Scientific Program

Sunday, June 2

PM

Plenary (Room A)

Chairperson：David Giedroc

PL01 **Chemistry of Bismuth in Medicine**
17:30 Hongzhe Sun（University of Hong Kong, China）

Monday, June 3

AM

Plenary (Room A)

Chairperson：Zijian Guo

PL02 **Structure and Dynamics of Functional RNAs and their**
9:00 **Partners**
Roland K. O. Sigel（University of Zurich, Switzerland）

PM

Plenary (Room A)

Chairperson：Chris Orvig

PL03 **From Pt-DNA Interactions to Metalloglycomics**
17:00 Sue J. Berners-Price（Griffith University, Australia）

AM

Metal-based medicines (Room A)

Chairpersons：Nils Metzler-Norte, Taiho Kambe

KN01 **10:15** **Organometallic Anticancer Agents: Novel Structural Motifs and Biophysical Investigations to Delineate Biomolecule Interactions**
Christian Hartinger（University of Auckland, New Zealand）

IN01 **10:45** **Towards Targeted Photodynamic Therapy with Metal-based Photosensitizers**
Gilles Albert Gasser（Chimie ParisTech, PSL University, CNRS, France）

IN02 **11:05** **Photoactivated Chemotherapy in Hypoxic Cancer Cells**
Sylvestre Bonnet（Leiden University, Netherlands）

OP01 **11:25** **Interaction of Vanadium Complexes with Red Blood Cells**
Daniele Sanna（Institute of Biomolecular Chemistry - National Research Council, Italy）

OP02 **11:40** **Ruthenium and Gold Anticancer Complexes Based on Glucose Phosphites**
Alexey Nazarov（M.V.Lomonosov Moscow State University, Russia）

KN02 **11:55** **The Therapeutic Utility of Metallocorroles**
Zeev Gross（Technion-Israel Institute of Technology, Israel）

Metal-nucleic acid interaction (Room B)

Chairpersons：Wee Han Ang, Hiroshi Nakajima

KN03
10：15 **DNAzyme Nanomaterials as Metal Ion Sensors for Environmental Monitoring, Medical Diagnostics and Imaging**
Yi Lu（University of Illinois at Urbana-Champaign, United States）

IN03
10：45 **DNA and Its Secondary Structures as Targets for Metal Complexes and Ligands**
Zongwan Mao（Sun Yat-Sen University, China）

IN04
11：05 **Metal-Mediated Base Pairing with a Phenanthroline-Derived Artificial Nucleobase**
Jens Müller（Westfälische Wilhelms-Universität, Münster, Germany）

OP03
11：25 **Organometallic Xeno-Nucleic Acid Nucleosides: Synthesis and Biological Activity**
Konrad Kowalski（University of Łódż, Poland）

OP04
11：40 **Cu(II)-responsive Split DNAzymes with Metal-mediated Artificial Base Pairs**
Yusuke Takezawa（The University of Tokyo, Japan）

KN04
11：55 **Fingerprinting Inflammation: Deducing the Roles of Zinc Finger Proteins in the NF-kB Inflammatory Signaling Pathway**
Sarah Michel（University of Maryland, United States）

Natural and engineered metalloproteins (Room C)

Chairpersons：Shigetoshi Aono, Paola Turano

KN05 **10:15** **Hydroxylation of Nonnative Substrates Catalyzed by Cytochrome P450BM3 Assisted by Decoy Molecules**
Osami Shoji（Nagoya University, Japan／JST CREST, Japan）

IN05 **10:45** **Engineered Myoglobin Catalysts for Selective Carbene Transfer Reactions**
Rudi Fasan（University of Rochester, United States）

IN06 **11:05** **Rational Design of Functional Metalloenzymes in Myoglobin for Green Biocatalysis**
Ying-Wu Lin（University of South China, China）

OP05 **11:25** **Metal Ions as Regulatory Elements of Artificial DNA Cleaving Enzymes**
Béla Gyurcsik（University of Szeged, Hungary）

OP06 **11:40** **Transition Metal Selectivity and Plasticity in Primary Active Transmembrane Zinc Pumps**
Gabriele Meloni（University of Texas at Dallas, United States）

KN06 **11:55** **Alternate Conformers of Cytochrome *c* in Peroxidase Activity and Cardiolipin Binding**
Bruce E. Bowler（University of Montana, United States）

PM

Metal-based medicines（Room A）

Chairpersons：Shin Aoki, Sarah Michel

KN07 13:45 **Proving Our ‘Mettle’ in Drug Discovery**
Seth Mason Cohen（U.C. San Diego, United States）

IN07 14:15 **Conjugates of Non Steroidal Anti-inflammatory Drugs or Antibiotics, with Metal Ions (CoMeD’s) towards the discovery and development of new therapeutic Agents**
Sotiris K. Hadjikakou（Universityof Ioannina, Greece）

IN08 14:35 **Protein Metalation by Metal-based Drugs: New MS Studies**
Luigi Messori（University of Florence, Italy）

IN09 14:55 **Elaborating the “ox” Ligand Family for Radiopharmaceutical Applications**
Chris Orvig（University of British Columbia, Canada）

IN10 15:15 **Forty Years after the FDA-approval of Cisplatin: What We Know About Transport and Mechanism of Action.**
Giovanni Natile（Università degli Studi di Bari Aldo Moro, Italy）

OP07 15:35 **Functionalization of Pt(IV) Anticancer Prodrugs to Conquer Drug Resistance**
Guangyu Zhu（City University of Hong Kong, China）

OP08 15:50 **Dual-acting Mitochondria-targeted Antitumor Pt(IV) Prodrugs of Kiteplatin**
Nicola Margiotta（Università degli Studi di Bari Aldo Moro, Italy）

KN08 16:05 **Anticancer Metallodrugs and Reactive Oxygen Species Generation**
Andrea Erxleben（National University of Ireland Galway, Ireland）

Sensing and imaging (Room B)

Chairpersons：Matthew Allen, Shin Mizukami

KN09 **Metal-based MRI-CEST Agents**
13:45 Silvio Aime（University of Torino, Italy）

IN11 **Magnetogenesis under Physiological Conditions with Probes**
14:15 **Responding to Specific Enzyme Activity**
Jens Hasserodt（University of Lyon - ENS, France）

IN12 **Intranasally Administered Nano-antioxidants Mitigate**
14:35 **Network Driven Pathologies in a Preclinical Model of Alzheimer's Disease**
Robia G. Pautler（Baylor College of Medicine, United States）

IN13 **Molecular Tools for Probing Cellular Copper**
14:55 Christoph J. Fahrni（Georgia Institute of Technology, United States）

IN14 **Fe^{III}-salen Complexes for Detecting Endogenous**
15:15 **Pyrophosphate**
Felix Zelder（University of Zurich, Switzerland）

