

# Curriculum Vitae

## Yoichi Hoshimoto (Ph.D.)

Center for Future Innovation (CFi), Faculty of Engineering  
Osaka University, Japan



### Biography

Yoichi Hoshimoto received his M.Sc. and Ph.D. from Osaka University under the supervision of Professor S. Ogoshi in 2013. He then joined the Frontier Research Base for Global Young Researchers, Osaka University as a tenure-track assistant professor (2013-2018). Then, he was promoted to Associate professor in the Department of Applied Chemistry, Faculty of Engineering, Osaka University (2018). Since 2023, he has been recognized as an “Outstanding Young Researcher (PI)” in the Center for Future Innovation (CFi), Faculty of Engineering, Osaka University. His recent research interests include homogeneous catalysis with transition-metal, and main-group-element complexes and the development of original N-heterocyclic carbenes.

**Born:** 28th March, 1986 in Nagano, Japan.

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**Research Gate:** [https://www.researchgate.net/profile/Yoichi\\_Hoshimoto](https://www.researchgate.net/profile/Yoichi_Hoshimoto)

**Google Scholar Profile:** <https://scholar.google.co.jp/citations?user=HsLrShsAAAAJ&hl=ja>

### Education

- 2013 **Ph.D.** Department of Applied Chemistry, Faculty of Engineering, Osaka University, Japan (Supervisor: Prof. Dr. Sensuke Ogoshi)
- 2013 **Exchange Ph.D. Student**, Department of Chemistry, Queen’s University, Canada (Supervisor: Prof. Dr. Cathleen M. Crudden)
- 2010 **M.S.** Department of Applied Chemistry, Faculty of Engineering, Osaka University, Japan
- 2008 **B.S.** Department of Applied Chemistry, Faculty of Engineering, Osaka University, Japan

### Professional Experiences

- 2023 **Visiting Professor** at Ruhr University Bochum, Germany
- 2023-present **Outstanding Young Researcher**, Center for Future Innovation (CFi), Department of Applied Chemistry, Faculty of Engineering, Osaka University
- 2018-present **Associate Professor**, Department of Applied Chemistry, Faculty of Engineering, Osaka University
- 2013-2018 **Assistant Professor** (Tenure track), Frontier Research Base for Global Young Researchers, Osaka University
- 2010-2013 **Research Fellow**, Japan Society for Promotion of Science (DC1)
- 2011-present **Otsu Academy Award Fellow**  
Membership for selected young Japanese chemists, founded in 2010 by Profs. Drs. H. Yamamoto, M. Shibasaki, and K. Maruoka under the sponsorship of MSD Life Science Foundation

- 2019-2020 The 2019 Early Career Advisory Board of *ACS Catalysis*  
(*ACS Catal.* **2019**, *9*, 3588.)
- 2022~ Scientific Advisory Board of *ChemRxiv*

## **Awards**

- 2024 Yazaki Academic Incentive Award
- 2024 Thieme Chemistry Journals Award
- 2024 **Merck-Banyu Lectureship Award**  
The prestigious award given annually to exceptional BCA winners who exhibit a well-balanced mix of originality, creativity, and overall potential of their research programs.
- 2023 Chemist Award BCA  
One of the top awards for young Japanese chemists, given by MSD Life Science Foundation
- 2023 Poster Award on Sustainable Future: Dream Reactions with Hydrogen (Münster, Germany, 2023)
- 2023 Award for Encouragement of Research in the 32nd Annual Meeting of MRS-Japan
- 2021 The 61th Research Grant Award of Ube Industries Foundation
- 2018 **The Chemical Society of Japan Award for Young Chemists**  
A prestige award for CSJ members younger than 36 years old who demonstrate significant research results in fundamentals and applications of chemistry.
- 2016 The Chemical Society of Japan Presentation Award
- 2014 The Honorable Mention in 2014 IUPAC-SOLVAY International Award
- 2014 Tosoh Award in Synthetic Organic Chemistry, Japan
- 2012 The Chemical Society of Japan Student Presentation Award
- 2011 Poster Prize on 16th IUPAC International Symposium on Organometallic Chemistry Directed Towards Organic Synthesis (OMCOS 16) (Shanghai, China, August 2011)
- 2009 Poster Award on 56th Symposium on Organometallic Chemistry (Kyoto, Japan, September, 2009)
- 2008 Royal Society of Chemistry Best Poster Award on International Conference on Advanced Organic Synthesis Directed toward the Ultimate Efficiency and Practicability (Shiga, Japan, May 2008)

