

The International Meeting of the Polarographic Society of Japan (PSJ)

Program

Place: Faculty of Agriculture Main Bldg. W100 (invited lectures), C102 (poster presentations)
Kyoto University

Shikata International Medal (25 min), Shikata Medal (20 min)

Invited lecture (talk: 20 min, discussion: 5 min)

Flash talk for poster presentation 1 min

Poster presentation (120 min) Odd number: first half (60 min), Even number: second half (60 min)

Notes for presenters

Lecturers

We recommend a slide screen ratio of 4:3.

Please bring your lecture data (PowerPoint) on a USB memory stick.

Poster presenters

Please send your flash presentation material (1 sheet, ppt and pdf files) by November 11 using Google Forms (<https://forms.gle/NHFoAuUfcmgCwxCH7>) on our website (<https://polaro-jp.secure-web.jp/meeting.html>).

Flash presentations will be given in W100. Presentation time of the flash talk is 1 minute (punctual). You will speak in order of number. Poster presentations will be given in C102. All presenters must stand in front of their posters during the presentation time. The posters should be prepared within the size of 120 cm (H) x 90 cm (W).

On the first day, please put up your poster during the lunch break or afternoon short breaks. On the second day, please put up your poster by 9:00 a.m. Presenters on the second day are requested to make a flash presentation in W100 from 9:00 a.m. After that, please move to C102 for your poster presentation. After your poster presentation, please remove your poster and take it home. Those eligible for the Student Presentation Award are marked with an “*”.

Participants in poster presentations

Those eligible for the Student Presentation Award are marked with an “*”. Please select and vote for two student presentations that you think are excellent for each time slot. The award ceremony for the Student Presentation Awards will be held at the closing ceremony at the end of the second day.

1st: November 16 (Sat)

Place: Faculty of Agriculture Main Bldg. W100 (invited lectures), C102 (poster presentations)

8: 00 Start of the registration

1 st. (11/16)		
Schedule	Number	Lecturer, Title
9:00-9:10		Opening
9:10-9:35	I1	Prof. Guobao Xu (Changchun Institute of Applied Chemistry), "Single" Electrode Electrochemiluminescence
9:35-10:00	I2	Prof. Soorathep Kheawhom (Chulalongkorn University), Tailoring Molecular Structures and Metal Coordination for High-Performance Bifunctional Electrocatalysts in Zinc-Air Batteries
10:00-10:25	I3	Prof. Taek Dong Chung (Seoul National University), Fourier Transform Electrochemical Impedance Spectroscopy for In Situ Realtime Monitoring of Etching and Deposition Processes
10:25-10:35		Short break
10:35-11:00	I4	Prof. Shigeru Amemiya (University of Pittsburgh), Recent Advancement of Transient Scanning Electrochemical Microscopy
11:00-11:25	I5	Prof. Zdeněk Samec (J. Heyrovský Inst. Phys. Chem. Czech Acad. Sci.), Electrochemical Effects of Ion Hydration in Polar Organic Solvents
11:25-11:50	I6	Prof. Vladimír Mareček (J. Heyrovský Inst. Phys. Chem. Czech Acad. Sci.), Ion Association Dynamics in Low Permittivity Solvents
11:50-12:50		Lunch
12:50-13:15		Awards ceremony (Shikata International Medal, Shikata Medal)
13:15-13:40	SI1	Prof. Jing LI on behalf of Prof. Erkang Wang (Changchun Institute of Applied Chemistry), Modern Nano-Electroanalytical Chemistry
13:40-13:45		Short break
13:45-14:05	S1	Dr. Hironobu Tahara (Nagasaki University), Development of Redox-Active Ionic Liquids and Their Electrochemical Properties

14:05-14:25	S2	Dr. Yuko Yokoyama (Kyoto University), Equilibrium and kinetic analysis of electrolyte properties
14:25-14:35		Short break
14:35-15:15	1P1-1P41	Flash Presentation (1 min) (W100)
15:15-15:25		Short break
15:25-16:25	1P1-1P41	Poster session: Odd-numbered presentations (C102)
16:25-17:25	1P2-1P40	Poster session: Even-numbered presentations (C102)
18:00-20:00		Banquet (North CO-OP building 2F)

