



Hanoi University of
Science and Technology

THE 16th ASIAN WORKSHOP ON POLYMER PROCESSING (AWPP2017)



ver. 1.66 13-10-2017

16-19 October, 2017
Hanoi University of Science and Technology, Hanoi, Vietnam

PROGRAM

16 Oct. 2017 (MON)		Welcome Reception
Time	HUST Venue	
16:00-17:30	D2A Building - 2nd Floor Room 201	AWPP2017 Executive Committee Members Meeting (<i>invited</i>)
18:00-18:30	D2A Building - 3rd Floor	Registration
18:30-20:00	D2A Building - 3rd Floor	Light Refreshment
17 Oct. 2017 (TUE)		10th Floor - Ta Quang Buu (TQB) Library Building
08:00-09:00	TQB Library Building	Registration
09:00-09:15	TQB Library Building	Opening Ceremony
09:15-10:00	Plenary Speaker	Influence of Morphological Scaling Effects on Mechanical Properties of Polymer Foams Volker Altstädt (ID15), University of Bayreuth, GERMANY
10:00-10:15		Photo Session
	10:15-11:45	Session 1. Fibers & Films & Textiles Session 2. Extrusion & Injection Moldings

	TQB Library Building	9th Floor - Room 923	9th Floor - Room 902
	Chairperson	Takeshi Kikutani	Takushi Saito
10:15-10:45	Invited Speaker	Dynamics and Structure Development for Biaxial Stretching PA6 Films Toshitaka Kanai (ID50), KT Polymer, JAPAN	Visualization analysis of asymmetric fountain flow phenonema in injection molding of short glass-fiber reinforces resins. Hidetoshi Yokoi (ID57), Jingru Guo, The University of Tokyo, JAPAN
10:45-11:05	Invited Speaker/ Oral Presentation	Preparation of High-Performance Polylactide Fibers via Manipulating Crystallization with Fibrillar Nucleating Agent Huixian Zhang (ID10), Hongwei Bai, Qiang Fu, Sichuan university, CHINA	Long Term Property of Injection Moldings Hiroyuki Hamada (ID2), Lichao Yu, YuQiu Yang, Kyoto Institute of Technology, CHINA
11:05-11:25	Oral Presentation	3-Dimentional Stress-Optical Behavior of Amorphous Films During Sequential Bi-axial stretching Process Kensuke Nemoto (ID16), Wataru Takarada, Takeshi Kikutani, Tokyo Institute of Technology, JAPAN	A New Dimension in Continuous Multi-Layered Co-Extrusion: Micro and Nano-layered Tubes and Pipes Joao Maia (ID5), Tyler Scheider, Case Western Reserve University, USA
11:25-11:45	Oral Presentation	Structural Formation of COC Film as Revealed by Real Time Retardation Measurements During Fast Stretching Process Yoshinori Hashimoto (ID44), Yoshinori Ohta, Hiroshi Ito, Yamagata University, JAPAN	Development of Semi-Solid Magnesium Alloy Injection Molding Trial Machine and Optimization of Molding Conditions Keita Sugimoto (ID35/36), Keita Sugimoto, Tastuya Tanaka, Akira Inoue, So Shimokusuzono, Doshisha University, JAPAN
11:45-12:05	Oral Presentation	Film Formation History Dependence of Structural Characteristics of Polyamide Membrane Naoki Nishikawa (ID14), Hiroshi Sekiguchi, Ryoko Nakano, Shigeru Yao, Fukuoka University, JAPAN	The Method for Online Monitoring of A Burn-Mark on Injection Moulded Parts Yoshio Fukushima (ID1), Tomoyuki Iwasawa, Akiko Sakamoto, Takashi Suzuki, Motokazu Asano, Saitama Institute of Technology, JAPAN
12:05-13:30	HUST	Lunch break - 10th Floor, TQB Library Building	
	13:30-14:40	Session 3. Polymer Nano Technology	Session 4. Advanced Polymer Characterization
	TQB Library Building	9th Floor - Room 923	9th Floor - Room 902

