

# International Journal of Geosciences

www.scirp.org/journal/ijg





## **Journal Editorial Board**

ISSN: 2156-8359 (Print) ISSN: 2156-8367 (Online) http://www.scirp.org/journal/ijg/

.....

Anna University, India

Texas A&M University, USA

Editor-in-Chief Prof. Shuanggen Jin

University of Texas, USA

Seoul National University, Korea (South)

#### **Editorial Board**

Prof. Hema Achvuthan Dr. Mishra A.K. Prof. Jong-Jin Baik Prof. Rajasekhar Balasubramanian Dr. Peter Bayer **Dr. Charles E. Button Prof. Hangseok Choi Dr. Dionisios Gasparatos** Dr. Yury G. Gatinsky Prof. Maofa Ge Prof. Tsiambaos George Prof. Zhengtang Guo Dr. Ruixia Hao Prof. Jiankun He Prof. Zhangdong Jin **Prof. George Kallos** Prof. Oleg Khavroshkin Dr. Qi Li Prof. Hongyan Liu Prof. Jun Liu Dr. Shaofeng Liu Dr. Hao Luo **Prof. Junboum Park Prof. Cosenza Philippe Dr. Saied Pirasteh Prof. Xianfang Song** Prof. Jimin Sun **Dr. Luciano Telesca** Dr. Xuexi Tie **Prof. Costas Varotsos** Prof. Fawu Wang Prof. Bernd Wünnemann Prof. Xinghui Xia Prof. Wenjiao Xiao Dr. Jianwen Yang Prof. Xiaohuan Yang Dr. Bin Yu Dr. Lianyang Zhang Prof. Ping Zhao Prof. A-Xing Zhu

#### **Editorial Assistant**

Lily Gan

**Guest Reviewer** 

**Greg Roff** 

Petr Pushistov

**Umesh Kumar Singh** 

Manish Kumar

National University of Singapore, Singapore Swiss Federal Institute of Technology Zürich, Switzerland Central Connecticut State University, USA Korea University, Korea (South) Agriculture University of Athens, Greece Vernadsky State Geological Museum, Russia Chinese Academy of Sciences, China National Technical University of Athens, Greece Chinese Academy of Sciences, China Peking University, China Chinese Academy of Sciences, China Chinese Academy of Sciences, China University of Athens, Greece Russian Academy of Sciences, Russia Geological Survey of Japan, Japan Peking University, China Chinese Academy of Sciences, China China University of Geosciences (Beijing), China Georgia Institute of Technology, China Seoul National University, Korea (South) Poitiers University, France University Putra Malaysia, Malaysia Chinese Academy of Sciences, China Chinese Academy of Sciences, China National Research Council, Italy National Center for Atmospheric Research, USA University of Athens, Greece Shimane University, Japan Freie Universitaet Berlin, Germany Beijing Normal University, China Chinese Academy of Sciences, China University of Windsor, Canada Chinese Academy of Sciences, China Environment Canada, Canada University of Arizona, USA China Meteorological Administration, China University of Wisconsin, USA

Scientific Research Publishing, USA. Email: ijg@scirp.org



### **TABLE OF CONTENTS**

#### Volume 2 Number 1

#### February 2011

Up-to-Date Geodynamics and Seismicity of Central Asia
Y. Gatinsky, D. Rundquist, G. Vladova, T. Prokhorova1
On the Wind and Turbulence in the Lower Atmosphere above Complex Terrain
G. Jandieri, A. Surmava, A. Gvelesiani
Changes in Tropical Cyclone Number in the Western North Pacific in a Warming Environment as Implied by Classical Thermodynamics
X. G. Zhou, C. J. Liu, Y. Liu, H. Xu, X. M. Wang
Rainfall Variability and Its Impact on Normalized Difference Vegetation Index in Arid and Semi-Arid Lands of Kenya
C. A. Shisanya, C. Recha, A. Anyamba
Heavy Metals in Soils around the Cement Factory in Rockfort, Kingston, Jamaica
A. Mandal, M. Voutchkov
Seismicity and Geologic Structures Indubitable in Wadi Hagul, North Eastern Desert, Egypt
T. A. Seleem, H. A. Aboulela
Inundation Maps for Extreme Flood Events at the Mouth of the Danube River
D. E. N. Gogoase, I. Armaş, C. S. Ionescu