OP09 **A Biocompatible Redox MRI Probe Based On A Mn^{II}/Mn^{III}**
15:35 **Porphyrin**
Carlos F.G.C. Geraldes（University of Coimbra, Portugal）

OP10 **Development of a Fluorescence Probe for H_2S and its**
15:50 **Application to Inhibitor Screening for H_2S-Producing Enzymes**
Kenjiro Hanaoka（The University of Tokyo, Japan）

KN10 **Bright Lanthanide Probes and Stains**
16:05 David Parker（Durham University, United Kingdom）

Bioinspired energy conversion (Room C)

Chairpersons：Stéphane Menage, Yutaka Amao

KN11 **13:45** **Development of Molecular Catalysts for Artificial Photosynthesis**

Shigeyuki Masaoka（Institute for Molecular Science, Japan）

IN15 **14:15** **Concerted Pathways for Energy Conversion: An Investigation of Iron-Thiolate Electrocatalysts**

Ming-Hsi Chiang（Academia Sinica, Taiwan）

IN16 **14:35** **The Catalytic Cycle of [FeFe] Hydrogenase: A Tale of Two Sites**

James Alexander Birrell（Max Planck Institute for Chemical Energy Conversion, Germany）

IN17 **14:55** **In Vivo Generation of Semi-synthetic [FeFe] Hydrogenases**

Gustav Berggren（Uppsala University, Sweden）

IN18 **15:15** **H_2 and O_2 activation**

Seiji Ogo（Kyushu University, Japan／Center for Small Molecule Energy, Kyushu University, Japan／JST CREST, Japan）

OP11 **15:35** **Activation of [NiFe]-carbon Monoxide Dehydrogenase: Structural Characterization of the Nickel Chaperones CooJ & CooT**

Christine Cavazza（University of Grenoble Alpes, France）

OP12 **15:50** **Functional and Spectroscopic Characterization of CODH-I from *C. hydrogenoformans* Produced Heterologously in *E. coli***

Patricia Rodríguez Maciá（Max Planck Institute for Chemical Energy Conversion, Germany）

KN12 **16:05** **Cooperativity of the Outer Coordination Sphere with the Active Site for Molecular Catalysts for Small Molecule Conversions**

Wendy Shaw（Pacific Northwest National Laboratory, United States）

Tuesday, June 4

AM

Plenary (Room A)

Chairperson：Andrea Erxleben

PL04 **Cu-Amyloid-β Complexes: Fascinating Chemistry and**
9:00 **Potential Biological Role in Alzheimer's Disease**
Peter Faller (University of Strasbourg / CNRS, France)

PM

Plenary (Room A)

Chairperson：Yoshitsugu Shiro

PL05 **The Roles and Reactivities of Heme in Biology**
17:00 Emma Raven (University of Bristol, United Kingdom)

AM

Metal-based medicines (Room A)

Chairpersons：Gilles Gasser, Mi Hee Lim

KN13 10:15 **Metallo-Supramolecular DNA and RNA Recognition Combined with Nanoscience to Achieve Bio-activity**

Michael John Hannon（University of Birmingham, United Kingdom）

IN19 10:45 **Development of CO-releasing Molecules (CO-RMs) as Therapeutics**

Roberto Motterlini（University Paris Est, France）

IN20 11:05 **Biological Activities of Phenanthroline-containing Vanadium and Copper Complexes**

João Costa Pessoa（University of Lisbon, Portugal）

IN21 11:25 **Cobalt(III) Complexes with Likely Hypoxia-Activation to Carry Biomolecules**

Péter Buglyó（University of Debrecen, Hungary）

OP13 11:45 **The Antimicrobial Activity of Metal-based Carbon Monoxide-Releasing molecules (CORMs)**

Lígia Mendonça Saraiva（ITQB-NOVA, Portugal）

OP14 12:00 **Searching for New Anticancer Drugs: The Potential of Electron-deficient Organometallic Complexes**

Joan Josep Soldevila-Barreda（University of Bradford, United Kingdom）

OP15 12:15 **Cu(I) Complexes Bearing Phosphines Derived From Hydrophilic SarGly - Physicochemical and Biological Characteristics**

Urszula Katarzyna Komarnicka（University of Wrocław, Poland）

Sensing and imaging (Room B)

Chairpersons：Christoph Fahrni, Tasuku Hirayama

KN14 **10:15** **Deciphering Transition Metal Signaling with Activity-Based Sensing**
Christopher J. Chang（University of California, Berkeley, United States）

IN22 **10:45** **NIR Fluorescent Probes for in vivo Multiplexed Biodetection**
Fan Zhang（Fudan University, China）

IN23 **11:05** **Unique Fluorescent Imaging Probes for Specific Manipulation of Cellular Functions and Dynamic Screening of Redox Inflammation**
Bengang Xing（Nanyang Technological University, Singapore）

IN24 **11:25** **Chemical Tools for Fluorescence Imaging**
Masayasu Taki（Nagoya University, Japan）

OP16 **11:45** **Targeted Bimodal Gold Nanoparticles for MRI/SPECT Imaging**
Maria Margarida C. A. Castro（University of Coimbra, Portugal）

OP17 **12:00** **Metal Chelation based Fluorescence Approach for Metallobiology**
Hongyan Li（The University of Hong Kong, China）

OP18 **12:15** **Chemical Tools for Detection and Delivery of Reactive Sulfur Species in Biology**
Michael Dwight Pluth（University of Oregon, United States）

Biohybrid catalysts and enzyme models (Room C)

Chairpersons：Masahito Kodera, Gerald Roelfes

KN15 **10:15** **NiKA as Versatile Scaffold for the Design of Artificial Oxidases and Oxygenases**

Stéphane Ménage（University Grenoble Alpes, France）

IN25 **10:45** **Biohybrid Catalysts for Olefin Metathesis**

Jun Okuda（RWTH Aachen, Germany）

IN26 **11:05** **Engineering Copper(II) Catalytic Sites in Pre-organized Peptides for Oxidative Transformations in Aqueous Media**

Olga Iranzo（Aix Marseille University, CNRS, France）

IN27 **11:25** **Insights into the Mode of Action of Copper Monooxygenases from Bioinspired Model Complexes**

A. Jalila Simaan（Aix Marseille University, CNRS, France）

IN28 **11:45** **Towards Evolution of Artificial Metalloenzymes - A Protein Engineer's Perspective**

Ulrich Schwaneberg（RWTH Aachen University & DWI Leibniz Institute for Interactive Materials, Germany）

OP19 **12:05** **Nickel Binding Abilities of NiSOD Related Peptides: Thermodynamic and Structural Features**

