

China Launched the First Wastewater Resource Recovery Factory in Yixing

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On October 18th 2021, the inaugural ceremony for the first wastewater resource recovery factory (WRRF) in China, Yixing Concept WRRF (Fig. 1), was held in the Environmental Science Park, Yixing, Jiangsu Province (Li, 2021). It is a milestone for water pollution control, which opens a new chapter for sustainable wastewater management.

China has the world's largest and still growing wastewater sector, thus its progress and experience in technology and mode is very valuable to the rest of the world. Over last decades, the unique rapid development of China has forged its leading position in wastewater treatment capacity and technology innovation capability (Qu et al., 2019). In 2014, a few well-known Chinese environmental



Fig. 1 The aerial view of Yixing Concept Wastewater Resource Recovery Factory.

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experts led by Prof. Jiuhui Qu, member of Chinese Academy of Engineering, established the **Expert Committee of China Concept Plant for Wastewater Treatment**, and proposed the vision of “constructing future-oriented China Concept Plants for Wastewater Treatment” (Qu et al., 2014). After a few years’ systematic investigation and 18 months’ construction, this first wastewater resource recovery factory, Yixing Concept WRRF is officially in operation now.

Yixing Concept WRRF is an integral center for water purification, organic matter co-treatment, and production scale research and development. It is an ecological complex that overturned the appearance of traditional wastewater treatment plant, while transformed the pollution reduction plant into water, energy, and fertilizer factory. The launch of Yixing Concept WRRF will not only promote the new concept that “wastewater is resource, wastewater treatment plant is a resource factory”, but also redefine the relation

between city and wastewater treatment plant, which integrated ecology, life, and work in the newly created and public shared space in the coming years.

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