

# Program at a glance

Sunday, November 09, 2014		
Time	Conference Room B1	Conference Room B2
13:00 - 17:00	Registration	
18:00 - 20:00	Welcome Gathering	

Monday, November 10, 2014		
Time	Conference Room B1	Conference Room B2
08:00 - 09:20	Registration	
09:20 - 09:30	Opening Address Masahiro Goto (Kyushu University)	
09:30 - 10:20	Plenary Lecture Geoff Stevens (University of Melbourne)	
10:20 - 10:50	Coffee Break sponsored by MicrotracBEL Corp.	
	Analytical Science and Technology	Nuclear Application
10:50 - 11:20	Keynote Lecture Takeshi Hashimoto (Sophia University)	Keynote Lecture Gary L. Foutch (Oklahoma State University)
11:20 - 11:40	Arinori Inagawa (Tokyo Institute of Technology)	Takuya Yokokita (Osaka University)
11:40 - 12:00	Shiho Asai (Japan Atomic Energy Agency)	Yu Tachibana (Nagaoka University of Technology)
12:00 - 13:30	Lunch Break	
	Organic Resin and Other Organic Ion Exchanger	Catalysis
13:30 - 14:00	Keynote Lecture Manabu Igawa (Kanagawa University)	Keynote Lecture Takayoshi Hara (Chiba University)
14:00 - 14:20	Hitoshi Takada (Organo Corporation)	Evelien Van de Steene (Ghent University)
14:20 - 14:40	Hirotaka Matsuura (Kumamoto University)	El-Said I. El-Shafey (Sultan Qaboos University)



14:40 - 15:00	Yukiho Hosomomi (Kyushu University)	Miray Emreol (Ege University)
15:00 - 15:30	Coffee Break sponsored by PerkinElmer Japan Co., Ltd.	
	Organic Resin and Other Organic Ion Exchanger Solvent Extraction	Inorganic Ion Exchanger Water Purification Fundamental Technology
15:30 - 15:50	Yuzo Baba (Kyushu University)	Nuryono (Universitas Gadjah Mada)
15:50 - 16:10	Akihiro Yamashita (University of Miyazaki)	Noriko Suzuki (Showa Pharmaceutical University)
16:10 - 16:30	Sylwia Ronka (Wroclaw University of Technology)	Takaaki Wajima (Chiba University)
16:30 - 16:50	Spas D. Kolev (University of Melbourne)	Masayuki Kishino (ASTOM Corporation)
16:50 - 17:10	Aulia I. Pratiwi (Doshisha Univerisity)	Zong-Huai Liu (Shaanxi Normal University)
17:20 - 17:50	JSIE Award Lecture	

ICIE2014 International Conference of Ion Exchange

Tuesday, November 11, 2014		
Time	Conference Room B1	Conference Room B2
09:10 - 10:00	Plenary Lecture Nalan Kabay (Ege University)	
10:00 - 10:30	Coffee Break sponsored by Shimadzu Corp.	
	Other	Advanced Science and Technology
10:30 - 11:00	Keynote Lecture Anna Jakubiak-Marcinkowska (Wroclaw University of Technology)	Keynote Lecture Marek Bryjak (Wroclaw University of Technology)
11:00 - 11:20	Yuiko Tasaki-Handa (Advanced Industrial Science and Technology)	Shinya Nozaki (Mitsubishi Chemical Corporation)
11:20 - 11:40	Tatsuya Oshima (University of Miyazaki)	Paul Sylvester (Energy Solutions)
11:40 - 12:00	Hidetaka Kawakita (Saga University)	Masanobu Nogami (Kinki University)
12:00 - 13:30	Lunch Break	

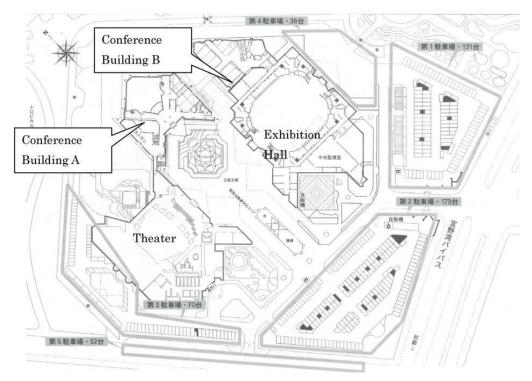


13:30 – 15:30	Poster Session (Conference Room A1)
18:00 - 21:00	Banquet (Laguna-Garden Hotel)