Norbert Lihi（University of Debrecen, Hungary）

PM

Metal-based medicines（Room A）

Chairpersons：Christian Hartinger, Yun-Ming Wang

KN16 **13:45** **Functionalization and Targeting of Platinum Anticancer Agents**

Zijian Guo（Nanjing University, China）

IN29 **14:15** **Anticancer Platinum(IV) Prodrug Complexes and Their Intracellular Activation Processes**

Wee Han Ang（National University of Singapore, Singapore）

IN30 **14:35** **A Modification at Tetrazole C5 Markedly Influences the *in vivo* Antitumor Efficacy of Tetrazolato-bridged Dinuclear Pt(II) Complexes**

Seiji Komeda（Suzuka University of Medical Science, Japan）

IN31 **14:55** **Chemical Tools and Tactics to Study Multiple Facets in Alzheimer's Disease**

Mi Hee Lim（Korea Advanced Institute of Science and Technology(KAIST), Korea）

OP20 **15:15** **Sustained Release of Bioactive Hydrogen by Pd Hydride Nanoparticles Overcomes Alzheimer's disease**

Xiubo Du（University of Shenzhen, China）

OP21 **15:30** **An Anticancer Osmium(II) Complex as Human Breast Cancer Stem Cell-Selective, Mammosphere Potent Agent that Kills Cells by Necroptosis**

Viktor Brabec（Czech Academy of Sciences, Czech）

OP22 **15:45** **From Fe(III) Scavengers to Radiometal Chelators**

Elzbieta Gumienna-Kontecka（Uniwersity of Wroclaw, Poland）

KN17 **16:00** **Fungal Metal Redistribution in Response to Antifungal Drug Stress**

Katherine Franz（Duke University, United States）

Sensing and imaging (Room B)

Chairpersons：Tsunehiko Higushi, Fan Zhang

KN18 **Biomedical Imaging Across the Periodic Table**
13:45 Peter Caravan（Harvard Medical School, United States）

IN32 **Functional Chemistry of Photo-excited Triplet State: from**
14:15 **Photon Upconversion to Dynamic Nuclear Polarization**
Nobuhiro Yanai（Kyushu University, Japan）

IN33 **Synthetic Model Platforms with Mn^{II} Spin-labels for**
14:35 **Nanometer-Scale Distances Measurements by High-field pulse EPR**
Helene Charlotte Bertrand（École Normale Supérieure, PSL University, Sorbonne Université, CNRS, France）

IN34 **Strategies in the Design of Responsive Contrast Agents for**
14:55 **MRI - A Case Study with Copper and Zinc**
Valerie Pierre（University of Minnesota, United States）

OP23 **Calcium-dependent fMRI using Iron Oxide Nanoparticles and**
15:15 **Engineered Proteins**
Satoshi Okada（Health Research Institute, AIST, Japan／PRESTO, JST, Japan）

OP24 **Mn(II)-based Smart/responsive Magnetic Resonance Imaging**
15:30 **Contrast Agent candidates**
Gyula Tircso（University of Debrecen, Hungary）

OP25 **Intracellular Oxygen Concentration Change Related to**
15:45 **Mitochondrial Respiratory Chain in 3T3-L1 Adipocyte**
Hidehiro Ito（Tokyo Institute of Technology, Japan）

KN19 **Divalent Europium in Magnetic Resonance Imaging**
16:00 Matthew John Allen（Wayne State University, United States）

Biohybrid catalysts and enzyme models (Room C)

Chairpersons：Lionel Cheruzel, Yutaka Hitomi

KN20 **Artificial Metalloenzymes based on LmrR**
13:45 Gerard Roelfes（University of Groningen, Netherlands）

IN35 **Carbene Transfer Catalysis Using Heme Proteins with**
14:15 **Artificial Cofactors**
Nicolai Lehnert（University of Michigan, United States）

IN36 **Bespoke Metallo-Porphyrin Containing Enzymes**
14:35 Angela Lombardi（University of Napoli "Federico II", Italy）

IN37 **De novo-Designed Miniaturized Heme Protein: Synthetic**
14:55 **Catalysts with an Unprecedented On-Demand Reactivity Resulting from pH-induced Ligand Switch and Molecular Motor Behavior**
Anabella Ivancich（Centre National de la Recherche Scientifique (CNRS), France）

Natural and engineered metalloproteins (Room C)

Chairpersons：Lionel Cheruzel, Yutaka Hitomi

OP26 **Selective Removal of Endogenous Carbon Monoxide**
15:15 **Disrupts Circadian Clock System in Mice**
Hiroaki Kitagishi（Doshisha University, Japan）

OP27 **Oxygen Binding Property of Recombinant Hemoglobin(β**
15:30 **C93A)-Albumin Cluster as a Red blood Substitute**
Yoshitsugu Morita（Chuo University, Japan）

OP28 **Covalent Fixing of Supramolecular Hemoglobin Polymer**
15:45 **Using Site-selective Intra-molecular Subunit Crosslinking**
Takashi Matsuhira（Nara Medical University, Japan）

Biohybrid catalysts and enzyme models (Room C)

Chairpersons：Lionel Cheruzel, Yutaka Hitomi

KN21 **From Antibodies to Metal Organic Frameworks: a Full Set of**
16:00 **Envelopes for Metal Cofactors for New Artificial Metalloenzymes**

Jean-Pierre Mahy（Université Paris-Sud/Paris-Saclay, France）

Wednesday, June 5

AM

Plenary (Room A)

Chairperson：Kenneth Karlin

PL06 **Oxygen Activation Mechanism by Copper Monooxygenases**
9:00 **and Models**
Shinobu Itoh（Osaka University, Japan）

PM

Plenary (Room A)

Chairperson：John Dawson

PL07 **Determining High-precision Metallation Binding Constants**
16:20 **and Rate Constants for the Metallation of Metallothioneins from Native ESI-mass Spectrometry.**
Martin Stillman（University of Western Ontario, Canada）

AM

Metal ions in human health and diseases (Room A)

Chairpersons：Katherine Franz, Masahiro Kawahara

KN22 **10:15** **Structural Components of Inhibiting Vanadium Complexes Effecting Mycobacteria**
Debbie C. Crans（Colorado State University, United States）

IN38 **10:45** **Molecular Mechanisms of Bacterial Transition Metal Homeostasis**
David Peter Giedroc（Indiana University, United States）

IN39 **11:05** **Synthesis and Reactivity of a Functional Mimic for Nickel Superoxide Dismutase and its Pharmaceutical Application**
Way-Zen Lee（National Taiwan Normal University, Taiwan）

IN40 **11:25** **Inhibitory Effect of a Nickel-Containing Superoxide Dismutase Mimic on Pancreatic Cancer Cell**
Yun-Ming Wang（National Chiao Tung University, Taiwan）

IN41 **11:45** **Iron-Binding Strategies Targeting Cancer Growth**
Elisa Tomat（University of Arizona, United States）

