

ISSN: 2163-0461

Volume 12, Number 2, April 2022



Open Journal of Modern Hydrology



ISSN: 2163-0461



<https://www.scirp.org/journal/ojmh>

Journal Editorial Board

ISSN: 2163-0461 (Print), 2163-0496 (Online)

<https://www.scirp.org/journal/ojmh>

Editor-in-Chief

Prof. Andrea Vacca

The 2nd University of Napoli, Italy

Editorial Board

Dr. Bahman Jabbarian Amiri

University of Tehran, Iran

Dr. Shadab Anwar

Missouri University of Science and Technology, USA

Prof. Anil Bhardwaj

Punjab Agricultural University, India

Dr. Darryl E. Carlyle-Moses

Thompson Rivers University, Canada

Dr. Yushun Chen

University of Arkansas, USA

Dr. Manish Kumar Goyal

Indian Institute of Technology, India

Prof. Ching-Chuan Huang

National Cheng Kung University, Chinese Taipei

Prof. Guanxing Huang

Chinese Academy of Geological Sciences, China

Dr. Michele Iervolino

Second University of Naples, Italy

Prof. A. W. Jayawardena

University of Hong Kong, China

Prof. M. Levent Kavvas

University of California, USA

Prof. Bahaa Khalil

McGill University, Canada

Prof. Björn Klöve

University of Oulu, Finland

Prof. Hillel Rubin

Technion-Israel Institute of Technology, Israel

Dr. Osvaldo Salazar

University of Chile, Chile

Prof. Miklas Scholz

University of Salford, UK

Dr. Romanovski Valentin

National University of Science and Technology MISIS, Russia

Table of Contents

Volume 12 Number 2

April 2022

Water in Morocco, Retrospective at the Political, Regulatory and Institutional Levels

M. Othman, S. Ayoub, S. Mohamed, M. Qarro, N. Mustapha, C. Mohamed and A. Ayoub.....11

**Oxbow Lakes as Geological Archives of Historical Changes in Channel Substrate,
Swan Creek, Toledo, Ohio (USA)**

J. L. Hicks, J. E. Evans.....32

**Hydrometeorological Modeling of Limpopo River Basin in Mozambique with TOPMODEL
and Remote Sensing**

T. E. Januário, A. J. Pereira Filho, M. F. Salviano.....55

**Microphysical and Dynamical Climatology of Precipitating Systems Inferred by Weather
Radar Polarimetric Measurements in Brazil**

A. J. Pereira Filho, F. Vemado.....74

Open Journal of Modern Hydrology (OJMH)

Journal Information

SUBSCRIPTIONS

The *Open Journal of Modern Hydrology* (Online at Scientific Research Publishing, <https://www.scirp.org/>) is published quarterly by Scientific Research Publishing, Inc., USA.

Subscription rates:

Print: \$69 per issue.

To subscribe, please contact Journals Subscriptions Department, E-mail: sub@scirp.org

SERVICES

Advertisements

Advertisement Sales Department, E-mail: service@scirp.org

Reprints (minimum quantity 100 copies)

Reprints Co-ordinator, Scientific Research Publishing, Inc., USA.

E-mail: sub@scirp.org

COPYRIGHT

Copyright and reuse rights for the front matter of the journal:

Copyright © 2022 by Scientific Research Publishing Inc.

This work is licensed under the Creative Commons Attribution International License (CC BY).

<http://creativecommons.org/licenses/by/4.0/>

Copyright for individual papers of the journal:

Copyright © 2022 by author(s) and Scientific Research Publishing Inc.

Reuse rights for individual papers:

Note: At SCIRP authors can choose between CC BY and CC BY-NC. Please consult each paper for its reuse rights.

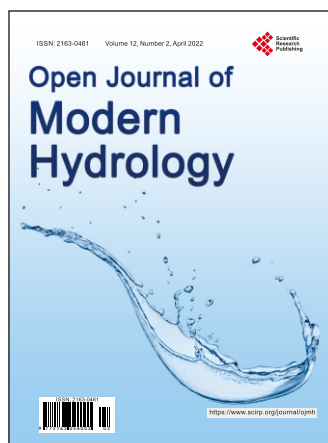
Disclaimer of liability

Statements and opinions expressed in the articles and communications are those of the individual contributors and not the statements and opinion of Scientific Research Publishing, Inc. We assume no responsibility or liability for any damage or injury to persons or property arising out of the use of any materials, instructions, methods or ideas contained herein. We expressly disclaim any implied warranties of merchantability or fitness for a particular purpose. If expert assistance is required, the services of a competent professional person should be sought.

PRODUCTION INFORMATION

For manuscripts that have been accepted for publication, please contact:

E-mail: ojmh@scirp.org



Open Journal of Modern Hydrology

ISSN: 2163-0461 (Print) ISSN: 2163-0496 (Online)
<https://www.scirp.org/journal/ojmh>

Open Journal of Modern Hydrology (OJMH) is an international journal dedicated to the latest advancement in modern hydrology. The goal of this journal is to provide a platform for scientists and academicians all over the world to promote, share, and discuss various new issues and developments in different areas of hydrology.

Editorial Board

Dr. Bahman Jabbarian Amiri
Dr. Shadab Anwar
Prof. Anil Bhardwaj
Dr. Darryl E. Carlyle-Moses
Dr. Yushun Chen
Dr. Manish Kumar Goyal
Prof. Ching-Chuan Huang
Prof. Guanxing Huang
Dr. Michele Iervolino

Prof. A. W. Jayawardena
Prof. M. Levent Kavvas
Prof. Bahaa Khalil
Prof. Björn Klöve
Prof. Hillel Rubin
Dr. Osvaldo Salazar
Prof. Miklas Scholz
Dr. Romanovski Valentin

Subject Coverage

All manuscripts must be prepared in English, and are subject to a rigorous and fair peer-review process. Accepted papers will immediately appear online followed by printed hard copy. The journal publishes original papers including but not limited to the following fields:

- Ecohydrology
- Environmental Hydraulics
- Groundwater Hydrology
- Hydrochemistry
- Hydrographic Survey
- Hydrography
- Hydrometeorology
- Land Hydrology
- Limnology
- Regional Hydrology
- Rivers and Estuaries Hydrology
- Soil Science
- Urban Hydraulics
- Water Resource Systems

We are also interested in: 1) Short Reports—2-5 page papers where an author can either present an idea with theoretical background but has not yet completed the research needed for a complete paper or preliminary data; 2) Book Reviews—Comments and critiques.

Notes for Intending Authors

Submitted papers should not have been previously published nor be currently under consideration for publication elsewhere. Paper submission will be handled electronically through the website. All papers are refereed through a peer review process. For more details about the submissions, please access the website.

Website and E-Mail

<https://www.scirp.org/journal/ojmh>

E-mail: ojmh@scirp.org