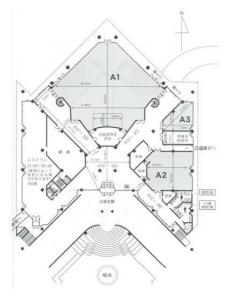
Wednesday, November 12, 2014		
Time	Conference Room B1	Conference Room B2
09:30 - 10:20	Pleanary Lecture Sri Juari Santosa (Universitas Gadjah Mada)	
10:20 - 10:30	Closing Remark Kazuharu Yoshizuka The University of Kitakyushu	
10:30 - 11:00	Move to	o bus
11:00 – 17:00	Excurs	sion



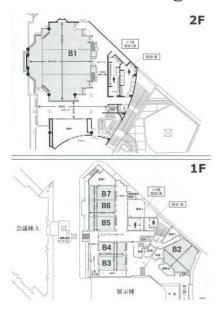
# Venue: Okinawa Convention Center



## **Conference Building A**



**Conference Building B** 





# **Location of Okinawa Convention Center**



### Access by Taxi

Naha Downtown to Okinawa Convention Center (10 km) Time: ca. 30 min hihara Town

Naha City



## **Full Program**

## **November 9 Sunday**

### **Conference Room B1**

- 13:00-17:00 Registration
- 18:00–20:00 Welcome Gathering

### November 10 Monday

### **Conference Room B1**

9:20 – 9:30 Opening Remark Masahiro Goto

Chairperson: Yu Komatsu

9:30-10:20 Plenary Lecture #1 Nutrient Release from Ion Exchange materials in the Presence and Absence of Biofilm: Implications for Hydrocarbon Degradation Ben Freidman, Kathryn Mumford, Sally Gras, and <u>Geoff Stevens</u>

10:20-10:50 Coffee Break

Chairperson: Naoki Hirayama

10:50-11:20	Keynote Lecture #1
	Development of Supramolecular Fluorescent Probe/Cyclodextrin Complex Sensors
	Possessing Dipicolylamine Unit as Recognition Site
	Takeshi Hashimoto, Kohei Katano, Hiroyuki Kobayashi, Keiko Ogura, and Takashi
	Hayashita

- 11:20-11:40Ice Grain Boundary Electrophoresis. Concept and Applicability<br/>Arinori Inagawa and Tetsuo Okada
- 11:40-12:00 REE Pattern Profiling with LA-ICP-MS Using REE-Adsorbed Resin Particles for Nuclear Forensics Shiho Asai and Andreas Limbeck
- 12:00-13:30 Lunch Break



# Conference Room B1

Chairperson: Tatsuya Oshima
Keynote Lecture #3 Separation of Amino Acids in the Double Ion-Exchange Membrane System
Tsubasa Doi, Shota Tsukahara, Ben Nanzai, and <u>Manabu Igawa</u>
Synthesis and Applications of Monolithic Ion Exchange Resin
Hitoshi Takada, Hiroshi Inoue, Akira Nakamura, and Koji Yamanaka
Separation of Sulfuric Acid and Monosaccharides with a Strong-Base Anion
Exchange Resin Containing Polystyrenesulfonate as Polymeric Counter Ion to
Reduce Tailing of Sulfuric Acid <u>Hirotaka Matsuura</u> , Zhaoyong Sun, Masashi Yanase, Toshihiro Ihara, Kenji Kida,
and Akinori Jyo
Sorption Properties of Rare Earth Elements on Chemically Modified E. coli
Yukiho Hosomomi, Rie Wakabayashi, Fukiko Kubota, Noriho Kamiya, and
Masahiro Goto
Coffee Break
Chairperson: Hidetaka Kawakita
Development of Polymer Inclusion Membrane with Amide Acid Type Extractant for
Separation of Critical Metals <u>Yuzo Baba</u> , Fukiko Kubota, Masahiro Goto, Robert W. Cattrall, and Spas D. Kolev
Synthesis of New Chitosan Derivative with Nitrogen and Sulfur Atoms and Its Adsorption Behavior for Precious Metals
Akihiro Yamashita, Kana Yoshida, Tatsuya Oshima, and Yoshinari Baba
Sulfur Containing Delanceria Southante
Sulfur-Containing Polymeric Sorbents Sylwia Ronka
Clean-up of Thiocyanate from Gold Mine Tailings Waters Using a Polymer Inclusion Membrane
Youngsoo Cho, Robert W. Cattrall, and <u>Spas D. Kolev</u>
Sugaring out of Sugarinia Agid through Aguagus Two Dhass System with Alashala
Sugaring-out of Succinic Acid through Aqueous Two-Phase System with Alcohols and Ionic Liquids
Aulia I. Pratiwi, Takeyuki Yokouchi, Michiaki Matsumoto, and Kazuo Kondo
JSIE Award Lecture