## **Publications**

- 45 J.N. Leung, Y. Mondori, S. Ogoshi, Y. Hoshimoto,\* H. V. Huynh,\* “Electronic Profiling of N-Phosphine Oxide-Substituted Imidazolin-2-ylidenes (PoxIms) and Imidazolidin-2-ylidenes (SPoxIms),” *Inorg. Chem.* **2024**, *63*, 4344.
- 44 S. Manna, F. Papp, Y. Hisata, J. Löffler, M. Rybka, V.H. Gessner,\* Y. Hoshimoto,\* L. J. Gooßen,\* “Palladium-Catalyzed  $\gamma$ -Arylation of Acylketene Synthons with Aryl Chlorides Enabled by Ylide-Functionalized Phosphines (YPhos),” *Adv. Synth. Catal.* **2024**, [Early View \(DOI: 10.1002/adsc.202301474\)](https://doi.org/10.1002/adsc.202301474).  
*Very Important Publication (VIP)*
- 43 M. Sakuraba, S. Ogoshi, Y. Hoshimoto,\* “Strategic Use of Crude H<sub>2</sub> for the Catalytic Reduction of Carbonyl Compounds,” *Tetrahedron Chem.* **2024**, *9*, 100059.  
*OPEN ACCESS; Special issue “Organocatalysis”*

