Chao-Huang Chen

Manager
Advanced Catalysis Department,
Chemical Engineering Division,
Material and Chemical Research Laboratories,
Industrial Technology Research Institute
No. 321, Sec.2, Kluang Fu Rd.,
Hsinchu, 30044, Taiwan R.O.C.

Office: Bldg. 17, Room 310
Tel: +886-35732448
Email: chchen1031@itri.org.tw

Education:

Worcester Polytechnic Institute, Worcester, MA

Doctorate of Philosophy, Chemical Engineering, 2011

National Cheng Kung University, Tainan, Taiwan (N.C.K.U.)

Bachelor and Master of Science, Chemical Engineering, 2002

National Cheng Kung University, Tainan, Taiwan (N.C.K.U.)

Experience:

- Department manager, Advanced Catalysis Department, Chemical Engineering Division, Material and Chemical Research Laboratories, Industrial Technology Research Institute, HsinChu, Taiwan (R.O.C), 2022~
- Researcher, Material and Chemical Research Laboratories (MCL), Industrial Technology Research Institute (ITRI), HsinChu, Taiwan (R.O.C), 2012~ 2022

Selective Honors & Awards:

2025 MCL Invention Award, ITRI (CCU technology)

Research Areas:

Heterogeneous catalyst, hydrogenation, CO_2 utilization, methane reforming, inorganic membrane for H_2 separation

Selective Publications:

1. Chao-Huang Chen, His-Yen Hsu, Chiou-Hwang Lee, “Catalyst and method for hydrogenation of 4,4’-METHYLENEDIANILINE”, US patent US 9399615 B2, TW patent I534131.
2. Chao-Huang Chen et. al.,” Catalyst composition for hydrogenating 4,4’-METHYLENEDIANILINE derivatives and method for preparing 4,4’-METHYLENE BIS(CYCLOHEXYLAMINE) derivatives using the same”, US patent US 11964259 B2.
3. Ma, Yi Hua, Chen, Chao-Huang, Catalano, Jacopo, Guazzonea, Federico and Payzant, E. Andrew, "Synthesis, Annealing and Performances of Pd-Au Asymmetric Composite Membranes for Hydrogen Purification", I&EC Research (2013).
4. Chen, Chao-Huang, and Ma, Y. H., “The effect of H_2S on the performance of Pd and Pd/Au composite membrane”, Journal of Membrane Science, 362 (2010).