

C: Crystallization

[Oral Session] (Day3 – Saturday, November 1st, 09:00-11:00)

[Separation Processes of Crystallization]

CO-01 9:00-9:20

Improved Dissolution of Poorly Water-Soluble Drug by Crystallization Confinement Using Porous Template

Hyunjin KIM and Jonghwi LEE* (Chungang University, Korea)

CO-02 9:20-9:40

Crystallization Supported by Ultrasonic Technology

Izumi HIRASAWA* (Waseda University, Japan)

CO-03 9:40-10:00

DNA-Guided Crystallization of π -Systems:

Structural and Optical Profiling

Jin-Hyuk PARK, Seung-Hyuk PAIK, Chunzhi CUI and Dong June AHN* (Korea University, Korea)

CO-04 10:00-10:20

Crystallization phenomena of Carbamazepine/Saccharin Cocrystalline Particles by Mixing Method of Two Solutions

Shoji KUDO* and Hiroshi TAKIYAMA (Tokyo University of Agriculture and Technology, Japan)Advanced

CO-05 10:20-10:40

Surface Phenomena During Dissolution of Calcium-based Minerals

Taewook YANG, Jae-Uoung JHO (Seoul National University, Korea), Chulki KIM, and Il-Won KIM* (Soongsil University, Korea)

CO-06 10:40-11:00

Impurity Effect of Furfural Derivatives on Amyloid Fibril Formation of Protein from Alzheimer's Disease

Toshinori SHIMANOUCI, Kohei TAKASHIMA, Miki IWAMURA and Yukitaka KIMURA* (Okayama University, Japan)

[Poster Session] (Day 2 – Friday, October 31st, 13:30-15:30 / 15:50-17:30)

- CP-01** Development of Porous Templates for Confined Crystallization of Drugs
Suyeong AN, Seunghwan JUNG, Hyun-Jin KIM, Harim BAE, Soohwan AHN, Kantappa HALAKE, Byoung Soo KIM, Cheong-Cheon LEE and Jonghwi LEE* (Chung-Ang University, Korea)
- CP-02** Properties of Calcium Sulfate Scale Formation in Concentration Polarization on RO Membrane
Kazuho NAKAMURA*, Masayuki MUKAI and Azusa FUSHIMI (Yokohama National University, Japan)
- CP-03** Fabricating Nano-Porous Patterns of Polymer Substrates by Melt & Crystallization
Byoung-Soo KIM and Jonghwi LEE* (Chung-Ang University, Korea)
- CP-04** Crystallization Analysis for Charge-Discharge Processes of Lead-Acid Battery under High Pressure
Makoto NOGAMI, Kouji MAEDA*, Koji ARAFUNE, Takuji YAMAMOTO, Kazuhiro ITOH, Keisuke FUKUI (University of Hyogo, Japan) and Hidetoshi KURAMOCHI (National Institute for Environmental Studies, Japan)
- CP-05** Development of Nanostructured Sensor for Target-Specific Crystallization Detection
Yong-Woo KIM, Sang-Mok CHANG, Yo-Han LEE (Dong-A University, Korea), Woo-Sik KIM (Kyung Hee University, Korea) and JongMin KIM* (Dong-A University, Korea)
- CP-06** Precipitation of Basic Copper Acetate Using a Circulating-Microreactor
Takahiro TOGAWA, Yuika SHIMIZU, Ken-Ichiro SOTOWA*, Toshihide HORIKAWA and Jesús Rafael Alcántara AVILA (The University of Tokushima, Japan)
- CP-07** Observation of a Biomineralization Using Quartz Crystal Microbalance
Woo-Sik KIM (Kyung Hee University, Korea), Sang-Mok CHANG, Jin-Soo PARK and JongMin KIM* (Dong-A University, Korea)
- CP-08** Crystallization Phenomenon of Zirconium Molybdate Hydrate to Prevent Encrustation
Liang ZHANG (Waseda University, Japan), Masayuki TAKEUCHI, Tsutomu KOIZUMI (Japan Atomic Energy Agency, Japan) and Izumi HIRASAWA* (Waseda University, Japan)
- CP-09** Real-Time Monitoring in Antisolvent Crystallization of Clopidogrel Hydrogen Sulphate by Raman Spectroscopy
Ernest Ansah OWUSU, Kwang-Joo KIM* (Hanbat National University, Korea)
- CP-10** Impurity Distribution of Melt Crystallization for Purification of Waste Cooking Oil as Biofuel
Takuto FUJIKAWA, Takuji YAMAMOTO, Kouji MAEDA (University of Hyogo, Japan), Hidetoshi KURAMOCHI (National Institute for Environmental Studies, Japan) and Keisuke FUKUI* (University of Hyogo, Japan)
- CP-11** A Comparative Study of Morphological and Compositional Effects of Zeolite Nanoparticles on Lung Fibroblasts
Seunghye YU (Soongsil University, Korea), Tae-Jung KIM (The Catholic University of Korea, Korea), Jeffrey D. RIMER (University of Houston, USA) and Il Won KIM* (Soongsil University, Korea)
- CP-12** Cocrystal Formation of Aspirin/4,4'-dipyridyl:
Crystallization Pathway by Monitoring of Solute Concentration Based on Ternary Phase Diagram
Kyeongsill LEE (Hanbat National University, Korea, Martin-Luther-Universität Halle-Wittenberg, Germany), Kwang-Joo KIM* (Hanbat National University, Korea) and Joachim ULRICH (Martin-Luther-Universität Halle-Wittenberg, Germany)
- CP-13** The Effect of High Pressure on the Electroless Nickel Plating
Yuta NOBUYOSHI, Takuji YAMAMOTO, Kouji MAEDA, Naoki FUKUMURO, Shinji YAE and Keisuke FUKUI* (University of Hyogo, Japan)
- CP-14** In-situ Measurement of Polymorphic Transformation by Using Raman Spectroscopy
Dang Le Tri NGUYEN and Kwang-Joo KIM* (Hanbat National University, Korea)