OP29 **12:05** **Gly-His-Lys Revisited: Ternary Cu(II) Complexes May Explain Biological Activity**
Wojciech Bal（Polish Academy of Sciences, Poland）

OP30 **12:20** **Antimicrobial Peptide-Metal Ion Interactions - a Potential Way of Activity Enhancement**
Magdalena Rowińska-Żyrek（University of Wroclaw, Poland）

Advanced spectroscopic methods (Room B)

Chairpersons：Denis Rousseau, Koichiro Ishimori

KN23 **10:15** **Molecular Interactions of Human IDO1 with Substrate, Inducer and Inhibitors**

Syun-Ru Yeh（Albert Einstein College of Medicine, United States）

IN42 **10:45** **Time-Resolved Spectroscopic Analysis of the Enzymatic Reaction Dynamics of NO Reductase**

Minoru Kubo（University of Hyogo, Japan）

IN43 **11:05** **X-ray Microscopy and Spectroscopy Combine to Probe Selenium Biology**

Hugh H Harris（The University of Adelaide, Australia）

IN44 **11:25** **Pre Steady-state Kinetics of Redox Metalloenzymes Using Ultrafast Mixing Techniques**

Peter-Leon Hagedoorn（Delft University of Technology, Netherlands）

OP31 **11:45** **Surface-Enhanced Infrared Absorption Spectroscopy of Nitric Oxide Reductase Immobilized on Gold Electrodes**

Masaru Kato（Hokkaido University, Japan／NIMS, Japan）

OP32 **12:00** **Surface Enhanced Resonance Raman Spectroelectrochemistry of Immobilized DyPs: Mechanistic Properties and Applications**

Smilja Todorovic（ITQB NOVA Universidade Nova de Lisboa, Portugal）

OP33 **12:15** **Hyperthermophilic Archaeon Group III Alcohol Dehydrogenase Structure and Enzymatic Activity**

Kouta Takeda（Tokyo University of Agriculture and Technology, Japan）

Biohybrid catalysts and enzyme models（Room C）

Chairpersons：Jean-Pierre Mahy, Yasuhiro Funahashi

KN24 **10：15** **Development of Artificial Cu and Fe Proteins**
Andrew Borovik（University of California-Irvine, United States）

IN45 **10：45** **Cupin Superfamily Proteins as Versatile Macromolecular Ligands**
Nobutaka Fujieda（Osaka Prefecture University, Japan）

IN46 **11：05** **Catalysts Based on Surface Functionalized Laccases**
Thierry Tron（Aix Marseille University, CNRS, France）

IN47 **11：25** **Visible Light Activation of P450 Enzymes Using Ru(II)-Polypyridyl Complexes**
Lionel Cheruzel（San Jose State University, United States）

IN48 **11：45** **Dirhodium Artificial Metalloenzymes: Selective Catalysis, Directed Evolution, Structure, and Dynamics**
Jared C. Lewis（Indiana University, United States）

OP34 **12：05** **Nickel(II)-mediated Arylation of Biopolymers with Arylboronic Acid**
Kengo Hanaya（Keio University, Japan）

Bioorganometallics (Room A)

Chairpersons：Luigi Messori, Toshiyuki Moriuchi

KN25 **13:45** **New Chemistry and Medicinal Applications of Organometallic Rhenium Complexes**
Nils Metzler-Nolte（Ruhr University Bochum, Germany）

IN49 **14:15** **iClick and Indole Conjugation as Versatile Methods for the Covalent Modification of Bio(macro)molecules**
Ulrich Schatzschneider（Julius-Maximilians-Universität Würzburg, Germany）

OP35 **14:35** **New Highly Cytotoxic Organometallic Bioconjugates Inhibiting the Invasive Potential of Tumor Cells**
Damian Plazuk（University of Łódż, Poland）

OP36 **14:50** **Multi-Targeted Complexes of the Selected Platinum Metals**
Pavel Starha（Palacky University in Olomouc, Czech）

OP37 **15:05** **Organometallic Iridium(III) Complexes: Understanding the Intracellular Modes of Action in Colorectal Cancer**
Rianne Michaela Lord（University of Bradford, United Kingdom）

OP38 **15:20** **Chirality-Organized Organogold(I)-Nucleobase Conjugates**
Toshiyuki Moriuchi（Osaka City University, Japan）

KN26 **15:35** ***The Beauty of Gold*: Playing with Organogold Compounds for Selective Modification of Biomolecules**
Angela Casini（Cardiff University, United Kingdom）

Biohybrid catalysts and enzyme models (Room B)

Chairpersons：Andy Borovik, Takahiko Kojima

KN27
13:45 **Biomimetic Metal-Oxygen Intermediates in Dioxygen Activation Chemistry**
Wonwoo Nam（Ewha Womans University, Korea）

IN50
14:15 **Metal-oxo Clusters as Artificial Enzymes for Protein Hydrolysis**
Tatjana N. Parac-Vogt（KU Leuven, Belgium）

IN51
14:35 **Structure and Reactivity of High-valent Manganese Reactive Oxygen Intermediates**
Jaeheung Cho（DGIST, Korea）

IN52
14:55 **Activation of Dioxygen at Nonheme Metal Centers: Metal/O_2 Derived Intermediates and Their Reactivity Toward Sulfur and Carbon Radical Substrates**
David Goldberg（Johns Hopkins University, United States）

IN53
15:15 **Selective Oxidation Catalyzed by Bioinspired Metal Complex**
Yutaka Hitomi（Doshisha University, Japan）

KN28
15:35 **Modeling Heme-Cu Oxidase Active-Site O-O Reductive Cleavage**
Kenneth D. Karlin（Johns Hopkins University, United States）

Natural and engineered metalloproteins (Room C)

Chairpersons：Anabella Ivancich, Nobufumi Nakamura

KN29 **Metal Ion Coordination By Metallothioneins: Insights Into**
13:45 **Metalation Pathways And Use Of Unusual Ligands**
Eva Freisinger（University of Zurich, Switzerland）

IN54 **Metal-specific Folding is Common in Type 4 Plant MTs**
14:15 Claudia Andrea Blindauer（University of Warwick, United Kingdom）

IN55 **Integrated Structural Biology of Iron Biomineralization in the**
14:35 **Ferritin Nanocage**
Paola Turano（University of Florence, Italy）

IN56 **The Purple Copper Center of Cytotochrome Oxidase:**
14:55 **Formation of the Novel Electron Acceptor Site**
Shyamalava Mazumdar（Tata Institute of Fundamental Research, India）

IN57 **Snapshot of an Oxygen Intermediate in the Catalytic Reaction**
15:05 **of Cytochrome *c* Oxidase**
Denis Lawrence Rousseau（Albert Einstein College of Medicine, United States）

Monday, June 3

17:55

Flash Talk (Room A)