	Chairperson	Anup K Ghosh	Toshitaka Kanai
13:30-14:00	Invited Speaker	Epoxidation Reaction of Deprotonized Natural Rubber Characterized in Latex-State NMR Spectroscopy Warunee Ariyawiriyanan (ID61), Phatcharapon Bunchua, Kewwarin Sae-Heng, Seiichi Kawahara, Rajamangala University of Technology Thanyaburi, THAILAND	Development of Acrylic PSAs Bearing A Mesogenic Group Hiroto Murakami (ID26), Ryu Nakanishi, Satoshi Yamaguchi, Shinichiro Kawahara, Nagasaki University, JAPAN
14:00-14:20	Oral Presentation		Effects of Mixing Condition on Mechanical Properties Shiori Watanabe (ID12), Madoka Kiriishi, Sayaka Yamada, Kobe Steel, Ltd., JAPAN
14:20-14:40	Oral Presentation	Surface and Inner Surface Plating Effect of Polyethylene Porous Membrane Tomonori Uchino (ID25), Tomonori Uchino, Hiroshi Sekiguchi, Ryoko Nakano, Shigeru Yao, Fukuoka University, JAPAN	The Evaluation of Stretchability of Polypropylene and Polystyrene Films using a Newly Developed Testing Machine Kentaro Egoshi (ID55), Toshitaka Kanai, Kazuhiro Tamura, ETO Co., Ltd. / Kanazawa University, JAPAN
14:40-15:00	Oral Presentation	Preparation and Characterization of Cellulose Nanofibers and Their Polymer Composites From Oil Palm Empty Fruit Bunches (OPEFB) Farah Fahma (ID60/65), Bogor Agricultural University, INDONESIA	The Kinetic and Thermodynamic Influence Factors of Phase Morphology of Polyolefin Based Polymer Blends via High Speed Thin Wall Injection Molding Yi Zhou (ID9), Hua Deng, Feilong Yu, Qiang Fu, Sichuan University, CHINA
15:00-15:40		Poster Presentation & Exhibition (9th Floor)	
	15:40-17:40	Session 5. Biopolymer & Bio Technologies	Session 6. Recycle & Environment & Energy
	TQB Library Building	9th Floor - Room 923	9th Floor - Room 902
	Chairperson	Phu Huynh Dai	Warunee Ariyawiriyanan

15:40-16:00	Invited Speaker/ Oral Presentation	Fiber Structure Development in High-Speed Melt Spinning of PEF, a Bio-based Alternative Polymer for PET Takeshi Kikutani (ID30), Wataru Takarada, Hajime Nakajima, Jesper Berker, Kenichi Sugimoto Tokyo Institute of Technology, JAPAN	The Change on The Filler Dispersion in SBR/Silica under Elongation by In-situ Ultra Small X-ray Scattering Shotaro Nishitsuji (ID21), Makoto Otomo, Mikihiro Takenaka, Yamagata University, JAPAN
16:00-16:20	Oral Presentation	Degradable Polymers From Renewable Resources with Low-Temperature Formability Ikuo Taniguchi (ID32), Kyushu University, JAPAN	Visualization Analysis on Reduction Effects of Bubble Breaking and Gas Generation at Flow Front by Counter Pressure Injection Molding with Low Pressure Level Eisaku Shimomura (ID54), Michihiro Tatsuno, Hidetoshi Yokoi, University of Tokyo, JAPAN
16:20-16:40	Oral Presentation	Microstructure and Mechanical Property of 3D Printing Polylactic Acid Acaffold Used for Biomedical Engineering Phu Huynh Dai (ID48), Nguyen Thai Hoa, Hochiminh City University of Technology, VIETNAM	Linseed Cake as a Promising, Biodegradable Plasticizing Filler for Poly(Lactic acid)-Based Composites Olga Mysiukiewicz (ID20), Mateusz Barczewski, Poznań University of Technology, POLAND
16:40-17:00	Oral Presentation	The Effect of Filler Preliminary Treatment on Rheological Behaviour of Polylic Acid Green Composites Filled with Ground Linseed Cake Mateusz Barczewski (ID28), Olga Mysiukiewicz, Krzysztof Lewandowski Institute of Materials Technology, Poznan University of Technology, POLAND	Study on the Change in Characteristics and Morphology of High Density Polyethylene/Organo-Modified Calcium Carbonate Composites Exposed Naturally at Dong Hoi-Quang Binh Le Duc Minh (ID69), Nguyen Thuy Chinh, Nguyen Vu Giang, Le Duc Giang, Tong Cam Le, Dau Thi Kim Quyen, Tran Huu Trung, Mai Duc Huynh, Thai Hoang, Vietnam Academy of Science and Technology, VIETNAM
17:00-20:00		Dinner - D2A Building, 3rd Floor	
18 Oct. 2017 (WED)		TQB Library Building	
	08:30-09:00	Registration	
	9:00-9:50	Session 7. Special Workshop	Session 8. Rheology & Rheometry
	TQB Library Building	9th Floor - Room 923	9th Floor - Room 902
	Chairperson	Phan Trung Nghia	Volker Altstädt

