

The 25th Joint Seminar of the Busan Branch of the Korean Chemical Society (KCS) and the Kyushu Branch of the Chemical Society of Japan (CSJ)

November 17-18, 2023
Building of Construction
(Building Number: 401 / 3rd Floor)
Pusan National University
Busan, Korea

Busan Branch of the Korean Chemical Society
Kyushu Branch of the Chemical Society of Japan

Co-organized by

BK21 Education and Research Center for Molecular Materials
Chemistry Institute for Functional Materials
Department of Chemistry, Pusan National University



KCS



Time Table

November 17, Friday

Time	
08:30 ~09:00	Registration
09:00 ~ 09:10	Opening Remarks
09:10 ~ 10:40	Oral Presentation for Young Chemists (9 speakers)
10:40 ~ 12:00	Poster Presentation
12:00 ~ 13:30	Lunch
13:30 ~ 14:50	Invited Talk (20 min, 4 speakers)
14:50 ~ 15:30	Coffee Break
15:30 ~ 17:10	Invited Talk (20 min, 5 speakers)
17:10 ~ 17:20	Closing Remarks
18:00 ~ 21:00	Banquet

November 18, Saturday

Time	
09:00 ~ 14:00	Excursion

Schedule for Joint Seminar (November 17th)

Venue: 3rd floor of building of construction in PNU

Main auditorium

Registration

08:30 ~ 09:00 Registration

Opening ceremony

09:00 ~ 09:10 Opening remarks

Session I Oral Presentation Chair: Prof. Youngsuk Kim

- 09:10~09:20 Sumin Kim (Pukyong National University)
“Selective Oxidation of a Mustard Gas Simulant by Tris(2,2'-bipyridine) Ruthenium(II) Encapsulated in Zeolite Y with Varied Si/Al Ratios”
- 09:20~09:30 Kazuki Okazawa (Kyushu University)
“Orbital Perspective of Stacked Aromaticity”
- 09:30~09:40 Haejoo Kim (Pukyong National University)
“Nucleic acid-based micelle incorporating USE1-silencing siRNA for suppression of lung cancer malignancy”
- 09:40~09:50 Keitaro Umeno (Kyushu University)
“Convergent Synthesis of the WXYZA'B'C'D'E'F' Ring Segment of Maitotoxin”
- 09:50~10:00 Jihyeon Kim (Pusan National University)
“Wash-free photoelectrochemical DNA detection based on photoredox catalysis combined with electroreduction and light blocking by magnetic microparticles”
- 10:00~10:10 Tomohiro Ryu (Kyushu University)
“Excited-state dynamics of donor-acceptor type fluorescent molecules studied by ultrafast spectroscopy”
- 10:10~10:20 Seon Lee Kwak (Pusan National University)
“Novel thermally cross-linked hole transport material enables stable perovskite nanocrystal light-emitting diodes”
- 10:20~10:30 Sae Nakai (Nagasaki University)
“Regulation of assembling structure and redox of viologen monolayer on ITO electrode: A spectroelectrochemical study”

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10:30~10:40 Jinhwan Park (Dong-A University)
“Copper(I)-Catalyzed Nitrogen-Phosphorus Bond Formation: Synthesis of N-Acyl Iminophosphoranes Utilizing Dioxazolones and Phosphines”

Session II Poster Presentation

10:40~12:00 Main auditorium

Lunch

12:00~13:30

Session III Invited Talk Chair: Prof. Yeongju Lee

13:30~13:50 Prof. Seunghoon Lee (Dong-A University)
“Plasmonic nanostructures for efficient conversion from light to chemical energy”

13:50~14:10 Prof. Yasuro Niidome (Kagoshima University)
“Alloy Nanoparticles for Immunodetection”

14:10~14:30 Prof. Teruyuki Nakato (Kyushu Institute of Technology)
“Effects of Negatively Charged Colloidal Clay Particles on the Photoprocesses of Anionic Dyes”

14:30~14:50 Prof. Ryo Ohtani (Kyushu university)
“Functional organic-inorganic hybrids consisting of nitridotetracyanometallate units”

Photo Session and Coffe Break

14:50~15:30

Session IV Invited Talk Chair: Prof. Minseob Koh

15:30~15:50 Prof. Jin Kyoon Park (Pusan National University)
“Electrochemical Synthesis of ¹H-Indazole N-Oxides and Their Divergent C–H Functionalizations”

15:50~16:10 Prof. Masaharu Sugiura (Sojo University)
“Development of TiCl₄-promoted Aldol Condensation”

16:10~16:30 Prof. Jeong-Mo Choi (Pusan National University)
“Rational Design of Amyloid Aggregation Inhibitors”

16:30~16:50 Prof. Hiroshi Watanabe (Kyushu University)
“Toward incorporation of quantum chemical effect of solvation into molecular dynamics simulations: stable and efficient adaptive QM/MM”

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16:50~17:10 Prof. Yeonjoon Kim (Pukyong National University)
“Computational Catalyst Design and Fuel Property Screening in Biomass
Conversion to Biofuels”

17:10~17:20 Closing remarks

Banquet

18:00~21:00

Schedule for Excursion (November 18th)

Excursion (Busan)

