

4th Asian Conference on Molten Salt Chemistry and Technology,  
44th Symposium on Molten Salt Chemistry, Japan

Scientific Program

**Sept. 24 (Mon), Room A**

**9:00-9:40 Plenary Talk**

- P1 “A Novel Rechargeable Sodium Battery Using a Mixed Molten Amide Electrolyte”  
Rika Hagiwara  
(Kyoto University, Japan)

**9:40-10:00 Coffee Break**

**10:00-11:00 Keynote Talk**

- K1 “Electrochemical Preparation of Highly Advance Carbon Films in the Molten Salt”  
Qiushi Song, Qian Xu, Chaoyang Xing, Zaiyuan Li  
(Northeastern University, China)
- K2 “Electrodeposition of Al Alloys as a Lubricating Material in Molten Salt”  
Mikito Ueda  
(Hokkaido University, Japan)

**11:00-12:00 General Presentation**

- G1 “Liquid Iron Production by High Temperature Electrolysis”  
Geir Martin Haarberg<sup>1</sup>, Eirin Kvalheim<sup>1</sup>, Ana Maria Martinez<sup>2</sup>  
(1 Norwegian University of Science and Technology, Norway;  
2 SINTEF Materials and Chemistry, Norway)
- G2 “Reduction of Niobium Oxide Using CaCl<sub>2</sub> Melt”  
Ryosuke Suzuki  
(Hokkaido University, Japan)
- G3 “Electrochemical Refining of Silicon in Molten Fluoride”  
Tetsuo Oishi, Miki Yaguchi, Mikiya Tanaka  
(National Institute of Advanced Industrial Science and Technology, Japan)

**12:00-13:00 Lunch**

**13:00-15:00 Poster Session (44th Symposium on Molten Salt Chemistry, Japan)**

**16:00-18:00 Banquet**

## Sept. 24 (Mon), Room B

### 10:00-11:00 Keynote Talk

- K3 “Investigation on Electrochemical Removal of  $\text{CaCl}_2$  from  $\text{LiCl-KCl}$  Melts”  
Bing Li, Miao Shen, Heng Wang, Xiannan Yan  
(East China University of Science and Technology, China)
- K4 “High-temperature X-ray Imaging Study of Simulated High-level Waste Glass Melt”  
Yoshihiro Okamoto<sup>1</sup>, Masami Nakada<sup>1</sup>, Mitsuo Akabori<sup>1</sup>, Satoshi Komamine<sup>2</sup>,  
Toshiki Fukui<sup>2</sup>, Eiji Ochi<sup>2</sup>, Hiroaki Nitani<sup>3</sup>, Masaharu Nomura<sup>3</sup>  
(1 Japan Atomic Energy Agency, Japan; 2 Japan Nuclear Fuel Limited Japan;  
3 High-Energy Accelerator Research Organization, Japan)

### 11:00-12:00 General Presentation

- G4 “Aspect in Structural Analysis of Molten Salts”  
Yasuhiko Iwadate  
(Chiba University, Japan)
- G5 “Anodic Behavior of Steam-Activated Boron-Doped Diamond Electrode in a Molten  $\text{NH}_4\text{F}\cdot 2\text{HF}$ ”  
Akimasa Tasaka<sup>1</sup>, Akihiro Ooishi<sup>1</sup>, Wataru Sugimoto<sup>2</sup>, Kazuhiro Hirao<sup>3</sup>,  
Masaharu Uno<sup>3</sup>, Takaaki Nakai<sup>3</sup>, Morihiro Saito<sup>1</sup>, and Minoru Inaba<sup>1</sup>  
(1 Doshisha University, Japan; 2 Shinshu University, Japan;  
3 Permerec Electrode Ltd., Japan)
- G6 “Wetting of  $\text{Na}_3\text{AlF}_6\text{-KF-AlF}_3$  Based Electrolytes on Graphite Cathode Material Associated with Melt Penetration”  
Yanan Zhang, Jilai Xue, Jun Zhu, Zhenhuan Huang  
(University of Science and Technology Beijing, China)

### 12:00-13:00 Lunch

### 13:00-15:00 Poster Session (44th Symposium on Molten Salt Chemistry, Japan)

### 16:00-18:00 Banquet

## Sept. 25 (Tue), Room A

### 9:00-9:40 Plenary Talk

- P2 “Basic Research of Titanium Extraction through Electrolysis of Titanium Oxycarbide”  
Hongmin Zhu  
(University of Science and Technology Beijing, China)

