

Journal of Environmental Protection

ISSN: 2152-2197 Vol. 3, No. 7, July 2012





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

Dr. Qingren Wang University of Florida, USA

Editorial Advisory Board

Prof. Hongyan Liu Peking Univerity, China

Editorial Board

Dr. Josh T. AckermanU.S. Geological Survey, USA**Prof. Graham Allan**University of Washington, USA

Dr. Nanjappa AshwathCentral Queensland University, AustraliaProf. Shuguang DengNew Mexico State University, USAProf. Ludmila A. GolovlevaRussian Academy of Sciences, Russia

Prof. Chin-pao Huang University of Delaware, USA

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

Dr. Jan Åke Jönsson Lund University, Sweden

Dr. Ganesh Raj JoshiUniversity of the Ryukyus, JapanProf. Rameshwar S. KanwarIowa State University, USA

Prof. Hyun-Joong KimSeoul National University, Korea (South)Dr. Raghava R. KommalapatiPrairie View A&M University, USA

Prof. Ashok Kumar University of Toledo, USA

Dr. Robert LiUnited States Department of Agricultural Research Service, USA

Prof. Roberto Manfredi University of Bologna, Italy

Prof. Bragadin MarcantonioCa' Foscari University of Venice, ItalyProf. Krishna MazumdarIndian Statistical Institute, IndiaProf. Jiangming MoChinese Academy of Sciences, China

Dr. Subhash C. Mojumdar University of Guelph, Canada

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

Prof. Pucheng Pei Tsinghua University, China

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

Prof. Arūnas Ramanavičius Vilnius Unversity, Lithuania

Dr. Yoram Shiftan Israel Institute of Technology, Israel

Dr. Gilbert SiguaUnited States Department of Agriculture-Subtropical Agricultural

Research Station, USA

Prof. Emilson Caputo Delfino Silva Georgia Institute of Technology, USA

Dr. Hongwen Sun Nankai University, China

Dr. Xiangjun Tian Chinese Academy of Sciences, China

Dr. Cornelia Vasile Laval University, Canada

Prof. Ernest K. YanfulUniversity of Western Ontario, CanadaProf. Qingwei YangChongqing Jiaotong University, China

Dr. Ierotheos Zacharias University of Ioannina, Greece



TABLE OF CONTENTS

Volume 3 Number 7	July 2012
The Use of Organic Waste as an Eco-Efficient Energy Source in Ghana	
R. O. Adu, R. Lohmueller.	553
A Situational Assessment of Socioeconomic Factors Affecting Solid Waste Generation and Comj in Freetown, Sierra Leone	position
F. P. Sankoh, X. B. Yan, A. M. H. Conteh.	563
Measurement of Cooling Effect of Building Environment Greening	
Q. H. Luo, J. Zou, X. F. Yang.	569
Active in Situ Biomonitoring of Pesticide Pulses Using Gammarus spp. in Small Tributaries of Lake Constance	
A. Gerhardt, M. Koster, F. Lang, V. Leib.	573
Biofiltration of Nitrous Oxide Using Cow-Manure Based Compost as Medium Filter	
T. S. Utami, H. Hermansyah, M. Nasikin	584
An Evaluation on the Physical and Chemical Composition of Coal Combustion Ash and Its Co-Placement with Coal-Mine Waste Rock	
G. J. Kusuma, H. Shimada, T. Sasaoka, K. Matsui, C. Nugraha, R. S. Gautama, B. Sulistianto	589
Experimental Study of Oil Pipeline Leak Processes	
A. A. Jasper, G. T. Ove, B. Torleiv	597
A Study on the Microbial Quality of Drinking Water in Rural Areas of Mazandaran Province in North of Iran (2011)	
A. Amouei, M. B. Miranzadeh, Z. Shahandeh, T. Taheri, H. A. Asgharnia, S. Akbarpour, B. Mokari	605
Defluoridation of Water by a Biomass: Tinospora cordifolia	
P. K. Pandey, M. Pandey, R. Sharma.	610
Trace Element Concentrations in Some Traditional Diets Consumed in Selected Parts of Eastern Province of Kenya	n
D. M. Maina, L. W. Njenga, J. M. Onyari, B. N. Kyalo	617

Copyright © 2012 SciRes.



