

**第1日目 9月21日(月) 午後 シンポジウム**

N101 : シンポジウム S1会場		N202 : シンポジウム S2会場	
The state of the art metal cluster chemistry: from synthetic methodology to new functionality		Toward an integrated biometal chemistry: emerging approaches to rigorous comprehension of biological systems	
Organizers: Nobuto YOSHINARI (Osaka Univ.), Yuma MORIMOTO (Osaka Univ.), Daisuke TANAKA (Kwansei Univ.)		Organizers: Nobutaka FUJIEDA (Osaka Univ.), Osami SHOJI (Nagoya Univ.)	
[16:40–16:45] Opening Remarks: Nobuto YOSHINARI (Osaka Univ.)		[16:40–16:45] Opening Remarks : Nobutaka FUJIEDA (Osaka Univ.)	
S1-01	Chair : Nobuto YOSHINARI (Osaka Univ.) 16:45–17:15 All-inorganic Coordination Chemistry of Cyclic-polyoxovanadate Ligands (Kanazawa Univ.) ○Yoshihito HAYASHI	S2-01	16:45 – 17:10 Chair: Yoshiaki FURUKAWA (Keio Univ.) How are zinc-requiring ectoenzymes activated, by zinc transporters in the secretory pathway? (Kyoto Univ.) ○Taiho KAMBE
S1-02	17:15–17:45 Organo-Metallic Sulfur Clusters for Nitrogen Activation (Nagoya Univ., JST PRESTO) ○Yasuhiro OHKI	S2-02	17:10–17:35 Chair: Takehiko TOSHA (RIKEN) Function and regulation of multiple terminal oxidases for aerobic respiration in <i>Pseudomonas aeruginosa</i> (Univ. of Tokyo) ○Hiroyuki ARAI
S1-03	Chair : Yuma MORIMOTO (Osaka Univ.) 17:45–18:15 Chemistry of Multimetallic Polyhydride Clusters: Activation and Transformation of Dinitrogen and Benzene (RIKEN) ○Takanori SHIMA	S2-03	17:35–18:00 Chair: Akira ONODA (Osaka Univ.) Structural chemistry of hydrogenase by diffraction method (Univ. of Hyogo) ○Yoshiki HIGUCHI
S1-04	Chair : Daisuke TANAKA (Kwansei Univ.) 18:15–18:45 Synthetic Methodology for Heterometallic One-Dimensional Complexes with Metal-Metal Bonds (Gifu Univ.) ○Kazuhiro UEMURA	S2-04	18:00–18:25 Chair: Masayasu TAKI (Nagoya Univ.) Artificial assembly of cytochrome P450 monooxygenase and auxiliary proteins for efficient electron supply (Univ. of Tokyo) ○Hidehiko HIRAKAWA
S1-05	18:45–19:15 Aggregation-Controlled Emission from Liquid-Crystalline Gold Complexes (Ritsumeikan Univ.) ○Osamu TSUTSUMI  19:15– Closing Remarks	S2-05	18:25 – 18:50 Chair: Tsubasa HATANAKA (Osaka Univ.) New insights into energetics for CO <sub>2</sub> fixation in the deep ocean: How does nature efficiently reduce CO <sub>2</sub> without the use of solar energy? (RIKEN) ○Ryuhei NAKAMURA
		S2-06	18:50 – 19:15 Chair: Yusuke TAKEZAWA (Univ.of Tokyo) Artificial metalloenzymes for olefin metathesis (RWTH Aachen Univ.) Jun OKUDA  19:15– Closing Remarks: Osami SHOJI (Nagoya Univ.)

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N302 : シンポジウム S3会場		S235 : シンポジウム S4会場	
New Aspects in Two-dimensional Materials -Focusing on Fusion with Coordination Chemistry-		On-demand Photofunctions in Coordination Chemistry from Mysterious Luminescence to Solar-energy Conversion	
Organizer: Ryota Sakamoto (Univ. of Tokyo)		Organizers: Miki Hasegawa (Aoyama Gakuin Univ.), Tomoyoshi Suenobu (Osaka Univ.), Kazuyuki Ishii (Univ. of Tokyo)	
[16:40－16:45] Opening Remarks: Ryota Sakamoto (Univ. of Tokyo)		[16:40－16:50] Opening Remarks : Miki Hasegawa (Aoyama Gakuin Univ.)	
S3-01	Chair: Ryota Sakamoto (Univ. of Tokyo) 16:45－17:10 Graphene oxide and reduced graphene oxide hybrids (Kumamoto Univ.) OShinya Hayami	S4-01	16:50－17:40 Chair: Miki Hasegawa (Aoyama Gakuin Univ.) Molecular Turnstiles (Univ. Strasbourg, CNRS) OMir Wais Hosseini
S3-02	17:10－17:35 Bottom-up growth of highly-oriented molecular nanosheets by employing liquid-phase interfaces (Osaka Pref. Univ., JST PRESTO) ORie Makiura	S4-02	17:40－18:10 Chair: Ayumi Ishii (Aoyama Gakuin Univ.) Light-induced water splitting by ruthenium complexes (Inst. Ind. Sci., Univ. of Tokyo; Dept. Appl. Chem, Tokyo Metropolitan Univ.; Sch. Chem., Monash Univ.; Dept. Chem. Univ. of Adelaide) OYan Mulyana · Kazuyuki Ishii · Leone Spiccia · F. Richard Keene
S3-03	17:35－18:00 Approaches toward synthesis of two-dimensional polymers using self-assembly of organic molecules at the interfaces (Osaka Univ., JST PRESTO) OKazukuni Tahara · Kazuki Kunimoto · Akihiro Tamaoka · Yoshito Tobe  Chair: Hayami Shinya (Kumamoto Univ.)	S4-03	18:10－18:40 Chair: Kazuyuki Ishii (Univ. of Tokyo) Tuning Emission Wavelengths of Metal Complexes Operative in Chemical Biology (Gunma Univ.; Akita Pref. Univ.) OToshitada Yoshihara · Masahiro Hosaka · Toshiyuki Takeuchi · Seiji Tobita
S3-04	18:00－18:25 Preparation of nanosheet pn-junction and their photocatalytic properties (Kyushu Univ., JST PRESTO) OShintaro Ida	S4-04	18:40－19:10 Chair: Yasuchika Hasegawa (Hokkaido Univ.) Spontaneous Switching of Circularly Polarized Luminescence of Rare Earth Complexes (Nara Inst. Sci. Tech.; JST-PRESTO) OJunpei Yuasa
S3-05	18:25－18:50 Functional "bottom-up" metal complex nanosheets (Univ. of Tokyo) ORyota Sakamoto  18:50－18:55 Closing Remarks Ryota Sakamoto (Univ. of Tokyo)	S4-05	19:10－19:50 Chair: Tomoyoshi Suenobu (Osaka Univ.) On-demand Coordination Design and Development of Molecular Labels and Sensors for Bioimaging and Photoredox Catalysis (Ewha Womans Univ.) OYoungmin You  19:50－20:00 Closing Remarks Tomoyoshi Suenobu (Osaka Univ.)