The figure on the front cover is from the article published in International Journal of Geosciences (IJG), 2011, Vol. 2, No. 1, pp.55-67 by Tarek A. Seleem and Hamdy A. Aboulela.

#### International Journal of Geosciences (IJG)

#### **Journal Information**

#### SUBSCRIPTIONS

The International Journal of Geosciences (Online at Scientific Research Publishing, www.SciRP.org) is published quarterly by Scientific Research Publishing, Inc., USA.

#### Subscription rates:

Print: \$40 per copy. 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 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: ijg@scirp.org



## **Editor-in-Chief**

Prof. Shuanggen Jin

## **Editorial Board**

Prof. Hema Achyuthan Dr. Mishra A.K Prof. Jong-Jin Baik Prof. Rajasekhar Balasubramanian Dr. Peter Bayer Dr. Charles E. Button Prof. Hangseok Choi Dr. Dionisios Gasparatos Dr. Yury G. Gatinsky Prof. Maofa Ge Prof. Tsiambaos George Prof. Zhengtang Guo Dr. Ruixia Hao Prof. Jiankun He Prof. Zhangdong Jin **Prof. George Kallos** Prof. Oleg Khavroshkin Dr. Oi Li Prof. Hongyan Liu Prof. Jun Liu

## Subject Coverage

All manuscripts submitted to IJG must be previously unpublished and may not be considered for publication elsewhere at any time during IJG's review period. Additionally, accepted ones will immediately appear online followed by printed in hard copy. Topics to be covered by this journal include, but are not limited to:

- ► Atmosphere
- Biosphere ≻
- ≻ Cartography
- Climate Change
- ► Earthquake and Seismology
- Earth System Modelling
- ► Environmental Science
- ≻ Estuarine and Coasts
- Geochemistry
- Geodesy and Surveying
- Geographic Information System >
- ≻ Geography
- Geology
- > Geomechanics

**Call for Papers** International Journal o Geosciences

> ISSN: 2156-8359 (Print) ISSN: 2156-8367 (Online) http://www.scirp.org/journal/ijg/

International Journal of Geosciences(IJG) is an international refereed journal dedicated to the latest advancement of geosciences. The goal of this journal is to keep a record of the state-of-the-art research and to promote study, research and improvement within its various specialties.

University of Texas, USA

Dr. Shaofeng Liu Dr. Hao Luo Prof. Junboum Park Prof. Cosenza Philippe Dr. Saied Pirasteh Prof. Xianfang Song Prof. Jimin Sun Dr. Luciano Telesca Dr. Xuexi Tie Prof. Costas Varotsos Prof. Fawu Wang Prof. Bernd Wünnemann Prof. Xinghui Xia Prof. Wenjiao Xiao Dr. Jianwen Yang

- Geomorphology and Surficial Process
- Geophysics
- Geostatistics
- Glaciology
- Hydrosphere
- Lithosphere or Geosphere
- 5
- NASA Earth Science Enterprise
- Oceanography
- Pedosphere
- Petrology
- Seismology
- Soil Science

We are also interested in: 1) Short Reports - 2 to 5 pages where the paper is intended to present either an original idea with theoretical treatment or preliminary data and results; 2) Book Reviews - Comments and critiques of recently published books in Geosciences.

## 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/ijg

Email: ijg@scirp.org

- Marine resources
- Mineralogy

Prof. Xiaohuan Yang Dr. Bin Yu Dr. Lianvang Zhang Prof. Ping Zhao Prof. A-Xing Zhu