



Yu-Chuan Lin

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Education:

2003 – 2006 Ph. D. Kansas State University (Chemical Engineering)

2000 – 2002 M. S. National Cheng Kung University (Chemical Engineering)

1996 – 2000 B. S. National Cheng Kung University (Chemical Engineering)

Experience:

2022.08– present Professor, Dept. of Chem. Eng. National Cheng Kung University

2018.02– 2022.07 Associate Professor, Dept. of Chem. Eng. National Cheng Kung University

2014.08 – 2018.01 Assistant Professor, Dept. of Chem. Eng. National Cheng Kung University

2013.02 – 2014.07 Associate Professor, Dept. of Chem. Eng. Mater. Sci, Yuan Ze University

2009.08 – 2013.01 Assistant Professor, Dept. of Chem. Eng. Mater. Sci, Yuan Ze University

Honors & Awards:

World Top 2% Scientist (2020-2025)

Catalysis Society of Taiwan – Outstanding Paper Award 2019

Yuan Ze University – Young Scholar Award 2012

Research Areas:

Catalytic conversion of CO₂ and CH₄; Machine learning in catalyst design; Plasma catalysis

Selected Publications:

1. P.-T. Chou, C.-C. Kuo, P.-Y. Peng, Y.-R. Lu, C.-L. Chen, Y.-C. Lin,* Redox-driven exsolution and dissolution behavior of high-entropy spinel catalysts: A comparative study of MnFeCoNiCuO_x and MnCoNiCuZnO_x, *ACS Appl. Mater. Interfaces* 17 (2025) 52315-52324
2. Y.-C. Lin,* S. Rajagopal, P.-T. Chou, P.-Y. Peng, Y.-R. Lu, C.-L. Chen, M.-H. Tsai, C.-H. Wang, Crafting a methanation-resistant, reverse water–gas shift-active nickel catalyst with significant nanoparticle dimensions using the molten salt approach, *ACS Sustainable Chem. Eng.* 12 (2024) 14771-14783
3. C.-H. Chen, H.-K. Chen, W.-H. Huang, C.-L. Chen, K. Choojun, T. Sooknoi, H.-K. Tian,* Y.-C. Lin,** Reversal of methanation-oriented to RWGS-oriented Ni/SiO₂ catalyst by the exsolution of Ni²⁺ confined in silicalite-1, *Green Chem.* 2023, 25, 7582-7597.

