

Journal of Environmental Protection





Journal Editorial Board

ISSN: 2152-2197 (Print), 2152-2219 (Online)

https://www.scirp.org/journal/jep

Editors-in-Chief

Prof. Thangarasu Pandiyan National Autonomous University of Mexico (UNAM), Mexico

Prof. Qingren Wang University of Florida, USA

Editorial Board

Prof. Josh T. Ackerman U.S. Geological Survey, USA Prof. Ana Alebic-Juretic University of Rijeka, Croatia

College of Technological Studies, Kuwait Dr. Raslan Alenezi

Prof. Taha Alkhamis Mutah University, Jordan

Dr. Assad Ahmed Al-Thukair Life Sciences Department, King Fahd University of Petroleum, Saudi Arabia

Dr. Mohamed Alwaeli Silesian University of Technology, Poland Prof. Lemnuel V. Aragones University of the Philippines, Philippines Dr. Nanjappa Ashwath Central Queensland University, Australia

Prof. Sandhya Babel Thammasat University, Thailand Prof. Shuguang Deng New Mexico State University, USA Prof. Larry Eugene Erickson Kansas State University, USA Prof. Ludmila A. Golovleva Russian Academy of Sciences, Russia Prof. El-Saved El-Deeb Mehana Alexandria University, Egypt

Hamouda

Dr. Amanda D. Harwood Alma College, USA Prof. Chin-Pao Huang

University of Delaware, USA Prof. Madan Kumar Jha Indian Institute of Technology Kharagpur, India

Prof. Ganesh Raj Joshi United Nations Center for Regional Development (UNCRD), Japan

Prof. Rameshwar S. Kanwar Iowa State University, USA

Prof. Hyun-Joong Kim Seoul National University, South Korea Prof. Raghava R. Kommalapati Prairie View A&M University, USA

Prof. Ashok Kumar University of Toledo, USA

United States Department of Agriculture-Agricultural Research Service, USA Prof. Robert Li

Prof. Julio Cesar Marin-Leal Universidad del Zulia, Venezuela Prof. Krishna Mazumdar Indian Statistical Institute, India Prof. Jiangming Mo Chinese Academy of Sciences, China Prof. Subhash C. Mojumdar University of Guelph, Canada

Prof. Saied Mostaghimi Virginia Polytechnic Institute and State University, USA

Dr. Shaibal Mukerjee U.S. Environmental Protection Agency, USA

Prof. Carmen N. Moelders aka Department of Atmospheric Sciences, Geophysical Institute and College of Nicole Mölders Natural Sciences and Mathematics, University of Alaska Fairbanks, USA

Dr. Ed Carlo Rosa Paiva Federal University of Goiás, Brazil Tsinghua University, China Prof. Pucheng Pei

Prof. Anjanapura V. Raghu Department of Chemistry, Jain University, India Dr. Muneer Aziz Mohammed Saleh University Teknologi Malaysia (UTM), Malaysia

Prof. Miklas Scholz Lund University, Sweden

Prof. Adriana Soares de Schueler Department of Architecture and Urbanism, Universidade Federal Rural do Rio de Janeiro,

Brazil

Umm Al-Qura University, Saudi Arabia Prof. Abdulaziz R. Seroji

Dr. Mohammad Nahid Siddiqui King Fahd University of Petroleum & Minerals, Saudi Arabia

Prof. Gilbert Sigua United States Department of Agriculture-Subtropical Agricultural Research Station, USA

Prof. Nguyen Van Song Resource Economic Department, Agriculture University of Hanoi, Vietnam

Dr. Sulejman Sulce Agricultural University of Tirana, Albania

Prof. Hongwen Sun Nankai University, China Prof. Cornelia Vasile Laval University, Canada

Prof. Qingwei Yang Chongqing Jiaotong University, China

Prof. Ierotheos Zacharias University of Patras, Greece

Prof. Jinheng Zhang America-China Culture & Education Foundation, USA



Volume 14 Number 9

ISSN Online: 2152-2219 ISSN Print: 2152-2197

September 2023

Table of Contents

Journal of Environmental Protection (JEP) Journal Information

SUBSCRIPTIONS

The *Journal of Environmental Protection* (Online at Scientific Research Publishing, https://www.scirp.org/) is published monthly by Scientific Research Publishing, Inc., USA.

Subscription rates:

Print: \$79 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 © 2023 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 © 2023 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: jep@scirp.org





Journal of Environmental Protection (JEP)

ISSN: 2152-2197 (Print) ISSN: 2152-2219 (Online)

https://www.scirp.org/journal/jep

JEP is an international refereed journal dedicated to the latest advancements in Environmental Protection. The goal of this journal is to keep a record of the state-of-the-art research and promote the research work in these fast moving areas.

Editors-in-Chief

Prof. Thangarasu Pandiyan

Prof. Qingren Wang University of Florida, USA

National Autonomous University of Mexico (UNAM), Mexico

Subject Coverage

This journal invites original research and review papers that address the following issues in Environmental Protection. Topics of interest include, but are not limited to:

Air pollution and air quality

Air pollution monitoring and modeling
Air pollution prevention and control
Air quality measurement and management
Sources of air pollution
Urban/indoor air pollution and control

Ecosystem restoration, toxicology and sustainability

Ecosystem restoration
Environmental toxicology
Greenhouse gas emission monitoring
and solutions
Hazardous materials management
Radiation safety in atomic industry
Solid waste management
Sustainable development of environment
and ecosystem

Environment assessment and policy

Environmental impact assessment
Environmental policy
Risk assessment of contaminated environments
Water resources and quality assessment
Water resource protection and sustainable use

Environmental pollution and public health

Chemical pollutants and its effects on health Effects of air pollution on public health Food and drug safety control Global climate changes and human health Land pollution and its effects on health

Hydrology and water quality

Ground water pollution control
Hydrobiology and water pollution
Methods of monitoring water quality
Modeling and measuring of water pollution

Wastewater treatment and utilization

New wastewater treatment technologies New water purification technologies Purification of drinking-water supplies Treatment, disposal and discharge of wastewater

We are also interested in short papers (letters) that clearly address a specific problem, and short survey or position papers that sketch the results or problems on a specific topic. Authors of selected short papers would be invited to write a regular paper on the same topic for future issues of the **JEP**.

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/jep E-mail: jep@scirp.org