- 42 M. Sakuraba, T. Morishita, T. Hashimoto, S. Ogoshi,\* Y. Hoshimoto,\* "Remote Back Strain: A Strategy for Modulating the Reactivity of Triarylboranes," *Synlett*, **2023**, *34*, 2187.  
*Special issue "Modern Boron Chemistry: 60 years of the Matteson Reaction"*
- 41 Y. Yamauchi, Y. Mondori, Y. Uetake,\* Y. Takeichi, T. Kawakita, H. Sakurai, S. Ogoshi,\* Y. Hoshimoto,\* "Reversible Modulation of the Electronic and Spatial Environment around Ni(0) Centers Bearing Multifunctional Carbene Ligands with Triarylaluminum," *J. Am. Chem. Soc.* **2023**, *145*, 16938.  
*OPEN ACCESS*
- 40 S. Nagai, T. Hinogami, S. Ogoshi,\* Y. Hoshimoto,\* "N-Borane-Substituted Cyclic Phosphine Imides (BCPIS)," *Bull. Chem. Soc. Jpn.* **2023**, *96*, 1346.  
*OPEN ACCESS; Selected Paper; Inside Cover*
- 39 Y. Hoshimoto,\* Y. Yamauchi, T. Tomoya, S. Ogoshi,\* "Complexation-Induced N-P Axial Chirality in Sm(II) N-Phosphine-Oxide-Substituted Imidazolylidene and Imidazolinylidene Complexes," *Can. J. Chem.* **2022**, *101*, 429.  
*Special issue in "Honor of Cathleen Crudden"*  
*ChemRxiv 2022, preprint*
- 38 T. Hashimoto, T. Asada, S. Ogoshi,\* Y. Hoshimoto,\* "Main group catalysis for H<sub>2</sub> purification based on liquid organic hydrogen carriers," *Science Advances* **2022**, *8*, eade0189.  
*OPEN ACCESS; PRESS Release (Japanese).*  
*Featured by EurekAlert; AlphaGalileo, Asia Research News; PhysOrg; Scienmag; Nanowerk; AZo Materials; 時事通信ニュース; YAHOO!; Cosmos Magazine; MIT Tech Review; 日経 xTech; Chem-Station; 現代化学2023年1月号; クリーンエネルギー2023年4月号(Vol.32, 54-61; 日本工業出版)*
- 37 Y. Yamauchi, Y. Hoshimoto,\* T. Kawakita, T. Kinoshita, Y. Uetake, H. Sakurai, S. Ogoshi,\* "Room-Temperature Reversible Chemisorption of Carbon Monoxide on Nickel(0) Complexes," *J. Am. Chem. Soc.* **2022**, *144*, 8818.  
*OPEN ACCESS; Press Release (Japanese), 現代化学2022年7月号, Chem-Station.*
- 36 Y. Hoshimoto,\* M. Sakuraba, T. Kinoshita, M. Ohbo, M. Ratanasak, J. Hasegawa,\* S. Ogoshi,\* "A boron-transfer mechanism mediating the thermally induced revival of frustrated carbene-borane pairs from their shelf-stable adducts," *Commun. Chem.* **2021**, *4*, 137.  
*OPEN ACCESS*
- 35 Y. Yamauchi, S. Nagai, T. Terada, Y. Hoshimoto,\* S. Ogoshi,\* "Sm(II)-Mediated Single-Electron Reduction of Pentafluorophenylcopper(I)," *Chem. Lett.* **2021**, *50*, 1394.  
*OPEN ACCESS*
- 34 Y. Hoshimoto,\* S. Nagai, T. Hinogami, S. Hazra, S. Ogoshi,\* "N-Phosphine Imide-Substituted Imidazolylidenes (PimIms)," *Asian J. Org. Chem.* **2021**, *10*, 1085.  
*Invited contributions to the special issue "Early Career Special Collection"*
- 33 Y. Hoshimoto,\* S. Ogoshi,\* "Development of Metal Complexes Equipped with Structurally Flexible Carbenes," *Bull. Chem. Soc. Jpn.* **2021**, *94*, 327.  
*OPEN ACCESS; Inside Cover; Award Account for The 67th Chemical Society of Japan Award for Young Chemists.*
- 32 K. Ashida, Y. Hoshimoto, S. Ogoshi,\* "Ni(0)-Catalyzed Synthesis of Polycyclic  $\alpha,\beta$ -Unsaturated  $\gamma$ -Lactams via Intramolecular Carbonylative Cycloaddition of Yne-imines with CO," *Synlett* **2020**, *32*, 1537.