- CP-15** Production Method of Organic Monodispersed Fine Particles Focusing on Nucleation Density at Template Interface
Haruka SUZUKI, Shoji KUDO and Hiroshi TAKIYAMA (Tokyo University of Agriculture and Technology, Japan)
- CP-16** Simulation of I₂ Crystal Falling For Development of Crystallizer in Sulfur-Iodine Water-Splitting Process
Byung Heung PARK* (Korea National University of Transportation, Korea), Seong-Uk JEONG, Kyoung-Soo KANG (Korea Institute of Energy Research, Korea) and Jeong Won KANG (Korea University, Korea)
- CP-17** Effect of Solution Condition on Zeta Potential of Lead Sulphate Crystals in Reactive Crystallization
Yuki TOYODA and Kazuho NAKAMURA* (Yokohama National University, Japan)
- CP-18** Effect of Washing, Centrifuge, and Sweating on Salt Removal from Cyclopentane Hydrates in Brine
Songlee HAN (Chungnam National University, Korea), Ju-Young SHIN (Hanyang University, Korea) and Seong-Pil KANG* (Korea Institute of Energy Research, Korea)
- CP-19** Development of Simultaneous Control Method of Polymorphism and Shape in Pharmaceutical Crystallization
Shuichi WADA and Hiroshi TAKIYAMA* (Tokyo University of Agriculture and Technology, Japan)
- CP-20** Parameter Analysis of Multi-Staged Continuous MSMR Crystallizer System
Kiho PARK, Do Yeon KIM and Dae Ryook YANG* (Korea University, Korea)
- CP-21** Effect of a Small Amount of Water on Crystallization of Ergosterol
Kazuya NAKAHASHI, Koichi IGARASHI and Hiroshi OOSHIMA* (Osaka City University, Japan)
- CP-22** Molecular Modeling Study for Solvent Effect on Morphology of OH-1 Crystal
Byeong Soo SHIN, In Young CHOI and Jeong Won KANG* (Korea University, Korea)
- CP-23** Crystal Size Control in Classified Bed Crystallizer
Koji MASAOKA*, Hayato MINEO, Naohito YOSHIKAWA and Masami HASEGAWA (Research Institute of Salt and Sea Water Science, Salt Industry Center of Japan, Japan)
- CP-24** Polymorphs of Calcium Carbonate as the Substrates of Ibuprofen Milling,
Kyung A CHO, Insil CHOI and Il Won KIM* (Soongsil University, Korea)
- CP-25** Secondary Crystal Growth of Hydrotalcite for CO₂ Separation
Wooyoung LEE and Ki Bong LEE* (Korea University, Korea)
- CP-26** Anti-Solvent Crystallization with Temperature Modulation for Controlling Polymorphism by Using Ternary Phase Diagram
Hiroshi TAKIYAMA* and Takuma MINAMISONO (Tokyo University of Agriculture and Technology, Japan)
- CP-27** Crystal Agglomeration of Ni/Mn/Co-Hydroxide in Continuous Couette-taylor Crystallizer
Quemé Peña Mayra MARITZA and Woo-Sik KIM* (Kyung Hee University, Korea)
- CP-28** Timing of Fines Dissolution by Heating for the Control of Crystal Size Distribution on Batch Crystallization
Katsuhiro OSHITA, Muneki KISHIDA, Koichi IGARASHI and Hiroshi OOSHIMA* (Osaka City University, Japan)
- CP-29** Non-isothermal Taylor Vortex for Uniform Crystal Size Distribution in Seeded Batch Cooling Crystallization
Zhaohui WU (Kyung Hee University, Korea), Choul-Ho LEE (Kongju National University, Korea) and Woo-Sik KIM* (Kyung Hee University, Korea)
- CP-30** Immobilization of Yeast in a Freeze-Dried Polyvinyl Alcohol Monolith Enhances Ethanol Fermentation Reaction
Toru KATAYAMA, Kouji MAEDA* (University of Hyogo, Japan) and Kyuya NAKAGAWA (University of Kyoto, Japan)

