

# List of Poster Presentation 1 (Sep. 5, 17:00–19:00)

\*: Student Poster Prize Nominee

5Po-01\* **Woojin Park** (Kyungpook National University, Korea)

Mixed-Reference Spin-Flip (MRSF) Time-Dependent Density Functional Theory for Accurate X-ray Absorption Spectroscopy

5Po-02\* **Maryam Farmani** (Kyungpook National University, Korea)

Photochemistry of Thymine in Solution and DNA Revealed by an Electrostatic Embedding QM/MM Combined with Mixed-Reference Spin-Flip TDDFT

5Po-03\* **Mitradip Das** (Tata Institute of Fundamental Research, India)

Emergence of Reaction Coordinates in Protein Simulations

5Po-04\* **Nidhi Gupta** (IIT Kanpur, India)

Growth of Silicene on Ag(111) Surface: A Kinetic Monte Carlo and DFT-Based Study

5Po-05\* **Ramsha Javed** (Indian Institute of Technology Kanpur, India)

Bucket Sampling: A New Sampling Approach to Sample High Dimensional Free Energy Landscapes

5Po-06 (cancelled)

5Po-07\* **Supratim Ghosh** (IIT Bombay, India)

Role of Noncovalent Interactions in an Asymmetric Reductive Deoxygenation of Alcohol Involving a Planar Carbocationic Intermediate

5Po-08\* **Abdullah Bin Faheem** (Kunsan National University, Korea)

Development of a Reliable Neural-Network Potential for Molten LiCl/KCl Salts

5Po-09 **Airi Kawasaki** (Gunma University, Japan)

Low-rank geminal theory for strongly correlated systems

5Po-10\* **Kenta Yoneyama** (Shizuoka University, Japan)

All-electron first-principles GW simulations for core-electron binding energies

5Po-11 **Taro Udagawa** (Gifu University, Japan)

DFT study on the nuclear quantum effect in the reaction between phenol and hydroxyl radical

5Po-12 **Masahiro Tsuda** (Osaka University, Japan)

Theoretical study on magnetic properties of mononuclear transition metal complexes on graphene

5Po-13\* **Chinami Takashima** (Waseda University, Japan)

Long-range corrected density functional theory calculation with the infinite-order two-component Hamiltonian

5Po-14 **Yoshio Nishimoto** (Kyoto University, Japan)

Analytic First-Order Derivatives of CASPT2 in OpenMolcas

5Po-15\* **Ryusei Nishimura** (Waseda University, Japan)

Main Configuration Analysis for Divide-and-Conquer Excited-State Calculations using Frequency-Dependent Polarizability

5Po-16 **Yutaka Nagahata** (Hokkaido University, Japan)

Challenges for finding bottleneck of energy landscape

5Po-17\* **Ryuto Kambara** (Hokkaido University, Japan)

Theoretical study on nonadiabatic dissociation dynamics of  $\text{OCS}^{2+}$  induced by direct photo-ionization

5Po-18\* **Akihiro Mutsuji** (Hokkaido University, Japan)

A theoretical analysis of electron self-exchange reactions of transition metal complexes by an energy extrapolation approach

5Po-19 **Rejwan Ali** (City University of New York & BHSEC, USA)

Electronic Energy Singularities of Weakly H-bonded Ammonium Dimer

5Po-20\* **Subhadip Mondal** (Indian Institute of Technology (IIT) Kanpur, India)

Polariton chemistry: Insights into Cavity-Mediated Vibrational Energy Flow Pathways

5Po-21 **Davor Margetic** (Rudjer Boskovic Institute, Croatia)

Computational Study of Reaction Mechanism of Formation of Boc-2-amino-quinazolin-4(3*H*)-ones from Aryl-(Boc)<sub>2</sub>Guanidines

5Po-22\* **Shakir Ali Siddiqui** (Shiv Nadar Institution of Eminence, India)

Local Electric Field Controlled Engineering of Porphyrin-Based Cage for Efficient Catalysis