# Conference Room B2

10:50-11:20	Keynote Lecture #2 Optimizing Cation to Anion Resin Ratio in Mixed-Bed Ion Exchange M. M. Rahman and <u>Gary L. Foutch</u>
11:20-11:40	Solid-Liquid Extraction Behaviors of Zr, Hf, and Th from HCl with Aliquat 336: Model Experiments for the Chemical Study of Rf <u>Takuya Yokokita</u> , A. Kino, K. Toyomura, Y. Shigekawa, K. Nakamura, Y. Komori, Y. Kasamatsu, N. Takahashi, T. Yoshimura, H. Haba, J. Kanaya, M. Huang, M. Murakami, and A. Shinohara
11:40-12:00	Adsorption Behavior of Radionuclides Using Novel Tannic Acid-type Resin Embedded in High-porous Silica Beads in Seawater <u>Yu Tachibana</u> , Yuki Yamazaki, Toshitaka Kaneshiki, Masao Nomura, Tatsuya Suzuki
12:00-13:30	Lunch Break
13:30-14:00	Chairperson: Syouhei Nishihama Keynote Lecture #4 Carbon-Carbon Bond-Forming Reactions with $[Rh(OH)_6]^{3-}$ -Intercalated Ni-Zn Hydroxy Double Salt Catalyst <u>Takayoshi Hara</u> , Nozomi Fujita, Nobuyuki Ichikuni, and Shogo Shimazu
14:00-14:20	Chairperson: Shogo Shimazu Kinetic Study of Acetic Acid Esterification with Methanol Catalyzed by Gel and Macroporous Resins Evelien Van de Steene, Jeriffa De Clercq, and Joris W. Thybaut
14:20-14:40	Modified Carbon Sorbent for the Removal of $CuSO_4$ from Aqueous Solution <u>El-Said I. El-Shafey</u>
14:40-15:00	Adsorption of a Reactive Dye by $Al_2O_3$ - and $Fe_2O_3$ -Bentonite Composite <u>Miray Emreol</u> and Saadet Yapar
15:00-15:30	Coffee Break
15:30-15:50	Chairperson: Nobuhiro Kumada Isotherm Adsorption of Au(III), Cu(II) and Ni(II) on Magnetite Coated with Mercapto Groups Modified Rice Hull Ash Silica <u>Nuryono</u> , Eka Muliaty, and Bambang Rusdiarso
15:50-16:10	Cesium Adsorption Behavior of Vermiculite and Its Application to the Column Method <u>Noriko Suzuki</u> , Kotaro Ochi, and Toshiyuki Chikuma



16:10-16:30	Preparation of Zeolitic Material with the Ability to Simultaneously Remove NH <sup>4+</sup>
	and PO <sub>4</sub> <sup>3-</sup> from Paper Sludge using Calcination and Alkali Treatment
	Takaaki Wajima

- 16:30-16:50Preparation and Characterization of Ion Exchange Membranes with Non-Woven<br/>Fabric Reinforcement<br/>Masayuki Kishino, Kenji Fukuta, and Kiyotaka Yoshie
- 16:50-17:10Preparation, Ion-Exchange and Phase Transformation Behavior of α-Co(OH)2<br/>Zong-Huai Liu, Qi Li, Liping Kang, Mancheng Hu, and Zhongwen Liu

