

A: Phase Equilibria / Transport Properties

[Oral Session] (Day 2 – Thursday, October 31st, 13:30-14:10)

- AO-01 13:30-14:10**
Water Pollution Control Using Low Cost Adsorbents
V. K. RATTAN* (Panjab University; INDIA) and Tomoya TSUJI (Nihon Univeristy, Japan)
- AO-02 14:10-14:30**
Prediction of VOCs Adsorption Equilibria Under Supercritical Carbon Dioxide Conditions
Ikuo USHIKI, Masaki OTA, Yoshiyuki SATA and Hiroshi INOMATA* (Tohoku University, Japan)
- AO-03 14:30-15:10**
CO₂ Capture from CO₂ + N₂ Gas Mixtures Using Tetra-n-Butyl ammonium Chlorides Semiclathrate
Soyoung KIM and Yongwon SEO* (Ulsan National Institute of Science and Technology, Korea)
- AO-04 15:10-15:30**
Origin of Diffusivity Change of Ionic Liquids by CO₂ sorption in CO₂ Separation Membranes
Hiromitsu TAKABA*, Hiroshi SETOGAWA and Md. Khorshed ALARM (Kogakuin University, Japan)
- [15:30-15:50] Coffee Break**
- AO-05 15:50-16:10**
Liquid-Liquid Equilibria of the Mixture; water+ Alkane+Non-ionic Surfactant
Hiroyuki MATSUDA*, Rei TSUCHIYA, Yuki NAKAZATO, Kiyofumi KURIHARA, and Katsumi TOCHIGI (Nihon University, Japan)
- AO-06 16:10-16:30**
Removal of Naphthenic Acid from Crude Oil By Liquid-Liquid Extraction
Sung Shin KANG and Jeong Won KANG* (Korea University, Korea)
- AO-07 16:30-16:50**
Solubilities of Aminoanthraquinone Derivatives in Supercritical Carbon Dioxide
Kazuhiro TAMURA*, Ratna Alwi SURYA and Tetsuro TANAKA (Kanazawa University, Japan)
- AO-08 16:50-17:10**
Development of Equation of State Model Parameters based on Group Contribution Method
Jeong Won KANG* (Korea University, Korea), B, Vladimir DIKY, Robert D. CHIRICO and Michael FRENKEL (National Institute of Standards and Technology, USA)
- AO-09 17:10-17:30**
Henry's Law Constants of Light Hydrocarbons in Ionic Liquids
Yoshimori MIYANO* (Kurashiki University of Science and the Arts, Japan)

[Poster Session] (Day 3 – Saturday, November 1st, 9:00-13:00)

(ODD-numbered posters presentation: 9:00-11:00, EVEN-numbered posters presentation: 11:20-13:00)

<Phase Equilibria>

- AP-01** Selection of Recommended Binary VLE Data for Process Design
K. TOCHIGI*, K. SUMITA, H. MATSUDA, K. KURIHARA (Nihon University, Japan) and V. K. RATTAN (Panjab University, INDIA)
- AP-02** Measurement and Correlation of Solid-Liquid Equilibria for Ethanol + Antipyrine and Ethanol + Caffeine at Vapor Pressure
Daigo YOKOI, Taka-aki HOSHINA, Tomoya TSUJI*, Toshihiko HIAKI (Nihon University, Japan) and Chiaki YOKOYAMA (Tohoku University, Japan)
- AP-03** Measurement of Henry Constants of Nitrogen and Oxygen in Benzene, Styrene, and Divinylbenzene
Tomoya TSUJI*, Koh-hei OHYA, Taka-aki HOSHINA, Toshihiko HIAKI (Nihon University, Japan), Shigeo OBA (Applied Thermodynamics and Physical Properties Co. Ltd., Japan) and V. K. RATTAN (Panjab Univeristy, INDIA)
- AP-04** Isothermal vapour-liquid equilibria for the binary systems of propylene oxide with 1-pentanol and 1-octanol
Hakmin KIM, Jungmin GWN and Hwayong KIM (Seoul National University, Korea)
- AP-05** Solubility Measurement of Sebacic Acid and Salts in Alcohols
Youngmin CHOI(Korea National University of Transportation, KOREA), Jung Gyu LEE (Small Lab Co., Ltd., Korea) and Yeon Ki HONG*(Korea National University of Transportation, Korea)
- AP-06** Vapor-Liquid Equilibrium Measurements for Carbon Dioxide + Alcohol Systems at the Subcritical Conditions of Carbon Dioxide
Masahiro ICHIKAWA and Satoru KATO* (Tokyo Metropolitan University, Japan)
- AP-07** Measurement and Correlation of the high-pressure equilibria of CO₂/Trimethoxy (methyl)silane and CO₂/Diisononyl Phthalate Binary Systems, and CO₂/Trimethoxy (methyl)silane/Diisononyl Phthalate Ternary System
Kazuki SUDO, Yuichiro SHIMADA, Daisuke KOBAYASHI, Atsushi SHONO and Katsuto OTAKE* (Tokyo University of Science, Japan)
- AP-08** A Phase Behavior of Arbutin/Ethanol/CO₂ at Elevated Pressures
Chang-Nam HAN and Choon-Hyoung KANG* (Chonnam University, Korea)
- AP-09** High Pressure Phase Behavior for 1-Hexyl-3-Methylimidazolium Chloride and Carbon Dioxide
Byeongheon KIM, Hyeong SEONGHOON and Hwayong KIM* (Seoul National University, Korea)
- AP-10** Phase Behaviour Measurement for the Ternary Mixture System of Water + Carbon Dioxide + 1-Butyl-3-Methylimidazolium Iodide at High Pressure
Taehyun IM(Seoul National University, Korea), Ki June YOON(Sungkyunkwan University, Korea) and Hwayong KIM*(Seoul National University, Korea)

