



*Special Issue Reprint*

## **Second Edition of Municipal Wastewater Treatment**

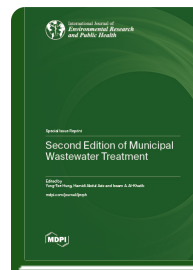
[www.mdpi.com/books/reprint/10682](http://www.mdpi.com/books/reprint/10682)

Edited by

Yung-Tse Hung

Hamidi Abdul Aziz

Issam A. Al-Khatib



ISBN 978-3-7258-3506-5 (Hardback)

ISBN 978-3-7258-3505-8 (PDF)

Water scarcity is a global issue. Municipal wastewater treatment aims to remove contaminants before releasing the effluent back into the environment. The treated effluent can be repurposed for water reuse and resource recovery initiatives. This reprint explores various aspects of wastewater treatment. Studies address the influence of salts on the photocatalytic degradation of formic acid, the impact of COD in toxic industrial wastewater on nitrification efficiency, and the efficiency of side stream nitrification in two-stage activated sludge plants. A risk analysis of heavy metals migration from sewage sludge and discussions on municipal wastewater connections related to water crises and jaundice outbreaks are included. Other studies evaluate magnetic nanomaterials, advanced oxidation technology in sludge conditioning and dewatering, and micro- and macro-elements in plants for landfill leachate treatment. Research also examines the effects of temperature shifts in anaerobic digestion, particle size, and zeta potential in treating highly colored landfill leachate; heavy metals in harvested rainwater for domestic use; treated wastewater irrigation on barley metabolism; chlorine and UV irradiation in wastewater treatment; 11 $\beta$ -TA synthesis from coal fly ash; Nephelium lappaceum seed as a coagulant; and shifts of multi-resistant pathogens in municipal wastewater treatment.



Order Your Print Copy

You can order print copies at

[www.mdpi.com/books/reprint/10682](http://www.mdpi.com/books/reprint/10682)

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.