2nd: November 17 (Sun)

Rooms open: 8:00

2 nd. (11/17)		
Schedule	Number	Lecturer, Title
-9:00	2P1-2P40	Preparation
9:00-9:40	2P1-2P40	Flash Presentation (1 min) (W100)
9:40-9:50		Short break
9:50-10:50	2P1-2P39	Poster session: Odd-numbered presentations (C102)
10:50-11:50	2P2-2P40	Poster session: Even-numbered presentations (C102)
11:50-13:00		Lunch (Food trucks: 10:30-14:30)
13:00-13:25	I7	Prof. Xiurong Yang (Changchun Institute of Applied Chemistry), Development of ECL Biosensor for the Detection of Myocardial Infarction Biomarker
13:25-13:50	I8	Prof. Hye Jin Lee (Kyungpook National University), Development of Voltammetric Biosensing Platforms with Inorganic-organic Hybrid Nanomaterials
13:50-14:15	I9	Prof. Philippe Buhlmann (University of Minnesota), What is Missing in the Theory of Ionic Liquid Reference Electrodes?
14:15-14:25		Short break
14:25-14:50	I10	Prof. Damien Arrigan (Curtin University), Electrochemical Analysis of "Forever Chemicals"
14:50-15:15	I11	Prof. Eric Bakker (University of Geneva), A New Chemical Microscopy Method with Ion Transfer Voltammetry

15:15-15:40	I12	Prof. Robert Dryfe (University of Manchester), Electrochemical Properties of Aqueous Biphasic Systems
15:40-15:50		Short break
15:50-16:15	I13	Cancellation
16:15-16:40	I14	Prof. Łukasz Półtorak (University of Lodz), Detection of Illicit Drugs at Polarized Liquid-Liquid Interfaces
16:40-16:50		Short break
16:50-17:15	I15	Associate Prof. Po-Chuan Hsieh (National Taiwan University), Ultrathin Parylene Coatings as the Functionalized Insulation Layer for Capacitive Aptasensor Constructions
17:15-17:40	I16	Dr. Hongqi Xia (Institute of Fruit Tree Research), Construction of Disposable Electrochemical Sensors for Detection of Bioflavonoids in Fruits
		Closing & Awards ceremony for students

After the second day's lectures, we will immediately begin cleaning up the venue. We ask that all participating persons please help out.

Chairpersons

1 st. (11/16)

9:00 - 9:10	Opening	Osamu Shirai
9:10 - 10:25	I1-I3	Masato Tominaga
10:35 - 11:50	I4-I6	Ryoichi Ishimatsu
12:50 - 13:15	Awards ceremony	Masahiro Yamamoto
13:15 - 13:40	SI1	Masahiro Yamamoto
13:45 - 14:25	S1,S2	Takamasa Sagara
14:35 - 15:15	FP 1P1-1P40	Keisei Sowa

2 nd. (11/17)

9:00 - 9:40	FP 2P1-2P39	Yuki Kitazumi
13:00 - 14:15	I7-I9	Kohji Maeda
14:25 - 15:40	I10-I12	Yumi Yoshida
15:50 -16:40	I13-I14	Hirohisa Nagatani
16:50-17:40	I15-I16	Naoya Nishi
17:40-17:50	Closing	M. Yamamoto & O. Shirai

Poster Presentation (C102)

