



# Environmental Engineering and Management Asian Institute of Technology

Dear Faculty, Students and Staffs,

You are cordially invited to a special lecture on “Water Environmental Engineering in China: Creative Innovation toward the Future” by Professor Xiaochang Wang, School of Environmental & Municipal Engineering, Xi'an University of Architecture & Technology, Xi'an, China. It will be held as follow:



Date: Thursday, 17 March 2016

Time: 11.00-11.45 hrs.

Room: E222, Academic Building

## Abstract

China has been undergone fast economic growth since later 1970s. This is accompanied by rapid urbanization, growing demand for natural resources, and inevitably increasing pollutant loading to the environment. In the field of water environmental engineering, China is facing three problems to cope with: pollution control and quality improvement of water bodies, safety drinking water supply, and upgrading of wastewater treatment facilities. In accordance with the requirements, stringent regulation and standards were put forward at the turn of the century regarding environmental water quality, drinking water quality, and treated effluent discharge. Toward the achievement of these goals, in addition to an increasing investment on infrastructure construction for water pollution control, a major science and technology program (MSTP) has been implemented since 2008 for water pollution and treatment. As one of the 16 MSTPs set up by the central government according to the "National Medium and Long-term Science and Technology Development Plan (2006-2020)", this MSTP aims at providing strong scientific and technological support for water pollution control and treatment all over the country to firstly achieve the target of 10% reduction of the total pollutant loading during the “11th Five Year” period (2006-2010) and then to realize sustainable management and continuous improvement of water environment in China. Creative innovation is the fundamental policy for this MSTP, which stresses the innovations in theories, systems, mechanisms, and integrations. Aiming at bottleneck problems, the study area has been mainly set in the watersheds of four rivers (Huai, Hai, Liao, and Songhua Rivers), three lakes (Tai, Dianchi, and Cao Lakes) and one reservoir (the Three Gorge). There are a number of major research themes, including industrial pollution control, non-point source control and management, quality improvement and ecological restoration of water bodies, urban water pollution control and treatment, safety drinking water supply, water environmental monitoring and warning, and water environmental policy and governance. The research outcomes should be demonstrated through various pilot/demonstrative projects. The MSTP includes three phases which covers the 11th, 12th, and 13th Five Year periods and with objectives of technological innovation for pollution control and source reduction, burden reduction and restoration, and comprehensive regulation and control. The total R/D budget for the MSTP will amount to over 30 billion RMB – the largest national R/D project so far implemented. In this keynote presentation, the major outcomes and achievements of the MSTP in the first phase will be introduced and along with future perspectives.

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All interested are welcome to this special lecture. EEM students are expected to attend.