## November 11 Tuesday

### **Conference Room B1**

9:10-10:00	Chairperson: Kazuharu Yoshizuka Plenary Lecture #2 Applicability of Ion Exchange in Integrated Membrane Processes for Water Treatment and Desalination <u>Nalan Kabay</u>
10:00-10:30	Coffee Break
10:30-11:00	Chairperson: Hisao Kokusen Keynote Lecture #5 Molecularly Imprinted Hydrogels for Controlled Uptake and Release of Biologically Active Compounds <u>Anna Jakubiak-Marcinkowska</u> , Mateusz Koziol, and Rolando C.S. Dias
11:00-11:20	Unique and Tunable Affinity of Lanthanide Ion Exchange in Phosphodiester Coordination Polymers <u>Yuiko Tasaki-Handa</u> , Yukie Abe, Kenta Ooi, Hirokazu Narita, Mikiya Tanaka, and Akihiro Wakisaka
11:20-11:40	Adsorptive Immobilization of Gold Nanoparticles onto Cellulose Aerogel Prepared Using Ionic Liquid Solution <u>Tatsuya Oshima</u> , Sawa Ohnishi, Kaoru Ohe, and Yoshinari Baba
11:40-12:00	Germanium Recovery Using Ion-Exchange Membrane and Solvent Extraction <u>Hidetaka Kawakita</u> , Shintaro Morisada, and Keisuke Ohto
12:00-13:30	Lunch Break



### **Conference Room B2**

10:30-11:00	Chairperson: Keisuke Ohto Keynote Lecture #6
10.30 11.00	Separation of Lithium by Membrane Enhanced Capacitive Deionization Marek Bryjak, Katarzyna Smolinska-Kempisty, and Jan Kujawski
11:00-11:20	ChromSpeed Series: 4 Types of Ion Exchangers for High Throughput Biopharmaceutical Production <u>Shinya Nozaki</u> , Masato Towata, Yoshito Fukuda, Noriyuki Yasuda, Masahiko Ishitobi, and Tadashi Adachi
11:20-11:40	New Standards in Liquid Waste Treatment at Fukushima <u>Paul Sylvester</u> and Timothy N. Milner
11:40-12:00	Adsorptivity of Various Metal Ions onto Benzo-15-Crown-5 and Dibenzo-21-Crown-7 Resins <u>Masanobu Nogami</u> , Tomohiro Haratani, Yu Tachibana, Toshitaka Kaneshiki, Masao Nomura, and Tatsuya Suzuki
12:00-13:30	Lunch Break

### **Conference Room A1**

13:30–15:30 Poster Session (program shown in next page)

### Laguna-Garden Hotel

18:00-21:00 Banquet

## November 12 Wednesday

### **Conference Room B1**

Chairperson: Masahiro Goto

9:30–10:20 Plenary Lecture #3 Immobilization of Active Site Protected Humic Acid on Chitosan as High Performance Adsorbent for Cd(II) <u>Sri Juari Santosa</u>, Uripto Trisno Santoso, Otty Ayu Megantari, Dwi Siswanta, and Bambang Rusdiarso

10:20–10:30 Closing Remark Kazuharu Yoshizuka

### **Bus tour**

11:00-17:00 Excursion



## November 11 Tuesday

### Poster Session (13:30 – 15:30)

### **Conference Room A1**

- P01 Space Available for Cation in Ion Exchange Resins Akio Yuchi, Momoka Satoh, and Rio Kawamura
- P02 Separation and Recovery of Eu(III) and Y(III) with Solvent Impregnated Resin Coated by Crosslinked Chitosan Syouhei Nishihama, Akane Kawasaki, and Kazuharu Yoshizuka
- P03 Recovery of Gold from Waste LED by Ion Exchange Method <u>Hironori Murakami</u>, Syouhei Nishihama, and Kazuharu Yoshizuka
- P04 Photo-Swing Extraction of Eu with Thermosensitive Polymer Immobilizing Extractant and Carbon Nanotube Seitaro Takayama, Syouhei Nishihama, and Kazuharu Yoshizuka
- P05 Functional Materials for Trimethylsilanol Removal <u>Yutaka Yamaguchi</u>, Yurika Nagatomo, and Kazuya Uezu
- P06 Separation of Scandium by a Synergistic Extraction System with a β-diketone TTA and TOPO Zhigang Zhao, Yuzo Baba, Fukiko Kubota, and Masahiro Goto
- P07 Lithium Selective Adsorption on Impregnated Resin with Trialkyl-Monoacetic Acid Derivative of Calix[4]arene Keisuke Ohto, Hirotoshi Sadamatsu, Takuya Hanada, Shintaro Morisada, and Hidetaka Kawakita
- P08 Functional Membrane for Virus Sensors by Radiation-Induced Graft Polymerization <u>Hirotaka Matsumasa</u>, Takeshi Goto, and Kazuya Uezu
- P09 Synthesis of Chitosan Derivatives Having Carboxylic Acids or Phosphinic Acid and Their Selective Adsorption for Rare Metals <u>Shiori Hidaka</u>, Tomohiro Sugimachi, Tatsuya Oshima, and Yoshinari Baba
- P10 Synthesis of Functionalized-Cellulose Particles and Its Application to Selective Adsorption and Recovery of Precious Metals and Rare metals <u>Miki Nakashima</u>, Tatsuya Oshima, and Yoshinari Baba
- P11 Adsorption Properties of Styrenesulfonate-Grafted Fibrous Metal Adsorbent Yuji Ueki, Seiichi Saiki, and Noriaki Seko
- P12 Evaluation of the Scandium Affinity under the Iron Coexistence Using Radiation Grafted Adsorbents Natsuki Hayashi, Hiroyuki Hoshina, Haruyo Amada, Takeshi Yamanobe, and Noriaki Seko
- P13 A New Eco-Friendly Synthesis Method for Arsenic Adsorbent Haruyo Amada, Makikatsu Takahashi, Hiroyuki Hoshina, and Noriaki Seko



