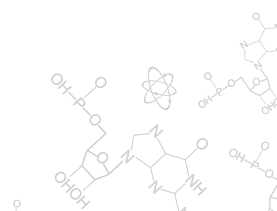




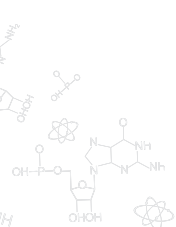
# Program at a Glance

Wednesday, September 4		
Time	Venue	Activity
14:00-17:00	Centennial Hall, Yamagata University	Registration
15:00-17:00	Centennial Hall, Yamagata University	Welcome reception

Thursday, September 5		
Venue	Big classroom	
08:50-09:00	Opening Ceremony	
09:00-10:30	Plenary Presentations	
10:30-10:40	Coffee Break	
Venue	Big classroom	
10:40-12:10	Invited Presentations	
12:10-13:00	Lunch Time	
Venue	Big classroom	
13:00-15:00	Invited Presentations	
15:00-15:10	Coffee Break	
Venue	Big classroom	Middle classroom
15:10-16:30	Oral Presentations	Oral Presentations
Venue	Meeting room	
16:30-17:10	Poster Presentations	
Venue	Uesugi Hakushakutei	
18:00-21:00	Banquet	

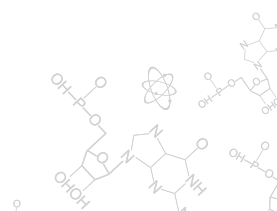


<b>Friday, September 6</b>		
<b>Venue</b>	<b>Big classroom</b>	
09:00-10:30	Plenary Presentations	
10:30-10:40	<b>Coffee Break</b>	
<b>Venue</b>	<b>Big classroom</b>	
10:40-12:10	Invited Presentations	
12:10-13:00	<b>Lunch Time</b>	
<b>Venue</b>	<b>Big classroom</b>	
13:00-15:30	Invited Presentations	
15:30-15:40	<b>Coffee Break</b>	
<b>Venue</b>	<b>Big classroom</b>	<b>Middle classroom</b>
15:40-17:40	Oral Presentations	Oral Presentations
<b>Venue</b>	<b>Big classroom</b>	
17:40-17:50	<b>Closing Ceremony</b>	

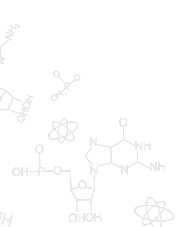




Thursday, September 5	
Venue	Big classroom
08:50-09:00	Opening Ceremony
Chair	H. Ito
09:00-09:45	<b>#1008</b> : Recent developments of polymers, foams, blends, composites, aerogels, and hydrogels with special functions and properties <u>Lih-Sheng Turnq</u>
09:45-10:30	<b>#1018</b> : A rheology perspective of polymer phase transitions <u>Grizzuti N</u>
10:30-10:40	Coffee Break
Venue	Big classroom
Chair	T. Kurose
10:40-11:10	<b>#1017</b> : Preparation and mechanical properties of composite fiber of poly(vinyl alcohol)/graphene oxide Y.J. Li, C.C. Wu, C. Xiao, D. Hu, X. Wang, J. Sun, <u>L.X. Dai</u>
11:10-11:40	<b>#1064</b> : Small-angle X-ray scattering studies on the formation of kinks in block copolymer millefeuille-like structures R. Tanaka and <u>S. Sakurai</u>
11:40-12:10	<b>#1012</b> : Particle network formation in PLA-based nanocomposite and its behavior Ji Hwan Kim, Jung Hyun Ahn, <u>Joung Sook Hong</u> , Kyung Hyun Ahn
12:10-13:00	Lunch Time
Venue	Big classroom
Chair	C.W. Kao
13:00-13:30	<b>#1003</b> : Polymer melt differential electrospinning: an eco-friendly way for nanofiber mass production <u>H.Y. LI</u> , J. Tan, H. Yan, and W.M. Yang
13:30-14:00	<b>#1009</b> : Polybenzimidazole based ion exchange membranes for fuel cells <u>Steve Lien-Chung Hsu</u>
14:00-14:30	<b>#1014</b> : Investigation on the deviation difference between numerical simulation and experiments in injection molding product development <u>Chao-Tsai Huang</u> , Po-Hsuan Chen, Yi-Hsuan Hsu, Wen-Ren Jong and Rong-Yeu Chang
14:30-15:00	<b>#0001</b> : Self-floating tungsten bronze/recycled cellulose triacetate porous fiber membranes for efficient light-driven interfacial water evaporation <u>Saba Naseem</u> , Chang-Mou Wu, Tolesa Fita Chala
15:00-15:10	Coffee Break