### 9:40-10:00 Coffee Break

### 10:00-11:00 Keynote Talk

- K5 “Low Temperature Electrolysis of Alloys Containing Li and RE, and the Gradation Rule of RE Deposition Potential”  
Hao Tang, Yongde Yan, Milin Zhang, Wei Han, Xing Li, Yun Xue  
(Harbin Engineering University, China)
- K6 “Formation of Functional Materials by Electrochemical Method in Molten Salts”  
Takuya Goto  
(Doshisha University, Japan)

### 11:00-12:00 General Presentation

- G7 “Theoretical Aspects of Lithium Secondary Battery Performances: Analysis on Measurement Techniques”  
Tatsuo Nishina<sup>1</sup>, Hiroyuki Takeda<sup>1</sup>, Kazuhiro Tachibana<sup>1</sup>, Masaki Ohtani<sup>2</sup>, Takao Kawahira<sup>3</sup>  
(1 Yamagata University, Japan; 2 Oguni High School, Japan, 3 IMV Co., Japan)
- G8 “Study on Electrochemical Fluorination of Graphite Anode in KF-KBF<sub>4</sub> Molten Slat”  
Gong Chen<sup>1</sup>, Zhongning Shi<sup>1,2</sup>, Bingliang Gao<sup>1,2</sup>, Zhaowen Wang<sup>1,2</sup>, Xianwei Hu<sup>1,2</sup>, Jiangyu Yu<sup>1,2</sup>  
(1 Northeastern University, China; 2 Ministry of Education, China)
- G9 “Reduction of TiO<sub>2</sub> or TiCl<sub>x</sub> into Liquid Bi in Molten Chlorides”  
Yuya Kado, Sho Maruyama, Akihiro Kishimoto, Yoshitaro Nose, Tetsuya Uda  
(Kyoto University, Japan)

### 12:00-13:00 Lunch

### 13:00-15:00 General Presentation

- G10 “Preparation of High Purity Titanium by Electro Refining in NaCl-KCl Melt”  
Jianxun Song, Guojing Hu, Qiuyu Wang, Shuqiang Jiao, Hongmin Zhu  
(University of Science and Technology Beijing, China)
- G11 “Study on Electrochemical Reduction of Zirconium Oxide in the Cryolite Melts”  
Min Li, Bingliang Gao, Zhongning Shi, Xianwei Hu, Zhaowen Wang, Jiangyu Yu  
(Northeastern University, China)
- G12 “Conditions for Electrowinning of Liquid Ti Metal”

Toshihide Takenaka, Taiki Morishige  
(Kansai University, Japan)

- G13 “Electrochemical Formation of RE-Ni Alloys in Molten NaCl-KCl-RECl<sub>3</sub> (RE=Nd, Dy)”  
Toshiyuki Nohira, Seitaro Kobayashi, Koji Yasuda, Rika Hagiwara  
(Kyoto University, Japan)
- G14 “Preparation of Different Phases of Al-Li-Yb Alloys from Yb<sub>2</sub>O<sub>3</sub> in LiCl-KCl-AlCl<sub>3</sub> Melt”  
Yongde Yan, Xing Li, Milin Zhang, Wei Han, Hao Tang, Yun Xue, and Meng Zhang  
(Harbin Engineering University, China)
- G15 “Anodic Behavior of Conductive Perovskite Oxides in Molten Calcium Chloride”  
Shubo Wang, Jianbang Ge, Yuejiao Hu, Hongmin Zhu, Shuqiang Jiao  
(University of Science and Technology Beijing, China)