18:50～20:20

PA01 **Development of Functional ^{19}F MRI Contrast Agents Using Perfluorocarbon-Encapsulated Nanoparticle**
Yuki Konishi (Osaka University, Japan)

PA02 **Different Antioxidant Efficacy of Two MnII-containing Superoxide Anion Scavangers on Hypoxia/reoxygenation-Exposed Cardiac Muscle**
Maria Giulia Fabbrini (University of Florence, Italy)

PA03 **Development of Bismuth Porphyrins as Novel Nephroprotectants Against Cisplatin-Induced Side Effects**
Runming Wang (The University of Hong Kong, China)

PA04 **A Silver Complex as Antimicrobial Material in Contact Lenses**
Andreas Rossos (University of Ioannina, Greece)

PA05 **Manganese Salen Complexes with Catalytic Auxiliary: Functional Mimetics of Catalase**
Tsunehiko Higuchi (Nagoya City University, Japan)

PA06 **New Ru(II) Polypyridyl Complexes Containing Non-Innocent Ligands as Chemotherapeutic Agents**
Anna Notaro (PSL University, France)

PA07 **Design of Supramolecular Heteronuclear Pd-Au Metallacages for Applications in Cancer Therapy**
Jens Oberkofler (Technical University of Munich, Germany)

PA08 **Potent Cytotoxicity of Unconventional Platinum(IV) Complexes as Anticancer Agents**
Krishant M. Deo (Western Sydney University, Australia)

PA09 **Development of Unconventional Cytotoxic Platinum(II) and Platinum(IV) Anticancer Agents**

Aleen Khoury（Western Sydney University, Australia）

PA10 **In Vitro Cytotoxicity and In Vivo Antitumor Efficacy of Tetrazolato-Bridged Dinuclear Platinum(II) Complexes with a Bulky Substituent at Tetrazole C5**

Masako Uemura（Suzuka University of Medical Science, Japan）

PA11 **Complexation of Platinum(II) and Palladium(II) with Imino-Pyridine Ligand Bearing Amino Acid ester and Their Anti-Cancer Activities**

Akihiro Nomoto（Osaka Prefecture Univ, Japan）

PA12 **H_3glyox: Versatile Oxine- based Bimodal Hexadentate Non-macrocyclic Ligand for Theranostic Radiometals**

Neha Choudhary（University of British Columbia, Canada）

PA13 **Synthesis of Mannose-Conjugated Chlorin-e6 as Singlet-Oxygen-Producing Photosensitizer for Photodynamic Therapy**

Lihao Zhang（Osaka Prefecture University, China）

PA14 **A Radiolabeling Strategy for Gold(III) *N*-heterocyclic Carbenes**

Federica Guarra（University of Pisa, Italy）

PA15 **H_6dappa: Bifunctional Chelator for Imaging and Therapy**

Thomas I. Kostelnik（University of British Columbia, Canada）

PA16 **CO Releasing Iron Complex Responsive to Biopermeable NIR Light**

Hiroshi Nakajima（Osaka City University, Japan）

PA17 **Induction of Cell Death of Cancer Cells by Luminescent Cyclometalated Iridium(III) Complex-Peptide Hybrids and Its Mechanistic Study**

Shin Aoki（Tokyo University of Science, Japan／Research Institute for Science and Technology, Tokyo University of Science, Japan）

PA18 **In Cell Protein Crystals Containing Organometallic Complexes**

Satoshi Abe（Tokyo Institute of Technology, Japan）

PA19 **Hydrogen Peroxide as a Hydride Donor and Reductant under Biologically Relevant Conditions**

Andrew G. Tennyson（Clemson University, United States）

PA20 **Probing the Sequence of Copper-Thiolate Cluster Formation in Metallothionein Using Native ESI-Mass Spectrometry**

Adyn Melenbacher（The University of Western Ontario, Canada）

PA21 **Stability and Reactivity of Cu(II) Complexes with the FomA Protein Fragments of *Fusobacterium nucleatum***

Monika Katarzyna Lesiów（University of Wrocław, Poland）

PA22 **An Isoflavone with Regulatory Multifunctionality against Four Pathological Factors of Alzheimer's Disease**

Geewoo Nam（Ulsan National Institute of Science Technology (UNIST), Korea／Korea Advanced Institute of Science and Technology, Korea）

PA23 **Tracking Zinc in Inflammation: Zinc Fingers, Proteomics and LC-ICP-MS**

Kiwon Ok（University of Maryland, United States）

PA24 **Avant-Garde Metallothioneins: Unusual Metals With Human MT**

Daisy Louise Wong（The University of Western Ontario, Canada）

PA25 **Strategies to Modify Amyloidogenic Peptides by Iridium(III) Complexes**

Juhye Kang（Ulsan National Institute of Science and Technology (UNIST), Korea／Korea Advanced Institute of Science and Technology (KAIST), Korea）

PA26 **Highly Fluorescent Metallacages functionalized with BODIPYs as drug delivery systems for cisplatin**

Brech Aikman（Cardiff University, United Kingdom）

PA27 **Zn^{2+}/Cd^{2+}-Selective Fluorescent Response of Quinoline-Based Ligands with Piperazine and Homopiperazine Frameworks**

Marin Tanaka（Nara Women's University, Japan）

PA28 **Quinoline-based Ratiometric Fluorescent Probes for Zinc Ions**

Mami Okamura（Doshisha University, Japan）

PA29 **Development of Reversible Protein Labelling Method using Exchangeable Fluorescent Turn-on Probes**

Shahi Imam Reja（Osaka University, Japan）

PA30 **Quantitative Analysis of Free Zinc Ion Concentration in Living Cells using Novel Targetable Fluorescent Probe**

Shin Mizukami（Tohoku University, Japan）

PA31 **High Selective NO Sensing by a Modified Electrode with Amidato-type Co(III) Complex Similar to the Active Site of Nitrile Hydratase**

Tomohiro Ozawa（Nagoya Institute of Technology, Japan）

PA32 **Multifunctional Ratiometric Fluorescence Probe: Intracellular Fe^{3+} Sensing in Living Cells and Portable Paper-based pH Sensor**

Pooria Lesani（University of Sydney, Australia）

PA33 **pH-Responsive Targeted Gold Nanoparticles For In Vivo Photoacoustic Imaging of Tumor Micro-environment**

Shiying Li（The Hong Kong Polytechnic University, China）

PA34 **Development of Fluorescent Probes with M6A-binding Protein for Detection of RNA Methylation**

Keisuke Nomura（Osaka University, Japan）

PA35 **Corneal Neovascularisation: Disease Monitor with Ultrasound Power Doppler**