- 31 T. Asada, Y. Hoshimoto,\* S. Ogoshi,\* “Rotation-Triggered Transmetalation on Heterobimetallic Cu/Al N-Phosphine-Oxide-Substituted Imidazolylidene Complex,” *J. Am. Chem. Soc.* **2020**, *142*, 9772.
- 30 T. Asada, Y. Hoshimoto,\* T. Kawakita, T. Kinoshita, S. Ogoshi,\* “Axial Chirality around N–P Bonds Induced by Complexation between E(C<sub>6</sub>F<sub>5</sub>)<sub>3</sub> (E = B, Al) and an N-Phosphine-Oxide-Substituted Imidazolylidene: A Key Intermediate in the Catalytic Phosphinoylation of CO<sub>2</sub>,” *J. Org. Chem.* **2020**, *85*, 14333.  
*Invited contributions to special issue “The New Golden Age of Organophosphorus Chemistry”  
OPEN ACCESS; One of the Most Read Article (monthly)*
- 29 Y. Hoshimoto,\* “Transformation of Aldehydes via Nickelacycles” in *Nickel Catalysis in Organic Synthesis: Methods and Reactions*, Ed by S. Ogoshi, Wiley-VCH: Germany, **2020**.
- 28 K. Ashida, Y. Hoshimoto, N. Tohnai, D. E. Scott, M. Ohashi, H. Imaizumi, Y. Tsuchiya, S. Ogoshi,\* “Enantioselective Synthesis of Polycyclic  $\gamma$ -Lactams with Multiple Chiral Carbon Centers via Ni(0)-Catalyzed Asymmetric Carbonylative Cycloadditions without Stirring,” *J. Am. Chem. Soc.* **2020**, *142*, 1594.
- 27 Y. Hoshimoto, C. Nishimura, Y. Sasaoka, R. Kumar, S. Ogoshi, “Catalytic Synthesis of Isoquinolines via Intramolecular Migration of N-Aryl Sulfonyl Groups on 1,5-Yne-Imines,” *Bull. Chem. Soc. Jpn.* **2020**, *93*, 182.  
*OPEN ACCESS*
- 26 Y. Hoshimoto,\* S. Ogoshi,\* “Triarylborane-Catalyzed Reductive N-Alkylation of Amines: A Perspective,” *ACS Catal.* **2019**, *9*, 5439.
- 25 T. Kinoshita, M. Sakuraba, Y. Hoshimoto,\* S. Ogoshi,\* “Complexation between MTOF (M = Li and Na) and N-Phosphine oxide-substituted Imidazolylidenes via Coordination of the N-Phosphoryl Groups,” *Chem. Lett.* **2019**, *48*, 230.  
*OPEN ACCESS*
- 24 Y. Hoshimoto,\* T. Kinoshita, S. Hazra, M. Ohashi, S. Ogoshi,\* “Main-Group-Catalyzed Reductive Alkylation of Multiply Substituted Amines with Aldehydes Using H<sub>2</sub>,” *J. Am. Chem. Soc.* **2018**, *140*, 7292.  
*EurekAlert. AlphaGalileo. PhysOrg. ScienceDaily.  
CHEMICAL INDUSTRY, 2018, 69, 551-552.  
academist Journal (2018.7.9).*
- 23 S. Hazra, Y. Hoshimoto,\* S. Ogoshi,\* “N-Phosphine Oxide-Substituted Imidazolylidenes (PoxIms): Multifunctional Multipurpose Carbenes,” *Chem. Eur. J.* **2017**, *23*, 15238.  
*Invited ‘Concept’ article. OPEN ACCESS. Most Accessed article on 2017 (from Oct. to Dec.).*
- 22 Y. Hoshimoto,\* T. Asada, S. Hazra, M. Ohashi, S. Ogoshi,\* “Phosphorylation of Isocyanates and Aldehydes by Multifunctional N-Phosphine Oxide-Substituted Imidazolylidenes,” *Chem. Lett.* **2017**, *46*, 1211.  
*OPEN ACCESS*
- 21 Y. Hayashi, Y. Hoshimoto, R. Kumar, M. Ohashi, S. Ogoshi,\* “Nickel(0)-Catalyzed Coupling Reactions of Carbonyls and Alkenes with Reducing Reagents Giving Six- and Seven-Membered Benzocycloalkanol,” *Chem. Lett.* **2017**, *46*, 1096.  
*OPEN ACCESS*
- 20 Y. Hoshimoto, K. Ashida, Y. Sasaoka, R. Kumar, K. Kamikawa, X. Verdaguer, A. Riera, M. Ohashi, S. Ogoshi,\* “Efficient Synthesis of Polycyclic  $\gamma$ -Lactams by Catalytic Carbonylation of Ene-Imines via Nickelacycle Intermediate,” *Angew. Chem. Int. Ed.* **2017**, *56*, 8206.