- P14 The Evaluation of Metal Adsorbent Based on Polyethylene Terephthalate Fiber Synthesized by Radiation-Induced Grafting Method Seiichi Saiki, Noriaki Seko, Takashi Oida, and Kozo Yamagishi
- P15 Adsorption of Gold on Biomaterials Prepared from Cellulosic Biomass Eric Moreau, Mirza Hossain, <u>Shafiq Alam</u>, and William Clarke
- P16 Ion-Exchange Property of Zeolite X for Diamminesilver(I) Cation <u>Hideto Sakane</u>, Sakie Kawamura, Daiki Endo, and Naoya Miyajima
- P17 Study of Ion Exchanging Process from Alkaline-Metal to Proton in Interlayer of Layered Compounds Using Carbonated Water <u>Yoshiharu Hada</u>, Ryota Imaki, Nobutaka Tobito, Yuki Yamaguchi, Shigeru Ito, and Kenjiro Fujimoto
- P18 Crystal Structures of Zirconium Phosphate with Adsorbed Rare-Earth Metals <u>Kiyoaki Iiduka</u>, Akira Miura, Takahiro Takei, Nobuhiro Kumada, Chikako Moriyoshi, and Yoshihiro Kuroiwa
- P19 Synthesis of Azomethine H Intercalated Layered Double Hydroxide and Evaluation of Adsorbent of Boron Shouta Fujishige, Shin Tomoya, Yuki Mukai, Isamu Fujiwara, and <u>Yoshiko Murakami</u>
- P20 Complexation reactions of Oxyanions on Anionic Clay Surfaces Kazuya Morimoto, Sohtaro Anraku, and Tsutomu Sato
- P21 Application of Propylene Carbonate to Liquid-Liquid Extraction of Metal Ion Kaoru Fujinaga, <u>Hirotoshi Nakamura</u>, Masaki Yamamoto, Shin-ichi Kawano, Syunichi Oshima, Yujiro Watanabe, Shigekazu Tsurubou, Geoff W. Stevens, and Yu Komatsu
- P22 Adsorption Behavior of Metal Ions with β-Diketone Type Chelating Agents Supported on Hydrophobized Mesoporous Silicate MCM-41 <u>Syunichi Oshima</u>, Yusuke Kumagai, Yujiro Watanabe, Kaoru Fujinaga, Geoffrey W. Stevens, and Yu Komatsu
- P23 Extraction and Separation of Nickel and Cobalt by Counter-Current Mixer-Settler Cascade Daiki Takase, Syouhei Nishihama, and Kazuharu Yoshizuka
- P24 Extraction Behavior for Metal Ions Using Cyclopentyl Methyl Ether as a Diluent Iori Fujiwara, Tatsuya Oshima, and Yoshinari Baba
- P25 New Extractants for Separation of Rare Earth Metals Arisa Fukami, Yuzo Baba, Fukiko Kubota, and Masahiro Goto
- P26 Solvent Extraction of Palladium(II) with Neutral Type of Trident Molecules Yuki Ueda, Shintaro Morisada, Hidetaka Kawakita, and Keisuke Ohto
- P27 Effect of Interfacial Activity on Silver Extraction Rate with Calix[4]arene Derivatives in Nitrate Media Jee Young Kim, Shintaro Morisada, Hidetaka Kawakita, and Keisuke Ohto