09:00~14:00

Poster Presentation List

Poster No.	Name	Title
P01	Ryutaro Kanamori	Synthesis and Optical Properties of Silicon Tetraazaporphyrin Oligomers
P02	Yeongmi Park,	Benzoyl Chloride-Catalyzed Reaction of N-Acyl Iminophosphoranes: New Synthetic Opportunity for Organic Nitriles
P03	Jihye An	Mn(I)-Catalyzed ortho-C-H Alkenylation of Purines with Terminal Alkynes
P04	Kaito Sasaki	Development of Z-Scheme Photocatalytic System Utilizing Vitamin B ₁₂ and Photosensitizer toward the Cross-coupling Reaction
P05	Jungwook Song	Sandwich-structured Na ₂ Ti ₆ O ₁₃ /rGO Composite as a High-Performance Anode for Sodium-Ion Batteries
P06	Ayesha Qayyum	Effect of Mn doping on the Electrochemical Characteristics of FeOF Cathode for Sodium-Ion Batteries
P07	Yuma Tanaka	Synthesis of novel dimeric aza-BODIPY analogues from N-Pechmann and their optical properties
P08	Jinmin Lee	Hyperphosphorylated tau aggregation in Alzheimer's disease: role of small multivalent charged biomolecule
P09	Kyubin Lee	Spectral Shifts and Crystalline Behavior of BODIPY Derivative, Pyrromethene 546: A Concentration-Dependent Study
P10	Asuka Oda	Incorporation of metal nano-structures in a redox-active viologen-pendant polymer hydrogel with high deformability
P11	Chanyeop Jeong	Physicochemical Properties of Copper Telluride Thin Films
P12	Jeongho Mun	Bismuth telluride thin film fabrication and characterization investigation
P13	Yingkai Wu	Comparing the Activity of Metal Oxide Catalyst on Oxygen Evolution Reaction
P14	Tae Gwang Kim	Low-Temperature Processable and Photo-crosslinkable Polyimide Gate Dielectrics for Flexible Thin Film Transistors
P15	Nam Woo Kim	Perfluorocyclobutane Containing Crosslinked Polyimide Gate Dielectric for Hysteresis Free Thin Film Transistor
P16	Yosuke Okuhata	A Novel Optical Arrangement for Real-time in situ Monitoring of Physiological Activities of a Plant Leaf by Making Using of Fluorescence Quenching / Probe Beam Deflection
P17	Rajeev Kumar	Mechanisms of Carbonic Anhydrase and its Metal Variants through DFT Calculations

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Poster No.	Name	Title
P18	Yu-Gon Eom	In Silico Engineering of Binding Affinities of Green Fluorescent Proteins
P19	Hiroki Shimizu	Gold-Catalyzed 5- <i>exo</i> - and 5- <i>endo</i> -Cycloisomerization of Malonate Derivatives Bearing Alkyne Moiety
P20	Hyeryeong Lee	Small Charged Biomolecules in Aggregation and Disaggregation of FUS Protein
P21	Minchae Kang	Polyamine on Charged-GFP Liquid-Liquid Phase Separation
P22	Kota Aramaki	Nucleotide linker numbers in reporter plasmids affect the ER α -ERR α synergistic transcriptional activation
P23	Soran Kim	A Fluoride Sensing Smart Microbe
P24	Hwiyeong Lee	Genetic encoding of fluorogenic synthetic amino acids for bioimaging
P25	Kiyohiro Toyofuku	Transdermal delivery of nucleic acid drugs using biocompatible ionic liquids
P26	Subin Park	Mechanochemical Activation of NHC-CS ₂ Adducts for Generating N-Heterocyclic Carbenes
P27	Hyejin Cho	TimP protein is a multimodal polymyxin B sensitizer expressed by a short non-coding RNA gene in <i>Escherichia coli</i>
P28	Daisuke Hashimoto	Detection of TNF-alpha through immunoassay using Alloy Nanoparticles
P29	Mohammad Yusuf	An Efficient Atmospheric Pollution Control Using Hierarchical Porous Nanofibers Containing Zeolitic-Imidazolate-Frameworks and Hydroxyapatite Nanoparticles
P30	Kyeong-Deok Seo	Synthesis and Characterization of Dealloyed Au-TBA Nano Composites with Ionic Liquid for Enhanced Arsenic Sensing
P31	Yusuke Tsuruta	Theoretical study of sulfite reduction on a ruthenium complex based on DFT calculations
P32	Madhusudana Koratikere Srinivasa	Redesigned Kohlrausch's Law to Describe Non-Aqueous Electrolytes for Lithium-Ion Batteries
P33	Seonghye Kim	Metabolic response to fluoxetine exposure in zebrafish larvae using ¹ H HR-MAS NMR
P34	Ryoga Toyoshima	Theoretical study of reduction of NO to N ₂ O by copper complex with in-built proton-donating functional group
P35	Dongho Seo	Improving Ethylene Production in Electrochemical CO ₂ Reduction by Manipulating the Planar Structure of Copper Complexes

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Poster No.	Name	Title
P36	Taesung Kwon	Electrocatalytic Activities of Metal Electrodes for Nitrate Reduction to Ammonia
P37	Ryo Fukumoto	Photocatalyzed CO ₂ Reduction Using Ir(III) Complexes Having Arylborane Units
P38	Hae Eun Lee	Tetra-component Palladium-catalyzed Asymmetric Diboration of Allenamides: Synthetic Approach to (Z)- δ -Amino Homoallylic Alcohol
P39	Seongchul Park	Rotational Isomerization of Carbon-Carbon Single Bonds in Haloethyl Radicals in Solution
P40	Masaya Yara	Real-time observation of electron transfer in TiO ₂ photoanode modified with molecular ruthenium complexes
P41	Yubin Hong	Universal Antifouling Surface Coating via Enzyme-Mediated Oxidation of a Tyrosine-Conjugated Sulfobetaine Derivative