11/16 (Sat) *Student

No.	Title	Presenter	Affiliation
1P1*	An electrochemical detection of environmentally toxic small molecules with carbon nanocomposites	<u>Seongyeop Kim</u> , Jingjing Li, Chelladurai Karuppiah, and Hye Jin Lee	Kyungpook National University
1P2*	Design and analysis of imidazolium-based ionic liquids with BF ₄ ⁻ anion	<u>Min Ho Lee</u> , Muhammad Salman, and Hye Jin Lee	Kyungpook National University
1P3*	Evaluation of antioxidants in lubricants by bicontinuous microemulsion electrochemical analysis	<u>Miki Ichise</u> ¹ and Masashi Kunitake ²	¹ Graduate School of Major in Applied Chemistry, Kumamoto Univ., ² Institute of Industrial Nanomaterials, Kumamoto Univ.
1P4*	Electrochemical determination of vitamin K1 in acidic media by HPLC and its application to aojiru powder products	<u>Misaki Kawakubo</u> , Akira Kotani, Aya Shiozawa, Koichi Machida, Kazuhiro Yamamoto, Hideki Hakamata	Tokyo University of Pharmacy and Life Sciences
1P5*	Effect of tryptophan residues on direct electron transfer-type bioelectrocatalysis with D-fructose dehydrogenase	<u>Yohei Suzuki</u> , Keisei Sowa, Yuki Kitazumi, Osamu Shirai	Graduate School of Agriculture, Kyoto University
1P6*	"Plasmosol" as a redox reaction media: metal particle preparation at the microdroplet/plasma interface	<u>Kai Kubota</u> , Yuko Yokoyama, Naoya Nishi, Tetsuo Sakka	Graduate School of Engineering, Kyoto University
1P7	Synthetic exploration of Keggin-type isopolyoxometalate ion encapsulating protons	<u>Kazuo Eda</u> , Haruto Kamiyama, Kaho Watanabe, Toshiyuki Osakai	Graduate School of Science, Kobe University
1P8*	Development of innovative diaphragm-free redox flow battery using bicontinuous microemulsion	<u>Karin Haruna</u> , Kodai Nakao, Akihiro Ohira, Masashi Kunitake	Faculty of Natural Science Education, Kumamoto University
1P9*	Electrowetting on Carbon Electrodes	<u>Sittipong Kaewmorakot</u> ¹ , A. A. Papaderakis ² , and R. A. W. Dryfe ³	¹ Department of Chemistry, University of Manchester, ² Faculty of Chemistry and Biochemistry, Ruhr-University Bochum, ³ Department of Chemistry, University of Manchester
1P10*	Electrochromism of a neat redox-active ionic liquid mixed with ferrocene and pyridinium derivatives	<u>Naoaki Iwanaga</u> , Hironobu Tahara, Hiroto Murakami	Graduate School of Engineering, Nagasaki University

1P11*	In-situ bioconversion of gaseous CO ₂ with formate dehydrogenase	<u>Ami Kobayashi</u> , Keisei Sowa, Yuki Kitazumi, Osamu Shirai	Graduate School of Agriculture, Kyoto University
1P12*	Liquid membrane model of non-simultaneous coupling of electron and ion permeations mediated by alternative ion channels	<u>Ryota Kobayashi</u> , Ayaka Ito, Shingo Sotoma, Yumi Yoshida, Kohji Maeda	Graduate School of Science and Technology, Kyoto Institute of Technology
1P13*	ESR analysis of TEMPONE as a spin probe in cyclodextrin-based deep eutectic ionic liquids	<u>Yudai Hayashi</u> , Narumi Koga, Hironobu Tahara, Hiroto Murakami	Graduate school of Integrated Science and Technology, Nagasaki University
1P14	Simulated electrochemical phenomena at the liquid-liquid interface based on the electrochemical potential of all ions in the system	<u>Yuki Kitazumi</u> , Keisei Sowa, Osamu Shirai	Graduate School of Agriculture, Kyoto University
1P15*	Solvent-activated 3D printed electrodes for electroanalytical quality control applications	<u>Karolina Kwaczyński</u> , Olga Szymaniec, Grzegorz Kowalski, and Lukasz Poltorak	Faculty of Chemistry, University of Lodz
1P16*	Glassy carbon-based paste electrode modified with bismuth(III) oxide as a tool for the electrochemical study of diphenoxuron	Maryia-Mazhena Dzemidovich ^{1,2} , Andrzej Leniart ¹ , Eubomír Švorc ³ , Olha Sarakhman ³ , <u>Sławomira Skrzypek</u> ¹ , and Mariola Brycht ¹	¹ Faculty of Chemistry, University of Lodz, ² Doctoral School of Natural and Exact Sciences, University of Lodz, ³ Faculty of Chemical and Food Technology Slovak University of Technology in Bratislava
1P17*	Conductivity changes of a dialkyl viologen invoked in the phase transitions across crystal/liquid crystal/isotropic phases	<u>Hidetoshi Tsubota</u> , Hironobu Tahara, Hiroto Yamada, Hiroto Murakami, Takamasa Sagara	Graduate School of Engineering, Nagasaki University
1P18	Involvement of the Sixth Copper-Binding Site in Direct Electron Transfer-Type Bioelectrocatalysis of Copper Efflux Oxidase	<u>Taiki Adachi</u> ¹ , Toshitada Takei ² , Takumi Nishiyama ² , Kenji Kano ³ , Satoshi Yamashita ² , Kunishige Kataoka ² , Keisei Sowa ¹	¹ Graduate School of Agriculture, Kyoto University, ² Graduate School of Natural Science and Technology, Kanazawa University, ³ Center for Advanced Science and Innovation, Kyoto University
1P19	Recent achievements on voltammetric behavior of polyoxometalates	Tadaharu Ueda	Kochi University
1P20	Kinetic analysis of the distribution of ions with same valence to ion exchange membrane	<u>Yu Sugimoto</u> ^{1,2} , Shunya Kayakiri ¹ , Yudai Utsumi ¹ , Mitsuru Higa ^{1,2}	¹ Yamaguchi university, ² Blue energy center
1P21*	Steady-state current-potential curve of HER/HOR in buffered near-neutral pH electrolytes	<u>Kohei Ihara</u> , Yuko Yokoyama, Naoya Nishi, Tetsuo Sakka	Graduate School of Engineering, Kyoto University
1P22*	Determination of Trace Amount of Cu in NCM of Lithium Ion Battery	Woo Yeoul Shim	Department of Chemistry Seoul National University

