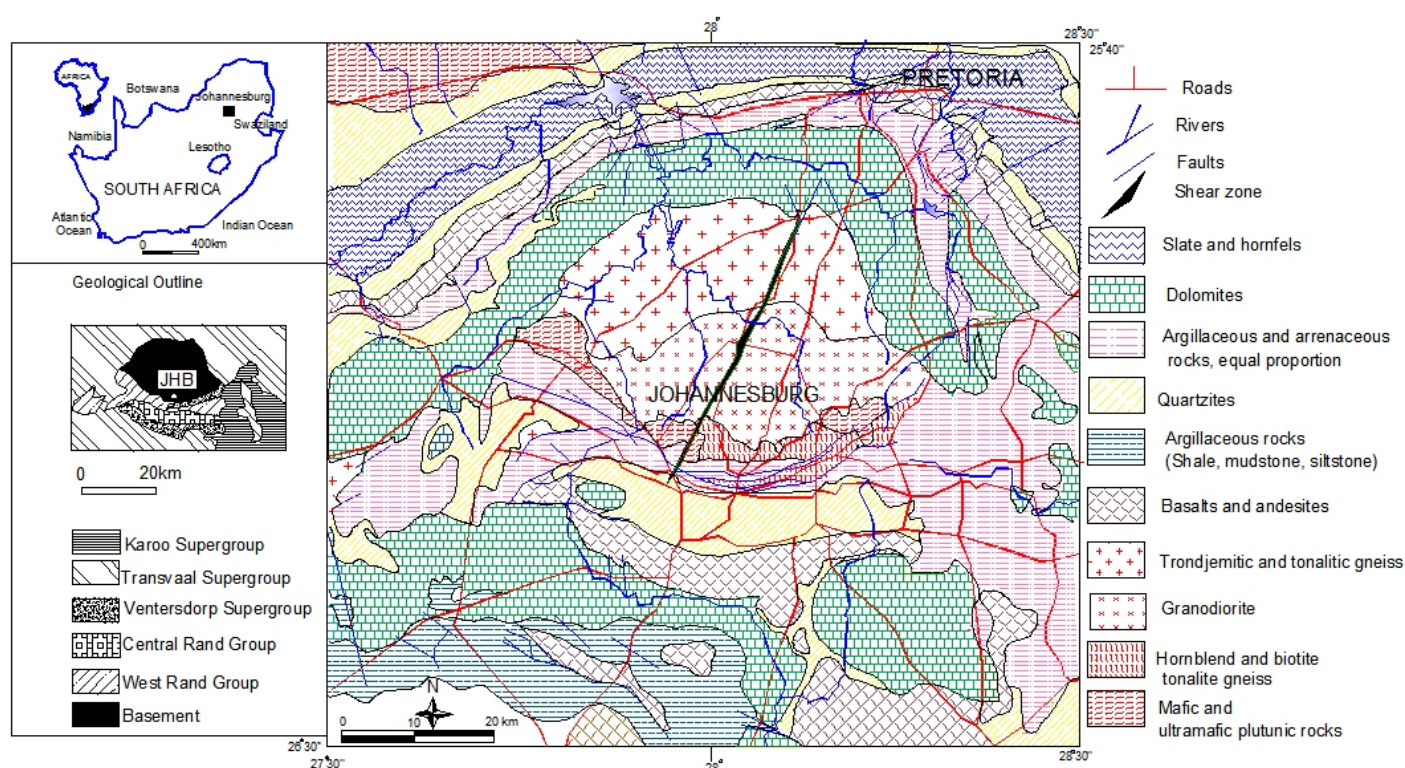




Journal of Water Resource and Protection

Editors-in-Chief : Jian Shen Ni-Bin Chang



ISSN: 1945-3094



Journal Editorial Board

ISSN: 1945-3094 (Print) ISSN: 1945-3108 (Online)

<http://www.scirp.org/journal/jwarp>

Editors-in-Chief

Prof. Jian Shen
Prof. Ni-Bin Chang

College of William and Mary, USA
University of Central Florida, USA

Editorial Board

Prof. Sam Atkinson	University of North Texas, USA
Dr. Amitava Bandyopadhyay	Universtiy of Calcutta, India
Prof. Peter Dillon	Trent University, Canada
Dr. Jane Heyworth	University of Western Australia, Australia
Dr. Madan Kumar Jha	Indian Institute of Technology, India
Prof. Zhaohua Li	Hubei University, China
Dr. Pan Liu	Wuhan University, China
Prof. Jiho Min	Chonbuk National University, Korea (South)
Dr. Dhundi Raj Pathak	Osaka Sangyo University, Japan
Prof. Ping-Feng Pai	National Chi Nan University, Taiwan (China)
Dr. Mohamed Nageeb Rashed	South Valley University, Egypt
Dr. Dipankar Saha	Ministry of Water Resources Govt. of India, India
Prof. Vladimir Soldatov	National Academy of Sciences, Belarus
Prof. Matthias Templ	Vienna University of Technology
Prof. Aswani K. Volety	Florida Gulf Coast University, USA
Prof. Muqi Xu	Chinese Academy of Sciences, China
Prof. Fan Zhang	Chinese Academy of Sciences, China
Prof. Xiyang Zhang	Chinese Academy of Sciences, China
Dr. Chunli Zheng	Dalian University of Technology, China

