

The International Conference on the Evolution of China Urban Water Environment & Ecology, 2019

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Over the last 40 years, China has gone through the largest scale urbanization and industrialization all over the world. After the stages of development oriented (1978–1999), integral utilization (1999–2012) and protection restoration (2012–2018), China is aiming to achieve overall improvements of water environment by 2050 which covering the whole progresses from eco-destruction to eco-civilization. With the extremely limited water resources, we have obtained the unprecedented achievements, especially considering the largest scale of water infrastructure and water industry and the fastest development speed. There is no doubt that such successful experiences are valuable to be shared with the whole world.

To explore and looking forward to the present situation, problems and future of water environment and ecology in China, and discuss the strategies and road map for constructing green urban water system, the 1st International Conference on the Evolution of China Urban Water Environment and Ecology was organized by the Water Environment and Ecology Council of Chinese Society for Urban Studies (CSUS). Under the theme of future sustainable and green urban water environment and ecology, and the core guidelines of systematically protection and treatment of urban water environment, the conference covered the following important topics, such as: 1) comprehensive environment governance and restoration of water ecology; 2) construction and safe operation of the future urban water infrastructure; 3) innovative technologies for water treatment, resource recovery and reuse; 4) environment management and risk control of urban water ecology; 5) water management of industrial parks. During the conference, new concepts, thinking and models on water environment improvements and governances were discussed in depth. Through sharing the latest national and international developments in the related field, several constructive and practical viewpoints and suggestions were proposed.

This special issue contains 14 papers that were delivered at the conference held in Chengdu from 15th to 16th July 2019. It provided multidimensional views of exchanged achievements in the fields of advanced water treatment, emerging contaminant removal, integrated environmental medium, water purification system, resource recovery and utilization. Half of these papers focused on the latest progresses in the new methods, new materials and innovative technologies for water treatment. These achievements represented not only the fundamental thoughts of environmentalists on the problems of water environment and water ecology, but also their efforts for the construction of sustainable urban water system.

Thanks to the successful organization of the conference, we acknowledge all the sponsorship and financial support of the conference. We appreciate the efforts by all the organizers, and volunteers for the conference. For the special issue of FESE, we give our thanks to the authors, editors and the assistance from the Editorial Office of FESE. In particular, we appreciate the support of Professor Xia Huang, Executive Associate Editor-in-Chief of FESE, for agreeing to dedicate an issue to this conference. Also, we are grateful to Ms. Xiangyi Zhang in the Editorial Office for their kind help. We especially thank the Responsible Editors, Prof. Shubo Deng and Prof. Huijuan Liu, for their dedication to this special issue. We also wish to thank the reviewers for their precious time and efforts on the submitted paper to this special issue.

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