- 19 K. Ravindra, Y. Hoshimoto, E. Tamai, M. Ohashi, S. Ogoshi,\* “Two-step synthesis of chiral fused tricyclic scaffolds from phenols via desymmetrization on nickel,” *Nat. Commun.* **2017**, *8*, 32.  
*OPEN ACCESS*
- 18 W. Tao, S. Akita, R. Nakano, S. Ito, Y. Hoshimoto, S. Ogoshi and K. Nozaki,\* “Copolymerisation of ethylene with polar monomers by using palladium catalysts bearing an N-heterocyclic carbene-phosphine oxide bidentate ligand,” *Chem. Commun.* **2017**, *53*, 2630.
- 17 Y. Hoshimoto, Y. Hayashi, M. Ohashi, and S. Ogoshi,\* “Kinetic and Theoretical Studies on Ni(0)/N-Heterocyclic Carbene-Catalyzed Intramolecular Alkene Hydroacylation,” *Chem. Asian J.* **2017**, *12*, 278.
- 16 Y. Hoshimoto,\* T. Asada, S. Hazra, T. Kinoshita, P. Sombut, R. Kumar, M. Ohashi, S. Ogoshi,\* “Strategic Utilization of Multifunctional Carbene for Direct Synthesis of Carboxylic-Phosphinic Mixed Anhydride from CO<sub>2</sub>,” *Angew. Chem. Int. Ed.* **2016**, *55*, 16075.  
*OPEN ACCESS*
- 15 R. Kumar, E. Tamai, A. Ohnishi, A. Nishimura, Y. Hoshimoto, M. Ohashi, and S. Ogoshi,\* “Nickel-Catalyzed Enantioselective Synthesis of Cyclobutenes via [2+2] Cycloaddition of  $\alpha,\beta$ -Unsaturated Carbonyls with 1,3-Enynes,” *Synthesis* **2016**, *48*, 2789.
- 14 Y. Hayashi, Y. Hoshimoto, R. Kumar, M. Ohashi, S. Ogoshi,\* “Nickel(0)-catalyzed intramolecular reductive coupling of alkenes and aldehydes or ketones with hydrosilanes,” *Chem. Commun.* **2016**, 6237.  
*OPEN ACCESS*
- 13 R. Kumar, H. Tokura, A. Nishimura, T. Mori, Y. Hoshimoto, M. Ohashi, and S. Ogoshi,\* “Nickel(0)/N-Heterocyclic Carbene-Catalyzed Asymmetric [2+2+2] Cycloaddition of Two Enones and an Alkyne: Access to Cyclohexenes with Four Contiguous Stereogenic Centers,” *Org. Lett.* **2015**, *17*, 6018.
- 12 R. Kumar, Y. Hoshimoto, H. Yabuki, M. Ohashi, S. Ogoshi,\* “Nickel(0)-Catalyzed Enantio- and Diastereoselective Synthesis of Benzoxasiloles: Ligand-Controlled Switching from Inter- to Intramolecular Aryl-Transfer Process,” *J. Am. Chem. Soc.* **2015**, *137*, 11838.
- 11 Y. Hoshimoto,\* T. Kinoshita, M. Ohashi, S. Ogoshi,\* “A Strategy to Control the Reactivation of Frustrated Lewis Pairs from Shelf-Stable Carbene-Borane Complexes,” *Angew. Chem. Int. Ed.* **2015**, *54*, 11666.  
*OPEN ACCESS. Front Cover. Altals of Science: “Control the frustration between molecular pairs with external stimuli-responsive motions.” Chemistry Today (Tokyo Kagaku Doujin Co.).*
- 10 Y. Kita, H. Sakaguchi, Y. Hoshimoto, D. Nakauchi, Y. Nakahara, J.-F. Carpentier, S. Ogoshi, K. Mashima,\* “Pentacoordinated Carboxylate  $\pi$ -Allyl Nickel Complexes as Key Intermediates for Ni-catalyzed Direct Amination of Allylic Alcohols,” *Chem. Eur. J.* **2015**, *21*, 14571.
- 9 Y. Hoshimoto, M. Ohashi, S. Ogoshi,\* “Catalytic Transformation of Aldehydes with Nickel Complexes through  $\eta^2$  Coordination and Oxidative Cyclization,” *Acc. Chem. Res.* **2015**, *48*, 1746.  
*Special Issue “Earth Abundant Metals in Homogeneous Catalysis”*
- 8 M. Ohashi, Y. Hoshimoto, S. Ogoshi,\* “Aza-Nickelacycle Key Intermediate in Nickel(0)-Catalyzed Transformation Reactions,” *Dalton Trans.* **2015**, *44*, 12060.
- 7 Y. Hoshimoto, H. Yabuki, R. Kumar, H. Suzuki, M. Ohashi, S. Ogoshi,\* “Highly Efficient Activation of Organosilanes with  $\eta^2$ -Aldehyde Nickel Complexes: Key for Catalytic Syntheses of Aryl-, Vinyl-, and Alkynyl-benzoxasiloles,” *J. Am. Chem. Soc.* **2014**, *136*, 16752.