09:00-09:30	Invited Speaker	The Use of Low and High Field NMR for The Characterization of Elastomer - Comparison of Methods and Applications Kuhn Winfried (ID30b), IIC Dr. Kuhn GmbH&Co KG, GERMANY	Rheology of Particulate Suspensions for Protective Devices in Defence Applications Anup K Ghosh (ID71), Indian Institute of Technology, Delhi, INDIA
09:30-09:50	Invited Speaker/ Oral Presentation	Research on Intelligent Manufacturing of 3D Printing/ Copying of Polymer Pengcheng Xie (ID40), Ranran Jian, Beijing University of Chemical Technology, CHINA	Transient Rheology and 3-Dimensional Fibre Orientation Evolution in Nylon-6 Glass Fibre Composites Rahul Gupta (ID37), RMIT University, AUSTRALIA
09:50-10:20		Poster Presentation & Exhibition (9th Floor)	
	10:20-11:50	Session 9. Structure & Properties & Simulation	Session 10. Advance Polymer Processing and Materials
	TQB Library Building	9th Floor - Room 923	9th Floor - Room 902
	Chairperson	Rahul Gupta	Warunee Ariyawinriyanan
10:20-10:50	Invited Speaker/ Oral Presentation	A Comparison Between The Use of Continuous and Pore Network Approach in The Simulation of The Drying Process of Porous Media with Different Pore Size Distributions Hong Thai Vu (ID8), Thomas Metzger, Evangelos Tsotsas, School of Chemical Engineering, Hanoi University of Science and Technology, VIETNAM	Achieving Eexcellent Dispersion and Electrical Conductivity of Olefin Block Copolymer/MWCNTs Composites Efficiently via High-shear Processing Guopeng Sui (ID11), Qiang Fu, Sichuan university, CHINA
10:50-11:10	Oral Presentation	Development of an Internal Structure in The Melt State of Polystyrene Shigeru Yao (ID23), Naoto Oda, Aya Tominaga, Natsumi Yamasaki, Ryoko Nakano, Hiroshi Sekiguchi, Fukuoka University, JAPAN	Influence of Carbon Nano Tube on Interfacial Adhesion for Hybrid Injection Molding Junya Shiode (ID41), Tatsuya Tanaka, Koki Matsumoto, Masao Tomioka, Takeshi Ishikawa, Doshisha University, JAPAN