5Po-23 **Taiji Nakamura** (Kyushu University, Japan)

Theoretical study of proton-coupled electron transfer in nitrogen fixation using metallocene: Analysis of reaction mechanism and electronic structures

5Po-24 (cancelled)

5Po-25\* **Takuma Ito** (Hokkaido University, Japan)

Reaction path search and kinetic simulation for a Diels-Alder reaction including dynamical bifurcations

5Po-26\* **Sangmin Jeong** (POSTECH, Korea)

Tunability of Photoisomerization Behavior via B-N Functionalization of Benzene

5Po-27 **Yoshifumi Nishimura** (Waseda University, Japan)

Extension and acceleration of nanoreactor molecular dynamics based on species-selective algorithm and linear-scaling tight-binding quantum chemical computations

5Po-28\* **Eunji Park** (The Catholic University of Korea, Korea)

Theoretical investigation of photo and thermal reaction mechanisms of *p*-hydroxyphenacyl diethyl phosphate (HPDP)

5Po-29 **Aditya Wibawa Sakti** (Waseda University, Japan)

Density-Functional Tight-Binding Molecular Dynamics on Deciphering Lithium Dendrite Formation in Li-S Battery

5Po-30\* **Takumi Koshiba** (Tohoku University, Japan)

Classical and quantum dynamics of vibrational relaxation in  $\text{H}_3\text{O}^+\text{Ar}$

5Po-31 **Chao Xu** (South China Normal University, China)

Ultrafast Internal Conversion Dynamics Through the on-the-fly Simulation of Transient Absorption Pump-Probe Spectra with Different Electronic Structure Methods

5Po-32 **Ryohei Kishi** (Osaka University, Japan)

Theoretical study on structure-excitation property relationships in non-alternant isomers of  $[n]$ acenes

5Po-33 **Takeshi Yoshikawa** (Toho University, Japan)

Theoretical Study on Fluorescence Properties of Pyridine with Dithiophene

5Po-34\* **Kaichi Shimada** (Osaka University, Japan)

Theoretical study on structures and electronic states of covalently-linked bis-periazulenes

5Po-35\* **Naoki Negishi** (The University of Tokyo, Japan)

Solvatochromic effect to broadening of absorption spectra in solution

5Po-36 **Hajime Miyamoto** (Osaka University, Japan)

Theoretical study on singlet fission dynamics in one-dimensional molecular aggregates: Effects of local changes of intermolecular interactions

5Po-37 **Fengyi Liu** (Shaanxi Normal University, China)

Photodynamics of Criegee intermediates: The expected and unexpected findings

5Po-38 **Yosuke Sumiya** (Kyushu University, Japan)

Comprehensive analysis for tensile, shear, and peel adhesion strength of epoxy resin based on quantum chemical calculations

5Po-39\* **Koki Masuda** (Osaka University, Japan)

Theoretical study on relationship between structure and magnetic anisotropy in Tb complexes

5Po-40\* **Takahiro Uwabe** (Kyushu University, Japan)

Elucidating effects of chemisorbed waters on adhesive interactions of epoxy resin to  $\gamma$ -alumina surface

5Po-41\* **Tamotsu Uchiyama** (Gunma University, Japan)

Theoretical study of the Si/C mixed analogues of polyhedral compounds

5Po-42\* **Naoka Amamizu** (Osaka University, Japan)

Theoretical study on electronic structure and electron conductivity of annulene as molecular parallel circuit models

5Po-43\* **Yuta Hayashi** (Osaka University, Japan)

Theoretical study of frontier orbitals of binuclear Ir<sup>III</sup>-M<sup>II</sup> (M<sup>II</sup> = Mn, Fe, Co, Ni, Cu, Zn) complexes that provides hydride in the reaction

5Po-44\* **Chihiro Nakasuji** (Osaka University, Japan)

Theoretical study on electronic structure of open-shell germynes stabilized by a phenalenyl-based ligand