### **15:00-15:20 Coffee Break**

### **15:20-17:00 General Presentation**

- G16 “The Application of Spray Coating to Anti-fouling and Pro-fouling Surface Treatments for Various Materials”  
Hideyuki Kanematsu<sup>1</sup>, Daisuke Kuroda<sup>1</sup>, Soshu Kirihara<sup>2</sup>, Hideo Itoh<sup>3</sup>  
(1 Suzuka National College of Technology, Japan; 2 Osaka University, Japan; 3 Nissen Kagaku, Japan)
- G17 “Fluoride Desorption of Secondary Alumina at High Temperature”  
Youjian Yang, Bingliang Gao, Jiangyu Yu, Zhaowen Wang, Zhongning Shi, Xianwei Hu  
(Northeastern University, China)
- G18 “Upgrade of Titanium Ore by Selective Chlorination Using Calcium Chloride”  
Jungshin Kang, Toru H. Okabe  
(The University of Tokyo, Japan)
- G19 “Electrochemical Behavior of the Titanium Plate with Carbon Films in a Vanadium Sulfate Solution”  
Huijun Liu, Tingting Cai, Qiushi Song, Qian Xu  
(Northeastern University, China)
- G20 “Formation Rate and Mechanism of LiH by Reacting Li with Hydrogen”  
Yu Suzuki, Osamu Takeda, Yuzuru Sato  
(Tohoku University, Japan)

## Sept. 25 (Tue), Room B

### 10:00-11:00 Keynote Talk

- K7 “Electrochemical Preparation of Cobalt Nano-particles in an Ionic Liquid”  
Yasushi Katayama, Ryuta Fukui, Takashi Miura  
(Keio University, Japan)
- K8 “Current Efficiency of Aluminum Electrolysis in NaF-KF-AlF<sub>3</sub> Melts at Lower Temperatures”  
Jun Zhu, Jilai Xue, Huanhuan Ma  
(University of Science and Technology Beijing, China)

### 11:00-12:00 General Presentation

- G21 “First-principles molecular dynamics simulation and conductivity measurement of molten  $x\text{Li}_2\text{O}-(1-x)\text{B}_2\text{O}_3$  system”  
Takahiro Ohkubo<sup>1</sup>, Eiji Tsuchida<sup>2</sup>, Mallory Gobet<sup>3</sup>, Catherine Bessada<sup>3</sup>,  
Yasuhiko Iwadate<sup>1</sup>  
(1 Chiba University, Japan; 2 National Institute of Advanced Industrial Science and Technology, Japan; 3 CNRS, France)
- G22 “Modelling of Surface Properties of Molten Ionic Mixtures”  
Masanori Suzuki, Toshihiro Tanaka  
(Osaka University, Japan)
- G23 “Thermal Properties of Alkali Metal Perfluoroalkyltrifluoroborates”  
Keigo Kubota, Hajime Matsumoto  
(National Institute of Advanced Industrial Science and Technology, Japan)

### 12:00-13:00 Lunch

### 13:00-15:00 General Presentation

- G24 “Chlorination Behavior of Fuel and Structural Materials for Fuel Debris Treatment”  
Nobuaki Sato and Akira Kirishima  
(Tohoku University, Japan)
- G25 “Use of Molten Salt for Concentrating Solar Power”  
Yoshitaro Tsubaki  
(Soken Tecnix Co.,Ltd., Japan)
- G26 “A view of Treatment Process of Melted Nuclear Fuel on a Severe Accident Plant using a Molten Salt System”  
Reiko Fujita, Yuya Takahashi, Hitoshi Nakamura, Koji Mizuguchi  
(Toshiba Corporation, Power Systems Company, Japan)
- G27 “Structure and Physico-chemical Properties of Molten Thorium Fluoride Mixtures – Synthesis of Thorium - lithium Fluoride Mixtures”  
Haruaki Matsuura<sup>1</sup>, Masahiko Numakura<sup>1</sup>, Kazuhiro Fujita<sup>1</sup>, Atsushi Nezu<sup>1</sup>,  
Hiroshi Akatsuka<sup>1</sup>, Catherine Bessada<sup>2</sup>, Nobuaki Sato<sup>3</sup>  
(1 Tokyo Institute of Technology, Japan; 2 CNRS France; 3 Tohoku University, Japan)

- G28 “Electrochemical Properties of Curium Ions in LiCl-KCl Eutectic Melts”  
Hiroki Shibata<sup>1</sup>, Hirokazu Hayashi<sup>1</sup>, Tadafumi Koyama<sup>2</sup>  
(1 Japan Atomic Energy Agency, Japan; 2 Central Research Institute of  
Electric Power Industry, Japan)
- G29 “Effect of Fluoride Addition on Electrochemical Behavior and Local Structure of  
Neodymium Cation in Molten Lithium - Potassium Chloride”  
Kazuhiro Fujita, Atsushi Nezu, Hiroshi Akatsuka, Haruaki Matsuura  
(Tokyo Institute of Technology, Japan)