1P23	Redoxless Electrochemical Capacitance Spectroscopy for Investigating Surfactant Adsorption on Screen-Printed Carbon Electrodes	Tzong-Jih Cheng	Department of Biomechatronics Engineering, National Taiwan University
1P24	Multi-Active Sites Loaded Tri-Metallic Oxides Anchored Graphene Sheets as a Cathode for High-Performance Aqueous Supercapacitors	<u>Durai Govindarajan</u> ¹ , Kamalan Kirubaharan ² , Wanwisa Limphirat ³ , and Soorathep Kheawhom ^{1,4,5}	¹ Department of Chemical Engineering, Chulalongkorn University, ² Coating Department FunGlass-Centre for Functional and Surface Functionalized Glass, Alexander Dubcek University of Trencin ³ Synchrotron Light Research Institute, ⁴ Center of Excellence on Advanced Materials for Energy Storage, Chulalongkorn University, ⁵ Bio-Circular-Green-economy Technology & Engineering Center (BCGeTEC), Chulalongkorn University
1P25*	Specific adsorption of anions onto a renewable pencil lead electrode surface	<u>Kanoko Ofude</u> , Hirosuke Tatsumi	Graduate School of Engineering Science, Shinshu University
1P26*	Polarography using a renewable graphite silicone rubber as an electrode	<u>Shou Ishida Armstrong</u> , Hirosuke Tatsumi	Faculty of Science, Shinshu University
1P27	Electrochemical Boron Detection Using Inclusion Complex of Catechol-Modified Cyclodextrin and Ferrocene	Kai Sato, <u>Takeshi Hashimoto</u>	Faculty of Science and Technology, Sophia University
1P28*	Microdialysis-integrated HPLC system with dual-electrode detection using track-etched membrane electrodes for in vivo monitoring of neurotransmitters	<u>Yuka Torii</u> ¹ , Sohei Tsugita ¹ , Yukuto Ogawa ¹ , Hiten Iwamoto ² , Jiro Kasahara ² Masaki Takeuchi ² , Masamitsu Iiyama ³ , Toshio Takayanagi ¹ , Hitoshi Mizuguchi ¹	¹ Department of Applied Chemistry, Tokushima University, ² Faculty of Pharmaceutical Sciences, Tokushima University, ³ Nomura Micro Science Co., Ltd.
1P29*	Effect of counter cations on uphill accumulation of anionic species into vesicles	<u>Kohei Nakabayashi</u> ¹ , Tsuyoshi Yamazaki ¹ , Hikaru Yanai ² , Shingo Sotoma ¹ , Kohji Maeda ¹ , Yumi Yoshida ¹	¹ Graduate School of Science and Technology, Kyoto Institute of Technology, ² School of Pharmacy, Tokyo University of Pharmacy and Life Sciences
1P30	Quantitative explanation of double layer capacitors in terms of 2D-ice	<u>Koichi Jeremiah Aoki</u> ¹ , Jingyuan Chen ¹ , Yongdan Hou ²	¹ Electrochem. Museum, ² Hubei Univ. Tech.

