

## **Kui-Hao Chuang**

### **Education :**

Ph.D. (2011) Department of Environmental Engineering, National Chung Hsing University

B.S. (2006) Department of Safety, Health and Environmental Engineering, National United University

### **Career Experience :**

Assistant Professor, Department of Safety, Health, and Environmental Engineering, Central Taiwan University of Science and Technology

Postdoctoral Research Assistant, Department of Civil Engineering, The University of Hong Kong, HKSAR

Research Assistant, Department of Civil Engineering, The University of Hong Kong, HKSAR

Adjunct Research Assistant, Department of Environmental Engineering, National Chung Hsing University

### **Courses Taught :**

Air pollution control technology and design

Environmental catalytic technology

Air Pollution Control

General Chemistry

General Chemistry Laboratory

Advance Chemistry

Noise and Vibration

Hydrology

### **Professional Fields :**

Air Pollution Control

Fabrication and Characterization of Nanomaterial

### **Research Interests :**

Develop Nanomaterial and its Application in Environmental Engineering

Chemical looping

H<sub>2</sub> production

### **Representative Publication in 5 Years :**

Ren-Xuan Yang, *Kui-Hao Chuang*, and Ming-Yen Wey (2016). Carbon nanotube and hydrogen production from waste plastic gasification over Ni/Al-SBA-15 catalysts: effect of aluminum content. *RSC Advances*, 6, 40731-40740. MOST 103-2221-E-005-001-MY3.

(SCI)

Chien-Hsing Lu and *Kui-Hao Chuang*\* (2016). Effect of municipal solid waste incinerator types on characteristics of ashes from different air pollution control devices. *Environmental Technology*, 37(3), 399-406. (SCI)

Chien-Hsing Lu, Jyh-Cherng Chen, *Kui-Hao Chuang*, and Ming-Yen Wey (2015). The different properties of lightweight aggregates with the fly ashes of fluidized-bed and mechanical incinerators. *Construction and Building Materials*, 101, 380–388. (SCI)

Yang, Ren-Xuan, *Chuang, Kui-Hao*, and Wey, Ming-Yen (2015). Effects of nickel species on Ni/Al<sub>2</sub>O<sub>3</sub> catalysts in CNTs and hydrogen production by waste plastics gasification: Bench-scale and pilot-scale tests. *Energy & Fuels*, 29(12), 8178-8187. MOST 103-2221-E-005-001-MY3. (SCI)

Minhua Su, Changzhong Liao, *Kui-Hao Chuang*, Ming-Yen Wey, and Kaimin Shih (2015). Cadmium Stabilization Efficiency and Leachability by CdAl<sub>4</sub>O<sub>7</sub> Monoclinic Structure. *Environmental Science & Technology*, 49(24), 14452–14459. (SCI)

Ren-Xuan Yang, *Kui-Hao Chuang*, and Ming-Yen Wey (2014). Hydrogen production through methanol steam reforming: Effect of synthesis parameters on Ni–Cu/CaO–SiO<sub>2</sub> catalysts activity. *International Journal of Hydrogen Energy*, 39, 19494-19501. (SCI)

*Kui-Hao Chuang*, Kaimin Shih, Chi-Yuan Lu, and Ming-Yen Wey (2013). Copper catalysts prepared via microwave -heated polyol process for preferential oxidation of CO in H<sub>2</sub>-rich streams. *International Journal of Hydrogen Energy*, 38(1),100-108. NSC 98-2221-E-005-014-MY3. (SCI)

*Kui-Hao Chuang*, Kaimin Shih, and Ming-Yen Wey (2012). The influences of microwave irradiation and polyol precursor pH on Cu/AC catalyst and its CO oxidation performance. *Journal of Nanoparticle Research*, 14 , 1178-1184. (SCI). Bing-Shun Huang, Hsin-Yi Chen,

*Kui-Hao Chuang*, Ren-Xuan Yang, and Ming-Yen Wey (2012). Hydrogen production by biomass gasification in a fluidizedbed reactor promoted by an Fe/CaO catalyst. *International Journal of Hydrogen Energy*, 37 , 6511-6518. (SCI). NSC 98-2221-E-005-014-MY3.

*K.H. Chuang*, C.Y. Lu, M.Y. Wey (2011). Effects of microwave power and polyvinyl pyrrolidone on microwave polyol process of carbon-supported Cu catalysts for CO oxidation. *Materials Science and Engineering: B*, 176, 745-749. (SCI)

*K.H. Chuang*, Chi-Yuan Lu, Ming-Yen Wey, Ya-Ni Huang (2011). NO removal by activated carbon supported copper catalysts prepared by impregnation, polyol, and microwave heated polyol processes. *Applied Catalysis A: General*, 397, 234-240. (SCI)

**Telephone:** +886-4-22391647 ext. 6868

**mail:**khchuang@ctust.edu.tw