**15:00-15:20 Coffee Break**

**15:20-17:00 General Presentation**

- G30 “A Laboratory Study of Thermal Conductivity of the Hall-Heroult Crust”  
Wenju Tao, Zhaowen Wang, Jianzhong Cui  
(Northeastern University, China)
- G31 “Electrical Conductivity of NaF-AlF<sub>3</sub>-CaF<sub>2</sub>-Al<sub>2</sub>O<sub>3</sub>-ZrO<sub>2</sub> Molten Salts”  
Morigengaowa Bao<sup>1,2</sup>, Zhaowen Wang<sup>1</sup>, Bingliang Gao<sup>1</sup>, Zhongning Shi<sup>1</sup>,  
Xianwei Hu<sup>1</sup>, Jiangyu Yu<sup>1</sup>  
(1 Northeastern University, China; 2 Inner Mongolia University, China)
- G32 “Oxygen Reduction Reaction at Lanthanum Nickel Oxide Supported by Gold  
Electrode in Molten Carbonate with Lanthanum Oxide”  
Koichi Matsuzawa, Yuichi Esaki, Yuuki Takeuchi, Kohei Watanabe, Yuji Kohno,  
Kenichiro Ota, Shigenori Mitsushima  
(Yokohama National University, Japan)
- G33 “Electrode Reaction of Fluorosilicate Ion on Ni and Mo Electrodes in Molten Fluoride”  
Shigeki Yamanaka, Osamu Takeda, Yuzuru Sato  
(Tohoku University, Japan)
- G34 “Electrical Conductivity of Some Molten Chlorides at Elevated Temperatures and  
Vapor pressures”  
Alexander B. Salyulev, Alexei M. Potapov  
(Ural Branch of Russian Academy of Sciences, Russia)

## Poster List, Sept. 24 (Mon) 13:00-15:00

- PS1 “Anodic Behavior of Ti Electrode in Eutectic LiCl-KCl Melt”  
Daichi Araki, Taiki Morishige, Toshihide Takenaka  
(Kansai University, Japan)
- PS2 “Manganese Oxide Supercapacitors with Butylmethylpyrrolidinium–dicyanamide Ionic Liquid Electrolyte”  
Jengkuei Chang<sup>1</sup>, Yunshan Li<sup>2</sup>, Chungjui Su<sup>2</sup>, Iwen Sun<sup>2</sup>,  
Mingsung Lee<sup>1</sup>, Huiying Li<sup>1</sup>  
(1 National Central University, Taiwan; 2 National Cheng Kung University, Taiwan)
- PS3 “Synthesis and Properties of ( $\mu$ -oxo)bis[trichloroferrate(III)] Dianion Salts Incorporated with Dicationic Moiety”  
Juicheng Chang<sup>1</sup>, Wenyueh Ho<sup>2</sup>, Iwen Sun<sup>1</sup>, Yukai Chou<sup>2</sup>,  
Hsinhsiu Hsieh<sup>2</sup>, Tziyi Wu<sup>1</sup>, Shihshin Liang<sup>1</sup>  
(1 National Cheng Kung University, Taiwan;  
2 Chia Nan University of Pharmacy & Science, Taiwan)
- PS4 “Preparation of Halide-free Ionic Liquids Using Carbonate Anions”  
Fulin Chen, Iwen Sun, F.-C. Chang, Chungjui Su, H. Paul Wang  
(National Cheng Kung University, Taiwan)
- PS5 “The Preparation and Application of Ionic Liquid-Graphite Composite Electrodes”  
Hao Cheng, Jyunda Chen, Poyu Chen  
(Kaohsiung Medical University, Taiwan)
- PS6 “Electrochemical Reduction of Oxidized Neodymium Scrap in CaCl<sub>2</sub>–CaO Melt”  
Ryunosuke Enmei, Hiromichi Nishiyama, Tatsuya Kikuchi, Ryosuke O. Suzuki  
(Hokkaido University, Japan)
- PS7 “Liquidus Temperature of LiF-LiCl-Li<sub>2</sub>O Melts”  
Bingliang Gao, Dong Shi, Junyue Qu, Zhongning Shi, Xianwei Hu, Zhaowen Wang  
(Northeastern University, China)
- PS8 “A Comparative Study on Electrochemical Behavior of Lu ions from Lu<sub>2</sub>O<sub>3</sub> and LuCl<sub>3</sub> Chlorinate in LiCl-KCl Melts”  
Wei Han, Yunxia Sun, Milin Zhang, Yi Sun, Canfeng Zhao, Tao Jiang  
(Harbin Engineering University, China)
- PS9 “The Electrochemical Behavior of Tb(III) on Ni Electrodes in LiCl-KCl Eutectic Melts at 773 K”  
Wei Han, Qingnan Sheng, Milin Zhang, Hailing Jiang  
(Harbin Engineering University, China)
- PS10 “Electrochemical Behavior of Lanthanum at Mo and Ni Electrodes in LiCl-KCl Melts at 773 K”  
Wei Han, Hailing Jiang, Milin Zhang, Qingnan Sheng  
(Harbin Engineering University, China)

