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Education

2009 – 2014 Ph. D. The Pennsylvania State University, University Park, PA, USA (Energy and Mineral Engineering)

2002 – 2004 M. S. National Taiwan University (Materials Science and Engineering)

1998 – 2002 B. S. National Taiwan University (Chemical Engineering)

Professional Career

2020.08 – Present Associate Professor, Dpt. Mat. Sci. & Eng., National Yang Ming Chiao Tung University, Taiwan

2017.02 – 2020.07 Assistant Professor, Dpt. Mat. Sci. & Eng., National Chiao Tung University, Taiwan

2015.08 – 2017.01 Assistant Professor, Dpt. Mat. Sci. & Eng., Feng Chia University, Taiwan

2014.12 – 2015.07 Postdoctoral Scholar, Energy Institute, The Pennsylvania State University, USA

Selected Publications

1. C.-Y. Hsu, *N. Kostoglou, C. Mitterer, C. Rebholz, C.-K. Chang, Y.-C. Chuang, ***C.-Y. Wang**, Enhanced dehydrogenation and regeneration behavior of $\text{LiBH}_4\text{-LiAlH}_4\text{-MgCl}_2$ in nanoporous carbons, *Int. J. Hydrogen Energy.*, 2025, 106, 712–722.
2. N.C. Cheng, Y.C. Wu, Y.-C. Chu, H.-Y. Hsu, W.-C. Chen, P.-H. Wang, T.-L. Chang, *J.-K. Chang, ***C.-Y. Wang**, Modulated MOF as a Modification Layer on Copper Foil for Lithium Dendrite Suppression, *J. Mater. Chem. A.*, 2024, 6, 4883–5230.
3. L.-X. Chang, P. Rajamanickam, L.-C. Hsu, C.-K. Chang, Y.-C. Chuang, J.-L. Chen, L.-C. Hsu, ***C.-Y. Wang**, Metal-organic framework-derived carbon-supported high-entropy alloy nanoparticles applied in ammonia borane hydrolytic dehydrogenation, *J. Catal.*, 2024, 437, 115663.
4. P.-H. Shen, H.-H. Yeh, E.-L. Chiu, ***C.-Y. Wang**, Ceria and nitrogen decorated Ca-BTC-derived carbon with residual CaO for CO_2 adsorption, *J. Environ. Chem. Eng.*, 2024, 12, 114928.
5. P.-H. Sung, C.-Y. Huang, C.-Y. Lin, P.-W. Chung, Y.-C. Chang, L.-C. Chen, H.-Y. Chen, *C.-N. Liao, E.-L. Chiu, ***C.-Y. Wang**, Photocatalytic CO_2 reduction for $\text{C}_2\text{-C}_3$ oxy-compounds on ZIF-67 derived carbon with TiO_2 , *J. CO2 Util.*, 2022, 58, 101920.
6. *N. Kostoglou, C.-W. Liao, ***C.-Y. Wang**, J.N. Kondo, C. Tampaxis, T. Steriotis, K. Giannakopoulos, A.G. Kontos, S. Hinder, M. Baker, E. Bousser, A. Matthews, C. Rebholz, C. Mitterer, Effect of Pt nanoparticle decoration on the H_2 storage performance of plasma-derived nanoporous graphene, *Carbon*, 2021, 171, 294–305.

Research Interests

1. Metal-Organic Frameworks (MOFs)
2. Hydrogen Storage
3. CO_2 Capture and Utilization

CV, Keynote Speaker, TICC2025

4. Heterogeneous Catalysis and Photocatalysis