5Po-45\* **Yuki Shirasawa** (Nagoya University, Japan)

Ionic conductivity in the solid electrolyte interphase film of the Li-ion battery during charging and discharging processes: 3D-RISM and Q-learning analysis

5Po-46 **Rabindranath Lo** (Czech Academy of Sciences, Czech Republic)

The impact of changing solvent polarity on the stability of covalent dative bonds

5Po-47 **Debashree Manna** (Czech Academy of Sciences, Czech Republic)

Dative Covalent Complexes: Role of the Solvent Dielectric Constant

5Po-48 **Shi Jun Ang** (Agency for Science, Technology and Research, Singapore)

Generating tandem mass spectra of natural products with *ab initio* molecular dynamics

5Po-49 **Shintaroh Kubo** (The University of Tokyo, Japan)

Molecular dynamics simulation of proton-transfer coupled rotations in ATP synthase Fo motor

5Po-50\* **Shreya Rastogi** (Indian Institute of Technology Kanpur, India)

Intramolecular Proton Transfer in Pyridoxal 5'-phosphate Schiff Bases and Free Energy Landscape for Transamination Reaction at the Active site of Ornithine Decarboxylase

5Po-51\* **Rounak Nath** (Indian Association for the Cultivation of Science, India)

Decoding Regioselective Reaction Mechanism of the Gentisic Acid Catalyzed by Gentisate 1,2-Dioxygenase Enzyme

5Po-52 **Yusuke Kanematsu** (Hiroshima University, Japan)

Characterization of P450nor by using statistical analysis and quantum chemical calculation

5Po-53 **Vladislav Vasilyev** (The Australian National University, Australia)

In silico Tuning of Binding Selectivity of Existing Drugs and Drug Candidates

5Po-54 **Thanyada Rungrotmongkol** (Chulalongkorn University, Thailand)

Exploring Novel Wild-type and Mutant EGFR Tyrosine Kinase Inhibitors from Furopyridine-Based Compounds: In Silico and In Vitro Study

5Po-55\* **Daisuke Terada** (FUJI FILM Corporation & Keio University, Japan)

Theoretical study of enzymatic C-glycosylation of Phloretin catalyzed by glycosyltransferase *GgCGT*

5Po-56 **Michal Michalski** (University of Warsaw, Poland)

Exploring the structure and dynamics of influenza hemagglutinin transmembrane domain

- 5Po-57 **Kaori Ueno-Noto** (Kitasato University, Japan)  
Theoretical Study of the Protein-Glycan Interaction in FimH Adhesin
- 5Po-58 **Victor Bernstein** (Technion - Israel Institute of Technology, Israel)  
Comparative molecular dynamics study of C<sub>60</sub> impact interactions with low mass targets
- 5Po-59 **Yusaku Abe** (Yokohama City University, Japan)  
Theoretical study of isotope effect on phase transition in lead hydrogen phosphate
- 5Po-60\* **Sara Suzuki** (Kyoto University, Japan)  
Influence of microscopic solute-solvent interaction on the radical cyclization reaction
- 5Po-61 **Manussada Ratanasak** (Hokkaido University, Japan)  
Mechanistic DFT Study of BPh<sub>3</sub>-Catalyzed *N*-Methylation of Amines with CO<sub>2</sub> and PhSiH<sub>3</sub>
- 5Po-62 **W. M. C. Sameera** (Hokkaido University, Japan)  
On the mechanism of the N<sub>2</sub> reduction by a [Mo<sub>3</sub>S<sub>4</sub>Fe] cluster
- 5Po-63 **Sarinya Hadsadee** (Hokkaido University, Japan)  
DFT Exploration of the Catalytic Active Site of CoN<sub>4</sub>C<sub>x</sub> on KB for Electroreduction of CO<sub>2</sub> to CO
- 5Po-64\* **Krish Jhurani** (Homestead High School, USA)  
Investigating the Role of Quantum Coherence in Transition Metal Catalyzed Reactions
- 5Po-65 **Patcharaporn Khajondetchairit** (Chulalongkorn University, Thailand)  
A DFT study on how transition metal affects hydrogen storage kinetics in magnesium nickel hydride
- 5Po-66 **Tinnakorn Saelee** (Chulalongkorn University, Thailand)  
On the enhanced performance of Pt-based high-entropy alloys catalyst during water-gas shift reaction: A density functional theory study
- 5Po-67\* **Chanthip Wangphon** (Chulalongkorn University, Thailand)  
How can the PtPd-based high-entropy alloy triumphs conventional TWC catalyst during the NO reduction? A Density Functional Theory Study
- 5Po-68\* **Arini Amalia Choir** (Bandung Institute of Technology, Indonesia)  
A Comparative Site-Specific Interactions of Ga<sub>12</sub>Y<sub>12</sub> (Y= N, P, As, Sb) Nanocages on The Adsorption of CO<sub>2</sub> and H<sub>2</sub> Molecules
- 5Po-69 **Gehoon Chung** (Seoul National University, Korea)  
Oleophilicity induced by ultraviolet irradiation of titanium surface
- 5Po-70\* **Sapajan Zakirovich Ibragimov** (Gdansk University of Technology, Poland)  
Geometry and electronic structure of iron(III) oxides and its reduced forms.
- 5Po-71\* **Kazuki Honjo** (Osaka University, Japan)  
Theoretical study on proton transfer to the M-cluster of nitrogenase

