

## Special Issue

# Water Management in Agriculture and Industry: Challenges, Trends and Opportunities

### Message from the Guest Editor

As freshwater is depleting at an alarming rate due to growing food demand, climate change, and intensive industrialization, more than 40% of the world's population is expected to live in severely arid regions by 2050. In this respect, the preservation of freshwater resources emerges as a critical challenge for both agriculture and industry. Drip irrigation and organic fertilizer use during farming, as well as water-efficient equipment and wastewater treatment in manufacturing, constitute diffused freshwater mitigation practices in line with circular economy. Agriculture and Industry 4.0 can offer revolutionary opportunities towards the digitalization of water management. Smart sensors for soil moisture measurement and precision agriculture techniques effectively support the control and reduction of freshwater use in farming activities. In addition, wireless sensor networks and data platforms allow for transparent water monitoring across the manufacturing chain. This Special Issue aims at exploring current challenges and trends, as well as opportunities for sustainability and innovation, in the fields of agricultural and industrial water management.

### Guest Editor

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### Deadline for manuscript submissions

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