Program overview

| | May 8 (Wed) | May 9 (Thu) | May 10 (Fri) |
|-----------|-------------------|-------------------------------------|---------------------------------------|
| Morning | | Plenary talk & Professor session | Professor session |
| Afternoon | Registration | Student short oral & poster session | Excursion for students and professors |
| Evening | Welcome reception | Student activity & Faculty meeting | Banquet |

Detailed Program

May 8 (Wed)

Hoam Faculty House Convention Center, Magnolia Hall (목련홀)

17:00~ **Registration**

19:00~21:00 Welcome Reception

May 9 (Thu)

Hoam Faculty House Convention Center, Magnolia Hall (목련홀)

Opening address / Announcements 09:00~09:20

Kvunghvun Ahn

(Director of Center for Coating Materials and Processing / Seoul National University, Korea)

Plenary Talk

Protecting layer coating on various devices through spatial atmospheric atomic layer deposition for life time enhancement 09:20~10:00 **Kyung-Hyun Choi**

(Jeju National University, Korea)

Long Oral Session

Detailed structural control of organic films prepared by a solution process to realize highly efficient organic light emitting diodes 10:00~10:20 Enju Sakai

(The University of Tokyo, Japan)

Recent studies on printing technology development at Department 10:20~10:40 of Chemical Engineering, National Taiwan University

Ying-Chih Liao

(National Taiwan University, Taiwan)

10:40~11:00 **Coffee Break**

Anti-thixotropic fluids in coating process

Masato Yamamura

(Kyushu Institute of Technology, Japan)

Film formation process of latex film accompanied by coupling 11:20~11:40 reaction

Yoshiyuki Komoda

(Kobe University, Japan)

Drying, packing and formation of packed layers of particles from 11:40~12:00 various colloidal suspensions

Susumu Inasawa

(Tokyo University of Agriculture and Technology, Japan)

12:00~13:30 **Lunch**

Student Short Oral Session

(5mins each, with 1min break in between)

(P01) Titanium dioxide thin films for perovskite solar cell devices 13:30~13:35 deposited with ultrasonic spray method

Tsubasa Shibata

(The University of Tokyo, Japan)

13:36~13:41 (P02) Formulation of 3D-Printable Resin with High Conductivity Shang-Cheng Tsai

(National Taiwan University, Taiwan)

(P03) Effect of Rheological Properties of TiO2 Slurry on Gravure

13:42~13:47 Printing Process

Ryuki Yamamoto

(Kobe university, Japan)

(**P04**) Analysis anti-fouling mechanism of patterned surface using Lattice Boltzmann simulation

Giwook Lee

(Korea University, Korea)

polyurethane-based clearcoat systems for tuning scratch-healing properties 13:54~13:59 **Donggeun Lee** (Korea University, Korea) (**P06**) Evaluation of heat resistance of ternary UV cured resin 14:00~14:05 **Ayumi Nishimura** (Kanazawa University, Japan) (**P07**) Effects of truncated domain size on the computation of blade coating 14:06~14:11 Hyungjoo Yim (Seoul National University, Korea) (P08) Drying Mechanism of Latex Film 14:12~14:17 Hiroaki Tanaka (Kobe University, Japan) (P09) Impact of slot die geometry on the coating window of twolayer slot coating process 14:18~14:23 Hyungyeol Kwak (Seoul National University, Korea) (P10) Roles of water wettability of particles on drying of particlestabilized water droplets immersed in oil 14:24~14:29 Kohei Abe (Tokyo University of Agriculture and Technology, Japan) (P11) Effect of Silica Nanoparticle and Ionic Liquid on the Poly (ethylene oxide) - based SPEs and Suspensions 14:30~14:35 **Sunkyung Kim** (Pusan National University, Korea) (P12) Synthesis of red light emitting Si nanoparticles in liquid phase 14:36~14:41 Keiichiro Ishihara

(**P05**) Application of polycarbonate diol with hindered urea to

(The University of Tokyo, Japan)

(P13) Numerical analysis of microfluidic passive mixer with herringbone patterns Minho Lee 14:42~14:47 (Seoul National University, Korea) (P14) Mathematical model of drying film in high Peclet number region 14:48~14:53 **Taehyung Yoo** (Korea University, Korea) (P15) Numerical simulation on capillary suspension using coarse grained potential for describing interaction between particle and 14:54~14:59 fluid droplet Jinhwan Choi (Seoul National University, Korea) 15:00~15:20 **Coffee Break** (P16) Critical cracking thickness of particle dispersion films containing liquid crystal phases 15:20~15:25 **Rvousuke Shitada** (Kyushu Institute of Technology, Japan) (P17) Operability windows of dual-layer slot coating processes for shear-thinning liquids 15:26~15:31 Jinseok Park (Korea University, Korea) (P18) Self-assemble Silver Nanoplates Thin Films 15:32~15:37 Yi-Chin Lai (National Taiwan University, Taiwan) (P19) Numerical analysis of flow rate disturbances inside a coating die manifold

15:38~15:43

Heechan Jung

(Seoul National University, Korea)

(P20) Effect of Flocculated Cluster Size and Aggregation Degree of Polyvinyl Alcohol/Silver Nanowire Suspensions on Rheological and Electrical Properties 15:44~15:49 **Suveon Kim** (Pusan National University, Korea) (**P21**) Light-driven solvent transport in acrylic coatings with reaction-induced phase separation 15:50~15:55 Tomoki Ogata (Kyushu Institute of Technology, Japan) (P22) Grid Pattern Formation in Blade Coating: Spanwise pattern 15:56~16:01 **Onvu Kim** (Sungkyunkwan University, Korea) (P23) Rheological and mechanical observation on radical and urethane dual curable clearcoats during low temperature curing 16:02~16:07 process **Kevin Injoe Jung** (Korea University, Korea) (P24) Experimental evaluation of fiber attrition behavior in twin screw extruder and prediction based on Hele-Shaw simulation 16:08~16:13 Yuva Obata (Kanazawa University, Japan) (P25) Controlling the distribution of small particles using capillary force in suspension 16:14~16:19 Jieun Park (Seoul National University, Korea) 16:20~17:20 **Poster Session Student activity** @ Yeouido, Banpo Hangang Park

Faculty meeting @ Seoul National University Faculty Club

18:00~

May 10 (Fri)

Hoam Faculty House Convention Center, Magnolia Hall (목련홀)

Announcements

09:00~09:10 Jaewook Nam

(Seoul National University, Korea)

Long Oral Session

Effect of silica nanoparticles (SiNPs) and coating conditions on electrical properties of polyvinyl alcohol (PVA)/silver nanowire 09:10~09:30 (AgNW) conductive films

Kyu Hyun

(Pusan National University, Korea)

Recent studies on particle dynamics in suspension coating and 09:30~09:50 drying processes

Hyun Wook Jung (Korea University, Korea)

09:50~10:10 **Coffee Break**

10:10~10:30 Electrical conductivity analysis for networks of conducting rods **Dongjae Kim**

(Seoul National University, Korea)

Thin-film formation flows and impact of rheological properties on 10:30~10:50 the operating limits in coating processes

Jaewook Nam

(Seoul National University, Korea)

Scaling relationship between UV intensity and gelation time for insight into the cross-linked network structure of photopolymerized multifunctional monomers

Kentaro Taki

(Kanazawa University)

11:10~11:40 Closing address, Photo session

11:40~12:40 **Lunch**

 $12:40\sim18:30$ Excursion for professors and students

18:30~ Banquet @ Olbaan Premium, Central City (올반 프리미엄 센트럴시티점)