- 5Po-72\* **Hitoshi Nabata** (Hokkaido University, Japan)  
Systematic reaction path search for thermal formic acid decomposition on the anatase TiO<sub>2</sub> (101) surface
- 5Po-73\* **Daiki Asada** (The University of Tokyo, Japan)  
Deoxydehydration reaction by monomeric and dimeric molybdenum oxide catalysts supported on TiO<sub>2</sub>: A density functional theory study
- 5Po-74 **David Samuel Rivera Rocabado** (Hiroshima University, Japan)  
Unlocking the secrets of CO interaction and activation on Ru nanoparticles supported on Al<sub>2</sub>O<sub>3</sub>: harnessing the predictive power of the electronic structure decomposition approach
- 5Po-75\* **Jewel Hossen** (Tokyo Metropolitan University, Japan)  
Theoretical study of structure control mechanism of [Pd<sub>6</sub>Si<sub>2</sub>] cluster
- 5Po-76\* **Milan Kumar Jena** (IIT Indore, India)  
Development of an Artificially Intelligent Nanopore for High-Throughput DNA Sequencing with a Machine-Learning-Aided Quantum-Tunneling Approach
- 5Po-77\* **Sneha Mittal** (IIT Indore, India)  
Decoding Both DNA and Methylated DNA Using a MXene-Based Nanochannel Device: Supervised Machine-Learning-Assisted Exploration
- 5Po-78 **Pavel Sidorov** (Hokkaido University, Japan)  
Predicting Highly Enantioselective Catalysts Using Machine Learning
- 5Po-79 **Yuya Nakajima** (ENEOS Corporation, Japan)  
Atomic clustering based on molecular properties considering surrounding environments and its application to accuracy verification
- 5Po-80\* **Ryo Fujisawa** (Waseda University, Japan)  
Development of machine-learned electron correlation model including the fourth-row elements
- 5Po-81 **Yu Takano** (Hiroshima City University, Japan)  
Prediction of Heme Protein Function with Random Forest Classifier Based on Porphyrin Distortions and Axial Ligands of Heme
- 5Po-82 **Soichi Shirai** (Toyota Central R&D Labs., Inc., Japan)  
Computational analysis of chemical reactions using a variational quantum eigensolver method without specifying spin multiplicity
- 5Po-83 **Chihiro Osaku** (The University of Tokyo, Japan)  
Quantum simulation of entangled electron-nuclear dynamics of molecular hydrogen ions using a quantum computer
- 5Po-84 **Kajjana Boonpalit** (VISTEC, Thailand)  
Graph Neural Networks Accelerated High-throughput Screening of Dual-atom Catalyst for Hydrogen Evolution Reaction

