

Zhongxing Huang

Department of Chemistry
University of Hong Kong
huangzx@hku.hk
(852) 5108-3085

Positions

2025-current **Associate Professor, University of Hong Kong**
2019-2025 **Assistant Professor, University of Hong Kong**
2017-2019 **Postdoctoral Fellow, Stanford University**
Advisor: Professor Barry M. Trost

Education

2012-2017 **Ph.D. in Chemistry, University of Chicago**
Advisor: Professor Guangbin Dong
2008-2012 **B.S. in Chemistry, Peking University**
Advisor: Professor Jianbo Wang and Professor Yan Zhang

Awards and Honors

1. Outstanding Young Researcher Award (HKU, 2024)
2. Chinese Chemical Society Prize for Young Scientists (2023, 中国化学会青年化学奖)
3. National Science Fund for Excellent Young Scholars (2023, 国家自然科学基金委优秀青年科学基金项目, 港澳)
4. Thieme Chemistry Journals Award (2023)
5. Research Output Prize (HKU, 2022)
6. Asian Core Program Lectureship Award (to Korea and Taiwan, 2022)
7. Chinese Government Award for Outstanding Self-Financed Students Abroad (2015, 国家优秀自费留学生奖学金)
8. International Precious Metals Institute (IPMI) Elemental graduate student award (2015)
9. BaoSteel Scholarship, Peking University (2010)

Research Grants

1. Research Grants Council of Hong Kong, Early Career Scheme, HK\$ 721,303 (2021, principal investigator)
2. Research Grants Council of Hong Kong, General Research Fund, HK\$ 843,379 (2023, principal investigator)
3. Research Grants Council of Hong Kong, Collaborative Research Fund, HK\$ 4,024,624 (2024, project coordinator)
4. National Natural Science Foundation of China, Excellent Young Scholars, RMB¥ 2,000,000 (2023, principal investigator)
5. National Natural Science Foundation of China, General Program, RMB¥ 600,000 (2021, principal investigator)

Publications

Independent research (selected publication):

1. Zhang, M.; **Huang, Z.***, "Enantioconvergent Deacylative Functionalization towards α -Quaternary Nitriles", *Angew. Chem. Int. Ed.* **2025**, *64*, e202503149.
2. Zheng, Y.; Yang, T.; Chan, K. F.; Lin, Z.*; **Huang, Z.***, "Cobalt-Catalyzed Desymmetrization of Malononitriles via Enantioselective Borohydride Reduction", *Nat. Chem.* **2024**, *16*, 1845-1854.
3. Zheng, W.-F.; Chen, J.; Qi, X.*; **Huang, Z.***, "Modular and Diverse Synthesis of Amino Acids via Asymmetric Decarboxylative Protonation of Aminomalonic Acids", *Nat. Chem.* **2023**, *15*, 1672-1682.
 - Highlighted by X. Lin and A. G. Woldegiorgis in *Nat. Chem.* **2023**, *15*, 1655-1656, "An acid for an acid"
 - Highlighted by R. Xu and B. List in *Synfacts*, **2024**, *20*, 0190.
4. Liu, H.; Lau, H. M.; Xu, P.; Chan, T. H.; **Huang, Z.***, "Modular and Diverse Synthesis of α -Tertiary Amines and Tertiary Alcohols via Desymmetric Reduction of Malonic Esters", *Nat. Commun.* **2022**, *13*, 4759.

