

Water Conservation and Management (WCM)

HEAD OFFICE ADDRESS:

Zibeline International Publishing Sdn Bhd

C2-2-3, Block 2, CBD Perdana 3,
Persiaran Cyberpoint Timur,
Cyber 12, 63000 Cyberjaya,
Selangor.

Tel: +603-86879842

EDITORIAL STAFF:

Publishing Manager

Tasbia Ab Rajul

Publishing Editor

Nurul Afiqah Ab Manan

Publishing Editor

Rozalaidah Abdul Karim

Technical Editor

Nuraliah Natasha Amirrulhisam

Technical Editor

Muhd Aqil Zikry Mohd Nizam

Frequency:

Bi-annual (2 issue per year)

ISSN: 2523-5664 (Print)

ISSN: 2523-5672 (Online)

Price:

Single issue: 50 MYR

Price for abroad

Single issue: 25 USD

Web:

www.watconman.org

E-mail:

info@zibelinepub.com

Water Conservation and Management (WCM)

Contents

VOLUME 7, ISSUE 2, 2023		
No	Editorial	Pages
1	PHYTOREMEDIATION OF CADMIUM POLLUTANTS IN WASTEWATER BY USING CERATOPHYLLUM DEMERSUM L. AS AN AQUATIC MACROPHYTES	83-88
2	EXPLORING THE EMPIRICAL EFFICACY OF PREPAID WATER METERS IN A FAILED STATE, A CASE OF HARARE IN ZIMBABWE	89-96
3	ENHANCING WATER SUSTAINABILITY INDEX ASSESSMENT THROUGH RISK MANAGEMENT, IOT, AND ARTIFICIAL INTELLIGENCE IN WATER OPERATION: A REVIEW	97-106
4	A LONG-TERM ESTIMATION AND MODELING OF DOMESTIC WATER RESOURCES IN THE YARMOUK RIVER BASIN-JORDAN	107-113
5	WATER LOSS PREDICTION MODEL FOR PIPE LEAKS IN WATER DISTRIBUTION NETWORKS LAID ON SLOPING TERRAINS	128-136
6	STUDY OF THE PROCESS OF CLEANING WATER-CONTAINING IRON SOLUTIONS USING OZONE TECHNOLOGY	137-146

Water Conservation and Management (WCM)

Editorial

Although the earth is rich in water, only one percent is liquid fresh water, the form we require for our highest priority needs. The demands on this liquid fresh water are growing, and many scientists feel that a future shortage of fresh water will be eminent. Water conservation and management emphasizes water quality protection, a growing area of employment and environmental concern. Water conservation and management encompasses the policies, strategies and activities made to manage water as a sustainable resource, to protect the water environment, and to meet current and future human demand. Population, household size, and growth and affluence all affect how much water is used. Factors such as climate change will increase pressures on natural water resources especially in industrial and agriculture.

Scientific Board

Editorial Team

Editor in Chief

Professor Dr Kamaruzzaman Yunus
Kulliyah of Science,
International Islamic University Malaysia,
Jalan Istana, Bandar Indra Mahkota, 25200
Kuantan, Pahang
Malaysia

Prof. Dr Ahmed Jalal Khan Chowdhury
Kulliyah of Science
International Islamic University Malaysia

Editorial Board

Xuan Phuong Nguyen
PATET Research Group, Ho Chi Minh City
University of Transport, Ho Chi Minh City, Vietnam

Yigezu Mekonnen Bayisa
Jimma Institute of Technology, Jimma University,
Jimma, Oromia, Ethiopia

Fekadu Fufa
Jimma Institute of Technology, Jimma University,
Jimma Oromia, Ethiopia.

Prof. Nandini Moondra
Assistant Professor, Civil Engineering Department,
Acropolis Institute of Technology and Research
(AITR), Indore

Dr. Johnson Cletus Ibuot
Department of Physics and Astronomy, University
of Nigeria, Nsukka

Le Huy Ba
Ho Chi Minh City University of Food Industry, 40
Le Trong Tan Str., Tay Thanh Ward., Tan Phu
District. Ho Chi Minh City, Viet Nam

Desalegn Abdissa Akuma
Jimma University/Jimma institute of Technology

Associate Editor

Engr. Saddam Hussain Wahla
Department of Irrigation and Drainage,
University of Agriculture Faisalabad, Pakistan,
Department of Agricultural and Biological
Engineering, University of Florida, USA

Editorial Board

Dr. Sudhir Kumar Singh
K. Banerjee Centre of
Atmospheric & Ocean Studies,
IIDS,
Nehru Science Centre,
University of Allahabad
Uttar Pradesh, India

Tafere Aga Bullo
Jimma University, Jimma
Institute of Technology, JIMMA,
OROMIYA, ETHIOPIAN

Associate Professor Dr Sarva
Mangala Praveena
Department of Environmental
& Occupational Health, Faculty
of Medicine and Health
Sciences, Universiti Putra
Malaysia 43400 UPM Serdang,
Selangor, Malaysia

Zulherry Isnain
Faculty of Science and Natural
Resources, University Malaysia
Sabah, Jalan UMS, 88400 Kota
Kinabalu, Sabah.

Aneeza Abdul Sattar
Mohalla Lahori Gate Rana
House Chiniot, Pakistan

Water Conservation and Management (WCM)

Dr Namrata Dharmendra Jariwala
Department of Civil Engineering, S V National
Institute Of Technology, Icchanath , Surat -395007,
Gujarat State (India)

Dr. Samuel Tennyson
Department of Zoology Madras Christian College
(Autonomous) Tambaram, Chennai 600 059 Tamil
Nadu, India

Bashir Brika
Libyan Advanced Center of Chemical Analysis,
Libyan Authority for Scientific Research

Dr. Mohd Syahmi Salleh
Kulliyyah of Science,
International Islamic University
Malaysia (IIUM), 25200
Kuantan, Pahang, Malaysia

Mobin Rahimi Golkhandan
Ferdowsi University, Park Sq.,
Vakil Abad Blvd, Mashhad,
Razavi Khorasan, Iran