## List of Poster Presentation 2 (Sep. 7, 17:00–19:00)

\*: Student Poster Prize Nominee

7Po-01\* **Satoka Yamada** (Shizuoka University, Japan)

Development of Full GW Electron-Hole Interaction Kernel

7Po-02\* **Soichiro Nishio** (Kyoto University, Japan)

Development of multireference theory for excited states of  $\pi$ -conjugated molecular aggregates and its application

7Po-03 **Ryo Fujiki** (University of Tsukuba, Japan)

3D-RISM Theory for Biological System: QM and MM

7Po-04\* **Hiroaki Okada** (Hokkaido University, Japan)

On accelerating substrate optimization using computational Gibbs energy barriers: A numerical investigation utilizing an extensive reaction barrier dataset of Claisen rearrangement

7Po-05\* **Lihao Qu** (Hokkaido University, Japan)

Reaction pathway and AIMD trajectory analysis and visualization of organic reactions using data science algorithms

7Po-06\* **Ryota Sato** (Hokkaido University, Japan)

Tacticity dependence on polystyrene structure: A theoretical analysis based on systematic structure search

7Po-07\* **Kosuke Imamura** (Kyoto University, Japan)

Open-boundary cluster model with a parameter-free complex absorbing potential

7Po-08\* **Yutaro Otani** (Tokyo Metropolitan University, Japan)

Development of DMRG-DOCI-PT2 method

7Po-09 **Satoi Wada** (Hokkaido University, Japan)

Intersystem crossing dynamics based on spin-pure and spin-mixed potential energy surfaces

7Po-10 **Manabu Kanno** (Tohoku University, Japan)

A structure-based Gaussian expansion for quantum reaction dynamics: Application to hydrogen tunneling in malonaldehyde

7Po-11 **Jun Yang** (The University of Hong Kong, Hong Kong)

Downfolded Configuration Interaction for Correlated Electronic States

7Po-12\* **Rei Oshima** (Waseda University, Japan)

Solving unstable behavior of divide-and-conquer self-consistent field calculations using level shift technique based on pair-excited perturbative selection

7Po-13\* **Jeheon Woo** (KAIST, Korea)

Neural network-based pseudopotential: development of a transferable local pseudopotential

7Po-14\* **Shoya Kondo** (Hokkaido University, Japan)

Exploring structural transitions in molecular crystals using AFIR combined with molecular mechanics force fields

7Po-15\* **Yuki Kanamaru** (University of Tsukuba, Japan)

Analysis of solvent electrostatic potential described by solvation models in charged systems

7Po-16\* **Burai Murayama** (Hokkaido University, Japan)

Characterizing Reaction Route Map of Realistic Molecular Reactions Based on Weight Rank Clique Filtration of Persistent Homology

7Po-17\* **Hiroki Sakagami** (Yokohama City University, Japan)

Development of combined plane wave and localized basis sets method toward theoretical analysis of H/D isotope effect of molecule adsorption on metal surface

7Po-18 **Masanori Yamanaka** (Nihon University, Japan)

Calculation of index of quantum evolution of biological macromolecules by density functional theory

7Po-19 (cancelled)

7Po-20\* **Keita Mataka** (Hokkaido University, Japan)

Reaction Space Projector Analysis for Ambimodal Pericyclic Reactions: Visualization of Potential Energy Landscape and Dynamics in Reduced Dimension

7Po-21\* **Wataru Kanna** (Hokkaido University, Japan)

Reaction Development of Catalytic Olefin Aminocarboxylation with CO<sub>2</sub> Based on Potential Energy Surface Crossing Points for Single Electron Transfer Steps

7Po-22 **Bastian Bjerkem Skjelstad** (Hokkaido University, Japan)

