

Ching-Tien Chen



Assistant Professor

Department of Chemical Engineering, National Tsing Hua University
(NTHU)

No. 101, Sec. 2, Kuang-Fu Rd., East Dist., Hsinchu City, 300044, Taiwan

Tel: +886-3-5715131 ext. 33695

Email: ctchen2@mx.nthu.edu.tw

Webpage: <https://scholar.google.com/citations?user=Pcn8Wo8AAAAJ&hl=>

Education:

PhD (2017/9~2020/9) Chemical System Engineering, The University of Tokyo, Japan

M.S. (2013/9~2015/7) Chemical Engineering, National Taiwan University, Taiwan

B.S. (2009/9~2013/7) Chemical Engineering, National Taiwan University, Taiwan

Experience:

Postdoc (2023/7~2024/1) Chemical & Biomolecular Engineering, Georgia Institute of Technology, USA

Postdoc (2021/11~2023/6) Chemical & Biomolecular Engineering, University of Illinois Urbana-Champaign, USA

Postdoc (2021/4~2021/10) Chemistry, National Central University, Taiwan

Postdoc (2020/10~2021/3) Chemical System Engineering, The University of Tokyo, Japan

Selective Honors & Awards:

1. Early-Career Editorial Board of *Chemical Engineering Journal* (Nov./2025~now)

Research Areas:

1. Zeolite Synthesis and Crystallization Mechanisms
2. Upcycling of Plastic Waste

Selective Publications:

1. "Reactions of Surface Peroxides Contribute to Rates and Selectivities for C₂H₄ Epoxidation on Silver" *ACS Catal.*, 15 (2025), 1387-1398.
2. "Reductive amination of furfural and furfurylamine with methoxides and MIL-53-NH₂ (Al)-derived Ru catalyst", *J. Taiwan Inst. Chem. Eng.*, 158 (2024), 104884
3. "Reaction Kinetics-Regulated Formation of Short-Range Order in an Amorphous Matrix During Zeolite Crystallization", *J. Am. Chem. Soc.*, 143 (2021), 10986-10997.
4. "Understanding the Nucleation and Crystal Growth of Zeolites: A Case Study on the Crystallization of ZSM-5 from a Hydrogel System Under Ultrasonication." *J. Phys. Chem. C*, 124 (2020), 11516-11524.
5. "Zeolite Crystallization Triggered by Intermediate Stirring." *J. Phys. Chem. C*, 123 (2019),

20304-20313.