



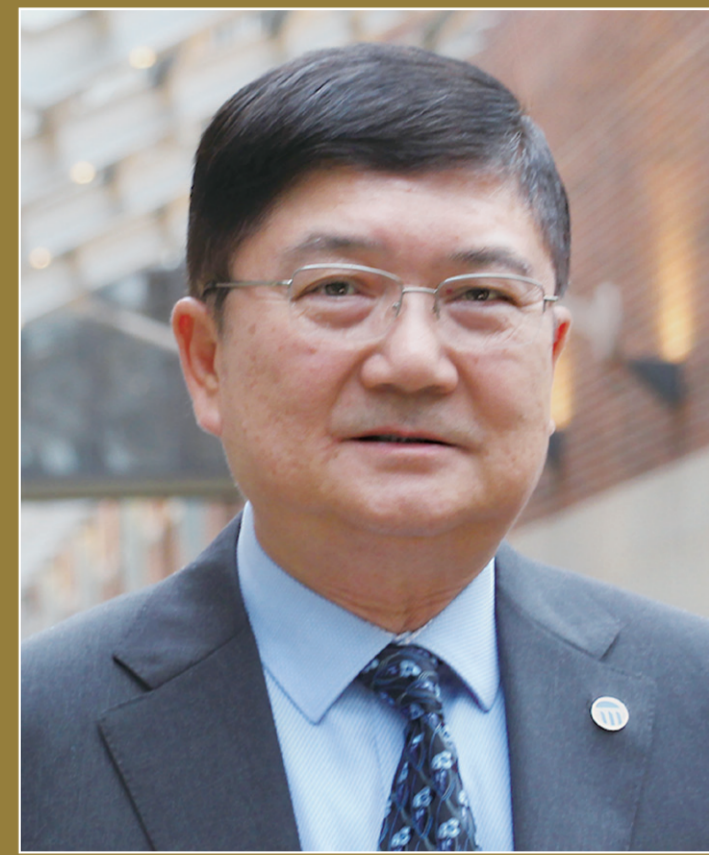
香港城市大學  
City University of Hong Kong

## City University Distinguished Lecture Series

Speaker

**Professor David Y. H. Pui**

*Member of U.S. National Academy of Engineering;  
Regents Professor and LM Fingerson/TSI Inc. Chair in  
Mechanical Engineering, University of Minnesota, U.S.A.*



## Green Technologies for Sustainable Environment

on  
Friday, 17 January 2020 at 4:30 pm

at  
Senate Room  
19/F Lau Ming Wai Academic Building  
City University of Hong Kong  
Tat Chee Avenue, Kowloon

### Abstract

We are developing green technologies that benefit sustainable environment, which will enable people and the environment to prosper together. The Particle Technology Laboratory (PTL) has developed many instruments and samplers to perform atmospheric measurements, which helped to establish the U.S. PM<sub>2.5</sub> standard. The major PM<sub>2.5</sub> sources in large urban cities have been identified to come from coal burning, vehicle emissions and steel/cement plants. Filtration is the principal means to control the PM<sub>2.5</sub> pollutants.

The Center for Filtration Research (CFR) at the University of Minnesota, collaborating with 20 leading international filtration companies, was established to find filtration solutions to mitigate PM<sub>2.5</sub> and other environmental pollutants. CFR investigators perform fundamental and applied research on air, gas and liquid filtration. A disruptive innovation, namely, the Solar-Assisted Large-Scale Cleaning System (SALSCS), is developed to mitigate PM<sub>2.5</sub> pollutants in urban air. The second generation SALSCS is developed to reduce not only the PM<sub>2.5</sub> but also CO<sub>2</sub> in the atmosphere.

An integrative and collaborative approach, among academia, governments, and industries, can effectively manage and create a sustainable global environment.

### Biography

Professor David Y. H. Pui is a Regents Professor and LM Fingerson/TSI Inc. Chair in Mechanical Engineering at the University of Minnesota. He is a Member of the U.S. National Academy of Engineering (NAE) and the Director of the world-renowned Particle Technology Laboratory at the University of Minnesota. He is also the Director of the Center for Filtration Research (CFR) consisting of 20 leading international filtration manufacturers and end users. Professor Pui has a broad range of research experience in aerosol and nanoparticle engineering and filtration technology and has over 300 journal papers and 40 patents. He has developed several widely used commercial aerosol instruments for PM<sub>2.5</sub> measurements. His recent interest involves developing green technologies for mitigating vehicle emissions, and for urban air cleaning using the Solar Assisted Large Scale Cleaning System (SALSCS). Professor Pui has received many awards, including the Max Planck Research Award (1993), the Humboldt Research Award for Senior U.S. Scientists (2000), the Fuchs Memorial Award (2010) — the highest disciplinary award conferred jointly by the American, German and Japanese Aerosol Associations. He served as President of the American Association for Aerosol Research (2000–2001), and President of the International Aerosol Research Assembly (2006–2010) consisting of 16 member associations from around the world.

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<https://www.cityu.edu.hk/vprt/dls-registration>

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Distinguished Lecture Series