Editorial Assistant

Vivian QI

Scientific Research Publishing

Email: jwarp@scirp.org

TABLE OF CONTENTS

Volume 3 Number 4

April 2011

Groundwater Resource in the Crystalline Rocks of the Johannesburg Area, South Africa

T. A. Abiye, H. Mengistu, M. B. Demlie.....199

Flocculating Properties of Water-Soluble Polymer-Colloid Complexes of Aluminosilicate Particles with Weakly Charged Cationic Polyelectrolytes

S. Radchenko, I. Novakov, P. Radchenko, C. L. Van, E. Rybakova.....213

Preliminary Experimental Study on Effectiveness of Vegetative Filter Strip to Pollutants in Surface Runoff

N. Deng, H. Li, D. Q. Shi.....222

Stability of Confidence Levels for Flood Frequencies Using Additional Data

T. V. Hromadka II, R. J. Whitley, M. J. Smith.....228

Predicting Phosphorus Sorption onto Steel Slag Using a Flow-through Approach with Application to a Pilot Scale System

C. J. Penn, J. M. McGrath.....235

Increase in Straight and Coiled *Cylindrospermopsis raciborskii* (Cyanobacteria) Populations under Conditions of Thermal De-Stratification in A Shallow Tropical Reservoir

M. do Carmo Bittencourt-Oliveira, A. do Nascimento Moura, T. C. Hereman, E. W. Dantas.....245

Treatment of Oily Wastewater Using Composite Flocculant of Polysilicate Ferro-Aluminum Sulfate – Rectorite

S. Q. Li, P. J. Zhou, L. Ding, K. Feng.....253

Seasonal Variations of Some Ecological Parameters in Tigris River Water at Baghdad Region, Iraq

A. M. Rabee, B. M. Abdul-Kareem, A. S. Al-Dhamin.....262

Health Risk Assessment after Exposure to Aluminium in Drinking Water between Two Different Villages

M. S. Qaiyum, M. S. Shaharudin, A. I. Syazwan, A. Muhaimin.....268

The figure on the front cover is from the article published in *Journal of Water Resource and Protection*, 2011, Vol. 3 No. 4, pp.199-212 by T. A. Abiye, H. Mengistu, M. B. Demlie.

Journal of Water Resource and Protection (JWARP)

Journal Information

SUBSCRIPTIONS

The *Journal of Water Resource and Protection* (Online at Scientific Research Publishing, www.SciRP.org) is published monthly by Scientific Research Publishing, Inc., USA.

Subscription rates:

Print: \$59 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©2011 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.

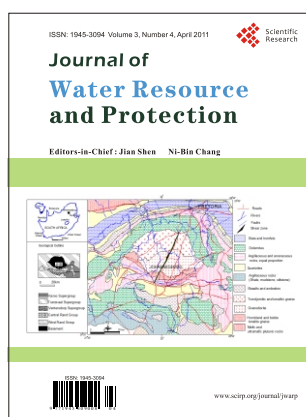
Requests for permission for other kinds of copying, such as copying for general distribution, for advertising or promotional purposes, for creating new collective works or for resale, and other enquiries should be addressed to the Publisher.

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 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: jwarp@scirp.org



Call for Papers

Journal of Water Resource and Protection (JWARP)

<http://www.scirp.org/journal/jwarp>

ISSN:1945-3094 (Print), 1945-3108 (Online)

JWARP is an international refereed journal dedicated to the latest advancement of water resource and 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. Jian Shen
 Prof. Ni-Bin Chang

College of William and Mary, USA
 University of Central Florida, USA

Editorial Board

Prof. Sam Atkinson
 Dr. Amitava Bandyopadhyay
 Prof. Peter Dillon
 Dr. Jane Heyworth
 Dr. Madan Kumar Jha
 Prof. Zhaohua Li
 Dr. Pan Liu
 Prof. Jiho Min
 Dr. Dhundi Raj Pathak
 Prof. Ping-Feng Pai
 Dr. Mohamed Nageeb Rashed
 Dr. Dipankar Saha
 Prof. Vladimir Soldatov
 Prof. Matthias Templ
 Prof. Aswani K. Volety
 Prof. Muqi Xu
 Prof. Fan Zhang
 Prof. Xiyang Zhang
 Dr. Chunli Zheng

University of North Texas, USA
 University of Calcutta, India
 Trent University, Canada
 University of Western Australia, Australia
 Indian Institute of Technology, India
 Hubei University, China
 Wuhan University, China
 Chonbuk National University, Korea (South)
 Osaka Sangyo University, Japan
 National Chi Nan University, Taiwan (China)
 South Valley University, Egypt
 Ministry of Water Resources Govt. of India, India
 National Academy of Sciences, Belarus
 Vienna University of Technology
 Florida Gulf Coast University, USA
 Chinese Academy of Sciences, China
 Chinese Academy of Sciences, China
 Chinese Academy of Sciences, China
 Dalian University of Technology, China

Subject Coverage

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

- Economic, sociological, and environmental considerations of water resources and sustainable use of water resources
- Innovative technologies and engineering solutions for water resources protection
- Monitoring, modeling and prediction of water pollution (watershed, lakes, rivers, estuaries, and coasts)
- Sea water utilization
- Surface and ground water systems and water pollution

- control
- Water management automation system
- Water purification and wastewater treatment (mechanical, biological, chemical, and other treatments)
- Water resources and climatic change
- Water resources conservation
- Water resources protection and sustainable use
- Water resources restoration and management
- Water resources study and water quality assessment

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 JWARP.

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/jwarp>

Email: jwarp@scirp.org