CV of Professor Dennis Y. C. Leung

1. Academic Qualification

- PhD (University of Hong Kong, 1988)
- BSc (Eng) (University of Hong Kong 1982)

2. Positions Held（Chronological Order）

- Head, Department of Mechanical Engineering, The University of Hong Kong (HKU) (02/2020 - present)
- Associate Head, Department of Mechanical Engineering, The University of Hong Kong (HKU) (07/2018-01/2020)
- Professor, Department of Mechanical Engineering, HKU (2007-present)
- Associate Professor, Department of Mechanical Engineering, HKU (1997-2007)
- Lecturer/Assistant Professor, Department of Mechanical Engineering, HKU (1993-1997)
- Assistant Engineer/Engineer, Hongkong Electric Co., Ltd. (1988-1993)
- Croucher Fellow at Department of Mechanical Engineering, HKU (1987-1988)

3. Research Areas Related to Ocean Science, Technology and/or Policy

Research Area: Air pollution control and policy, photocatalysis for antifouling, marine power and micro-plastic removal system.

4. Funded Research Projects as Principal Investigator (PI), Co-PI or Co-Investigator (Co-I) over the Past 5 Years (Maximum 5 Projects):

Professor Leung has completed a number of externally funded research projects (total amount > HK$30 M) and trained 20 PhD, 7 MPhil students and 5 postdoctoral researchers. External funded projects:

Project title	**Funding source**	**Amount**
High-efficacy, Environmental- and Eco-friendly Nano-photocatalytic marine antifouling (2018-2020)	ITF (Co-PI)	HK$2.1M (allocated HK$600,000)
Integrated System of Advanced Thermal Nano Technologies for Energy Efficient Air Conditioning (2018-2020)	ITF (Co-PI)	HK$21.6M (allocated HK$3.12M)
Mechanistic study of the degradation of multiple indoor air pollutants through vacuum UV (2016-2019)	NSFC/RGC Research Scheme	HK$1.18M
Intensive treatment of petrochemical wastewater by photocatalytic technology	Sinopec Int.	US$350,000

(2013-2016)		
Demonstration of an efficient air pollutants scrubbing device for marine application (2012-2014)	ECF, HKSAR Government	HK$2M

5. Five Key Publications over the Past 5 Years （*Corresponding author）

- Zhao W., Feng Y., Huang H., Zhou P., Li J., Zhang L., Dai B., Xu J., Zhu F., Sheng N., Dennis Y.C. Leung*, "A novel Z-scheme Ag3VO4/BiVO4 heterojunction photocatalyst: Study on the excellent photocatalytic performance and photocatalytic mechanism" Applied Catalysis B:Envir. 245,448-458, 2019.
- Zhao W., Zhang J., Zhu F., Mu F., Zhang L., Dai B., Xu J., Zhu A., Sun C., Dennis Y.C. Leung* "Study the photocatalytic mechanism of the novel Ag/p-Ag2O/n-BiVO4 plasmonic photocatalyst for the simultaneous removal of BPA and chromium(VI)" Chemical Engineering Journal 361, 1352-1362, 2019.
- Lu, X., **Leung, D.Y.C.***, Wang, H.Z., Xuan, J. "A high performance dual electrolyte microfluidic reactor for the utilization of CO2" Applied Energy 194, 549-559, 2017
- Lu, X., Leung, D.Y.C.*, Wang, H.Z., Xuan, J. "Characterization of a Microfluidic Reactor for CO2 Conversion with Electrolyte Recycling" Renewable Energy 102, Part A, 15–20, 2017.
- Wang, Y.F., Leung, D.Y.C.*, Wang, H.Z., Xuan, J. "A vapor feed methanol microfluidic fuel cell with high fuel and energy efficiency" Applied Energy 147, 456-465, 2015.

6. Awards and Recognition

- Highly Cited Researcher in Engineering 2017, 2018 & 2019 (from Clarivate Analytics)
- Top 1% highly cited in energy area in 2010-2018 (from ISI Essential Science Indicators)
- Outstanding Research Student Supervisor Award, HKU (2017-2018)
- Gold Medal and Special Inventor Award for the invention of a Flexible paper-based Al-air battery, 3rd International Invention Innovation Competition in Canada, iCAN 2018.
- High Impact Icon, University of Malaya 2014 to 2015.
- Best Paper Award of the 2017 International Conference on Applied Energy for the paper "A counter-flow based dual-electrolyte protocol for multiple electrochemical applications".
- Best Paper Award of the 2010 International Conference of Mechanical Eng for the paper "Design Optimization of a Cost Effective Micro Wind Turbine" by International Association of Engineers.
- Outstanding Earth Champion Hong Kong Award conferred by the Earth Champions Foundation (2008).