1P31*	Oxidation reaction mechanism of caffeic acid under UV irradiation	<u>Yuito Kitagawa</u> ¹ , Sorai Kanno ¹ , Kenji Matsumoto ² , Yoshio Tsujino ² , Hiroki Hotta ^{1,2}	¹ Graduate School of Maritime, Sciences Kobe University, ² Graduate School of Science, Technology and Innovation
1P32	Detection of Biomarkers by Coupling Isothermal Amplification with Electrochemistry	Yan Du	State Key Laboratory of Electroanalytical Chemistry, Changchun Institute of Applied Chemistry
1P33	Dynamic Changes of 2D Nanosheets Investigated by Electrochemical Atomic Force Microscopy	Haoran Guo, Yanxue Guan, <u>Jilin Tang</u>	State Key Laboratory of Electroanalytical Chemistry, Changchun Institute of Applied Chemistry
1P34*	Structural and bioelectrochemical elucidation for the catalytic reaction mechanism of direct electron transfer-type fructose dehydrogenase	<u>Eole Fukawa</u> , Keisei Sowa, Yuki Kitazumi, Osamu Shirai	Graduate School of Agriculture, Kyoto University
1P35*	Redox Reaction of Coenzyme F420 in Methanogenesis on F420-Dependent Sulfite Reductase-Modified Electrodes	<u>Kazuma Shimada</u> ^{1,2} , Seiya Tsujimura ^{1,2} , Satoshi Furota ² , Daijiro Takesita ³ , Kensuke Igarashi ⁴	¹ Faculty of Pure and Applied Science, University of Tsukuba; ² Geological Survey of Japan, AIST; ³ Biomedical Research Institute, AIST; ⁴ Bioproduction Research Institute, AIST
1P36*	Tandem system of the thin-layer electrolysis flow cell for ion transfer —ionic separation and coulometry—	<u>Hinata Okinaga</u> , Ryo Iwasaki, Yudai Yamana, Shingo Sotoma, Kohji Maeda, Yumi Yoshida	Graduate School of Science and Technology, Kyoto Institute of Technology
1P37	Migration Effects Cause Linear Response in Cyclic Voltammetry of Zero-valent Products without Supporting Electrolyte	<u>Yuko Yokoyama</u> ¹ , Masahiro Yamamoto ² , Kenji Kano ¹	¹ Kyoto Univ., ² Konan Univ.
1P38*	Synthesis of a hydrophobic ionic liquid, <i>N</i> -ethyl- <i>N</i> -decylpyrrolidinium (nonafluorobutanesulfonyl)(trifluoromethane sulfonyl)amide, and its application to ionic liquid salt bridge	<u>Itsuki Ikeda</u> , Kosuke Katagiri, Takashi Kakiuchi, Masahiro Yamamoto	Graduate School of Natural Science, Konan University, Department of Chemistry, Konan University, pH Science and Technology Laboratory
1P39*	Analysis of fluorescent anion transport through a bilayer lipid membrane by an electrochemical method combined with fluorometry	<u>Hibiki Fujihara</u> ¹ , Kohei Nakabayashi ¹ , Hikaru Yanai ² , Shingo Sotoma ¹ , Kohji Maeda ¹ , Yumi Yoshida ¹	¹ Kyoto institute of technology, ² Tokyo University of Pharmacy and Life Sciences
1P40*	Interfacial structure and its potential dependence at a water-free liquid/liquid interface between ionic liquid and oil studied using molecular dynamics simulation	<u>Kazuma Yamaguchi</u> , Yuko Yokoyama, Tetsuo Sakka, Naoya Nishi	Graduate School of Engineering, Kyoto University