11.10-11.30	Oral Presentation	Partially Filled Flow Simulation for Mixer Using Meshfree Method Satoshi Chikaguchi (ID13), Kazuhide Sekiyama, Sayaka Yamada, Tomokazu Nakagawa, Kobe Steel, Ltd., JAPAN	Development of Mold for Evaluating Fiber Breakage/Dispersibility in Injected Resins in Long-fiber Reinforced Resin Injection Xiaobin Wu (ID53), Shigeru Owada, Hidetoshi Yokoio, University of Tokyo, JAPAN
11.30-11:50	Oral Presentation	One-Step Fabrication of Silver Nanoparticle Embedded Cholesteryl Pyridine Carbamate Organogel Nguyen Ngoc Thang (ID64), Jui Hsiang Liu, Hanoi University of Science and Technology, VIETNAM	SCCBC'S Functional Units Length Dependence to Polyethylene Surface Hydrophilic Modification Ability Yuga Miho (ID22/27), Ryoko Nakano, Hiroshi Sekiguchi, Shigeru Yao, Fukuoka University, JAPAN
12:00-13:30	HUST	Lunch break - 10th Floor, TQB Library Building	
	13:30-15:30	Session 9. Structure & Properties & Simulation	Session 10. Advance Polymer Processing and Materials
	TQB Library Building	9th Floor - Room 923	9th Floor - Room 902
	Chairperson	Takeshi Kikutani	Hiroto Murakami
13:30-14:00	Invited Speaker/ Oral Presentation	Evaluation of Thermal Resistance at Welded Interface of Heterogeneous Polymer System Takushi Saito (ID31), Tatsuya Kawaguchi, Isao Satoh, Tokyo Institute of Technology, JAPAN	Fabrication and Evaluation of Resin Matrix-Nanocarbon Composites using Melt-Kneading Technique Takashi Amemiya (ID47), Ryuta Oki, Toshiyuki Yasuhara, Nippon Institute of Technology, JAPAN
14:00-14:20	Oral Presentation	Impacts of Pitched Tips of Kneading Element in Twin-Screw Extrusion: Tuning Flow Pattern and Mixing Performance Yasuya Nakayama (ID3), Hiroki Takemitsu, Toshihisa Kajiwara, Koichi Kimura, Takahide Takeuchi, Hideki Tomiyama, Kyushu University, JAPAN	Thermoplastic Cassava Starch-PVA Composite Films with Cellulose Nanofibers from Oil Palm Empty Fruit Bunches as Reinforcement Agent Sugiarto (ID80), Farah Fahma, Titi Candra Sunarti, Sabrina Manora Indriyani, Nurmalisa Lisdayana, Department of Agroindustrial Technology, Faculty of Agricultural Engineering and Technology, Bogor Agricultural University, INDONESIA
14:20-14:50	HUST	Poster Presentation & Exhibition (9th Floor)	

14:50-15:10	Oral Presentation	Study on the Conductivity of Graphene Oxide (GO)/ Cellulose Nanofiber (CeNF)/ Water Dispersible Polyester (PEs) Composites Shigeji Konagaya (ID29), Mariko Terada, Toshio Saruyama, Hitoshi Shibuya, Nagoya Industrial Science Research Institute, JAPAN	Nano-particle Catalyst Hydrogenation of Natural Rubber in Latex Stage Nguyen Thu Ha (ID78), Phan Trung Nghia, Seiichi Kawahara, Hanoi University of Science and Technology, VIETNAM
15:10-15:30	Oral Presentation	The Study on the Change with Density Fluctuations of Polycarbonate under Deformation by Time-resolved Small Angle X-ray Scattering Yuki Watanabe (ID18), Shotaro Nishitsuji, Hiroshi Ito, Masaru Ishikawa, Takashi Inoue, Mikihiro Takenaka, Yamagata University, JAPAN	Structure of Self-Organized Porous Polyamide Membrane Dependence on Polyamic Tsubasa Wakabayashi (ID24), Naoki Nishikawa, Hiroshi Sekiguchi, Ryoko Nakano, Shigeru Yao, Fukuoka University, JAPAN
15:30-15:40		Closing Ceremony at 9th Floor Room 923	
16:00-16:30		Free Time or Visiting Center for Rubber Science and Technology, D2A Building, HUST	
17:30-21:00		Banquet (Welcome and Farewell Dinner of AWPP2017) at GIO MOI Restaurant 287 Le Duan Str. Next AWPP2018 in Thailand-Presentation	
19 Oct. 2017 (THU)		AWPP2017 TECHNICAL TOUR	
7:00	Departure from HUST (TQB Library Building) to Nhat Minh Plastic Company and Trang An, Ninh Binh Province		
19:00	Arrive at HUST (TQB Library Building)		