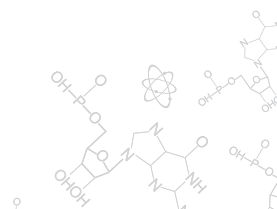


Thursday, September 5		
Venue	Big classroom	Middle classroom
Chair	D. Lee	S.K. Sukumaran
15:10-15:30	<b>#1010</b> : Synthesis of segmented copolymers by living polymerizations and preparation of nanomaterials <u>Chih-Feng Huang</u>	<b>#1023</b> : Fabrication of polystyrene-magnetic composite nanoparticles and their additive effect on magnetorheology <u>Q. Lu, C.Y. Gao and H.J. Choi</u>
15:30-15:50	<b>#1013</b> : Electrospun polybutylene succinate-activated carbon composite fibers: methylene blue adsorption <u>D. Aussawasathien, S. Tawee, K. Kerdsiri and K. Hrimchum</u>	<b>#1024</b> : Water/alcohol soluble poly(p-phenylene)s: synthesis and application as electron-injection layer in plds <u>Yun Chen, Huai-An Lu, Chia-Shing Wu and Ying-Ju Lin</u>
15:50-16:10	<b>#1019</b> : Preparation of graphene coating for radiative cooling <u>C. Cheng, W.H. Shi, C.R. Yang</u>	<b>#1050</b> : Fundamental study of fluoropolymer/BN filled composites with highly thermal conductive <u>T. Ootshi, A. Ishigami, T. Kurose, H. Mukae, M. Komori, H. Kono and H. Ito</u>
16:10-16:30	<b>#1022</b> : Graphene oxide based smart polymer composite particles and their electrorheological response <u>H. J. Choi and Q. Lu</u>	<b>#1038</b> : Research on the surface transferability of liquid silicone rubber molded by injection molding process <u>K. Hasegawa, A. Ishigami, A. Nemoto, T. Kurose, H. Ito</u>
Venue	Meeting room	
16:30-17:10	Poster Presentations	
Venue	Uesugi Hakushakutei	
18:00-21:00	Banquet	





Friday, September 6	
Venue	Big classroom
Chair	S.J. Liu
09:00-09:45	<b>#1059</b> : Fiber formation in melt spinning of olefin polymers <u>T. Kikutani</u>
09:45-10:30	<b>#1011</b> : Polymer science revealed by quantum beams <u>Toshiji Kanaya</u>
10:30-10:40	Coffee Break
Venue	Big classroom
Chair	Y.Z. Chang
10:40-11:10	<b>#1051</b> : Fabrication of high refractive index organic-inorganic hybrid optical polymers <u>S. Kawaguchi</u>
11:10-11:40	<b>#1016</b> : Functional polybenzoxazine nanocomposites <u>Shiao-Wei Kuo</u>
11:40-12:10	<b>#1026</b> : Development of function control and processing technique of polymer materials based on thermal engineering <u>T. Saito</u>
12:10-13:00	Lunch Time
Venue	Big classroom
Chair	M. Sugimoto
13:00-13:30	<b>#1021</b> : High performance solution processed organic field effect transistors <u>C.L. Liu</u>
13:30-14:00	<b>#1070</b> : Monomer and polymer processing in our research field of additive manufacturing and twin screw extrusion <u>K. Taki</u>
14:00-14:30	<b>#1048</b> : Synthesis and application of catechol-containing random and block copolymers <u>Hiroshi, Yabu</u>
14:30-15:00	<b>#1042</b> : Effect of molecular weight of poly(L-lactic acid) and poly(D-lactic acid) on stereocomplex formation by injection molding <u>Y. Srithep</u> and D. Pholharn
15:00-15:30	<b>#0002</b> : In situ molecular aggregation structure analyses on poly(methyl methacrylate) and polycarbonate films during bulge deformation process Aya Fujimoto, Tomoko Kajiwara, Chigusa Nagano, Chao-Hung Cheng, Shuhei Nozaki, Shiori Masuda, Nattanee Dechnarong, Kazutaka Kamitani, <u>Ken Kojo</u> and Atsushi Takahara
15:30-15:40	Coffee Break



