

Program

May 16th	
17:30~19:30	Welcome Reception

Day 1

May 17th			
8:50~9:00	Opening Remarks		Chair
9:00~9:30	Invited 1	Effects due to multiple slot jets on liquid coatings in air knife coating A. Yahyaee Soufiani ¹ , J.R. McDermid ¹ , <u>A.N. Hrymak</u> ³ and F.E. Goodwin ⁴ 1 McMaster University, Canada, 2 Western University, Canada, 4 International Zinc Association, USA	Susumu Inasawa
9:30~9:50	Oral 1	Skip Scriven Impact to Coating Research <u>Shuzo Fuchigami</u> , University of Minnesota, USA	
9:50~10:10	Oral 2	Applications of Coating Technology on the Development of Biomedical and Electronic Products <u>Ta-Jo Liu</u> , National Tsing Hua University, Taiwan	
10:10~10:30	Coffee Break		
10:30~10:50	Oral 3	On the microfluidic development for coating applications <u>An-Bang Wang</u> , National Taiwan University, Taiwan	Yoshiyuki Komoda
10:50~11:10	Oral 4	Postponed cracking to thicker films: an overview T. Tahara, and <u>M. Yamamura</u> , Kyushu Institute of Technology, Japan	
11:10~11:30	Oral 5	Recent Studies on Viscoelastic and Suspension Coating Flows W.-G. Ahn, I. Kwon, B. Chun, J. S. Park and <u>H. W. Jung</u> , Korea University, Korea	
11:30~12:00	Invited 2	Hydration and Rheology of Chemically Modified Celluloses in Aqueous Solution <u>Toshiyuki Shikata</u> , Kengo Arai, Tokyo University of Agriculture & Technology, Japan	Susumu Inasawa
12:00~13:30	Lunch		
13:30~13:50	Oral 6	Research overview on the internal structure of particle dispersions <u>Yoshiyuki Komoda</u> , Kobe University, Japan	Masato Yamamura
13:50~14:10	Oral 7	Recent advances in coating flows and microstructure analyses (Overview of Nam's group research) <u>Jaewook Nam</u> , Sungkyunkwan University, Korea	
14:10~14:30	Oral 8	Process-structure-performance relationships within the manufacturing chain of lithium-ion battery cathode films Fatih Çetinel ¹ , <u>Marcel Schmitt</u> ² , Xiana Romání Fernández ¹ , Lukas Wengeler ¹ , Frank Kleine Jäger ¹ 1 BASF SE, Germany, 2 BASF Advanced Chemicals Co., Ltd, PR China	
14:30~14:50	Student 1	Structural analysis of temperature-dependent capillary suspension in PMMA bead/glycerol system <u>Jin Hwan Choi</u> , Seung Jong Lee, and Kyung Hyun Ahn, Seoul National University, Korea	Hyun Wook Jung
14:50~15:20	Coffee Break		

15:20~15:40	Student 2	Frequency Response of Slot Coating Flow: Computation and Experiment <u>Semi Lee</u> , Jaewook Nam, Sungkyunkwan University, Korea	Hyun Wook Jung
15:40~16:00	Student 3	Effect of Viscoelasticity of Coating Liquids on Operability Window and Flow Behavior in Slot Coating Processes <u>Won-Gi Ahn</u> ¹ , Yong Woo Lee ¹ , Jaewook Nam ² and Hyun Wook Jung ¹ , 1 Korea University, Korea, 2 Sungkyunkwan University, Korea	Ying-Chih Liao
16:00~16:20	Student 4	Application of image analysis in coating process <u>D. Kim</u> , H. Hong and J. Nam, Sungkyunkwan University, Korea	
16:20~16:40	Student 5	Drying of Pickering Emulsions: Effects of Types of Surface-active Particles <u>Hayato Miyazaki</u> , Susumu Inasawa, Tokyo University of Agriculture & Technology, Japan	
17:30~19:30	Social Hour for Faculty & Industry Social Hour for Students		