1P41*	Interfacial structure at the electrochemical fluoros solvent/water interface studied using neutron reflectometry: electric double layer and protein nanolayer	<u>Kosuke Ishii</u> , Yuko Yokoyama, Tetsuo Sakka, and Naoya Nishi	Graduate School of Engineering, Kyoto University
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11/17 (Sun)

No.	Title	Presenter	Affiliation
2P1*	Voltammetric Magneto sandwich assay for protein biomarkers	<u>Mun Gyeong Jeong</u> , Jingjing Li, Sung Hwa Jung, and Hye Jin Lee	Kyungpook National University
2P2	Effect of boron isotope composition on cyclic voltammograms of molten borosilicate glasses	<u>Takayuki Nagai</u> , Koji Kaneko, Ryuhei Motokawa	Japan Atomic Energy Agency
2P3*	Development of Rapid Electrochemical Immunoassay using Dielectrophoretic Liposome Manipulation	<u>Saki Mizuta</u> , Yushi Isozaki, Masato Suzuki, Tomoyuki Yasukawa	Graduate School of Material Science, University of Hyogo
2P4*	Electroactive monolayers on ITO electrode: Covalent immobilization including direct esterification method and spectroelectrochemical characterization	<u>Shota Kojin</u> , Sae Nakai, Takamasa Sagara	Graduate School of Integrated Science and Technology, Nagasaki University
2P5*	Kinetic and Thermodynamic Analysis of Truncated Aldehyde Dehydrogenase Based on Linear Free Energy Relationship	<u>Konatsu Ichikawa</u> , Taiki Adachi, Yuki Kitazumi, Osamu Shirai, and Keisei Sowa	Graduate School of Agriculture, Kyoto University
2P6*	Glassy carbon electrode vs electrified liquid-liquid interface. Danofloxacin as a case study	<u>Konrad Rudnicki</u> , Sławomira Skrzypek, Łukasz Póttorak	Faculty of Chemistry, University of Lodz
2P7	Selective determination of fluoros ions utilizing ion-transfer voltammetry at the fluoros solvent water interface	<u>Kohei Uematsu</u> , Erina Tanaka, Minato Tanaka, Hajime Katano	Department of Bioscience and Biotechnology, Fukui Prefectural University
2P8*	Facilitated potassium ion transport across a bilayer lipid membrane in the presence of triiodide ion	<u>Weipai Chuang</u> , Keisei Sowa, Yuki Kitazumi, Osamu Shirai	Graduate School of Agriculture, Kyoto University
2P9*	All-Solid-State Coulometric Potassium Ion Sensor	<u>Daigo Saito</u> , Takeshi Nakata, Shingo Sotoma, Kohji Maeda, Yumi Yoshida	Kyoto Institute of Technology
2P10*	Determination of antifungal drug posaconazole in human serum by HPLC with electrochemical detection	<u>Masaaki Ito</u> , Akira Kotani, Koichi Machida, Kazuhiro Yamamoto, Hideki Hakamata	Tokyo University of Pharmacy and Life Sciences
2P11*	Simultaneous Mapping of Surface Charge Density and Topography in Aqueous Solution State	Chang Il Shin, <u>Taek Dong Chung</u>	Department of Chemistry, Seoul National University
2P12*	Electrochemistry at the atmospheric pressure plasma water interface: elucidation of the rate-determining process of charge transfer reaction considering mass transport in plasma	<u>Yousuke Kinoshita</u> ¹ , Koichi Sasaki ² , Yuko Yokoyama ¹ , Naoya Nishi ¹ , Tetsuo Sakka ¹	¹ Graduate School of Engineering, Kyoto University, ² Graduate School of Engineering, Hokkaido University