Friday, September 6		
Venue	Big classroom	Middle classroom
Chair	G. Matsuba	J. Gong
15:40-16:00	<b>#1041</b> : Investigations on crystallization behaviors for novel blends composed of ionic liquid and green polymer <u>L.T. Lee</u>	<b>#1055</b> : Gel fibers produced by uv-reactive electrospinning Kohei Takahashi, Takuya Miyazaki, and <u>Jin Gong</u>
16:00-16:20	<b>#1043</b> : Flexible and freestanding electrodes based on polypyrrole /carbon nanotube/cellulose composites for supercapacitor application J. P. Jyothibas, M. Z. Chen, and <u>R. H. Lee</u>	<b>#1060</b> : Precision bonding technology of bio-chip with nanostructure for microphysiological system <u>Kazuma Kurihara</u> , Ryohei Hokari, Taku Sato, Shunji Sugiura Koji Miyake and Toshiyuki Kanamori
16:20-16:40	<b>#1049</b> : Advanced TiO <sub>2</sub> -SiO <sub>2</sub> -Sulfur (Ti-Si-S) nanohybrid materials: potential adsorbent for the remediation of contaminated wastewater <u>Kishore Jena</u> and Saeed M. Alhassan	<b>#1061</b> : Evaluation of engineering properties of graphene filled uhmwpe composites prepared via a novel kneading process <u>Cheng-Ying Liu</u> , Akira Ishigami, Takashi Kurose, Hiroshi Ito
16:40-17:00	<b>#1027</b> : Retardation of reaction kinetics of polymers due to entanglement in post-gel stage in multi-chain slip-spring simulations <u>Y. Masubuchi</u> and T. Uneyama	<b>#1062</b> : Fabrication of a wire-grid polarizer for the visible light by nano printing technique <u>R. Hokari</u> , K. Takakuwa, H. Kato, A. Yamamoto, Y. Yamaguchi and K. Kurihara
17:00-17:20	<b>#1053</b> : Crystal structure of biodegradable poly(urea) films Y. Chonan, K. Kobayashi, <u>G. Matsuba</u>	<b>#1074</b> : Viscoelasticity and sol-gel transition of PMMA/grafted PBA blends <u>M. Sugimoto</u> , S. K. Sukumaran, K. Ishizuka, K. Hatano, Y. Aoki
17:20-17:40	<b>#1054</b> : Chemical ligation and phase transformation of silk polymers Chieh-Yun Hsu, Liang-Yu Chang, Nai-Chia Teng, Shih-Han Hung, Hsuan-Chen Wu, Thomas Chung-Kuang Yang, <u>Jen-Chang Yang</u>	<b>#1075</b> : Slip and roughness at the interface between immiscible polymeric liquids <u>S. K. Sukumaran</u> , T. Ito, R. Komuro, M. Sugimoto
Venue	Big classroom	
17:40-17:50	Closing Ceremony	



