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Understanding Soil Water Content for Irrigation Management

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Deadline for manuscript submissions:

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Message from the Guest Editors

As agriculture is the largest consumer of water, with approximately 70% of global withdrawals used for irrigation, the proper management of irrigation water is critical for ensuring global water and food security.

The knowledge of soil moisture and the understanding of soil moisture concepts and thresholds, which affect plant growth, chemical transport, soil temperature and groundwater recharge, are necessary to achieve effective irrigation management. Monitoring soil moisture by sensors and correctly interpreting the sensors measurements is one of the most promising methods in proper irrigation management.

This Special Issue aims in providing advances in the fields of soil moisture-based irrigation management, irrigation scheduling based on soil moisture monitoring sensors, irrigation scheduling based on soil moisture remote sensing, water use efficiency, soil water balance, soil water movement and drainage in irrigated agriculture, irrigation systems and one-, two- and three-dimensional soil water movement, soil water-plant relationships and the effect of irrigation method and scheduling on plant growth, management of irrigation water to address the soil salinity problem.



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Special Issue



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Message from the Editor-in-Chief

In the context of global changes, the sustainable management of water cycles, going from global and regional water cycles to urban, industrial and agricultural water cycles, plays a very important role on the water resources and on their relationships with food, energy, biodiversity, ecosystem functioning and human health. *Water* invites authors to provide innovative original full articles, critical reviews and timely short communications and to propose special issues devoted to new technological and scientific domains and to interdisciplinary approaches of the water cycles. We ensure a critical review process and a quick turnaround between submission and final decision.

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