Poster ID	POSTER SESSION (9th Floor, TQB Library Building)
01	Detection of Isomerization in Commercial Natural Rubber Thuong Nghiem Thi (ID59), Phan Trung Nghia, Seiichi Kawahara, Hanoi University of Science and Technology, VIETNAM
02	Living Radical Polymerization Properties and Function of the Monomer Having a Very Long Side Chain Takuro Hasuwa (ID42), Hiroshi Sekiguchi, Ryoko Nakano, Shigeru Yao, Satoshi Yamaguchi, Shinichiro Kawahara, Fukuoka University, JAPAN
03	Optimization of The Flame Retardant Additive to Build A Green Flame Retardant Coating Formulation Le Cao Chien (ID77), Dat Trinh Minh, Ha Le Thi Song, Qui Vu Ngoc, Centre for Organic Materials & Construction Chemical, VIETNAM
04	Microstructural Changes in Cellulose Nanofiber Composites upon Stretching Hitoshi Takagi (ID63), Yuya Sakaguchi, Antonio Nakagaito, Tokushima University, JAPAN
05	Influence of Cyanuric Acid as an Efficient Nucleating Agent on the Crystallization Behavior and Morphology of Biodegradable Poly(ϵ-caprolactone) Zhaobin Qiu (ID4), Kangjing Zhang, Beijing University of Chemical Technology, CHINA
06	Melt Kneading Process Dependence of Mechanical and Structural Properties of Amorphous Polymer Natsumi Yamasaki (ID46), Aya Tominaga, Hiroshi Sekiguchi, Ryoko Nakano, Shigeru Yao, Kazuko Nomiyama, Fukuoka University, JAPAN
07	Effect of WO₃ Dooped TiO₂ Nanoparticles For Solar Photocatalytic Degradation of Methyl Blue and Methyl Organe Nguyen Thi Tuyet Mai (ID56), Luu Thi Lan Anh, Neto Mateus Manuel, Trinh Xuan Anh, Ta Ngoc Dung, Phan Trung Nghia, Huynh Dang Chinh, Vo Thach Son, Hanoi University of Science and Technology, VIETNAM
08	Preparation and Mechanical Properties of Natural Rubber Vulcanizates with MgO Nano-Particles Luu Thanh Huyen (ID68), Phan Trung Nghia, Seiichi Kawahara, Nagaoka University of Technology, JAPAN
09	Mechanical Properties of Natural Rubber with Polystyrene Nanomatrix Structure Kota Endo (ID67), Nghia Phan Trung, Seiichi Kawahara, Nagaoka University of Technology, JAPAN
10	Microstructure Formation to PEI by Thermal Imprinting Hiroto Shishido (ID17), Akihiko Nemoto, Hiroshi Ito Graduate School of Organic Materials Science, Yamagata University, JAPAN

Poster ID	POSTER SESSION (9th Floor, TQB Library Building)
11	<p>Characterization of Epoxidized Natural Rubber for Coating Application Nguyen Hong Quan (ID70), Nguyen Thu Ha, Phan Trung Nghia, Seiichi Kawahara, Hanoi University of Science and Technology, VIETNAM</p>
12	<p>Characterization of Natural Rubber from Jackfruit Tran Thanh Tung (ID72), Nguyen Thu Ha, Phan Trung Nghia, Seiichi Kawahara, Hanoi University of Science and Technology, VIETNAM</p>
13	<p>Hydrogenation of Natural Rubber with Nano Palladium as Heterogeneous Catalyst Do Quoc Viet (ID73), Nguyen Thu Ha, Phan Trung Nghia, Seiichi Kawahara, Hanoi University of Science and Technology, VIETNAM</p>
14	<p>Characterization of Structure and Properties of Vietnam Commercial Natural Rubbers Nguyen Văn Linh (ID74), Nghiem Thi Thuong, Hanoi University of Science and Technology, VIETNAM</p>
15	<p>Preparation of Natural Rubber/ Na⁺-Montmorillonite Nanocomposites by Latex Mixing Method Nguyen Hong Duy (ID75), Nghiem Thi Thuong, Phan Trung Nghia, Seiichi Kawahara, Hanoi University of Science and Technology, VIETNAM</p>
16	<p>Synthesis and Investigations of Visible-Light-Driven Photocatalytic Degradation of Phenol by Nanoparticles Ta₂O₅ Vu Dinh Phuong (ID79), Nguyen Quang Bac, Doan Trung Dung, Pham Ngoc Chuc, Nguyen Thi Ha Chi, Duong Thi Lim, Tran Hong Con, Dao Ngoc Nhiem, Vietnam Academy of Science and Technology, VIETNAM</p>
17	<p>Study of Shrink Film Using Homo-PET as Sole Material Masayuki Haruta (ID45), Toyobo., LTD, JAPAN</p>
18	<p>Synthesis, Characterization of Graphene Quantum Dots And Its Application for Fabrication of Electrochemical Hydrogen Peroxide Sensor Hoang Vinh Tran (ID81), Nghia Duc Nguyen, Tuan Van Nguyen, Chinh Dang Huynh, Department of Inorganic Chemistry, School of Chemical Engineering, Hanoi University of Science and Technology, VIETNAM</p>
19	<p>Synthesis of FeOOH/Carbon Quantum Dots Nanocomposite And Investigate Its Peroxidase-like Catalytic Activity Hoang Vinh Tran (ID82), Tuan Ngoc Nguyen, Nghia Duc Nguyen, Chinh Dang Huynh, Department of Inorganic Chemistry, School of Chemical Engineering, Hanoi University of Science and Technology, VIETNAM</p>