# Poster Session

Thursday, September 5

Time: 16:30-17:10

Location: Meeting room

Category: G1. Processing and manufacturing

**001) #1007 Fractional orthogonal design of sprayed poly (D,L)-lactide-co-glycolide microspheres**

Yau-Zen Chang, Ming-Yi Hsu, Chu-Han Feng, Yen-Wei Liu and Shih-Jung Liu

**002) #1028 Manufacture of a novel biodegradable polycaprolactone fixer for rib fracture osteosynthesis using injection molding**

Yi-Hsun Yu, Yu-Ting Lin and Shih-Jung Liu

**003) #1029 Fast manufacture of microfunctional plastic diffusers using injection molding assisted by IR**

Kun-Yeh Lin, Yu-Chen Wu and Shih-Jung Liu

Category: G2. Rubber and elastomers

**004) #1067 The study of the change with the filler dispersion in rubber under deformation by in-situ USAXS**

Makoto Otomo, Shotaro Nishitsuji, Mikihiro Takenaka

Category: G3. Polymerization and synthesis

**005) #1057 Moisture-proofing of zinc sulfide phosphor particles using crosslinked polymer gel**

Takuya Saito, Jin Gong and Fumihiko Hirose

**006) #1068 The effects of hyperbranched epoxy resin on thermal curing behavior of DGEBA resin**

T. Boonlert-uthai, K. Taki and A. Somwangthanaroj

Category: G4. Polymer blends and alloys

**007) #1040 Mechanical properties and higher-order structural analysis of polybutylene terephthalate/polyrotaxane blends**

S. Mikoshiba, A. Ishigami, T. Kurose, H. Ito

**008) #1052 Precise analysis of phase separation and crystallization processes for blends of poly(methylene-methacrylate) and fluorinated polymers**

H. Sakamaki, G. Matsuba, S. Yamaguchi, S. Komori, H. Kohno

**009) #1069 Effects of loading amount of plasticizers on improved crystallization of poly(L-lactic acid)**

Pham Thi Ngoc Diep, Hideaki Takagi, Nobutaka Shimizu, Noriyuki Igarashi, Sono Sasaki, Shinichi Sakurai

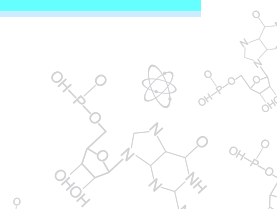
Category: G5. Polymer composites

**010) #1004 The influences of curing temperature and storage temperature on the elution characteristics of vancomycin from polymethylmethacrylate cement**

C.L. Tai, M.Y. Liu, S.L. Tsai and P.H. Hsieh

**011) #1044 Relationship between internal structures and mechanical properties of 3D printed PP/GW composite**

Sai Takahashi, Akira Ishigami, Takashi Kurose, Masanori Fujita, Hiroshi Ito



**012) #1046 Evaluation of higher-order structure and mechanical properties of cellulose nanofibers/epoxy composites**

T. Ueda, A. Ishigami, T. Kurose and H. Ito

**013) #1065 Isothermal crystallization of poly(L-lactic acid)/poly(D-lactic acid) blends induced by silk fibroin nanodisc**

Amit Kumar Pandey, Hideaki Takagi, Nobutaka Shimizu, Noriyuki Igarashi and Shinichi Sakurai

**014) #1066 Hybrid effects of surface treated pitch-based short carbon fiber and short glass fiber reinforced thermoplastic composites**

J.H. Cho, J.S. Lee and J.S. Park

G6. Fiber, membrane and film

**015) #1015 Identify the key parameters that affect the electrospun poly(D,L)-lactide-co-glycolide micro/nanofibers**

Ming-Tsung Sun, Yi-Pin Chen, Hsin-Yi Liu, Yen-Wei Liu, Shih-Jung Liu

**016) #1020 The effect of heat treatment with alternating tension on the structure of ptt fibers**

J. Sun, L.X. Dai

**017) #1072 Structure and properties of polyether-ester elastomeric fibers prepared through high-speed melt spinning and spin-drawing processes**

