thunyaburi, THAILAND</i> ² <i>Department of Material and Metallurgical Engineering, Faculty of Engineering, Rajamangala University of Technology Thunyaburi, THAILAND</i> ³ <i>Department of Industrial Engineering, Faculty of Industrial Education, Rajamangala University of Technology Thunyaburi, THAILAND</i></p>
Recycling	
R01	<p>HIGH PERFORMANCE PELLETIZING PROCESS OF WASTE PLASTICS</p> <p>Natsumi Yamasaki, Keitaro Yamashita, Yasuko Ueno, Patchiya Phanthong and Shigeru Yao* <i>Fukuoka University, JAPAN</i></p>
R02	<p>RELATIONSHIP BETWEEN INNER STRUCTURE TRANSITION AND THE DEGRADATION OF PHYSICAL PROPERTIES IN LOW-DENSITY POLYETHYLENE</p> <p>Patchiya Phanthong [*], Hiroshi Sekiguchi, Ryoko Nakano and Shigeru Yao <i>Fukuoka University, JAPAN</i></p>
R03	<p>CHANGE IN MECHANICAL PROPERTIES OF POLYSTYRENE DUE TO THE DIFFERENCE OF SHEAR MODE</p> <p>N. Yamasaki ^{1*}, P. Phanthong ², K. Yamashita ¹, Y. Ueno ¹, R. Nakano ², H. Sekiguchi ², and S. Yao ^{1,2} ¹ <i>Graduate School of Chemical Engineering, Fukuoka University, JAPAN</i> ² <i>Department of Chemical Engineering, Fukuoka University, JAPAN</i></p>

R04 Poster	MULTI-FUNCTIONAL RECYCLED POLY(ETHYLENE TEREPHTHALATE) FIBER FOR THERMAL INSULATION Danu Hunsunatai *, Weraporn Pivsa-Art and Sommai Pivsa-Art <i>Rajamangala University of Technology Thanyaburi, THAILAND</i>
R05 Poster	A STUDY OF THE PROPERTIES OF FIBERS AND YARNS FROM RECYCLED RAG AND RESIDUAL POLYESTER YARNS Sakda Preechawattanasakul*, Weraporn Pivsa-Art and Sommai Pivsa-Art <i>Rajamangala University of Technology Thanyaburi, THAILAND</i>
Biobased and Biodegradable polymer	
BB01	LOW-TEMPERATURE PROCESSABLE POLYMERS FROM RENEWABLES 1: ELUCIDATION OF FLOW MECHANISM Ikuo Taniguchi* and Kaoru Akikusa <i>Kyushu University, JAPAN</i>
BB02	LOW-TEMPERATURE PROCESSABLE POLYMERS FROM RENEWABLES 2: FLOW PROPERTIES AND DEGRADABILITY Kaoru Akikusa* and Ikuo Taniguchi <i>Kyushu University, JAPAN</i>
BB03	EFFECTS OF HEAT TREATMENT ON POLYLACTIC ACID SHEETS FOR LIQUID PHASE DEPOSITION OF ALUMINUM OXIDE Varistha Chobpattana <i>Rajamangala University of Technology Thanyaburi (RMUTT), THAILAND</i>
BB04	CRYSTALLIZATION KINETICS AND MORPHOLOGY OF BIODEGRADABLE POLY(BUTYLENE SUCCINATE-CO-BUTYLENE ADIPATE)/CELLULOSE NANOCRYSTALS NANOCOMPOSITES Jingnan Li and Zhaobin Qiu* <i>Beijing University of Chemical Technology, CHINA</i>
BB05 Poster	PREPARATION OF BIO-BASED RESIN FROM EPOXIDIZED SOYBEAN OIL AND OLIGOMER OF 1,4-BUTANEDIOL AND SUCCINIC ACID: EFFECT OF REAGENT RATIO AND CATALYST CONTENT ON CURING KINETIC Suwitchaya Gongarsa *, Wanchai Lerdwijitjarud and Amnard Sittattrakul <i>Silpakorn University, THAILAND</i>
BB06 Poster	MORPHOLOGY AND MECHANICAL PROPERTIES OF BIOPOLYMER BLEND BETWEEN THERMOPLASTIC STARCH GRAFTED WITH MALEIC ANHYDRIDE AND POLYCAPROLACTONE GRAFTED WITH MALEIC ANHYDRIDE Nanntee Thampanya *, Wanchai Lerdwijitjarud and Amnard Sittattrakul <i>Silpakorn University, THAILAND</i>
BB07 Poster	DEVELOPMENT OF CELLULOSE/β-CYCLODEXTRIN COPOLYMER FOR CAFFEINE ABSORPTION Raphiphat Lerdsuriyakun* and Wanchai Lerdwijitjarud <i>Silpakorn University, THAILAND</i>

BB08 Poster	BIO-BASED BLENDS OF POLY(LACTIC ACID) AND POLYAMIDE 11 WITH THE ADDITION OF POLY(LACTIC ACID) GRAFTED WITH MALEIC ANHYDRIDE Siraprapa Thaptham * and Nattakarn Hongsriphan <i>Silpakorn University, THAILAND</i>
BB09	THE DERIVED PLANT OILS: THE PERFECT IMPACT MODIFIER FOR BIOPLASTICS Kullawadee Sungsanit*, Passkovrn Nirundon and Veerasak Dechmo <i>Rajamangala University of Technology Thanyaburi, THAILAND</i>
BB10 Poster	FABRICATION OF POLY(LACTIC ACID) NON-WOVEN FIBER BY MELT-BLOWN METHOD FOR ANTIMICROBIAL APPLICATIONS Saowaluk Boonyod*, Weraporn Pivsa-Art and Sommai Pivsa-Art <i>Rajamangala University of Technology Thanyaburi, THAILAND</i>
3D-printing and additive manufacturing	
3D01	ELECTROSPUN BIODEGRADABLE NANOFIBERS AND 3D PRINTED BOLT FOR PROMOTION OF TENDON-BONE HEALING Ying-Chao Chou ¹ , Chien-Lin Chao ² and Shih-Jung Liu ^{1,2*} ¹ Chang Gung Memorial Hospital, TAIWAN ² Chang Gung University, TAIWAN
3D02 Poster	COMPUTATIONAL DESIGN AND MATERIAL SELECTION FOR SHIPPING PACKAGING Phiraphong Wongwisitchai * , Nattakarn Hongsriphan and Pajaera Patanathabutr <i>Silpakorn University, THAILAND</i>
The vented injection molding	
S-V01	MECHANICAL PROPERTIES OF JUTE/PLA COMPOSITES FABRICATED BY DFFIM : EFFECT OF FIBER SURFACE TREATMENT Prattakon Sarasook ¹ , Putinun Uawongsuwan ^{1*} , Anin Memon ² and Hiroyuki Hamada ³ ¹ King Mongkut`s University of Technology North Bangkok, THAILAND ² Rajamangala University of Technology Thanyaburi, THAILAND ³ Kyoto Institute of Technology, JAPAN