Development of Immunochemical Methods for I	Purification and D	Detection of the S	Steroid Drug
Medroxyprogesterone Acetate			

••	
A. Bronshtein, A. Krol, H. Schlesinger, M. Altstein.	624
Assessment of Gaseous and Particulate Pollutants in the Ambient Air in Al Mirfa City United Arab Emirates	<i>'</i> ,
E. Al Katheeri, F. Al Jallad, M. Al Omar	640
Unhealthy Cooking and Prevalence of Tuberculosis in Indian Women: A Case Study	
A. L. Singh, S. Jamal.	648
Temporal Trends in Ambient ${ m SO}_2$ at a High Altitude Site in Semi-Arid Western India: versus Chemical Transport Modeling	: Observations
T. Francis.	657
Assessment of Environmental Changes in the Iraqi Marshes by Index of Biological Int	tegrity
A. A. Al-Saboonchi, H. S. Abid, A. H. M. J. Alobaidy, B. K. Maulood, I. M. Abd	681
Atmospheric Environmental Quality Assessment RBF Model Based on the MATLAB	
Z. H. Fei, D. G. Luo, Z. F. He, B. Li	689

The figure on the front cover is from the article published in Journal of Environmental Protection, 2012, Vol. 3, No. 7, pp. 573-583 by Almut Gerhardt, Margie Koster, Frank Lang and Vera Leib.

Copyright © 2012 SciRes.

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: \$39 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©2012 Scientific Research Publishing, Inc.

All Rights Reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording, scanning or otherwise, except as described below, without the permission in writing of the Publisher.

Copying of articles is not permitted except for personal and internal use, to the extent permitted by national copyright law, or under the terms of a license issued by the national Reproduction Rights Organization.

Requests for permission for other kinds of copying, such as copying for general distribution, for advertising or promotional purposes, for creating new collective works or for resale, and other enquiries should be addressed to the Publisher.

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 assumes 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



Call for Papers

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 National Autonomous University of Mexico (UNAM), Mexico

Dr. Qingren Wang 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

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

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

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

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

http://www.scirp.org/journal/jep E-mail: jep@scirp.org

TABLE OF CONTENTS

Volume 3 Number 7	July 2012
The Use of Organic Waste as an Eco-Efficient Energy Source in Ghana R. O. Adu, R. Lohmueller	553
A Situational Assessment of Socioeconomic Factors Affecting Solid Waste Generation and Composition in Freetown, Sierra Leone F. P. Sankoh, X. B. Yan, A. M. H. Conteh	563
Measurement of Cooling Effect of Building Environment Greening Q. H. Luo, J. Zou, X. F. Yang	569
Active in Situ Biomonitoring of Pesticide Pulses Using Gammarus spp. in Small Tributaries of Lake Constance A. Gerhardt, M. Koster, F. Lang, V. Leib	573
Biofiltration of Nitrous Oxide Using Cow-Manure Based Compost as Medium Filter T. S. Utami, H. Hermansyah, M. Nasikin	584
An Evaluation on the Physical and Chemical Composition of Coal Combustion Ash and Its Co-Placement with Coal-Mine Waste Rock G. J. Kusuma, H. Shimada, T. Sasaoka, K. Matsui, C. Nugraha, R. S. Gautama, B. Sulistianto	589
Experimental Study of Oil Pipeline Leak Processes A. A. Jasper, G. T. Ove, B. Torleiv	597
A Study on the Microbial Quality of Drinking Water in Rural Areas of Mazandaran Province in North of Iran (2011) A. Amouei, M. B. Miranzadeh, Z. Shahandeh, T. Taheri, H. A. Asgharnia, S. Akbarpour, B. Mokari	605
Defluoridation of Water by a Biomass: Tinospora cordifolia P. K. Pandey, M. Pandey, R. Sharma	610
Trace Element Concentrations in Some Traditional Diets Consumed in Selected Parts of Eastern Province of Kenya D. M. Maina, L. W. Njenga, J. M. Onyari, B. N. Kyalo	617
Development of Immunochemical Methods for Purification and Detection of the Steroid Drug Medroxyprogesterone Acetate A. Bronshtein, A. Krol, H. Schlesinger, M. Altstein	624
Assessment of Gaseous and Particulate Pollutants in the Ambient Air in Al Mirfa City, United Arab Emirates E. Al Katheeri, F. Al Jallad, M. Al Omar	640
Unhealthy Cooking and Prevalence of Tuberculosis in Indian Women: A Case Study A. L. Singh, S. Jamal	648
Temporal Trends in Ambient SO, at a High Altitude Site in Semi-Arid Western India: Observations versus Chemical Transport Modeling T. Francis	657
Assessment of Environmental Changes in the Iraqi Marshes by Index of Biological Integrity A. A. Al-Saboonchi, H. S. Abid, A. H. M. J. Alobaidy, B. K. Maulood, I. M. Abd	681
Atmospheric Environmental Quality Assessment RBF Model Based on the MATLAB Z. H. Fei, D. G. Luo, Z. F. He, B. Li	689