



Iron-based Technologies for Soil Remediation and Waste Treatment

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ABSTRACT

Iron is the fourth most abundant element in the Earth's crust, and plays a major role in the environmental cycling reactions of organic or inorganic contaminants. Consequently, iron-based environmental clean-up technologies have been proposed. In this seminar, some case studies (lab-scale experiments and field-scale applications) for iron-based technologies on the soil remediation, and solid-waste and wastewater treatment with or without energy enhancement will be presented. We will show that zero-valent iron, ferrous ions and iron-based composites could be used as reductants, adsorbents, Fenton-like catalysts, and even microwave absorbents to enhance reactions (degradation of organic pollutants, stabilization of heavy metals, and production of biochars), and the environmental sample matrix could affect their performances.

Date: 9 January 2018 (Tuesday)

Time: 16:00 – 17:00

Venue: Room Z406, 4/F, Block Z,
The Hong Kong Polytechnic University,
181 Chatham Road South,
Hung Hom, Kowloon

SPEAKER'S BIOGRAPHY

Dr. Linling Wang is an Associate Professor and the Principal Investigator of the Environmental Science Research Institute within the School of Environmental Science and Engineering at the Huazhong University of Science and Technology in China. Currently, she is also a fellow of the Ecological Society of China, and the Hubei Provincial Chemistry and Chemical Engineering Society.

Dr. Wang has experiences on environmental analysis, soil remediation, organic waste gas recycling, and waste and wastewater treatment. Her current research focusing on developing novel iron-based technologies for the remediation of contaminated soil, and the treatment of solid waste and wastewater with or without energy enhancement. In 2016, her research group was awarded the First Prize in Natural Science by Ministry of Education in recognition of the most meritorious contribution to waste treatment and soil remediation science, and the First Prize in Science and Technology Advancement Award by Hubei Province government of China for developing novel technologies and products of pollutants detection and risk assessment.

*** All Interested Are Welcome ***

For further information, please contact Dr. Dan Tsang at Tel. 2766-6072.

Free Admission. Certificates of attendance will be provided to participants if they attend the whole lecture.