Curriculum Vitae

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Dr. Mingoo Jin

Specially Appointed Assistant Professor
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Introduction

Mingoo Jin is an Assistant Professor at Hokkaido University. He got a Ph.D. under supervising from Professor Hajime Ito from Hokkaido University. His Ph.D. research subject was “Development of Novel Luminescent Crystalline Materials of Gold(I) Complexes with Stimuli-Responsive Properties”. After his graduation, He joined as postdoctoral researcher in Professor Miguel A. Garcia-Garibay Laboratory, University of California Los Angeles, and investigated luminescent functional materials based on amphidynamic crystals. Recently, His research has been focused on developing a novel platform toward crystalline molecular rotors with photo-functions. His research interests are Organometallic Chemistry, Coordination Chemistry, Polymer Chemistry, Computational Chemistry and Luminescent Solid-State Materials.

Professional Experiences

1. *09/2016 – 12/2016:*

Visiting Graduate Researcher: Professor Miguel A. Garcia-Garibay Lab.
Department of Chemistry & Biochemistry, University of California Los Angeles, Los Angeles, USA.

2. *04/2017 – 03/2019:*

Research Fellow for Young Scientists of JSPS.

3. *01/2018 – 07/2018:*

Visiting Graduate Researcher: Professor Miguel A. Garcia-Garibay Lab.
Department of Chemistry & Biochemistry, University of California Los Angeles, Los Angeles, USA.

4. *11/2018 – 03/2019:*

JSPS Postdoctoral Researcher Fellow

Supervisor: Professor Miguel A. Garcia-Garibay

Laboratory

Department of Chemistry & Biochemistry, University of California Los Angeles

Education

04/2010 – 03/2014:

Bachelor of Engineering

Division of Applied Chemistry, Hokkaido University, Sapporo, Japan

04/2014 – 03/2016:

Master course of Chemical Sciences and Engineering

Organoelement Chemistry Laboratory (Professor

Hajime Ito)

Graduate School of Chemical Sciences and Engineering, Hokkaido University

04/2016 – 09/2018:

Ph.D program of Chemical Sciences and Engineering

Organoelement Chemistry Laboratory (Professor

Hajime Ito)

Graduate School of Chemical Sciences and Engineering, Hokkaido University

04/2016 – 09/2018:

Ph.D program of Chemical Sciences and Engineering

Organoelement Chemistry Laboratory (Professor

Hajime Ito)

Graduate School of Chemical Sciences and Engineering, Hokkaido University

Publications

[9] Anisotropic Thermal Expansion as the Source of Macroscopic and Molecular Scale Motion in Phosphorescent Amphidynamic Crystals.

Jin, M.; Yamamoto, S.; Seki, T.; Ito, H.; Garcia-Garibay, M.A. *Angew. Chem. Int. Ed.,* **2019***, 58,* 18003–18010.

[8] Mechanical-Stimulation-Triggered and Solvent-Vapor-Induced Reverse Single-Crystal-to-Single-Crystal Phase Transitions with Alterations of the Luminescence Color

Jin, M.; Sumitani, T.; Sato, H.; Seki, T.; Ito, H. *J. Am. Chem. Soc.* **2018**, *140*, 2875–2879.

[7] Phosphorescence Control Mediated by Molecular Rotation and Aurophilic Interactions in Amphidynamic Crystals of 1,4-Bis[tri-(*p*-fluorophenyl)phosphane-gold(I)-ethynyl]benzene **Jin, M.**; Chung, T. J.; Seki, T.; Ito, H.; Garcia-Garibay, M. A. *J. Am. Chem. Soc.* **2017**, *139,* 18115–18121.

[6] Mechano-Responsive Luminescence via Crystal-to-Crystal Phase Transitions between Chiral and Non-Chiral Space Groups

Jin, M.; Seki, T.; Ito, H. *J. Am. Chem. Soc.* **2017**, *139*, 7452–7455.

[5] Luminescent mechanochromism of a chiral complex: Distinct crystal structure and color changes of racemic and homochiral gold(I) isocyanide complexes with a binaphthyl moiety **Jin, M.**; Seki, T.; Ito, H. *Chem. Commun.* **2016**, *52*, 8083–8086.

[4] Copper(I)-Catalyzed Enantioselective Nucleophilic Borylation of Ketones: Synthesis of Enantioenriched Chiral Tertiary alpha-Hydroxyboronates

Kubota, K.; Osaki, S.; **Jin, M.**; Ito, H. *Angew. Chem. Int. Ed.* **2017**, *56*, 6646–6650.

[3] Introduction of a Biphenyl Moiety for a Solvent Responsive Aryl Gold(I) Isocyanide Complex with Mechanical Reactivation

Seki, T.; **Jin, M.**; Ito, H. *Inorg. Chem.* **2016**, *55*, 12309–12320.

[2] Computational Insight into the Enantioselective Nucleophilic Borylation of a Polarized C=O Double Bond Catalyzed by Di-phosphine-Borylcopper(I) Complexes

Kubota, K.; **Jin, M.**; Ito, H. *Organometallics* **2016**, 35, 1376–1383.

[1] Synthesis of water-soluble polyisocyanates with the oligo(ethylene glycol) side-chain as new thermoresponsive polymers

Sakai, N.; **Jin, M.**; Sato, S.; Satoh, T.; Kakuchi, T. *Polym. Chem.* **2014**, *5*, 1057 - 1062.

Scholarships / Academic and Research Awards

1. *Government Scholarship* for Science and Engineering (Japan and South Korea) 09/2009 – 03/2014
2. *Government Scholarship*: Hokkaido University Ambitious Leader's Program (Japan)
3. *Best Poster Presentation Award*, Hokkaido University-University of California, Berkeley Joint Symposium on Chemical Sciences and Engineering, 2016
4. *Best Oral Presentation Award*, National Taiwan University-Hokkaido

University Joint Materials Science Workshop, 2015

5. *Best Poster Presentation Award*, 5th Chemistry Festa of Chemical Society of Japan (CSJ), 2015
6. *Best Oral Presentation Award,* CSJ Annual Meeting 2017 (presented in English)
7. *Best Oral Presentation Award*, Annual Meeting on Photochemistry 2017 (presented in English)
8. *Student Lectureship Award*, Annual Meeting on Japan Society of Coordination Chemistry 2017 (presented in English)
9. *Research Fellowships for Young Scientists,* Japan Society for the Promotion of Science (JSPS research fellow), 2017.4–2018.9.
10. *Postdoctoral Research Fellow,* Japan Society for the Promotion of Science (JSPS), 2018.10–2019.3
11. *Inoue Research Award for Young Scientists,* Inoue Foundation for Science, 2019. 12. 12

References

1. Professor Miguel A. Garcia-Garibay — University of California Los Angeles
   email: mgg@chem.ucla.edu — Tel: +1 (310) 825 3159

2. Professor Hajime Ito — Hokkaido University, Japan
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