A Computational Study on the Early-Stage Self-Assembly of the SIFSIX-3-Zn Metal-Organic Framework

7Po-23\* **Tomislav Rozic** (University of Copenhagen, Denmark)

Insights into non-statistical chemical reactivity from a vibrational relaxation model

7Po-24\* **Maximilian C. Poverlein** (Stockholm University, Sweden)

QM/MM Free Energy Calculations of Long-Range Biological Protonation Dynamics

7Po-25\* **Friederike Allgower** (Stockholm University, Sweden)

Mechanism of Water Oxidation of Proton Release in Photosystem II

7Po-26\* **Ryoichi Tanaka** (Hokkaido University, Japan)

An analysis of Chemical Reaction Dynamics in Dimensionally Reduced Phase Space

7Po-27\* **Hyunho Kim** (Stockholm University, Sweden)

Proton-coupled Electron Transfer Dynamics in the Alternative Oxidase of *Trypanosoma brucei*

7Po-28 **Daniel Riepl** (Stockholm University, Sweden)

Long-Range Charge Transfer Mechanism of the III<sub>2</sub>IV<sub>2</sub> Mycobacterial Supercomplex



7Po-29\* **Shuhei Kanosato** (Nagoya University, Japan)

All-atom simulation of chain-transfer alkene polymerization reaction of (pyridylamido)Hf catalyst: Microscopic steric effects on polymerization properties

7Po-30 **Hiroshi Teramoto** (Kansai University, Japan)

Reproducing Reaction Route Map on the Shape Space from its Quotient by Complete Nuclear Permutation-Inversion Group

7Po-31\* **Moe Murata** (Yokohama City University, Japan)

Molecular Dynamics Simulations for Analysis of Substituent Effects in Self-Assembled Gear-Shaped Amphiphile Molecules with/without Methyl Groups

7Po-32 **Kenji Okada** (Osaka University, Japan)

Low-lying excited states of fused-ring diphenquinones and their potential applications to singlet fission molecules

7Po-33 **Osamu Takahashi** (Hiroshima University, Japan)

Structure of aqueous ethanol solution: Soft X-ray emission spectroscopy measurements and theoretical calculations

7Po-34\* **Marina Mizuno** (Hokkaido University, Japan)

Development of Circularly Polarized Luminescent Materials with Axially Chiral Binaphthyl Framework Based on Theoretical Calculations of Their Excited States

7Po-35\* **Wataru Yoshida** (Osaka University, Japan)

Theoretical study on charge density distributions of cationic multimers of  $\pi$ -conjugated molecules

7Po-36 **Hiroki Uratani** (Kyoto University, Japan)

Kinetics of thermally activated delayed fluorescence in amorphous aggregates: effects of structural disorder

7Po-37 **Yuichi Tanaka** (Nagoya University, Japan)

Electrode potential effect on the formation process and stability of SEI film in lithium-ion batteries

7Po-38\* **Hikaru Tanaka** (Gifu University, Japan)

Nuclear quantum effect on aromaticity: A path integral molecular dynamics study

7Po-39\* **Mitsuhiro Nishida** (Osaka University, Japan)

Theoretical study of heteroatom substitution effect on current-voltage characteristics of polyacenes

7Po-40\* **Seiya Tsuchida** (Osaka University, Japan)

Theoretical studies on electronic structures of open-shell  $\pi$ -extended pentalenes

7Po-41\* **Ryota Sugimori** (Osaka University, Japan)

Calculations of magnetic response properties of  $\pi$ -stacked dimers of antiaromatic molecules.

