THE HONG KONG POLYTECHNIC UNIVERSITY
香港理工大學

DEPARTMENT OF CIVIL AND ENVIRONMENTAL ENGINEERING
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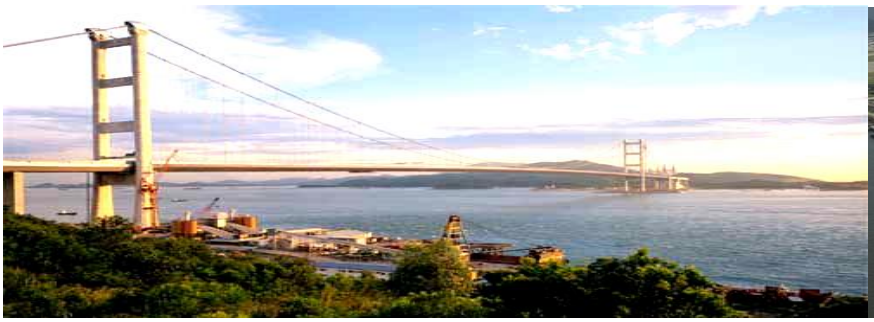

Roles of halogen radicals in the abatement of micropollutants in water treatment

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Date: **23 January 2019 (Wednesday)**

Time: **11:00 a.m. – 12:00 noon**

Venue: **Z407, Block Z,**
The Hong Kong Polytechnic University,
181 Chatham Road South,
Hunghom, Kowloon, Hong Kong

ABSTRACT

The increasing worldwide contamination of freshwater systems with thousands of micropollutants is one of the key environmental problems. Advanced oxidation processes are widely used in water treatment for the abatement of micropollutants via the generation of radicals, such as hydroxyl radical (HO•). The UV/chlorine process is an emerging AOP via producing HO• and reactive chlorine species (RCS) such as Cl•, $Cl_2^{\bullet-}$ and ClO•. HO• is a broad-spectrum strong oxidant, while RCS are selective. The presentation will include data of three aspects: (1) identification of RCS roles on micropollutant abatement by kinetic modeling and experimental methods; (2) kinetics and mechanisms of micropollutant transformation by RCS; (3) effects of water matrices on RCS chemistry and the application potential of the UV/chlorine process in real water treatment.

SPEAKER'S BIOGRAPHY

Dr. Jingyun Fang is an associate professor at Sun Yat-Sen University. She received her bachelor and doctoral degrees from Harbin Institute of Technology in 2003 and 2010, respectively. Then she worked as a postdoctoral researcher at the Hong Kong University of Science and Technology from 2010 to 2012. Dr. Fang's research focuses on fundamentals and application of advanced oxidation technology for water pollution control. Recent projects have investigated roles of halogen radicals on the abatement of micropollutants by typical advanced oxidation processes. She has published more than 40 papers, mostly in Environmental Science & Technology and Water Research. She was selected as the "Guangdong Special Project" technology innovation young talent, and served as a guest editor for Journal of Hazardous Materials and Separation and Purification Technology.

***** All Interested Are Welcome *****
For further information, please contact Prof. X.D. Li at Tel. 2766-6041 or xiang-dong.li@polyu.edu.hk.
Certificates of attendance will be provided to participants if they attend the whole lecture.