- P28 A Specific Synergistic Effect by Halides in Ionic Liquid Chelate Extraction Motoya Sakato and <u>Naoki Hirayama</u>
- P29 Mutual Extraction Separation of Iron(II) and Iron(III) Using 1,10-Phenanthroline and an Ionic Liquid <u>Hiroaki Suzuki</u> and Naoki Hirayama
- P30 Precious Metal Extraction with Calix[4]arene Derivatives by Using Microreactors <u>Keisuke Ohto</u>, Jee Young Kim, Shintaro Morisada, Hidetaka Kawakita, Masatoshi Meki, and Masaya Miyazaki
- P31 Extraction of Co(II) with Microcapsules of Cross-Linked Gel of Poly(Vinyl Alcohol)/Alginic Acid Containing PC-88A <u>Shunichi Komatsu</u>, Nov Irmawati Inda, Shiro Kiyoyama, Takayuki Takei, Masahiro Yoshida, and Koichiro Shiomori
- P32 Extraction of Precious Metals from Hydrochloric Acid with Sulfonamide Type of Extractant with a Pyridine Ring Shintaro Kanemaru, Yui Kanamaru, Tatsuya Oshima, and Yoshinari Baba
- P33 Synthesis of New Extractant with Amide Group and Its Selective Extraction for Gold(III) <u>Yuji Sasaki</u>, Yui Kanamaru, Shintaro Kanemaru, Tatsuya Oshima, and Yoshinari Baba
- P34 Preparation of Impregnated Magnetic Resin Containing *N*-Phenyl-*N*-(*p*-octylphenyl)thiourea and Its Adsorption Behavior for Precious Metals <u>Minako Iwakuma</u>, Makiko Sueyoshi, and Yoshinari Baba
- P35 Visible Intramolecular Charge Transfer Absorption of Bipyridinium-Crown Ether Conjugates in Response to the Alkali and Alkaline Earth Metal Ions <u>Tetsuo Kuwabara</u>, Haocheng Guo, and Hideki Kurokawa
- P36 The Electrochemical Sugar Recognition Using a β-Cyclodexrtrin Assembled on the Gold Electrode Naoki Ishiguro, Yugo Maruyama, Takeshi Hashimoto, Akira Endo, and Takashi Hayashita
- P37 Rapid and Simple Method of Bacteria Detection Based on Supramolecular Complex <u>Hiroyuki Kobayashi</u>, Aya Yamasawa, Nobuyuki Kanzawa, Takeshi Hashimoto, and Takashi Hayashita
- P38 Design and Evaluation of ATP Recognition for Dipicolylamine Conjugated Azoprobe/Cyclodextrin Supramolecules <u>Masashi Okaniwa</u>, Takuya Uemura, Anna Koshino, Kazuki Sato, Yuji Tsuchido, Takeshi Hashimoto, and Takashi Hayashita
- P39 Development of Dipicolylamine Fluorescent Probes with Different Structures <u>Maki Sawada</u>, Hiroyuki Kobayashi, Kohei Katano, Takeshi Hashimoto, and Takashi Hayashita
- P40 Preparation of Saccharide Exchange Membrane Modified by Phenylboronic Acid Azoprobe/PAMAM Dendrimer <u>Yuji Tsuchido</u>, Keisuke Aimu, Yuka Toda, Takeshi Hashimoto, and Takashi Hayashita