7Po-42\* **Tomohito Shinozuka** (Kyoto University, Japan)

Computational study on the enhancement of the negative second hyperpolarizability in mixed-valence molecules

7Po-43 **Takashi Kawakami** (RIKEN, Japan)

Theoretical studies on magnetic interactions in trinuclear manganese complexes by UNO CAS-based methods

7Po-44\* **Yuika Baba** (Japan Womens University, Japan)

Electronic State of Sumanene Derivative Bowl-Shaped Molecules

7Po-45 **Yuriko Ono** (Hokkaido University, Japan)

Anharmonic vibrational state computations to reveal disappearance mechanism of the fundamental peak of noble gas complex

7Po-46\* **Keisuke Sasaki** (Osaka University, Japan)

Theoretical Study on Redox Control of Paddlewheel-type Diruthenium Complexes by Introducing  $\pi$ -electron Groups

7Po-47\* **Mitsuhiro Bandai** (Ibaraki University, Japan)

Evaluation of the effects of mutations in Cp<sup>\*</sup>Rh(III) complex-linked artificial metalloenzyme Nitrobindin<sup>HLH</sup>-Cp<sup>\*</sup>Rh(III) by MD simulation

7Po-48 **Tomoki Nakayoshi** (Hiroshima City University, Japan)

Computational estimation of the activation energy for the peptide-bond flip induced by active-center reduction of plant-type ferredoxin

7Po-49\* **Mio Takakuwa** (Yokohama City University, Japan)

Theoretical study on hydrogen-bonded structures of the green fluorescent protein with multi-component density functional theory

7Po-50\* **Ayaka Sato** (University of Tsukuba, Japan)

Theoretical analysis of the electronic and geometrical structures of the active center of a high-potential iron-sulfur protein and its influence from surrounding amino acids

7Po-51 **Koichi Miyagawa** (University of Tsukuba, Japan)

Relative stability and electronic structure in the S<sub>1</sub> state of the CaMn<sub>4</sub>O<sub>5</sub> cluster of the PSII by DFT and CC calculations

7Po-52 **Kizashi Yamaguchi** (Osaka University, Japan)

Theory of Chemical Bonds in Metalloenzyme XXV —OEC of PSII—

7Po-53 **Kowit Hengphasatporn** (University of Tsukuba, Japan)

FMO-Guided Design of Darunavir Analogs as HIV-1 Protease Inhibitors

7Po-54\* **Haruka Yotsuya** (Nagoya University, Japan)

Structural regulation of hemoglobin by the histidine protonation state depending on pH: a theoretical analysis

7Po-55\* **Koki Adachi** (Waseda University, Japan)

Molecular dynamics study on the roles of K-loop of KIF1A in the binding to microtubule

7Po-56 **Koichi Yamashita** (Yokohama City University, Japan)

Optical Properties and Defect Structures of Double Perovskite Cs<sub>2</sub>SnGeI<sub>6</sub>

7Po-57\* **Tomoya Iwashita** (Kyushu University, Japan)

The Decomposition of Friction Coefficients for Analysis of Solvation Effects on Diffusion Coefficients

7Po-58 **Kazuaki Kuwahata** (Yokohama City University, Japan)

Nuclear quantum effect in the phase transition from Ice VII to Ice X

7Po-59 **Deepak Ojha** (Tohoku University, Japan)

Vibrational Dynamics of Liquid Water in an External Field

7Po-60\* **Nan He** (Tokyo Metropolitan University, Japan)

DFT and CASPT2 studies of Fe-catalyzed coupling reaction: Effect of electron correlation

7Po-61\* **Kai Oshiro** (Hokkaido University, Japan)

Mechanistic study of the alkali tolerance mechanism of  $\text{H}_2\text{SO}_4/\text{Fe-CeO}_2$  catalyst for  $\text{NH}_3$ -SCR

7Po-62\* **Tomohisa Yonemori** (Osaka University, Japan)

Theoretical investigation on the role of moisture in the process of CO oxidation reaction by Au/Polyoxometalate catalyst

7Po-63 **Wei-Chih Chen** (Providence University, Taiwan)

Effect of Alkali Metal Ions on the Reduction Mechanism of Phosphinous Acid-Ligated Pd(II) Precatalysts in Suzuki-Miyaura Cross-Coupling Reactions

7Po-64\* **Noriyuki Takai** (Hokkaido University, Japan)