2P13*	Analysis of Phenolic Compounds in Beverages Using HPLC Equipped with Multiple Electrode Pairs Detection System Utilizing Track-Etched Membrane Electrodes	<u>Yusuke Kita</u> ¹ , Rikuo Hashimoto ¹ , Tomohiko Kuwabara ¹ , Kenji Matsumoto ² , Hiroki Hotta ³ , Masamitsu Iiyama ⁴ , Toshio Takayanagi ¹ , Hitoshi Mizuguchi ¹	¹ Graduate School of Science and Technology, Tokushima University, ² Graduate School of Science, Technology and Innovation, Kobe University, ³ Graduate School of Maritime Sciences, Kobe University, ⁴ Nomura Micro Science Co
2P14*	Factors determining ionic permeability through a charged bilayer lipid membrane	<u>Kai Yamamoto</u> , Tsuyoshi Yamazaki, Kohji Maeda, Shingo Sotoma, Yumi Yoshida	Kyoto Institute of Technology
2P15	Capacitive Sensing for Biofuel Blending Ratio Detection	Yi Kung	Department of Biomechatronics Engineering, National Chiayi University
2P16	Analysis of Extracellular Electron Transfer Mechanisms by Co-Culturing Chlorella Sorokiniana SU-1 and Shewanella Decolorationis NTOU1 on the Photosynthetic Bio-Anode to Metabolize Glucose to Carbon Felt Electrode	<u>Ren-Fang Zheng</u> , Shiue-Lin Li	Department of Environmental Science and Engineering, Tunghai University
2P17	Solvent-free synthesis of FeCo-carbon nanotubes for oxygen reduction and zinc-air battery	<u>Mohammad Etesami</u> , Anongnat Somwangthanoj, Soorathep Kheawhom	Department of Chemical Engineering, Faculty of Engineering, Chulalongkorn University
2P18	Study of Basic Characteristics of Silicon Anode toward Next Generation Lithium-ion Batteries	<u>Hideaki Ohta</u> , Masahiro Yamamoto, Nobuya Machida	Department of Chemistry, Konan University
2P19*	Membrane-less electrochemical toluene hydrogenation in a liquid-liquid two-phase system using water and toluene-protic ionic liquids mixtures	<u>Kengo Itai</u> , Yuko Yokoyama, Tetsuo Sakka, Naoya Nishi	Graduate School of Engineering, Kyoto University
2P20*	Determination of the real potential of hydrogen ion using the Kenrick method with a streaming carbon powder electrode	<u>Kaori Noguchi</u> , Hirosuke Tatsumi	Graduate School of Science and Technology, Shinshu University
2P21*	Selective determination of halogens by silver disc electrode stripping voltammetry	<u>Yoichiro Kurose</u> , Shingo Sotoma, Yumi Yoshida, Kohji Maeda	Graduate School of Science and Technology, Kyoto Institute of Technology
2P22*	How soft are ionic plastic crystals at the electrode interface? A molecular dynamics simulation study	<u>Iori Tabata</u> , Yuko Yokoyama, Tetsuo Sakka, Naoya Nishi	Graduate School of Engineering, Kyoto University
2P23*	Quantum chemical calculation of solvation enthalpy using the mixed implicit-explicit solvation model: Comparison between experiment and calculation	<u>Haruki Ishiyama</u> , Masahiro Yamamoto	Department of Functional Molecular Chemistry, Konan University
2P24*	Self-supported nickel-based LDHs on stainless steel mesh as charging electrode for zinc-air battery	<u>Wacharapisuth Thanapong-a-morn</u> , Soorathep Kheawhom	Department of Chemical Engineering, Faculty of Engineering, Chulalongkorn University