- PS11 “The Electrochemical Behavior of Pr(III) in Eutectic LiCl-KCl Molten Salt at 873 K at Different Electrodes”  
Wei Han, Wei Li, Miling Zhang, Yaochen Liu  
 (Harbin Engineering University, China)
- PS12 “Cyclic Voltammetry of Lead in Ionic Liquid with or without Sulfuric Acid Aqueous Solution”  
Nobumitsu Hirai  
 (Suzuka National College of Technology, Japan)
- PS13 “Local Structure Around Uranyl Ion in Concentrated Aqueous Solution of LiCl by MD Simulation”  
Yoshiki Ishii<sup>1</sup>, Yuta Nagata<sup>1</sup>, Norikazu Ohtori<sup>1</sup>, Akihiro Uehara<sup>2</sup>,  
 Toshiyuki Fujii<sup>2</sup>, Hajime Yamana<sup>2</sup>, Kazuo Minato<sup>3</sup>  
 (1 Niigata University, Japan; 2 Kyoto University, Japan;  
 3 Japan Atomic Energy Agency, Japan)
- PS14 “Conversion of CO<sub>2</sub> to CO by Electrolysis of Molten Li<sub>2</sub>CO<sub>3</sub>-Li<sub>2</sub>O Melt and Conditions of Li<sub>2</sub>CO<sub>3</sub>-Li<sub>2</sub>O Melt Stability in Air”  
Valery Kaplan, Igor Lubomirsky  
 (Weizmann Institute of Science, Israel)
- PS15 “Electrorefining of Titanium from Bi-Ti Alloy in Molten Salt”  
Akihiro Kishimoto, Sho Maruyama, Shuhei Arisawa, Yuya Kado,  
 Yoshitaro Nose, Tetsuya Uda  
 (Kyoto University, Japan)
- PS16 “Electrochemical Formation of Pr-Ni Alloys in Molten LiF-CaF<sub>2</sub>-PrF<sub>3</sub>”  
Katsuya Kondo, Koji Yasuda, Toshiyuki Nohira, Rika Hagiwara  
 (Kyoto University, Japan)
- PS17 “The Study of Electrochemical Behavior of Nd(III) on Ni Electrode in LiCl-KCl Molten Salts at 723 K”  
 Mei Li, Yaochen Liu, Wei Han, Milin Zhang, Wei Li  
 (Harbin Engineering University, China)
- PS18 “Preparation of nano-Fe<sub>69</sub>Cr<sub>18</sub>Ni<sub>9</sub>Cu<sub>4</sub> Alloy Powder by Chemical Co-precipitation Hydrogen Reduction”  
Zaiyuan Li, Qian Xu, Ying Li  
 (Northeastern University, China)
- PS19 “Formation of Carbon Nitride Powder by Cathode Discharge Electrolysis in Molten Salt”  
Yuki Matsumoto, Takuya Goto, Yasuhiko Ito  
 (Doshisha University, Japan)
- PS20 “Structural Investigations of Aluminoborosilicate Glasses containing MoO<sub>3</sub> by Solid-state NMR”  
Ryusuke Monden<sup>1</sup>, Kenzo Deguchi<sup>2</sup>, Shinobu Ohki<sup>2</sup>, Tadashi Shimizu<sup>2</sup>,  
 Shin Nishiyama<sup>1</sup>, Yasuhiko Iwadate<sup>1</sup>, Takahiro Ohkubo<sup>1</sup>  
 (1 Chiba University, Japan; 2 National Institute for Materials Science, Japan)