Kwok Ho Lui（The Hong Kong Polytechnic University, China）

PA36 **2,6-Dimercuriphenol as a Bifacial Dinuclear Organometallic Nucleobase.**

Dattatraya Uttam Ukale（University of Turku, Finland）

PA37 **DNA Groove-binding of Luminescent Platinum(II) Complexes**

Marian Hebenbrock（Westfälische Wilhelms-Universität Münster, Germany ／Stanford University, USA）

PA38 **Targeting DNA G-quadruplexes by Gold(I) *N*-heterocyclic Compounds: Mechanistic Insights by Combined Metadynamics and Biophysical Methods**

Riccardo Bonsignore（Cardiff University, United Kingdom）

PA39 **Insight into the E_1 State of Mo Nitrogenase using Mo and Fe K-edge XAS**

Casey Van Stappen（Max-Planck Institute for Chemical Energy Conversion, Germany）

PA40 **Electronic Spectra of $Cs_2NaYb(NO_2)_6$: Is There Quantum Cutting?**

Yuxia Luo（Hong Kong Baptist University, China）

PA41 **Formation of Complexes of Cu (II) with Imidazole Derivatives of Polar Amino Acids**

Karen Cruz Vargas Castro（University of Guadalajara, Mexico）

PA42 **Theoretical Study on the Methane Hydroxylation Catalyzed by Mononuclear Nickel-Oxyl Radical Complex**

Kei Ikeda（Kyushu University, Japan）

PA43 **Isolation and Characterization of Metal Binding Polysaccharides from Algae**

Wojciech Jurkowski（Technical University of Munich, Germany）

PA44 **NO-binding and Protonation Process in the Catalytic Reaction of Heme/non-heme Iron Nitric Oxide Reductase Proved by Time-Resolved Spectroscopic System**

Hanae Takeda（University of Hyogo, Japan）

PA45 **On-demand Installation of Metal Ions into Pentanuclear Complexes for Precise Control over Their Redox Behaviors**
Hitoshi Izu（Institute for Molecular Science, Japan）

PA46 **Electronic Effect of Supporting Ligand: Reactivity Control of Dicopper Active Species in the Direct Oxidation of Benzene**
Kazuhito Wada（Doshisha University, Japan）

PA47 **Characterization and Electrochemical H_2 Generation Using a Ni(II) Complex with NP-type Bidentate Ligand with Tautomerization**
Takuma Kato（Nagoya Institute of Technology, Japan）

PA48 **Construction of a Micellar Assembly of Hexameric Hemoprotein and its Photochemical Properties**
Shota Hirayama（Osaka University, Japan）

PA49 **The Rate of Cadmium Metallation of Metallothionein is Dependent on Structure and Binding Pathways**
Natalie Christine Korkola（University of Western Ontario, Canada）

PA50 **Heme Transport and Metabolism in Pathogenic Bacteria**
Shin-ichi Ozaki（Yamaguchi University, Japan）

PA51 **Hydrogen Sulfide Bypasses the Rate-limiting Oxygen Activation of Heme Oxygenase**
Toshitaka Matsui（Tohoku University, Japan）

PA52 **How Cu(II) Ions Influence the Structure of ZnuD - a Zn(II) Transporter from *Neisseria Meningitidis*?**
Aleksandra Hecel（University of Wrocław, Poland）

PA53 **The Characterization of Zinc Complexes of α5 Domain from Mycobacterial SmtB/BigR4 Transcription Regulators - a Histidine Mutations Study**
Slawomir Potocki（University of Wrocław, Poland）

PA54 **Interrogating the Structure and Binding Characteristics of a Designed Hetero Trimetallic Coiled Coil**
Paul Teare（University of Birmingham, United Kingdom）

PA55 **Direct Hydroxylation of Benzene to Phenol Catalyzed by the Whole-Cell Biocatalyst Utilizing Substrate Misrecognition of P450BM3**
Masayuki Karasawa（Nagoya University, Japan）

PA56 **Incorporation of a Noncanonical Metal-binding Amino Acid into a Nitrobindin Protein**
Mhairie Claire Alvarez Miller（Osaka University, Japan）

PA57 **Thermostabilization of NAD Dependent ADH by Chimerisation with a NAD Binding Domain from Hyperthermophilic Archaeon**
Tatsuya Nakano（Tokyo University of Agriculture and Technology, Japan）

PA58 **Structure and Properties of High Valent Diiron Complexes Using Isoquinoline-Based Ligands Derived from TPA**
Chihiro Yamamoto（Nara Women's University, Japan）

PA59 **Macrocyclic Multinuclear Ni and Zn Complexes as Effective Catalysts for CO_2 Fixation**
Bikash Dev Nath（Okayama University, Japan）

PA60 **Photo-driven Cross-couplings Catalyzed by B_{12} Derivative**
Li Chen（Kyushu University, Japan）

PA61 **Electrocatalytic Perfluoroalkylation of Arenes and Heteroarenes Mediated by Imine/Oxime-type B_{12} Model Complex**
Luxia Cui（Kyushu University, Japan）

PA62 **A Model Complex of the Cu_A Biological Electron-Transfer Site**
Kengo Shimada（Kanagawa University, Japan）

PA63 **Synthesis, Characterization, and Reactivity of Peroxodiiron(III) Complexes with 6-hpa^{X} ligands (X = H, 4-NO_2, or 4-OMe-3,5-Me_2): Dioxygen Activation via O-O Bond Scission**

Yuki Tanaka（Doshisha University, Japan）

PA64 **Mechanistic Studies on Dioxygen Activation by a Manganese(III) Complex in Alkaline Solution**

Takuya Kurahashi（Institute for Molecular Science, Japan／University of Nagasaki, Siebold／JST, PREST, Japan）

PA65 **Modeling ‘Histidine Brace’ Motif in Mononuclear Copper Monooxygenases**

Arisa Fukatsu（Osaka University, Japan）

PA66 **Multinuclear Manganese Complexes Having a Cage-type Ligand as a Structural Model for Oxygen Evolving Center**

Tsubasa Hatanaka（Osaka University, Japan）

PA67 **Cyclization of Phenylacetylene Catalyzed by a Cobalt(I) Metalloprotein**

Andreas Thiel（RWTH Aachen University, Germany）

PA68 **Tailoring Artificial Metalloenzymes by Directed Evolution**

Ulrich Markel（RWTH Aachen University, Germany）

PA69 **Construction and Evaluation of a Hemoprotein-based Functional Model of Methane-producing Enzyme**

Yuta Miyazaki（Osaka University, Japan）

PA70 **Controlled Intersystem Crossing in Iron Porphycene Substituted Myoglobin for Cyclopropanation Reaction: A Theoretical Study**

Liming Zhao（Hokkaido University, China）

PA71 **One-pot Reaction for Stilbenoid Production from Renewable Resources**

Marie Anna Stephanie Mertens（RWTH Aachen University, Germany）

PA72 Structures and Catalytic Activities of DNA Complexes Consisting of Chemically Modified Heme and Tetrameric G-Quadruplex DNA