- CP-31** Influence of Taylor Vortex on Crystal Size Distribution of L-lysine in Cooling Crystallization
Zhaohui WU, Anh-Tuan NGUYEN (Kyung Hee University, Korea), Seung Tae KOH (Dongyang University of Korea, Korea) and Woo-Sik KIM* (Kyung Hee University, Korea)
- CP-32** Formation of Nickel Ammine Complexes during Continuous Nickel Hydroxide Precipitations
Kunio FUNAKOSHI* and Makiko SHIMIZU (Suzuka National College of Technology, Japan)
- CP-33** Analysis of Polymorphic Nucleation and Phase Transformation Using Functionalized QCM
Li-Shang LIU, Zhao-Hui WU (Kyung Hee University, Korea), Jongmin KIM (Dong-A University, Korea) and Woo-Sik KIM* (Kyung Hee University, Korea)
- CP-34** Optical Resolution Using the Difference of Crystal Face Selective Behaviour on Aspartic Acid Crystal Growth in the Presence of Additive
Hiroyasu SATO, Norihito DOKI*, Saki YOSHIDA, Masaaki YOKOTA and Kenji SHIMIZU (Iwate University, Japan)
- CP-35** pH Effect of Precipitated Calcium Carbonate System
Hyeok Min KIM and Hyun Kak HAN* (Soonchunhyang University, Korea)
- CP-36** Modification of Indomethacin Crystals Using Supercritical and Aqueous Antisolvent crystallizations
Dae-Chul KIM, Sam-Hee KIM and Sang-Do YEO* (Kyungpook National University, Korea)
- CP-37** Investigation of Capturing Behaviour of Strontium by CaCO₃ as a Method of Removing Radioactive Strontium
Akari NAKAI* and Izumi HIRASAWA (Waseda University, Japan)
- CP-38** Monte Carlo Simulation on The Crystal Growth of 1,1-Diamino-2,2-Dinitroethylene
Hong-Min SHIM, Jae-Kyeong KIM (Sogang University, Korea), Hyoun-Soo KIM (Agency for Defense Development, Korea) and Kee-Kahb KOO* (Sogang University, Korea)
- CP-39** Effects of N₂ Fine-Bubble Injection on Antisolvent Crystallization of Indomethacin
Masatoshi OHNO, Masaki OKADA, Toshiyuki SATO, Toshihiko HIAKI and Masakazu MATSUMOTO (Nihon University, Japan)
- CP-40** Sonocrystallization of Acetaminophen with a Nucleation Inhibitor
Wang-Soo KIM, Jun-Woo KIM and Kee-Kahb KOO* (Sogang University, Korea)
- CP-41** Encapsulation of Chromium Oxide Nanoparticles with Ammonium Perchlorate by Drowning-Out
Jae-Yun JUNG, Jae-Kyeong KIM, Hong-Min SHIM (Sogang University, Korea), Hyoun-Soo KIM (Agency for Defense Development, Korea) and Kee-Kahb KOO* (Sogang University, Korea)
- CP-42** Polymorphic Control of HMX by Solvent-Mediated Transformation with Sonication
Jae-Eun LEE, Jun-Woo KIM, Sang-Young LEE (Sogang University, Korea), Sang-Keun HAN (Hanwha R&D Center, Korea), Joo-Seung CHAE, Keun-Deuk LEE (Agency for Defense Development, Korea) and Kee-Kahb KOO* (Sogang University, Korea)
- CP-43** Formation of Submicrometer-Sized Cyclotrimethylene Trinitramine by Solvent/Antisolvent Crystallization
Se-Eun LEE, Eun-Ae LEE, Jae-Kyeong KIM, Hong-Min SHIM (Sogang University, Korea), Sang-Keun HAN (Hanwha R&D Center, Korea), Joo-Seung CHAE, Keun-Deuk LEE (Agency for Defense Development, Korea) and Kee-Kahb KOO* (Sogang University, Korea)