Curriculum Vitae

HYUNWOO KIM

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PROFESSIONAL POSITION

Associate Professor, Pohang University of Science and Technology (POSTECH)
Dept. of Chemistry
2025-present

Assistant Professor, Pohang University of Science and Technology (POSTECH)
Dept. of Chemistry
2022-2025

Assistant Professor, Ewha Womans University
Dept. of Chemistry and Nanoscience
2020-2022

Postdoctoral Associate, Cornell University, 2019–2020
Postdoctoral Advisors: Profs. Song Lin & Tristan H. Lambert

EDUCATION

Korea Advanced Institute of Science and Technology (KAIST), Daejeon
Ph.D. in Organic Chemistry (Organometallic Catalysis) 2013–2018
Advisor: Prof. Sukbok Chang

Korea Advanced Institute of Science and Technology (KAIST), Daejeon
B.S. in Chemistry 2009–2013

AWARDS & HONORS

The Distinguished Lectureship Award for Work on Electrochemistry, The Chemical Society of Japan (CSJ), 2025
Asian Core Program (ACP) on Cutting-Edge Organic Chemistry Lectureship Award, 2024
Samsung Science & Technology Foundation Awardee in Chemistry, 2024
Thieme Chemistry Journals Award, 2024
Asian Core Program (ACP) on Cutting-Edge Organic Chemistry Lectureship Award, 2023
The 6th Toray Research Grant for Young Investigator, 2023
The 13th POSCO Science Fellowship, 2022
Excellent Thesis Award, KAIST, 2018

EDITORIAL BOARD MEMBER OF JOURNAL

Green Synthesis and Catalysis, 2020/10-present
Early Career Advisory Board, Science of Synthesis, Thieme, 2025-2027

SELECTED REPRESENTATIVE PUBLICATIONS

13) Choi, A.; Kim, D.; Yim, D.; Park, J.; Sharma, A.;* Kim, W.;* Kim, H.;* and Kim, H.* Photon-Primed Organic Electrosynthesis Enabled by Oxidation of Photon-Induced Intermediates. *J. Am. Chem. Soc.* **2025**, *147*, 30897–30906.

12) Kim, S.; Kim, H.* Electrochemical Access to Difluoromethyl Groups: An Overview of Scope, Mechanisms and Challenges. *ACS Catal.* **2025**, *15*, 6826-6851.

11) Park, S.; Yang, B.; Lee, D.; Kim, H.*; Shim, K.* Pd-Electrocatalytic Remote Hydrofunctionalization of Alkenes with Nucleophiles. *ACS Catal.* **2024**, *14*, 14858-14868.

10) Won, S.; Park, D.; Jung, Y.*; Kim, H.*; Chung, T. D.* Photoelectrocatalytic System as a Reaction Platform for a Selective Radical–Radical Coupling. *Chem. Sci.* **2024**, *15*, 16705-16714

9) Kim, S.; Kim, H.* Cu-Electrocatalysis Enables Vicinal Bis(difluoromethylation) of Alkenes: Unraveling Dichotomous Role of $Zn(CF_2H)_2(DMPU)_2$ as Both Radical and Anion Source. *J. Am. Chem. Soc.* **2024**, *146*, 22498-22508.

8) Sharma, A.; Choi, A.; Yim, D.; Kim, H.*.; Kim, H.* Access to 4-Membered Heterocycles via Visible-Light Triggered Intramolecular Cyclization from Alkynes: Bypassing Unfavorable 4-endo-dig Cyclization. *Adv. Synth. Catal.* **2024**, *366*, 2257-2263.

7) Choi, A.; Kim, H.* Electrocatalytic Radical-Polar Crossover Hydrofunctionalization of Alkenes via Cobalt-Catalyzed Hydrogen Atom Transfer. *Curr. Opin. Elec.* **2024**, *44*, 101449.

6) Kwak, D.; Jung, S.; Ha, H.; Han, T.; Ryu, D. H.; Kim, H.*; Kwak, J.* Electroreductive Access to 1,2-Aminoalcohols via Cross Aza-Pinacol Coupling of N-Acyl Diarylketimines and Aldehydes. *Org. Lett.* **2024**, *26*, 2733-2738.

5) Park, S. H.; Bae, G.; Choi, A.; Shin, S.; Shin, K.*; Choi, C. H.*; Kim, H.* Electrocatalytic Access to Azetidines via Intramolecular Allylic Hydroamination: Scrutinizing Key Oxidation Steps through Electrochemical Kinetic Analysis. *J. Am. Chem. Soc.* **2023**, *145*, 15360–15369.

4) Mandal, A.; Jang, J.; Yang, B.; Kim, H.*; Shin, K.* PdH-Catalyzed Electrooxidative Hydrofluorination of Aryl-Substituted Alkenes with Nucleophilic Fluorine Source. *Org. Lett.* **2023**, *25*, 195-199.

3) Park, S. H.; Jang, J.; Shin, K.*; Kim, H.* Electrocatalytic Radical-Polar Crossover Hydroetherification of Alkenes with Phenols. *ACS Catal.* **2022**, *12*, 10572-10580.

2) Kim, S.; Hwang, K. H.; Park, H. G.; Kwak, J.*; Lee, H.*; Kim, H.* Radical Hydrodifluoromethylation of Unsaturated C–C Bonds via an Electroreductively Triggered Two-pronged Approach. *Communications Chemistry* **2022**, *5*, 96

1) Chung, D. S.;† Park, S. H.;† Lee, S.-g.;* Kim, H.* Electrochemically Driven Stereoselective Approach to *syn*-1,2-Diol Derivatives from Vinylarenes and DMF. *Chem. Sci.* **2021**. *12*, 5892-5897.