Atsuya Momotake（University of Tsukuba, Japan）

Tuesday, June 4

17:50

Flash Talk (Room A)

18:50～20:20

PB01 **Improving the Selectivity of Titanium Deferasirox [$Ti(Def)_2$] Complex Using Bioactive Peptides**
Lauren Vanessa Fernández-Vega (University of Puerto Rico-Rio Piedras Campus, Colombia)

PB02 **Geometry of Bismuth MOFs Adjusted with Polycarboxylate and their Antimicrobial Activity against *Helicobacter pylori***
Xiaojun He (The University of Hong Kong, China)

PB03 **Complexation of Zr(IV) with the Natural Siderophore Desferrioxamine B and Its Analogs**
Yuliya Toporivska (University of Wrocław, Poland)

PB04 **Interaction of Potential Vanadium Drugs with Proteins Studied by an Experimental and Computational Approach**
Eugenio Garribba (University of Sassari, Italy)

PB05 **Loading of a New Silver(I) Metallodrug with a Natural Product in pHEMA-hydrogel Contact Lenses**
Christina N. Banti (University of Ioannina, Greece)

PB06 **Active Pharmaceutical Ingredient Bismuth Subcitrate as pH Compatible Metal-organic Frameworks**
Xuqiao Hu (The University of Hong Kong, China)

PB07 **Novel Piano-stool Ru(II) and Ir(III) Complexes Containing Aminomethylphosphanes Based on Fluoroquinolones**
Sandra Amanda Kozieł (University of Wrocław, Poland)

PB08 **Understanding the Mechanisj-of-Action of Pt(II)-based Type II ICD Inducer via Purposeful Scaffold Modification**

Max Jing Rui Tham（National University of Singapore, Singapore）

PB09 **Anticancer Cyclometalated Iridium(III) Complexes with Planar Ligands: Mitochondrial DNA Damage and Metabolism Disturbance**

Yue Zheng（Sun Yat-Sen University, China）

PB10 **Lipid Raft-targeted Assembly of Ru(II) Complex-anchoring Peptides Regulates Hippo Signaling for Ovarian Cancer Treatment**

Guanying Li（Okinawa Institute of Science and Technology, Japan）

PB11 **Synthesis of Polypyridine Co(III) Complexes and Antitumor Activities Against Hypoxia Tumor**

Misaki Nakai（Kansai Univeristy, Japan）

PB12 **Synthesis of Sugar-Conjugated Chlorin-e6 Derivatives and Their Application to Photodynamic Therapy**

Masato Masuda（Osaka Prefecture University, Japan）

PB13 **Understanding the Cytotoxic Activity of Aminosugar-Conjugated Schiff Base Complexes**

Laurenzo De Vera Alba（Osaka University, Japan）

PB14 **Europium-Ruthenium Complex as Anticancer Prodrug: Insight into its Photodissociation Mechanism**

Waygen Thor（Hong Kong Baptist University, China）

PB15 **Construction of Metal-based Nitric Oxide (NO) Donors as an Antimicrobial Agent**

Ena Yamaguchi（Nagoya Institute of Technology, Japan）

PB16 **Solvent Driven Ligand Diversity in Cobalt Complexes: Synthesis and Application**

Ya Fan Lin（Kaohsiung Medical University, Taiwan）

PB17 **Carnosine as a Possible Drug for Vascular Dementia and Lung Diseases**

Masahiro Kawahara（Musashino University, Japan）

PB18 **A Practical Synthesis of Symmetric and Asymmetric meso-Tetraaryl Substituted Porphycenes Through Oxidative Macrocyclizations**

Ning Xu（Kyushu University, Japan）

PB19 **Synthesis and Evaluation of Biological Properties of Ferrocenyl Analogs of Folic Acid**

Karolina Chrabąszcz（University of Łódź, Poland）

PB20 **Organometallic Conjugates with Colchicine - Synthesis and Anticancer Properties**

Karolina Kowalczyk（University of Łódź, Poland）

PB21 **Cyclometallated Au(III) Complexes for Cysteine Arylation in Zinc Finger Protein Domains: Towards Controlled Reductive Elimination**

Sophie Rebecca Thomas（Cardiff University, United Kingdom）

PB22 **Can Cu(II) Ions Modulate Self-assembly of the Alzheimer's Amyloid-β Peptide?**

Ewelina Stefaniak（Polish Academy of Sciences, Poland）

PB23 **Oxygen Activation by Cu-Amyloid-β Peptide: Models Relevant for Alzheimer's Disease**

Léonie Berthonnaud（Université Toulouse Paul Sabatier, France）

PB24 **Copper and Cu-associated Proteome in Alzheimer's Disease**

Nan Jiang（The University of Hong Kong, China）

PB25 **A Misfolding Mechanism of Cu/Zn-superoxide Dismutase under Oxidative Conditions of Amyotrophic Lateral Sclerosis**

Yoshiaki Furukawa（Keio University, Japan）

PB26 **Loss of Zinc Ion Triggers the Pro-oxidant Activity of the Cu, Zn-superoxide Dismutase (SOD1)**

Kunisato Kuroi（Tohoku University, Japan）

PB27 **External Electro-compensation (and Water Compatibility) Provided by Sulfonates in Picolyl-bearing Coordination Complexes**

Jeremy Kenneth Salaam（Ecole Normale Supérieure de Lyon, France）

PB28 **Structural Insights into the Mechanism of the Pathologically Related Fibrillogenesis of Ataxin-3 Induced by Metal Ions**

Nozomi Goso（Tohoku University, Japan）

PB29 **Localized Accumulation of Tungsten in Bone as *in situ* Generated Polytungstate determined via LA-ICP-MS and X-ray Spectroscopy**

Cassidy R. VanderSchee（McGill University, Canada）

PB30 **Development of Fluorescent Probe for in vivo Analysis the Effects of Bone Affinity in Different Bisphosphonates**

Ryu Hashimoto（Osaka University, Japan）

PB31 **Copper(II)－Dipicolylamine－Coumarin Sensor for Maltosyltransferase Assay**

Tse-Wei Hsu（National Taiwan University, Taiwan）

PB32 **Sensitive and Selective ^{19}F MR Imaging of Cathepsin K Activity Using Perfluorocarbon-Encapsulated Silica Nanoparticle**

Atsuya Okunishi（Osaka University, Japan）

PB33 **Development of a Golgi-targeted Fluorescent Probe of Labile Fe(II)**

Tasuku Hirayama（Gifu Pharmaceutical University, Japan）

PB34 **Single-backbone Polynuclear Complexes Achieving Intra-molecular Upconversion Luminescence**

