







Special Issue Reprint

Advances in the Monitoring, Diagnosis, and Optimisation of Water Systems

www.mdpi.com/books/reprint/8338

Edited by Miquel À. Cugueró-Escofet Vicenç Puig

ISBN 978-3-0365-9594-8 (Hardback) ISBN 978-3-0365-9595-5 (PDF)



This Special Issue is committed to focusing on highly relevant state-of-the-art advances in the monitoring, diagnosis, and optimisation of water systems, aiming to provide a broad spectrum of reference methods and techniques specially focused on water cycle applications, including fault detection (namely, leak localisation to reduce the loss of water due to leaks, which may account for up to 65 % of the total water depending on the network) or water quality modelling in Water Distribution Networks (WDNs), as well as different methodologies applied to water sanitation. Here, there is growing interest in the adaptation and use of technologies related to the circular economy that promote environmental sustainability, in which resource recovery is a key issue for industrial and environmental processes and shows a wide spectrum of study possibilities, especially in wastewater treatment plants (WWTPs). This is mainly related to sludge treatment processes such as biogas generation via the substrate co-digestion process, which can be an alternative source for thermal and electrical energy production, as well as a source of renewable natural gas. Hence, all the contributions in this Special Issue have an impact on the advances in the monitoring, diagnosis and optimisation of water systems and, overall, cover a wide and complete sector of knowledge within this area.





MDPI Books offers quality open access book publishing to promote the exchange of ideas and knowledge in a globalized world. MDPI Books encompasses all the benefits of open access – high availability and visibility, as well as wide and rapid dissemination. With MDPI Books, you can complement the digital version of your work with a high quality printed counterpart.



Open Access

Your scholarly work is accessible worldwide without any restrictions. All authors retain the copyright for their work distributed under the terms of the Creative Commons Attribution License.



Author Focus

Authors and editors profit from MDPI's over two decades of experience in open access publishing, our customized personal support throughout the entire publication process, and competitive processing charges as well as unique contributor discounts on book purchases.



High Quality & Rapid Publication

MDPI ensures a thorough review for all published items and provides a fast publication procedure. State-of-the-art research and time-sensitive topics are released with a minimum amount of delay.



High Visibility

Due to our global network and well-known channel partners, we ensure maximum visibility and broad dissemination. Title information of books is sent to international indexing databases and archives, such as the Directory of Open Access Books (DOAB), and the Verzeichnis Lieferbarer Bücher (VLB).



Print on Demand and Multiple Formats

MDPI Books are available for purchase and to read online at any time. Our print-on-demand service offers a sustainable, cost-effective and fast way to publish MDPI Books printed versions.

MDPI AG St. Alban-Anlage 66 4052 Basel Switzerland Tel: +41 61 683 77 34 www.mdpi.com/books books@mdpi.com