- PS21 “Interionic Interaction in Sodium Borate Glasses”  
Yuta Negishi<sup>1</sup>, Masanori Sakaue<sup>1</sup>, Koichi Shiraki<sup>2</sup>, Yoshiki Ishii<sup>1</sup>, Norikazu Ohtori<sup>1</sup>  
 (1 Niigata University, Japan; 2 Nippon Sheet Glass Co. Ltd., Japan)
- PS22 “Electronic Polarizability of a Hydroxide Ion Estimated from Refractive Indexes and Molar Volumes of Molten NaOH-NaNO<sub>3</sub> Eutectic”  
Ryosuke Ohnishi, Takahiro Ohkubo, Yasuhiko Iwadate  
 (Chiba University, Japan)
- PS23 “Dissolution Behavior of Na<sub>2</sub>O-B<sub>2</sub>O<sub>3</sub> Glass using Micro-channel Flow-through Test Method”  
Yohei Ohsasa<sup>1</sup>, Yaohiro Inagaki<sup>2</sup>, Shin Nishiyama<sup>1</sup>, Yasuhiko Iwadate<sup>1</sup>, Takahiro Ohkubo<sup>1</sup>  
 (1 Chiba University, Japan; 2 Kyushu University, Japan)
- PS24 “The Flat-band Potential of an n-type Titanium Dioxide in Ionic Liquid Containing Bromide Ions”  
Hiroaki Ota, Yasushi Katayama, Takashi Miura  
 (Keio University, Japan)
- PS25 “Molecular model of the melts solidification”  
 Valeriy V. Pavlov<sup>1</sup>, Alexei M. Potapov<sup>2</sup>  
 (1 Ural State Mining University, Russia; 2 Russian Academy of Sciences, Russia)
- PS26 “Electronic Spectra of Sm<sup>3+</sup> in Molten Fluorides”  
Alexei M. Potapov, Alexei S. Payvin, Alexander A. Khokhryakov  
 (Russian Academy of Sciences, Russia)
- PS27 “Formation of Ag Alloy Particles in the Glass by Ion Exchange Treatment in Molten Salt”  
Yuko Sakai, Mikito Ueda, Toshiaki Ohtsuka  
 (Hokkaido University, Japan)
- PS28 “Electrochemical Formation of Aluminum Alloy Film in LiCl-KCl-CsCl”  
Yoshihide Sakanaka<sup>1</sup>, Takuya Goto<sup>1</sup>, Ken Hachiya<sup>2</sup>  
 (1 Doshisha University, Japan; 2 Kyoto University, Japan)
- PS29 “Formation of Titanium oxide with Visible Light Activity in Molten Salt”  
Tatsuro Sasa, Takuya Goto, Yasuhiko Ito  
 (Doshisha University, Japan)
- PS30 “Electrodeposition of Aluminum Wires from the AlCl<sub>3</sub>/trimethyl Hydrochloride Ionic Liquid”  
Chungjui Su<sup>1</sup>, Tziyi Wu<sup>2</sup>, Yulin Sun<sup>1</sup>, Poyu Chen<sup>3</sup>, Paul H. Wang<sup>1</sup>, Iwen Sun<sup>1</sup>  
 (1 National Cheng Kung University, Tainan; 2 National Yunlin University of Science & Technology, Taiwan; 3 Kaohsiung Medical University, Taiwan)