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G101 : シンポジウム S5会場		G201 : シンポジウム S6会場	
Capture and Activation of Small Molecules in Coordination Chemistry and Bioinorganic Chemistry		溶液の目で見る錯体化学～溶液中での錯体分子の本質的な役割～	
Organizers: Tomohiko Inomata (Nagoya Inst. Tech.)		開催責任者: 小谷 明 (金沢大医薬保)	
[16:40-16:45] Opening Remarks : Tomohiko Inomata (Nagoya Inst. Tech.)		[16:40-16:45] 開会の辞: 小谷 明 (金沢大医薬保)	
S5-01	Chair: Tomohiko Inomata (Nagoya Inst. Tech.) 16:45-17:15 Conjugate addition using palladium(II)-oxazolinylpyridine complexes with bulky amide groups as catalysts (Kochi Univ.) ○Kenji Matsumoto・Masaki Takeda・Toshiaki Yonemura	S6-01	第1部 <非共有結合的相互作用に基づいた錯体科学> 座長 佐竹 彰治 (東京理大理) 16:45-17:05 (発表 15分 質疑応答 5分) 分子性多孔質結晶に閉じ込められた水クラスターの科学 (東京理大理) ○田所 誠
S5-02	17:15-17:45 Structural and functional studies of membrane protein monolayer by surface enhanced infrared absorption spectroscopy (Freie Univ. of Berlin) ○Kenichi Ataka・Joachim Heberle	S6-02	座長 田所 誠 (東京理大理) 17:05-17:25 (発表 15分 質疑応答 5分) 置換活性な配位結合が誘起する亜鉛ポルフィリン多量体の構造変化 (東京理大理) ○佐竹 彰治
S5-03	Chair: Kenji Matsumoto (Kochi Univ.) 17:45-18:15 Ionic liquid-modified substrates entrapping metal complexes for small molecule activation (Nagoya Inst. Tech.) ○Tomohiko Inomata・Tatsuya Kitagawa・Junpei Nishino・Tomohiro Ozawa・Hideaki Masuda	S6-03	17:25-17:50 (発表 20分 質疑応答 5分) 複数の相互作用を活用した配位性一次元分子集合体の構築 (名城大理工) ○藤田 典史 17:50-17:55 コメンテーターによる第一部の講評  17:55-18:05 PC接続
S5-04	18:15-18:45 Small molecules activation by dinuclear metal complexes (Kyushu Univ.; sMol) ○Hidetaka Nakai・Seiji Ogo	S6-04	第2部 <生体・自然界に備わる錯体の特性> 座長 小谷 明 (金沢大医薬保) 18:05-18:30 (発表 20分 質疑応答 5分) 青色花の発色と金属錯体化学 (名古屋大情報) ○吉田 久美
S5-05	Chair: Hidetaka Nakai (Kyushu Univ.) 18:45-19:15 Uranium-mediated electrocatalytic H <sub>2</sub> production from water (Friedrich-Alexander-Univ. Erlangen-Nürnberg) Dominik P. Halter・Frank W. Heinemann・○Karsten Meyer  19:15-19:20 Closing Remarks: Tomohiko Inomata (Nagoya Inst. Tech.)	S6-05 S6-06	座長 立屋敷 哲 (女子栄養大) 18:30-18:55 (発表 20分 質疑応答 5分) 生体酵素の活性部位を溶液中に取り出す錯体化学 (大阪大理) ○船橋 靖博  18:55-19:15 (発表 15分 質疑応答 5分) タンパク質と金属、薬物との結合研究から見えてきた溶液研究の魅力 (金沢大医薬保) ○小谷 明 19:15-19:20 コメンテーターによる第二部の講評  19:20-19:25 閉会の辞 佐竹 彰治 (東京理大)