- Highlighted by H. Yamamoto and T. Hattori in *Synfacts*, **2022**, 18, 1384.
5. Xu, P.; Shen, C.; Xu, A.; Low, K.-H.; **Huang, Z.***, "Desymmetric Cyanosilylation of Acyclic 1,3-Diketones", *Angew. Chem. Int. Ed.* **2022**, 61, e202208443.
 - Highlighted in Angewandte Chemie Author Profile, *Angew. Chem. Int. Ed.* **2022**, 61, e202212025.
 6. Xu, P.; Liu, S.; **Huang, Z.***, "Desymmetric Partial Reduction of Malonic Esters", *J. Am. Chem. Soc.* **2022**, 144, 6918-6927.
 - Selected by ACS Editors' Choice.
 - Highlighted by S. Chakrabarty in JACS Spotlights, **2022**, 144, 6623-6624.
 7. Zheng, Y.; Zhang, S.; Low, K.-H.; Zi, W.; **Huang, Z.***, "A Unified and Desymmetric Approach to Chiral Tertiary Alkyl Halides", *J. Am. Chem. Soc.* **2022**, 144, 1951-1961.
 - Highlighted by M. Oestreich, H. F. T. Klare, and N. Kranidiotis-Hisatomi in *Synfacts*, **2022**, 18, 0518.
 8. Xu, P.; **Huang, Z.***, "Catalytic Reductive Desymmetrization of Malonic Esters", *Nat. Chem.* **2021**, 13, 634.
 - Highlighted by J. Gajewy and M. Kwit in *Nat. Chem.* **2021**, 13, 623-624, "The gains from breaking symmetry"
 - Highlighted by L. Boerner in *C&EN News*, "Reduction carves path to chiral compounds"
 - Highlighted by G. R. Stephenson in *Chemistry&Industry*.
 - Featured in *Organic Chemistry Portal*.

Patents

1. **Huang, Z.**; Zheng, W.-F., "Methods of Preparing Chiral Amino Acids", US Patent App 18/658,762
2. Dong, G.; **Huang, Z.**, "Direct β -Arylation of Carbonyl Compounds", US 20160229778 A1.

Invited lectures

The 18th National Conference on Homogeneous Catalysis, Sanya, China, Jun 26, 2025
 Frontier Symposium on Synthesis FSS 2025, HKUST, Hong Kong, China, Jun 12, 2025
 Chinese University of Hong Kong Shenzhen, Shenzhen, China, May 24, 2025
 South China University of Technology, Guangzhou, China, May 16, 2025
 Symposium on the Frontiers in Synthetic Chemistry, SFSC2025, CUHK, Hong Kong, China, Apr 19, 2025
 Zhangjiang Institute for Advanced Study, Shanghai Jiaotong University, Shanghai, Mar 03, 2025
 Hainan Organic Chemistry Outlooks, HOCO-2024, Haikou, China, Dec 20, 2024
 The 12th Singapore International Chemistry Conference (SICC-12), Singapore, Dec 9, 2024
 Shanghai Jiaotong University, Shanghai, China, Oct 15, 2024
 East China Normal University, Shanghai, China, Oct 14, 2024
 South China University of Technology, Guangzhou, China, Jun 17, 2024
 Chinese Chemical Society Meetings, Guangzhou, China, Jun 16, 2024
 Northwestern Polytechnical University, Xi'an, China, Jan 11, 2024
 Northwest University, Xi'an, China, Jan 10, 2024
 Xi'an Jiaotong University, Xi'an, China, Jan 9, 2024
 Southern University of Science and Technology, Shenzhen, China, Aug 30, 2023
 Zhejiang University, Hangzhou, China, Aug 24, 2023
 Westlake University, Hangzhou, China, Aug 23, 2023
 Wuhan University, Wuhan, China, Aug 20, 2023
 Central China Normal University, Wuhan, China, Aug 19, 2023
 Gwangju Institute of Science and Technology, Gwangju, Korea, Jun 15, 2023
 Sungkyunkwan University, Suwon, Korea, Jun 14, 2023
 Hanyang University, Seoul, Korea, Jun 13, 2023
 Nankai University, Tianjin, China, Apr 24, 2023
 Peking University, Beijing, China, Apr 21, 2023

Hong Kong Baptist University, Hong Kong, China, Mar 24, 2023

Hong Kong University of Science and Technology, Hong Kong, China, Jan 27, 2023

University of Melbourne, Melbourne, Australia, Nov 7, 2022.

15th International Conference on Cutting-Edge Organic Chemistry in Asia, Hong Kong, China, Jul 25, 2022