

CURRICULUM VITAE

Kevin Chia-Wen WU

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1. Personal information

Date of birth: 02-08-1976; Gender: Male

2. Education

2001-2005 Ph.D., Dept. of Mater. Sci. Eng., The University of Tokyo, Tokyo, Japan
1998-2000 M.S., Dept. of Agri. Chem., National Taiwan University, Taipei, Taiwan
1994-1998 B.S., Dept. of Agri. Chem., National Taiwan University, Taipei, Taiwan

3. Current position and relevant experience

2016-present Professor, Dept. of Chem. Eng., National Taiwan University
2010-present Joint Appointed Investigator, National Health Research Institutes, Taiwan
2012-2016 Associate Professor, Dept. of Chem. Eng., National Taiwan University
2013-2016 Vice chair, The Center of Strategic Materials Alliance for Research and Technology (SMART Center), National Taiwan University, Taipei, Taiwan
2008-2012 Assistant Professor, Dept. of Chem. Eng., National Taiwan University
2006-2008 Post-doc, Dept. of Chem., Iowa State Univ., Iowa, USA
2005-2006 Post-doc, Dept. of Applied Chem., Waseda Univ., Tokyo, Japan

4. Fields of specialty

Metal-Organic Frameworks; Mesoporous Materials; Membrane Separation; Solar Cells; Drug Delivery Systems; Biomass Conversion; Green Energy.

5. Major awards and honours

- 2014: The Distinguished Lectureship Award, The CSJ Asian International Symposium, Nagoya, Japan.
- 2015: Wu Da-Yu Award, Ministry of Science and Technology (MOST), Taiwan.
- 2012-present: Editorial Board, *Advanced Powder Technology* (Elsevier).
- 2015-present: Editorial Board, *Scientific Reports* (Nature Publishing Group).
- 2016: The Best Paper Award in the Catalysis Society of Taiwan.
- 2016: The SCEJ Award for Outstanding Asian Researcher and Engineer.
- 2017: Lai Zia-Te Award, Taiwan Institute of Chemical Engineers, Taiwan.
- 2017: Outstanding Young Chemist Award, Chemistry Society of Taiwan.
- 2017-present: Editorial Board, *Journal of the Taiwan Institute of Chemical Engineers* (Elsevier).
- 2018: Early Career Board Members, *ACS Sustainable Chemistry & Engineering* (ACS).
- 2018: Humboldt scholars, Research Fellowship for Experienced Researchers from Alexander von Humboldt Foundation, Germany, 2018-2020.
- 2018: Outstanding Research Award, Ministry of Science and Technology, Taiwan.

6. Research fields

6-1. Biomaterials for drug delivery systems: We are developing alginate-based core/shell nanocomposites consisting of inorganic materials such as CaP, Fe₃O₄, and Au as core and organic alginate as shell for various kinds of cancer therapy.

6-2. Lignocellulosic biomass conversion: We are developing microporous (MOFs) and mesoporous materials as effective solid catalysts for lignocellulosic conversion. We aim to convert lignocellulosic biomass into 5-hydroxymethylfurfural (HMF) because HMF has been regarded as the Top 10 useful platform for further conversion to other high-value chemicals (such as DMF and FDCA).

6-3 Membrane separation: We are working on the synthesis of MOFs-based membranes and mixed matrix membranes (MMMs) for pervaporation (PV). We have demonstrated a non-drying process to homogeneously load inorganic nanoporous nanoparticles into organic polymers, leading MMMs with excellent performance.