Day 2

May 18 th		Chair	
9:00~9:30	Invited 3	Influences of physicochemical effects on interfacial hydrodynamics <u>Yuichiro Nagatsu</u> , Tokyo University of Agriculture & Technology, Japan	Susumu Inasawa
9:30~10:00	Invited 4	A prediction model for molecular diffusivity in polymeric systems and application for coating processes <u>Hidegori Ohashi</u> , Tokyo University of Agriculture & Technology, Japan	
10:00~10:30	Invited 5	Derivation of higher order structure and performance of functional materials based on coating technology <u>Akira Ohno</u> , Mitsubishi Chemical Holdings, The KAITEKI Institute Future Design Division, Japan	
10:30~10:50	Coffee Break		
10:50~11:10	Oral 9	Recent advances of UV-curing process technology and fundamentals of photopolymerization in Taki's lab. <u>Kentaro Taki</u> , Kanazawa University, Japan	Jaewook Nam
11:10~11:30	Oral 10	Surface metallization on plastic substrates: 2D and 3D patterning <u>Ying-Chih Liao</u> , National Taiwan University, Taiwan	
11:30~11:50	Oral 11	Numerical simulation of segregation in drying bimodal colloidal suspensions <u>R. Tatsumi</u> ¹ , <u>T. Iwao</u> ¹ , <u>O. Koike</u> ² , <u>Y. Tsuji</u> ¹ and <u>Y. Yamaguchi</u> ² , 1 The University of Tokyo, Japan, 2 Products Innovation Association, Japan	
11:50~13:20	Lunch		
13:20~15:00	Poster Session		
15:00~15:15	Coffee Break		
15:15~15:35	Student6	Synthesis and Real-time Thermal Curing Characterization of Thermal Radical Initiator Derivatives Based on O-imino-isourea <u>Dong Geun Lee</u> ¹ , <u>Kevin Injoe Jung</u> ¹ , <u>Beomjin Kim</u> ² , <u>Seung Man Noh</u> ² , <u>Young Il Park</u> ² and <u>Hyun Wook Jung</u> ¹ , 1 Korea University, Korea, 2 Korea Research Institute of Chemical Technology, Korea	Kentaro Taki
15:35~15:55	Student7	Curving Silver Nanowires Using Spray Coating <u>Kwangguk Ahn</u> , <u>Guh-Hwan Lim</u> , <u>Byungkwon Lim</u> and <u>Jaewook Nam</u> , Sungkyunkwan University, Korea	
15:55~16:15	Student 8	Effect of polymer molecular weight on shear stress instability in nanoparticle suspensions <u>Eunhye Jang</u> , <u>Yoshihide Mawatari</u> and <u>Masato Yamamura</u> , Kyushu Institute of Technology, Japan	Rei Tatsumi
16:15~16:35	Student 9	Analysis of thermal convection on the sinusoidal substrate <u>Jae Hyun Yoo</u> ¹ , <u>Jaewook Nam</u> ² and <u>Kyung Hyun Ahn</u> ¹ 1 Seoul National University, Korea, 2 Sungkyunkwan University, Korea	
16:35-16:45	Closing Remarks		
18:00-20:00	Banquet		

List of Posters (Poster session on May 18th)