- P41 Esterification of Humin and Its Effect on the Removal of AuCl<sub>4</sub><sup>-</sup> from Aqueous Solution Sri Juari Santosa, Shinta Rosalia Dewi, Dwi Siswanta, and Sri Sudiono
- P42 Synthesis of Metal Ion Adsorbent Using Banana Fiber and Its Adsorption Properties to Rare Earth Metal Ions <u>Tetsuto Kajiyama</u>, Shohei Sakai, Jun Inoue, and Hisao Kokusen
- P43 Elution Behavior of Cesium Ion in Synthetic Mordenite After a Heat Treatment <u>Takuro Sasakura</u>, Yujiro Watanabe, Syunichi Oshima, Kaoru Fujinaga, Hirohisa Yamada, and Yu Komatsu
- P44 Adsorption Properties of Modified Banana Fiber to Transition Metal Ions Tetsuto Kajiyama, <u>Shohei Sakai</u>, Jun Inoue, and Hisao Kokusen
- P45 Recovery of Cu and EDTA from EDTA-Cu Solution by Use of Electrodialysis Accompanied by Electro-Chemical Reaction Hiroshi Takahashi, Etsuko Kashiuchi, and Kenzo Munakata
- P46 Effect of the Saturated Higher Fatty Acid Salts on the Foaming Property of Soap-Based Firefighting Foam Yugo Takasaki and Kazuya Uezu
- P47 Adsorption of Arsenic Using Supermacroporous Cryogel Monolith Containing Magnetite <u>Megumi Tokumaru</u>, Kaoru Ohe, Tatsuya Oshima, and Yoshinari Baba
- P48 Separation of Cesium: Adsorption Properties to Ferrocyanate Salt and Removal from Soil Kosuke Uchiyama, Ryutaro Kai, Hiroki Takane, Ben Nanzai, and <u>Manabu Igawa</u>
- P49 Adsorption of Cu(II) Ion in the Presence of Ca(II) and Ag(I) Ions Using Dithizone-Immobilized Zeolite <u>Mudasir Mudasir</u>, Siti Alfiah, Roto Roto and Nurul H. Aprilita
- P50 The Volume Reduction Method of Radioactively-Contaminated Plant Waste through Extraction and Removal of Radioactive Cesium <u>Seiichi Saiki</u>, Hiroyuki Hoshina, Takuya Shibata, Yuji Ueki, Noboru Kasai, and Noriaki Seko
- P51 Adsorption Properties for Se(IV), Se(VI) and Sb(III) Using Magnetite Kaoru Ohe, Tatsuya Oshima, and Yoshinari Baba
- P52 Selective Adsorbent for Mercury Based on Dithizone-Loaded Zeolite <u>Mudasir Mudasir</u>, Karelius Karelius, and Nurul H. Aprilita
- P53 Removal of Perchlorate Ion in Tap Water with Montmorillonite Modified with Hexadecylpyridinium Chloride Yoji Makita, Ramesh Chitrakar, and Akinari Sonoda
- P54 Highly Selective Adsorption of Phosphate with Inorganic-Macromolecule Composite Materials Dujuan Liang, Hong Wu, Min Wu, and <u>Xiaojing Yang</u>



- P55 Cesium Adsorption Behavior Depending on the Degree of Vermiculitization of Biotite from Fukushima Prefecture Hirohisa Yamada, Y. Watanabe, S. Yokoyama, M. Suzuki, S. Suzuki, and Tamao Hatta
- P56 The Cesium Adsorption-Desorption Behavior in Amorphous Aluminum Silicates Masaya Suzuki, Kazuko Manpuku, Ai Hoshinoya, Eri Hirabayashi, Takumi Sato, and Akira Oowada
- P57 Selective Uptake Behavior of Insoluble Ferrocyanide Loaded Zeolites and Development of Stable Solidification Method Yuki Ikarashi, <u>Hitoshi Mimura</u>, Tomonori Nakai, Yuichi Niibori, Eiji Ishizaki, and Minoru Matsukura
- P58 Development of an Adsorbent for Cs Removal Synthesized by Radiation-Induced Graft Polymerization <u>Takuya Shibata</u>, Noriaki Seko, Haruyo Amada, Noboru Kasai, Seiichi Saiki, Hiroyuki Hoshina, and Yuji Ueki
- P59 ESR Characterization of Cs<sup>+</sup> and Ag<sup>+</sup> Sites in Clay Minerals Jacek Michalik, Anna Bugaj, Jarosław Sadło, Grażyna Strzelczak, and Hirohisa Yamada
- P60 Removal of Iodide Ions from Contaminated Water Using Silver-Chloride-Impregnated Fibers <u>Kanae Takahashi</u>, Kunio Fujiwara, Wataru Amakai, Takanobu Sugo, Shigeko Kawai-Noma, Daisuke Umeno, and Kyoichi Saito
- P61 Chromatographic Separation of Nuclear Rare Metals by Highly Functional Xerogels <u>Takashi Onishi</u>, Shin-ichi Koyama, Rana Syed Masud, Takuya Kawamura, Hitoshi Mimura, and Yuichi Niibori
- P62 Adsorption Behavior of Neptunium Ions on Pyridine-Type Resin in Hydrochloric Acid Solutions <u>Yu Tachibana</u>, Yuki Yamazaki, Tatsuya Suzuki, and Tomoo Yamamura
- P63 Intercalation of [Pd(OH)<sub>4</sub>]<sup>2-</sup> Complex into Ni-Zn Hydroxy Double Salt: Application to Effective Heterogeneous Catalyst for Suzuki-Miyaura Coupling Reaction <u>Mami Shimada</u>, Takayoshi Hara, Nobuyuki, Ichikuni, and Shogo Shimazu
- P64 Layered Yttrium Hydroxide Catalyzed Knoevenagel Reaction in Water <u>Yoshito Tateyama</u>, Yumiko Nishizawa, Takayoshi Hara, Nobuyuki Ichikuni, and Shogo Shimazu
- P65 Photocatalytic Activities of Layered Niobate Perovskite (A'A<sub>n-1</sub>Nb<sub>n</sub>O<sub>3n+1</sub>, A: Ca, La) with Substitution of Ti and W for Nb <u>Nan Xu</u>, Takahiro Takei, Akira Miura, and Nobuhiro Kumada
- P66 Asymmetric Hydrogenation of Ketones by Chiral Interlayer Catalysts Composed of Chiral Rh(I) Pillar Complexes Immobilized on Taeniolite <u>Tomohiro Edano</u>, Takayoshi Hara, Nobuyuki Ichikuni, and Shogo Shimazu
- P67 Synthesis of Nickel-Base Layered Oxide from Orientation-Controlled Layered Double Hydroxide Containing Period-Four Transition Metal <u>Hiroki Fuse</u>, Takahiro Takei, Akira Miura, and Nobuhiro Kumada