Poster ID	POSTER SESSION (9th Floor, TQB Library Building)
20	<p>Synthesis and Application of Chitosan/Graphene Oxide/Magnetite (CS/GO/Fe₃O₄) Multifunctional Nanostructured Composite. Application to Remove of Heavy Metal Ions From Contaminated Water Le Dang Truong (ID83), Tran Vinh Hoang, Le Dieu Thu, Tran Ngoc Quang, Nguyen Thi Minh Hang, School of Chemical Engineering, Hanoi University of Science and Technology, VIETNAM</p>
21	<p>Polymer Alloy of Polybutylene Terephthalate and Polyrotaxane and Its Physical Properties Fumiya Sakakibara (ID19), Akira Ishigami, Hiroshi Ito, Yamagata University, JAPAN</p>
22	<p>Synthesis and Application of Chitosan/Graphene Oxide/Magnetite (CS/GO/Fe₃O₄) Multifunctional Nanostructured Composite. Application to Remove of Heavy Metal Ions From Contaminated Water Le Dieu Thu (ID84), Do Quang Trung, Trinh Xuan Anh, Hanoi University of Science and Technology, VIETNAM</p>
23	<p>Biomaterial Scaffold of Micro-Nano Electrospun Polylactide Acid and Hydroxy Apatite From Wet Chemical Hydrothermal Reaction Phu Huynh Dai (ID58), Nguyen Thai Kien, Pham Trung Kien, Hochiminh City University of Technology, VIETNAM</p>
24	<p>Actinoplanes sp. of Rubber Degrading Bacteria Ffunctional Aanalysis of Rubber Degradation Genes Daito Suda (ID85), Viet Linh Dao, Daisuke Kasai, School of Bioengineering, Ngaoka University of Technology, JAPAN</p>
25	<p>Low-temperature Processable Block Copolymers from Renewable Resources Kaoru Akikusa (ID33), Ikuo Taniguchi, Kyushu University, JAPAN</p>
26	<p>Thermoplastic Starch-PVA Composite Films Reinforced with Nanocellulose from Oil Palm Empty Fruit Bunches (OPEFBs): Effect of Starch Type Nurmalisa Lisdayana (ID86), Farah Fahma, Titi Candra Sunarti, Sugiarto, Department of Agroindustrial Technology, Faculty of Agricultural Engineering and Technology, Bogor Agricultural University, IINDONESIA</p>
27	<p>Biodegradation Properties of TPS-PVA Nanocomposite with Nanocellulose from Oil Palm Empty-Fruit-Bunch as Nanofiller Rahmad Dwi Haryadi (ID87), Purwoko, Farah Fahma, Sugiarto, Department of Agroindustrial Technology, Faculty of Agricultural Engineering and Technology, Bogor Agricultural University, INDONESIA</p>
28	<p>Application of Thermoplastic Starch-PVA Composite Films Reinforced with Nanocellulose from Oil Palm Empty Fruit Bunches (OPEFBs) for enhancing shelf-life of red chilli Opal Priya Wening (ID88), Farah Fahma, Sugiarto, Purwoko, Department of Agroindustrial Technology, Faculty of Agricultural Engineering and Technology, Bogor Agricultural University, INDONESIA</p>