2P25*	CNTs-supported Al-Doped ZnO@CuO Nanoflowers/rods in Redox-Mediated Electrolytes for High-Performance Supercapacitor	<u>Abdulkadeem Sanni</u> ¹ , Durai Govindarajan ¹ , Supinya Nijpaanich ² , Wanwisa Limphirat ² , Jayaraman Theerthagiri ³ , Myong Yong Choi ³ , Soorahthep Kheawhom ^{1,4}	¹ Faculty of Engineering, Chulalongkorn University, ² Synchrotron Light Research Institute, ³ Research Institute of Natural Sciences, Gyeongsang National University, ⁴ Center of Excellence on Advanced Materials for Energy Storage, Chulalongkorn University
2P26	Spectroelectrochemical analysis of phase transfer mechanisms of cell-penetrating peptides at liquid liquid interfaces: Effects of lipids and organic anions	<u>Hiroki Sakae</u> , Chitose Maruyama, Yoshimitsu Hamano, Hirohisa Nagatani	Faculty of Chemistry, Institute of Science and Engineering, Kanazawa University
2P27*	Optimization of Hydrogel Electrodes and Development of Novel Organic Redox Polymer	<u>Yutaro Sakano</u> , Seiya Tsujimura	Graduate School of Science and Technology, University of Tsukuba
2P28*	Transport of chemical transmitter ions across bilayer lipid membranes	<u>Kazuto Nakamura</u> , Keisei Sowa, Yuki Kitazumi, Osamu Shirai	Graduate school of agriculture, Kyoto university
2P29	Boosting Oxygen Reduction Reaction Kinetics by Designing Rich Vacancy Coupling Pentagons in the Defective Carbon	Jing LI	State Key Laboratory of Electroanalytical Chemistry, Changchun Institute of Applied Chemistry
2P30*	Coulometric determination of cationic surfactant based on the ion transfer	<u>Yudai Yamana</u> , Ryo Iwasaki, Kohji Maeda, Shingo Sotoma, Yumi Yoshida	Graduate school of science and technology, Kyoto institute of technology
2P31*	Generation and Propagation of Electric Signals in Mimosa Pudica	<u>Yuan Yucong</u> , Keisei Sowa, Yuki Kitazumi, Osamu Shirai	Graduate School of Agriculture, Kyoto University
2P32*	Reaction mechanism of polyphenols containing reactivating metadihydroxybenzene moiety	<u>S. Kanno</u> ¹ , Y. Kitagawa ¹ , M. Shioji ¹ , K. Matsumoto ² , T. Kuwabara ³ , H. Mizuguchi ³ , Y. Tsujino ² , T. Osakai ⁴ , H. Hotta ^{1,2}	¹ Graduate School of Maritime, Sciences Kobe University, ² Graduate School of Science, Technology and Innovation Kobe University, ³ Graduate School of Faculty of Science and Technology Tokushima University, ⁴ Graduate School of Science Kobe University
2P33	Surface treatment of PTFE by radical anions of several polycyclic aromatic hydrocarbons	<u>Ryoichi Ishimatsu</u> , Shogo Kawashima	University of Fukui
2P34*	Impact of spray pyrolysis conditions of p-type CuBi ₂ O ₄ thin films for photoelectrochemical energy conversion process	<u>Yusuke Aso</u> ¹ , Tomohiro Higashi ² , Kenji Yoshino ¹	¹ Electrical and Electronic Engineering Program, Faculty of Engineering, University of Miyazaki, ² Institute for Tenure Track Promotion, University of Miyazaki

2P35*	Water-free liquid/liquid interface between a quaternary ammonium-based ionic liquid and oil for reductive deposition of base metal nanoparticles	<u>Kota Araki</u> , Yishan Zhou, Yuko Yokoyama, Tetsuo Sakka, Naoya Nishi	Graduate School of Engineering, Kyoto University
2P36	Flow electrolysis of Np ions for pretreatment separation for ICP-MS analysis	<u>Yoshihiro Kitatsuji</u> , Toshitaka Oka, Kazuki Ouchi, Makoto Matsueda, Kayo Yanagisawa	Japan Atomic Energy Agency
2P37*	Ni-Fe-Based Electrocatalysts for Oxygen Evolution toward the Development of Photoelectrochemical Water Splitting Devices	<u>Koichi Yoshiyama</u> ¹ , Tomohiro Higashi ² , Kenji Yoshino ¹	¹ Graduate School of Engineering, University of Miyazaki, ² Institute for Tenure Track Promotion, University of Miyazaki
2P38	On the epoch-making significance of ionic liquid salt bridge in electroanalytical chemistry	Takashi Kakiuchi	pH Science and Technology Laboratory
2P39	Coulometric determination of ionic perfluoroalkyl substances (PFAS)	Ryo Iwasaki, Shingo Sotoma, Kohji Maeda, <u>Yumi Yoshida</u>	Faculty of Molecular Chemistry and Engineering, Kyoto Institute of Technology
2P40*	In-situ analysis of Li electrodeposition and SEI formation in ionic liquids using electrochemical surface plasmon resonance	<u>Tomoki Furuya</u> , Tetsuo Sakka, Yuko Yokoyama, and Naoya Nishi	Graduate School of Engineering, Kyoto University