- P68 The Effect of Interfering Substances on the Iodine Production Method from Underground Brine Water Masatoshi Endo, Kento Sugawa, Atsushi Sasaki, Takahiro Sato, Tatsuhiko Ooki, Masaya Watanabe
- P69 The Mechanism and Inhibition for Deterioration of Frying Oil Masatoshi Endo, Kensuke Munakata, Atsushi Sasaki, and Isao Aruse
- P70 Decomposition of Ion Exchange Resin by Vanadium Takaaki Chuman, Koya Abe, Yasuharu Minato, and Nobuhiro Orita
- P71 The Investigation on PRB Designing Parameters for Remediating Fluoride-Contaminated Groundwater by Means of the Volcanic Ash Soil Adsorbent <u>Takaaki Shinohara</u> and Mamoru Iwasaki
- P72 Ion Exchange Technology in the Extraction of Gallium Xiaokang Kou and Suidang Li
- P73 Purification of Catechin Gallate Esters from Green Tea by an Acrylic Weak Acid Cation Exchange Resin <u>Eiya Yao</u>, Masahiro Ogino, and Miwa Ito
- P74 Recovery of Scandium from Hot Spring Water with Fibrous Graft Adsorbent Having Phosphoric Groups
  <u>Hiroyuki Hoshina</u>, Noboru Kasai, Haruyo Amada, Makikatsu Takahashi, Kazuya Tanaka, and Noriaki Seko
- P75 Adsorptivity of Various Metal Ions onto Benzo-18-Crown-6 and Dibenzo-18-Crown-6 Resins Irradiated by γ-Ray21
   <u>Tetsuhiro Nishida</u>, Shinya Tajima, Tomohiro Haratani, Masanobu Nogami, Nobuhiro Sato, Yu Tachibana, and Tatsuya Suzuki
- P76 Removal of Radioactive Cesium Ions from Contaminated Water Using a Braid of Adsorptive Fibers <u>Kunio Fujiwara</u>, Shota Goto, Takanobu Sugo, Shigeko Kawai-Noma, Daisuke Umeno, and Kyoichi Saito
- P77 Ion Exchange Properties of α-Zirconium Phosphate with Alkali Metal Ions Yasushi Nakajima and Susumu Nakayama
- P78 Hydrous Titanium Oxide: Effect of Preparation Conditions on Textural and Adsorption Properties <u>Anatoly Bortun</u> and James Knoll
- P79 Adsorption of Heavy Metal Ion by Modified Cellulose Fibers <u>Min Wu</u>, Ye Tian, and Yong Huang