Electronic theory analysis of Pd-catalyzed cross-coupling reaction based on reactive orbital energy theory

7Po-65 **Tatsushi Ikeda** (The University of Tokyo, Japan)

Long-Range Proton and Hydroxide Ion Transfer Dynamics at Water/ $\text{CeO}_2$  Interface in Nanosecond Regime: Molecular Dynamics Simulations with Neural Network Potential

7Po-66\* **Kota Oishi** (The University of Tokyo, Japan)

Computational analysis of Al site-directing ability of organic structure-directing agents in FER and CHA zeolites

7Po-67\* **Takaaki Endo** (The University of Tokyo, Japan)

Free energy analysis of nitrile hydration reaction using cerium oxide catalysts

7Po-68\* **Tomoya Kanno** (The University of Tokyo, Japan)

Grand Canonical Monte Carlo Simulations for Hydrogen Adsorption on Metal Surfaces with Neural Network Potentials

7Po-69\* **Yuta Kataoka** (The University of Tokyo, Japan)

Calculation of hydrogen diffusion coefficients on metal surfaces using density functional based potential

7Po-70\* **Narumi Fujiwara** (Japan Womens University, Japan)

Theoretical study on reaction mechanism of water splitting process on Cobalt-Oxo Cubane Clusters

- 7Po-71 **Azusa Muraoka** (Japan Womens University , Japan)  
Charge Separation Process in PTB7/BTAx Nonfullerene Organic Solar Cells
- 7Po-72\* **Yuzuka Minami** (Japan Womens University , Japan)  
Comparison of Charge Transfer Distance in PDCBT/BTA Non-Fullerene Organic Solar Cells
- 7Po-73\* **Luxuan Guo** (KU Leuven, Belgium)  
Computational Modelling of Microscopic Reactivity of Phenylferrate Ions
- 7Po-74 **Motoji Sakai** (Nagoya University, Japan)  
Learning Organo-Transition Metal Catalyzed Reactions by Graph Neural Networks
- 7Po-75\* **Lian Duan** (University of Tsukuba, Japan)  
Convolutional Neural Network Model for Predictive Screening of Cyclic Peptides in Drug Design and Development
- 7Po-76\* **Ryosuke Sasaki** (Waseda University, Japan)  
Utilization of image recognition for chemical experiments toward development of automated electronic laboratory notebook
- 7Po-77 **Philippe Gantzer** (Hokkaido University, Japan)  
Representation of Reaction Networks by Generative Topographic Mapping
- 7Po-78\* **Takuya Isoda** (Waseda University, Japan)  
A Feasibility Study of Symbolic Regression Algorithms for Chemical Laws
- 7Po-79\* **Seonghwan Kim** (KAIST, Korea)  
Reliable generative AI for Chemical reaction exploration
- 7Po-80 **Dmitry Zankov** (Hokkaido University, Japan)  
Multi-Instance learning approach to the modeling of enantioselectivity of conformationally flexible organic catalysts
- 7Po-81\* **Jun Hyeong Kim** (Korea Advanced Institute of Science and Technology, Korea)  
Discovery of Thermally Activated Delayed Fluorescence Materials Using the Deep Generative Model
- 7Po-82\* **Ryoya Kondo** (Hokkaido University, Japan)  
Development of Information Theoretical Analysis Based on Spatial Heterogeneity for Raman HISTOLOGY
- 7Po-83 **Changduk Yang** (UNIST, Korea)  
Universal Volatile Additives to Realize Polymer Batch Insensitive Organic Solar Cells
- 7Po-84 **Supanida Piyayotai** (King Mongkuts University of Technology Thonburi , Thailand)  
Predicting small molecule bioactivity with machine intelligence
- 7Po-85\* **Akanksha Mishra** (Babasaheb Bhimrao Ambedkar University, India)  
Illuminating the Path of Inhibited Acetylcholinesterase by Unravelling the Dynamics of Biochemical Pathways of CNS