

ISSN: 2160-049X

Vol.1, No. 6, December 2011



Scientific
Research

World Journal of Mechanics

ISSN: 2160-049X



www.scirp.org/journal/wjm

Journal Editorial Board

ISSN 2160-049X (Print) ISSN 2160-0503 (Online)

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

Editors-in-Chief

Prof. Dan Mateescu

McGill University, Canada

Prof. Kumar K. Tamma

University of Minnesota, USA

Editorial Board (According to Alphabet)

Prof. Ramesh K. Agarwal

Washington University in St. Louis, USA

Prof. Nurullah Arslan

Fatih University, Turkey

Dr. Tommaso Astarita

University of Naples, Italy

Prof. Joao Bernardo Lares Moreira de Campos

The University of Porto, Portugal

Prof. Ismail Celik

West Virginia University, USA

Prof. Jin-Rae Cho

Pusan National University, Korea (South)

Prof. Igor Emri

California Institute of Technology, USA

Prof. Victor A. Eremeyev

Martin Luther University Halle-Wittenberg, Germany

Dr. Xiaosheng Gao

The University of Akron, USA

Dr. Guy M. Genin

Washington University in St. Louis, USA

Dr. Swapan Kumar Ghosh

Narajole Raj College, India

Dr. Sachin Goyal

Emory University, USA

Prof. Nguyen Dang Hung

University of Liege, Belgium

Prof. Ilya G. Kaplan

National Autonomous University of Mexico, Mexico

Prof. Semih Kucukarslan

Istanbul Technical University, Turkey

Prof. Anjan Kundu

Saha Institute of Nuclear Physics, India

Prof. Tadeusz Lagoda

Opole University of Technology, Poland

Prof. Sanboh Lee

National Tsing Hua University, Chinese Taipei

Prof. Xiaodong Li

University of South Carolina, USA

Prof. Giulio Lorenzini

University of Parma, Italy

Prof. Antonio Alberto Ferreira Miguel

University of Evora, Portugal

Dr. Rostand Moutou-Pitti

Blaise Pascal University, France

Prof. Mohamed Ibrahim Ahmed Othman

Zagazig University, Egypt

Dr. Rafael Pacheco

Arizona State University, USA

Prof. Christopher Provatidis

National Technical University of Athens, Greece

Prof. Richard Saurel

Aix Marseille University, France

Prof. Fulin Shang

Xi'an Jiaotong University, China

Prof. David S.-K. Ting

University of Windsor, Canada

Prof. Qiang Xue

Civil and Hydraulic Engineering and Information Technology
Research Center, Chinese Taipei

Prof. Ruey-Jen Yang

National Cheng Kung University, Chinese Taipei

Prof. Duyi Ye

Zhejiang University, China

Editorial Assistant

Lilliam Chen

Scientific Research Publishing, USA E-mail: wjm@scirp.org

TABLE OF CONTENTS

Volume 1 Number 6

December 2011

Study of Surface Instability of Kelvin-Helmholtz Type in a Fluid Layer Bounded above by a Porous Layer and below by a Rigid Surface

N. Rudraiah, K. B. Chavaraddi, I. S. Shivakumara, B. M. Shankar.....267

Convection of Radiating Gas in a Vertical Channel through Porous Media

M. Jana, S. L. Maji, S. Das, R. Jana.....275

The Effect of Relaxation Time on the Heat Transfer and Temperature Distribution in Tissues

M. I. A. Othman, M. G. S. Ali, R. M. Farouk.....283

Unsteady Boundary Layer Flow and Heat Transfer Due to a Stretching Sheet by Quasilinearization Technique

W. Ibrahim, B. Shanker.....288

Slipping Phenomenon in Polymeric Fluids Flow between Parallel Planes

Y. A. Altukhov, G. V. Pyshnograï, I. G. Pyshnograï.....294

A Finite Element Approximation of the Stokes Equations

S. Alami, A. Elakkad, J. El-Mekaoui, A. Elkhalfi, M. El Hammoumi.....299

The Wave Equation Together with Matheu-Hill and Laguerre Form Dynamic Boundary Conditions

K. Koser.....306

World Journal of Mechanics (WJM)

Journal Information

SUBSCRIPTIONS

The *World Journal of Mechanics* (Online at Scientific Research Publishing, www.SciRP.org) is published bimonthly 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©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: wjm@scirp.org



Call for Papers

World Journal of Mechanics (WJM)

ISSN 2160-049X (Print) ISSN 2160-0503 (Online)

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

World Journal of Mechanics (WJM) is an international journal, covers general field of mechanics and motions including solids, structures and fluids and their interaction. The goal of this journal is to provide an international forum for the publication and dissemination of original work in these areas.

Subject Coverage

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

- Classical and Quantum Aspects
- Control Theory
- Dynamics and Vibration Control
- Elasticity and Plasticity
- Functional Materials Mechanics
- Mechanism and Mechanics
- Microfluidics
- Multi Scale Mechanics
- Nanomechanics
- Quantum Mechanics
- Statistical Mechanics
- Thin Film Mechanics
- Viscoelasticity

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 World Journal of Mechanics.

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/wjm>

E-mail: wjm@scirp.org