- PS31 “Electrodeposition of FeCoZn Alloys from the Zinc Chloride-based Ionic Liquid”  
Chungjui Su, Paul H. Wang, Dingxuan Zhuang, Jiaming Yang, Iwen Sun  
 (National Cheng Kung University, Taiwan)
- PS32 “Development of Technology for Separation of Melted Nuclear Fuel  
 at Power Plants Suffering Severe Accidents”  
Yuya Takahashi, Hitoshi Nakamura, Koji Mizuguchi, Reiko Fujita,  
 Takashi Omori, Akira Ikeda  
 (Toshiba Corporation, Power Systems Company, Japan)
- PS33 “Condition of Metal Fog Formation in LiCl-KCl Melt and Its Prevention  
 by Li<sub>2</sub>O Addition”  
Ryosuke Takayanagi, Taiki Morishige, Toshihide Takenaka  
 (Kansai University, Japan)
- PS34 “Electrolytic Reduction of SiO<sub>2</sub> Powder in Molten CaCl<sub>2</sub>”  
Tetsuya Toba<sup>1</sup>, Koji Yasuda<sup>1,2</sup>, Toshiyuki Nohira<sup>1,2</sup>, Rika Hagiwara<sup>1,2</sup>,  
 Koki Ichitsubo<sup>3</sup>, Kenta Masuda<sup>4</sup>, Takayuki Homma<sup>2,4</sup>  
 (1 Kyoto University, Japan; 2 JST-CREST, Japan;  
 3 Taiheiyo Cement Co., Japan; 4 Waseda University, Japan)
- PS35 “Electrochemical Behavior of Metal Oxides in Molten Fluoride Systems”  
Fumiya Tsujii, Takuya Goto, Ken Hirota  
 (Doshisha University, Japan)
- PS36 “CO<sub>2</sub> decomposition and Formation of CNT by molten salt electrolysis”  
Takuya Uchiyama, Norihito Sakaguchi, Koya Otake, Tatsuya Kikuchi,  
 Ryosuke O. Suzuki  
 (Hokkaido University, Japan)
- PS37 “Electrochemical Formation of Silicides on Si Wafer in Molten Salt”  
Shohei Ueda, Takuya Goto  
 (Doshisha University, Japan)
- PS38 “Electrochemical Characteristics of Various Graphite Electrodes  
 in Room-temperature Ionic Liquid”  
 Koichi Ui, Tomohiro Karouji, Jun Towada, Yoshihiro Kadoma, Naoaki Kumagai  
 (Iwate University, Japan)
- PS39 “Anodic Reaction on Carbon Materials in LiCl-KCl Melt”  
Masaki Umehara, Taiki Morishige, Toshihide Takenaka  
 (Kansai University, Japan)
- PS40 “Density and Surface Tension for 1-methyl-3-pentylimidazolium and  
 1,2-dimethyl-3-pentylimidazolium-based Ionic Liquids with  
 bis(trifluoromethanesulfonyl)imide Anion  
Tziyi Wu<sup>1</sup>, Borkuan Chen<sup>2</sup>, Chichang Chen<sup>3</sup>, Chungjui Su<sup>3</sup>,  
 Chungwen Kuo<sup>4</sup>, Iwen Sun<sup>3</sup>  
 (1 National Yunlin University of Science and Technology, Taiwan;  
 2 Kun Shan University, Taiwan; 3 National Cheng Kung University, Taiwan;  
 4 National Kaohsiung University of Applied Sciences, Taiwan)

- PS41 “Electrochemical Characterizations of Cyclic Ammonium Based Ionic Liquids with Allyl Substituents”  
Tziyi Wu<sup>1</sup>, Chichang Chen<sup>2</sup>, Yuanchung Lin<sup>3</sup>, Paul H. Wang<sup>2</sup>,  
Shyhgang Su<sup>2</sup>, Chungwen Kuo<sup>4</sup>, Iwei Sun<sup>2</sup>  
(1 National Yunlin University of Science and Technology, Taiwan;  
2 National Cheng Kung University, Taiwan; 3 National Sun Yat-Sen University, Taiwan;  
4 National Kaohsiung University of Applied Sciences, Taiwan)
- PS42 “Electrowinning of Li from LiOH by BDD Anode and Tungsten Cathode”  
Kenichiro Yoshida, Mikito Ueda, Toshiaki Ohtsuka  
(Hokkaido University, Japan)
- PS43 “Electrode Reaction of Iron Phenanthroline Complexes in an Amide-type Ionic Liquid”  
Mami Yoshihara, Yasushi Katayama, Takashi Miura  
(Keio University, Japan)
- PS44 “The Equilibrium between Titanium Ions and Titanium Metal in NaCl-KCl  
Equimolar Molten salt”  
Qiuyu Wang, Guojing Hu, Xiaobo Zhu, Hongmin Zhu  
(University of Science and Technology Beijing, China)
- PS45 “Study on Electrochemical Preparation of Al-Li-Er Alloys from Er<sub>2</sub>O<sub>3</sub> in LiCl-KCl-AlCl<sub>3</sub>  
Molten Salts”  
Milin Zhang, Yi Sun, Wei Han, Yusheng Yang, Tao Jiang  
(Harbin Engineering University, China)