P-1	<p>Effects of Dispersant and Binder Additive Dosage on the Crack Formation in Graphite Green Sheets <u>Naoya Iwata</u> and Takamasa Mori, Hosei University, Japan</p>
P-2	<p>Influence of mixing processes on mechanical properties of Li-ion battery slurry from capillary suspension <u>J. Park</u>¹, N. Willenbacher², S. J. Lee¹ and K. H. Ahn¹, 1 Seoul National University, Korea, 2 Karlsruhe Institute of Technology, Germany</p>
P-3	<p>Rapidly Dissolving Microneedle Patches Fabricated with Hyaluronic Acid <u>Ting-Yu Lin</u>, Hsiu-Feng Yeh, Ta-Jo Liu*, National Tsing Hua University, Taiwan</p>
P-4	<p>Time variation of viscoelastic properties of sessile drying droplet of aqueous polymer solution with microrheological methods <u>N. Furukawa</u>, Y. Komoda, K. Suzuki, R. Hidema and H. Suzuki, Kobe University, Japan</p>
P-5	<p>Technology Transfer for Coating the Hole Injection Layer (HIL) of Organic Light-Emitting Diode (OLED) Lighting Devices <u>Yu-Wei Liu</u>, Hsiu-Feng Yeh, Chiao-Ting Tai, Ta-Jo Liu, National Tsing Hua University, Taiwan</p>
P-6	<p>Crosslinking and Mechanical Properties of Dual Curable Clearcoats with New Thermal Curing Agent <u>K.I. Jung</u>¹, D.G. Lee¹, T.H. Lee², Y.I. Park², S.M. Noh² and H.W Jung¹, 1 Korea University, Korea, 2 Korea Research Institute of Chemical Technology, Korea</p>
P-7	<p>Preparation of Silver Nanoparticle Emulsion for Long-term Ink Stability Enhancement Against Sedimentation and Aggregation <u>Chia-Wei Chang</u> and Ying-Chih Liao, National Taiwan University, Taiwan</p>
P-8	<p>Transient response of shear thickening co-solvent suspensions <u>Takayuki Kai</u>, Yoshihide Mawatari and Masato Yamamura, Kyushu Institute of Technology, Japan</p>
P-9	<p>Application of Thin-Film-Direct-Coating Method for Construction of Microbial Metagenomic Library <u>S.-C. Lee</u>, C.-M. Huang, T.-C. Wang, Y.-K. Lin, Y.-Y. Chen, C.-C. Chu, Y.-K. Yen, C.-Y. A. Liu, C.-T. Liu, A.-B. Wang, National Taiwan University, Taiwan</p>
P-10	<p>Effects of internal structure of cathode slurry on the particle packing process of cathode of Li-ion battery <u>K. Ishibashi</u>¹, Y. Komoda^{1,2}, K. Kuratani^{2,1}, H. Suzuki¹, R. Hidema¹, K. Suzuki^{1,2}, N. Kobayashi² 1Kobe University, Japan, 2 Organization of Advanced Science and Technology, Japan</p>
P-11	<p>UV-curable Conductive Ink with Low Percolation Threshold for Stretchable Conductors <u>C. Y. Huang</u> and Y. C. Liao, National Taiwan University, Taiwan</p>
P-12	<p>Collapsing liquid crystal phases in drying aqueous glyceryl-ether solutions <u>Ryotaro Hayashi</u>, Yoshihide Mawatari, Masato Yamamura, Kyushu Institute of Technology, Japan</p>
P-13	<p>Comparison of Poly(2,3-dihydrothieno-1,4-dioxin)-poly(styrenesulfonate) (PEDOT:PSS) with 1,4,5,8,9,11-Hexaazatriphenylenehexacarbonitrile (HAT-CN) as the Hole Injection Materials in the Solution-Processed Organic Light Emitting Diodes <u>Yi-Ting Chen</u>, Hsiu-Feng Yeh and Ta-Jo Liu, National Tsing Hua University, Taiwan</p>

P-14	<p>Dependence of drying fluxes on the scale of drying interface using colloidal suspensions <u>Kohei Abe</u> and Susumu Inasawa, Tokyo University of Agriculture and Technology, Japan</p>
P-15	<p>Influence of Slurry Properties on Coatings of Fine Particles on Porous Substrates <u>Saori Yamada</u>, Takamasa Mori, Hosei University, Japan</p>
P-16	<p>Evaluation of film formation process of metal particle dispersion under high temperature condition using speckle pattern <u>T. Fukatsu</u>, Y. Komoda, K. Suzuki, R. Hidema and H. Suzuki, Kobe University, Japan</p>
P-17	<p>Measurement of shrinkage of UV-curable resin in inert and air atmosphere <u>Ryui Yamada</u> and K Taki, Kanazawa University, Japan</p>
P-18	<p>The investigation of foaming cell development for the epoxy resin with curing and blowing agent <u>Hyo Jae Kong</u>, Sunkyung Kim and Kyu Hyun, Pusan National University, Korea</p>
P-19	<p>Effect of the colloidal particle content on the PVA/AgNW suspension via rheological and morphological perspective <u>Seung Hak Lee</u>, Sunkyung Kim, Kyu Hyun, Pusan National University, Korea</p>