- AP-11** Solubility of Carnuba WAX in Cosolvent-Loaded Supercritical Carbon Dioxide
Elvina FITRISIA, Van Chinh TRAN, Kaikai CHEN, Allan QUINTO, Jr., Charmaine LAMIEL, and Jae-Jin SHIM* (Yeungnam University, Korea)
- AP-12** Measurement and Prediction of Phase Equilibria of Multicomponent System Related to Polymerization Process of Poly(Ethylene-co-Vinylacetate)
Takaaki NAKAMURA, Ayako IGARASHI, Yoshiyuki SATO* and Hiroshi INOMATA (Tohoku University, Japan)
- AP-13** Phase Behaviors of Supercritical Carbon Dioxide Including Dioctyl Sulfosuccinate Sodium Salt and Water
Jaehoon BAEK and Hun Yong SHIN* (Seoul National University of Science & Technology, Korea)
- AP-14** Measurements of Vapor-Liquid Equilibrium by a Newly Developed Flow-Type Apparatus for Modeling a Rectification Process
Yuya MAETA, Masaki OTA, Yoshiyuki SATO, Hiroshi INOMATA* (Tohoku University, Japan)
- AP-15** Measurement and Correlation of Isobaric Vapor-Liquid Equilibria for Development of Biobutanol Distillation Process
Fumiyuki YAMAGISHI, Yasushi MORI, Takayuki KURATSU, Hiroyuki MATSUDA and Kiyofumi KURIHARA* and Katsumi TOCHIGI (Nihon University, Japan)

<Physicochemical Properties>

- AP-16** Dielectric Properties for Dimethyl Ether + Ethanol Liquid Mixture at 293.2 – 313.2 K
Kazunori SATO, Taka-aki HOSHINA*, Tomoya TSUJI and Toshihiko HIAKI (Nihon University, Japan)
- AP-17** Measurements and Prediction of Viscosity for Liquid Polymer+CO₂ Mixtures
Mizuki MURAI, Yuya MAETA, Yoshiyuki SATO, Hiroshi INOMATA* (Tohoku University, Japan)
- AP-18** Physicochemical Properties of Diglyme-Lithium Salt Solution
Daisuke KODMA*, Yasuhiro ENDO, Takuya SHIMOMURA(Nihon University, Japan), Takashi MAKINO and Mitsuhiro KANAKUBO (AIST, Japan)
- AP-19** Predictive Correlation for Binary Diffusion Coefficients in Water at Ambient Pressure
Toshitaka FUNAZUKURI*, Minoru TAGUCHI, Kazuko YUI (Chuo University, Japan) and Tatsuya UMECKEY (Saga University, Japan)

<Calculation Model>

- AP-20** New CDSAP Model for Calculation of Activity Coefficients
Yasuhiro TADA, Issei TANIGUCHI and Yoshio IWAI*(Kyushu University, Japan)
- AP-21** Development of Calculation Model Based on Hole Theory for Phase Equilibria of Supercritical Carbon Dioxide system Containing Water
Yuta YOKOZAKI and Yusuke SHIMOYAMA* (Tokyo Institute of Technology, Japan)

<Materials>

- AP-22** Preparation of Solid Dispersions of Poorly Water-Soluble Drugs Using the Melting point Depression by High-Pressure Carbon Dioxide
Aya SAWADA, Yuichiro SHIMADA, Daisuke KOBAYASHI, Atsushi SHONO and Katsuto OTAKE* (Tokyo University of Science, Japan)

- AP-23** Evaluation of Nano-Sized Ordered Domain Formed in Lipid Bilayer Membrane
Keishi SUGA and Hiroshi UMAKOSHI* (Osaka University, Japan)
- AP-24** Investigation for Effect of Organic Solvent on Supercritical Carbon Dioxide Drying for
Preparation of Nano-Needle Titania
Motohiro KINOSHITA and Yusuke SHIMOYAMA* (Tokyo Institute of Technology, Japan)
- AP-25** Phase Behavior for Homogeneous Phase Formation on Supercritical Carbon Dioxide
Drying
Nattanai KUNANUSONT, Motohiro KINOSHITA and Yusuke SHIMOYAMA*
(Tokyo Institute of Technology, Japan)