



Journal of Environmental Protection





Journal Editorial Board

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

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

......

Editors-in-Chief

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

Prof. Qingren WangUniversity of Florida, USA

Editorial Board

Prof. Josh T. Ackerman US Geological Survey, USA

Dr. Nanjappa Ashwath Central Queensland University, Australia

Prof. Jayajit ChakrabortyUniversity of South Florida, USAProf. Shuguang DengNew Mexico State University, USAProf. Larry Eugene EricksonKansas State University, USA

Prof. Ludmila A. Golovleva Russian Academy of Sciences, Russia

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 KimSeoul National University, South KoreaProf. Raghava R. KommalapatiPrairie View A&M University, USA

Prof. Ashok Kumar University of Toledo, USA

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

Prof. Roberto ManfrediUniversity of Bologna, ItalyProf. Krishna MazumdarIndian Statistical Institute, IndiaProf. Jiangming MoChinese 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 US Environmental Protection Agency, USA

Prof. Pucheng Pei Tsinghua University, China

Prof. Alexey V. Polonikov Kursk State Medical University, Russia

Dr. Muneer Aziz Mohammed Saleh University Teknologi Malaysia (UTM), Malaysia

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. Emilson Caputo Delfino Silva Georgia Institute of Technology, USA

Prof. Hongwen Sun Nankai University, China

Prof. Xiangjun Tian Chinese Academy of Sciences, China

Prof. Cornelia Vasile Laval University, Canada

Prof. Qingwei Yang Chongqing Jiaotong University, China

Dr. Ierotheos Zacharias University of Patras, Greece



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

Table of Contents

Volume 10	Number 4	April 2019
Inventory of Estua Southern Benin (V	•	stems Subjected to Sand-Mining Activities in
R. K. Lalèyè, H. Ag	adjihouèdé, A. Chikou, H. A	djagbo, C. Assogba, D. Lédéroun, P. A. Lalèyè473
	lity for All Causes and A lant in New Jersey, USA	all Cancers Combined before and after Startup of
J. Mangano, J. Shei	man	488
	al Forms in Two Calcare nd Moisture Regimes	ous Soils Treated with Different Levels of
F. Rassaei, M. Hoo	daji, S. A. Abtahi	500
	ential Ecological Risk of ns in Makurdi, Nigeria	Heavy Metals in Soils from Waste Dumpsites in
R. C. Nwankwo, S.	M. Tongu, I. S. Eneji, L. A. N	Nnamonu, R. A. Wuana, R. Sha'Ato514
Land Use Land Co Bale Zone, Ethiop	•	nd Deforestation Modeling: In Delomena District of
G. Ayele, H. Hayic	ho, M. Alemu	532
	f Trace Metals in Soils in Delta State, Nigeria	the Vicinity of NPA Expressway Open Dump in
H. Ataikiru, F. E. C	Okieimen	562
Health Risks due t Containing Heavy	-	s domestica Golden Delicious
		M. C. Breton, M. R. Marrón, J. J. P. Pérez,

Journal of Environmental Protection (JEP) Journal Information

SUBSCRIPTIONS

The *Journal of Environmental Protection* (Online at Scientific Research Publishing, 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 © 2019 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 © 2019 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)

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

JEP is an international refereed journal dedicated to the latest advancement of 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

National Autonomous University of Mexico (UNAM), Mexico University of Florida, USA

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