- 6 Y. Hoshimoto, T. Ohata, Y. Sasaoka, M. Ohashi, S. Ogoshi,\* “Nickel(0)-Catalyzed [2+2+1] Carbonylative Cycloaddition of Imines and Alkynes or Norbornene Leading to  $\gamma$ -Lactams,” *J. Am. Chem. Soc.* **2014**, *136*, 15877.  
*C&E NEWS 2014*, *92*, 35.
- 5 Y. Hoshimoto, Y. Hayashi, H. Suzuki, M. Ohashi, S. Ogoshi,\* “One-Pot, Single-Step and Gram-Scale Synthesis of Mononuclear  $[(\eta^6\text{-arene})\text{Ni}(\text{N-heterocyclic Carbene})]$  Complexes; Useful Precursors of the  $\text{Ni}^0\text{-NHC}$  Unit,” *Organometallics* **2014**, *33*, 1276.  
*Selected as one of the top 20 downloaded articles.*
- 4 Y. Hoshimoto, T. Ohata, M. Ohashi, S. Ogoshi,\* “Nickel-Catalyzed Synthesis of N-Aryl-1,2-Dihydropyridines by [2+2+2] Cycloaddition of Imines with Alkynes via T-Shaped 14-Electron Aza-Nickelacycle Key Intermediates,” *Chem. Eur. J.* **2014**, *20*, 4105.
- 3 Y. Hoshimoto, Y. Hayashi, H. Suzuki, M. Ohashi, S. Ogoshi,\* “Synthesis of Five- and Six-Membered Benzocyclic Ketones through Intramolecular Alkene Hydroacylation Catalyzed by Nickel(0)/N-Heterocyclic Carbenes,” *Angew. Chem. Int. Ed.* **2012**, *51*, 10812.
- 2 Y. Hoshimoto, M. Ohashi, S. Ogoshi,\* “Nickel-Catalyzed Selective Conversion of Two Different Aldehydes to Cross-Coupled Esters,” *J. Am. Chem. Soc.* **2011**, *133*, 4668.  
*Most Read Articles (1st place) on May, 2011. Highlighted in Angew. Chem. Int. Ed. 2011, 50, 11047-11049, and Kagaku, 2011, 9, 12-16.*
- 1 S. Ogoshi, Y. Hoshimoto, M. Ohashi, “Nickel-catalyzed Tishchenko reaction *via* hetero-nickelacycles by oxidative cyclization of aldehydes with nickel(0) complex,” *Chem. Commun.* **2010**, *46*, 3354.

### **Original Patents (Applications)**

- P5 Y. Hoshimoto, “Boron compound, and preparation of hydrogenated compound and polymer thereby”, Application No. JP2023-095773; Application Date: 2023-06-09
- P4 Y. Hoshimoto, “Boron compound, and preparation of hydrogenated compound and polymer thereby”, Application No. JP2022-195051; Application Date: 2022-12-06
- P3 Y. Hoshimoto, S. Ogoshi, T. Kawamoto, T. Tanaka, “Boron compound, and preparation of hydrogenated compound and polymer thereby”, *JP7079696* (Publication Date: 2022-06-02; Application No. JP2018-160332; Application Date: 2018-08-29)
- P2 Y. Hoshimoto, S. Ogoshi, T. Tomoaki, T. Kawamoto, “Method for hydrogenation of unsaturated compounds using crude hydrogen and frustrated Lewis pair”, *JP2017206474A* (Publication Date: 2017-11-24; Application No. JP2016-100976; Application Date: 2016-05-20).
- P1 Y. Hoshimoto, S. Ogoshi, T. Kawamoto, *JP6569973* (Publication Date: 2019-8-16; Application No. JP2014-206649; Application Date: 2014-10-7).