Chen Xie（University of Strasbourg, France／Hong Kong Baptist University, China）

PB35 Enzyme Responsive, Iridium(iii) Complexes Based Fluorescent Supramolecular Metallohydrogel

Chengzhi Jin（Okinawa Institute of Science and Technology Graduate University, Japan）

PB36 Development of Fluorogenic Probe for imaging Endogenous Membrane Proteins

Nozomi Yamazaki（Osaka University, Japan）

PB37 Responsive Upconversion Nanoprobe For Monitoring and Inhibition of EBV-associated Cancers via Targeting EBNA1

Shuai Zha（Hong Kong Baptist University, China）

PB38 Synthesis of New Bioconjugated Probes for the Multimodal Imaging of Prostate Cancer

Ruediger Maria Exner（University of Bath, United Kingdom）

PB39 Enzyme-Mediated Dual-targeted Molecular Assembly Achieves Synergetic Anticancer Effect

Xia Wu（Okinawa Institute of Science and Technology Graduate University, Japan）

PB40 The Interactions Between Small Molecules and G-quadruplexes

Liuyi Liu（Sun Yat-Sen University, China）

PB41 Significant Activity Enhancement by Amide-Tether in Oxidative DNA Cleavage of Dicopper Complexes with *p*-Cresol-Derived Ligands

Machi Hata（Doshisha University, Japan）

PB42 Metal-dependent Regulation of Hybridization Behaviors of DNA Strands Containing 5-Hydroxyuracil Bases at the Terminus

Keita Mori（The University of Tokyo, Japan）

PB43 **Enzymatic Synthesis of Ligand-bearing DNA using Polymerase and Ligase toward Development of Cu(II)-responsive DNAzymes**

Takahiro Nakama（The University of Tokyo, Japan）

PB44 **Acceleration of Hydrolytic DNA Cleavage by Dicopper(II) Complexes at Slightly Acidic pH and the Mechanistic Insights**

Yuki Kadoya（Doshisha University, Japan）

PB45 **NMR Characterization of Dynamic Properties of Cytochrome *c* bound to Membranes using Lipid Bicelles**

Satoshi Nagao（Nara Institute of Science and Technology, Japan）

PB46 **Impact of Zn(II) and Cu(II) on the Antimicrobial Effect of Amylin and its Analogues**

Dorota Dudek（University of Wrocław, Poland）

PB47 **Purification and Characterization of Methanol Dehydrogenase from *Methylosinus Trichosporium* OB3b**

Wataru Shiina（Tokyo Institute of Technology, Japan）

PB48 **Methanol Production by Regulation of Methanol Dehydrogenase Gene Expression in *Methylosinus Trichosporium* OB3b**

Kosei Yoshimori（Tokyo Institute of Technology, Japan）

PB49 **Structural Insights and Biomimetic Application of Heavy Metal Proteins**

Wei Wei（Nanjing University, China）

PB50 **Neutron Crystallography Visualized Hydrogen Atoms in 4Fe4S-type Ferredoxin Structure at Room Temperature**

Masaki Unno（Ibaraki University, Japan）

PB51 **Mechanism of CO Biosynthesis for the Maturation of [NiFe] Hydrogenase Revealed by Crystal Structure of HypX**

Norifumi Muraki（Tohoku University, Japan）

PB52 **Synthesis and O_2-binding Property of Distal Amino Acid Mutated Hemoglobin-Albumin Cluster**
Ryosuke Funaki（Chuo University, Japan）

PB53 **Construction of Polyacrylamide Gel Containing Engineered Hexameric Hemoprotein as a Cross-linker**
Kazuki Kageyama（Osaka University, Japan）

PB54 **N-terminus Selective Protein Modification Using 1*H*-1,2,3-Triazole-4-carbaldehyde Derivatives**
Eigo Sumiyoshi（Osaka University, Japan）

PB55 **Engineering of Enzymatic Activity Achieved By Employing Newly Screened Peptide-Like Molecules**
Kai Yonemura（Nagoya University, Japan）

PB56 **Conferment of CO-Controlled Dimer-Monomer Transition Property to Thermostable Cytochrome c' by Mutation in the Subunit Interface**
Masaru Yamanaka（Nara Institute of Science and Technology, Japan）

PB57 **Bioinspired Catalytic Group Transfer Reactions with Fe and Co-Corroles**
Bradley Wayne Musselman（University of Michigan, United States）

PB58 **Synthesis and Reactivity of Ruthenium-Oxo Complexes Supported by Carboxylamido Ligands**
Satoshi Wamura（Doshisha University, Japan）

PB59 **Selective Oxidation Catalyzed by Carboxylamidoiron(III) Complex with Restricted Reaction Space**
Hiroki Adachi（Doshisha University, Japan）

PB60 **Selective C-H Oxidation Catalyzed by Bioinspired Carboxylamidoiron(III) Complexes**
Junpei Ueda（Doshisha University, Japan）

PB61 **Theoretical Study on a Mechanism of Nitrite Reduction on a Diruthenium Platform**

Akihito Egi（Kyushu University, Japan）

PB62 **Can We Tune Metallacrowns Formation and Stability in the Solution by the Proper Use of Metal Ions and Ligand Structure?**

Malgorzata Ostrowska（University of Wrocław, Poland）

PB63 **Stabilization and Alkane Hydroxylation by Oxoiron(IV) Prophyrin π-Cation Radical Complex in Fluorocarbon Solvent**

Yuma Morimoto（Osaka University, Japan）

PB64 **From Biomimetic to Biocompatible Catalysis**

Jing Zhao（Nanjing University, China）

PB65 **What Effect Does Indole Has on M(II)-phenoxyl Radical?**

Hiromi Oshita（Konan University, Japan）

PB66 **A Catalytically Latent Rh(III) Complex for a Cell Surface Displayed Biohybrid Catalyst**

Shunsuke Kato（Osaka University, Japan）

PB67 **Catalytic Hydroxylation of a C–H Bond by Myoglobin Reconstituted with Manganese Porphycene Using Dioxygen as a Terminal Oxidant**

Yoshiyuki Kagawa（Osaka University, Japan）

PB68 **Sequential Conjugation of Different Molecules onto Protein Surface and Comparison of Reactivities of Cysteine Residues**

Teruyuki Miyake（Nara Institute Science and Technology, Japan）

PB69 **Biohybrid Catalysts Based on Beta-barrel Proteins Nitrobindin and FhuA**

Daniel F. Sauer（RWTH Aachen University, Germany）

PB70 **Theoretical Studies on the Role of Amino-Acid Residue on the O-O Bond Cleavage of Cu_2O_2 Adduct in pMMO**

Tsukasa Abe（Kyushu University, Japan）

PB71 **Development of Photoswitchable Fluorescent Molecules Using Fulgimide**

Kenji Torii（Osaka University, Japan）