G. Kanazawa, W. Takarada and T. Kikutani

**018) #1073 Stress-optical behavior in elongation and relaxation processes of PMMA film containing diphenyl sulfide**

Shun Nakada, Wataru Takarada, Takeshi Kikutani

G7. Mixing and compounding

**019) #1045 Fabrication and hydrophilic evaluation of nanoparticles-filled polymer composites**

Y. Hanzawa, T. Kurose, H. Koseko, and H. Ito

**020) #1071 Numerical simulation and experimental investigation of fiber attrition in co-rotating selfwiping twin screw extruder**

Y. Obata, M. Ohara, S. Tanifuji and K. Taki

G9. Monitoring and characterization

**021) #1047 The study on the observation of the plastic zone and the fracture of amorphous polymer**

Daisuke Iwahra, Shotaro Nishitsuji, Hiroshi Ito and Masaru Ishikawa

**022) #1063 Comparison of indica and japonica rice flour milled by the shear and heat milling machine**

Y. Kanke, H. Yano, K. Miyata, T. Koda, T. Nishio and A. Nishioka

G10. Rheology and rheometry

**023) #1039 The effect of molecular weight distributions on the rheological properties of poly(propylene carbonate)**

L.X. Yang, T. Uneyama and Y Masubuchi





## S1. Biomedical materials

- 024) #1030 Sustained local delivery for mycotic aortic aneurysm of high concentration vancomycin from hybrid biodegradable antibiotic-eluting nanofiber-charged endovascular prosthesis: in vitro and in vivo studies**  
Yen-Wei Liu, Demei Lee, Michelle Liu, Chen-Kai Wu, Cheng-Hung Lee, Kuo-Sheng Liu
- 025) #1031 Concurrent and sequential delivery to the brain of anticancer and antiangiogenic agents using nanofibrous membranes charged with drugs**  
Yuan-Yun Tseng, Shih-Kuang Chen and Shih-Jung Liu
- 026) #1032 Chemoprotective gene therapy supported by hybrid-structured nanofibrous membrane promotes chemotherapy efficacy in malignant glioma rats**  
Yuan-Yun Tseng, Ying-Chun Chen, Ya-Ling Tang, Shih-Jung Liu
- 027) #1033 Biodegradable loaded nanofibrous membranes offer hemostatic and pain relief for oral wounds**  
Fu-Ying Lee, Demei Lee, Tzu-Chia Lee, Chen-Kai Wu, Shih-Jung Liu
- 028) #1034 Biodegradable nanofibrous anti-adhesive membranes that provide sustained pain relief for surgical wounds**  
Ching-Wei Kao, Demei Lee, Min-Hsuan Wu, Shih-Jung Liu
- 029) #1035 Effects of gamma irradiation and treatment with ethylene oxide on biodegradable poly(lactide-co-glycolide) composites release characteristics**  
Chao-Ying Hsiao, Shih-Jung Liu, Steve Wen-Neng Ueng, Err-Cheng Chan
- 030) #1037 Nanofibrous rhPDGF-eluting PLGA-collagen hybrid scaffolds improve diabetic wound healing**  
Yu-Ling Hsieh, Cheng-Hung Lee, Chia-Jung Lu, Shih-Jung Liu
- 031) #1056 In vivo degradation studies of PLA-PGA block copolymer and its composite applicable as spinal fixation cage**  
S.K. Yoon, Y.W. Chang, Y.J. Kim, J.Y. Jho and D.J. Chung
- S2. Optical/Electrical applications
- 032) #1058 Star-shaped molecule with planar triazine core and perylene diimide branches as an n-type additive for bulk-heterojunction perovskite solar cells**  
Chi-Shiuan Du, Da-Wei Kuo, and Rong-Ho Lee