## *Selected Invited Oral Lectures*

- ✚ 2024 Y. Hoshimoto, “*Exploring Ways to Harness N-Heterocyclic Carbenes and Triarylboranes in Organometallic and Synthetic Chemistry*”, The 7th ICREDD International Symposium ~The Rising Star Program~, Hokkaido University.
- ✚ 2023 Y. Hoshimoto, “*Exploring Ways to Harness N-Heterocyclic Carbenes and Triarylboranes in Organometallic and Synthetic Chemistry*”, Organic Chemistry Colloquium, RWTH Aachen University, Germany
- ✚ 2023 Y. Hoshimoto, “*Exploring Ways to Harness N-Heterocyclic Carbenes and Triarylboranes in Organometallic and Synthetic Chemistry*”, Technische Universität Berlin, Germany
- ✚ 2023 Y. Hoshimoto, “*Exploring Ways to Harness N-Heterocyclic Carbenes and Triarylboranes in Organometallic and Synthetic Chemistry*”, Anorganisch-Chemische Colloquium, Universität Würzburg, Germany
- ✚ 2023 Y. Hoshimoto, “*Molecular-Based Approaches for Sustainable H<sub>2</sub> Production Promoting Waste-to-H<sub>2</sub> Strategy*”, RESOLV Colloquium, Ruhr University Bochum, Germany
- ✚ 2023 Y. Hoshimoto, “*Exploring Novel Strategies for Harnessing ‘Molecular Frustration’ in Main-Group-Catalyzed Organic Synthesis*”, ACS Science Talk, Webinar.
- ✚ 2023 Y. Hoshimoto, “*A New Strategy for Gas Purification using Ni/PoxIm Complexes or Frustrated Lewis Pairs*”, Asian International Symposium, The 103rd CSJ Annual Meeting, Japan.
- ✚ 2022 Y. Hoshimoto, “*Main-group Catalysis for H<sub>2</sub> Purification Based on Liquid Organic Hydrogen Carriers*”, 11<sup>th</sup> Singapore International Chemistry Conference (SICC-11), Singapore.
- ✚ 2021 Y. Hoshimoto, “*PoxIm: Multifunctional Multipurpose Carbenes*”, MPC Webinar, CDRI Lucknow, India (On-line webinar).
- ✚ 2018 Y. Hoshimoto, “*Multifunctional Multipurpose Carbenes*”, *Workshop of Hybrid Catalysis for Enabling Molecular Synthesis on Demand*, Shiga, Japan.
- ✚ 2017 Y. Hoshimoto, “*Multifunctional Multipurpose Carbenes*”, *ITbM/IGER Chemistry Workshop 2017*, Nagoya, Japan.
- ✚ 2017 Y. Hoshimoto, “*A Frustration Revival System: Concept Development*”, International Symposium on Pure & Applied Chemistry (ISPAC) 2017, Ho Chi Minh City, Vietnam.
- ✚ 2017 Y. Hoshimoto, “*A Frustration Revival System*”, 398th Institute for Catalysis (ICAT) Colloquium, Sapporo, Japan.
- ✚ 2016 Y. Hoshimoto, “*Frustration Revival System: Concept and Utilization*”, The 9th Symposium on Organocatalyst, Nagoya, Japan.
- ✚ 2016 Y. Hoshimoto, “*Synthesis and Utilization of Stimuli-Responsive Complexes*”, The 1st Workshop for Young Organic Chemists, Kyoto, Japan.
- ✚ 2014 Y. Hoshimoto, “*Practical Synthesis of (η<sup>6</sup>-Arene)Ni(NHC) Complexes and Their Application for Organonickel Chemistry*”, ICOMC 2014 Post-Symposium in Osaka, Osaka, Japan.