

Editorial: Sustainable wastewater treatment and resource recovery

In recent years, the wastewater treatment sector has been shifting from linear to circular economy fostering the development of innovative approaches for recovering resources from wastewater. As a matter of fact, there is a growing awareness that the recovery and utilization of those resources are essential for the establishment of a sustainable society. Furthermore, energy, nutrients (phosphorus and nitrogen), and organic materials (cellulose fibers, bioplastics and biopolymers) are increasingly being recovered and shifting wastewater treatment plants to water resource recovery facilities.

In this special issue of *Water Science and Technology*, entitled 'Sustainable wastewater treatment and resource recovery', authors were encouraged to submit their contributions related to one of the following topics:

- Nitrogen removal and recovery from main and solids treatment line
- Phosphorus removal and recovery
- Nutrient removal and recovery (NRR) technologies for low C/N wastewater
- Carbon management for nutrient removal and nutrient & energy recovery
- Modelling, optimization and control of NRR and full plant flowsheets especially considering different C/N/P ratios and inerts
- Energy saving and economic consideration of NRR processes
- Regulatory optimization/improvement for upgrade of NRR processes
- Nutrient polishing of secondary effluents and/or its interface with water reuse

This special issue also collects the best papers presented at the IWA International Conference 'Innovation Conference on Sustainable Wastewater Treatment and Resource Recovery' held in Shanghai, China, in November 2019.

In total, this special issue consists of 16 papers spanning all of the listed topics. The editors do hope that the issue will expand the knowledge and provide inspiration in the field of resource recovery from wastewater treatment to pin down new solutions and innovations.

It is our hope that a rapid transition will take place transforming 'Resource Recovery' from a concept to a standard practice.

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