

Modern Mechanical Engineering

Special Issue on Intelligent Structure and Vibration Control





Journal Editorial Board

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

Editor-in-Chief

Prof. C. W. Lim City University of Hong Kong, China

Editorial Board

Dr. Eugen Axinte Gheorghe Asachi Technical University of Iasi (TUIASI), Romania

Dr. Vincenzo Bianco University of Genova, Italy

Prof. Daniel Chen University of Saskatchewan, Canada

Dr. Gang (Sheng) Chen Marshall University, USA

Prof. Wen-feng Ding Nanjing University of Aeronautics and Astronautics, China

Dr. Babak Ebrahimian Petroleum Industry Research Engineering Company (PIRE Co.), Iran

Dr. Asghar Esmaeeli Southern Illinois University, USA

Dr. Sachin Goyal University of California, USA

Dr. Linxia GuUniversity of Nebraska-Lincoln, USA

Prof. Xingjian Jing Hong Kong Polytechnic University, China

Dr. Jaehyung JuUniversity of North Texas, USA

Dr. Abdullah Abbas Kendoush Augusta Technical College, USA

Dr. Hong Jin Kim Samsung Electronics Co., Ltd., South Korea

Dr. Samir Mekid King Fahd University Petroleum & Minerals, Saudi Arabia

Dr. Gordon R. Pennock Purdue University, USA

Dr. Giuseppe VairoUniversity of Rome "Tor Vergata", Italy

Prof. Yong Zhou Zhejiang Normal University, China



TABLE OF CONTENTS

Volume 3	Number 3A	July 2013
Thermal Activ	vation of Asymetrical Composites for Vibration Control	
A. Imbert, G. I	L'Hostis, D. Rigel, F. Laurent, B. Durand	1
Vibration Con	ntrol of a Gym Floor Using Tuned Mass Dampers: A Numerical Analysis	
M. D. S. dos S	Santos, D. V. F. Lima, J. E. C. Carmona, S. M. Avila, G. N. Doz	9
O	ult Detection of Retainer Clutch Mechanism of Tractor by ibration Analysis	
E. Ebrahimi, P.	. Javadikia, M. H. Jalili, N. Astan, M. Haidari, M. Bavandpour	17

The figure on the front cover is from the article published in Modern Mechanical Engineering, 2013, Vol. 3, No. 3A, pp. 17-24 by Ebrahim Ebrahimi, *et al*.

Copyright © 2013 SciRes.

Modern Mechanical Engineering (MME)

Journal Information

SUBSCRIPTIONS

The *Modern Mechanical Engineering* (Online at Scientific Research Publishing, www.SciRP.org) is published quarterly 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@2013 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: mme@scirp.org



Modern Mechanical Engineering

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



Modern Mechanical Engineering (MME) is an international journal dedicated to the latest advancement of mechanical engineering. The goal of this journal is to provide a platform for scientists and academicians all over the world to promote, share, and discuss various new issues and developments in different areas of mechanical engineering.

Editor-in-Chief

Prof. C. W. Lim

City University of Hong Kong, China

Editorial Board

Dr. Eugen Axinte Dr. Vincenzo Bianco Prof. Daniel Chen Dr. Gang (Sheng) Chen Prof. Wen-feng Ding Dr. Babak Ebrahimian

Dr. Asghar Esmaeeli Dr. Sachin Goyal Dr. Linxia Gu Prof. Xingjian Jing Dr. Jaehyung Ju

Dr. Abdullah Abbas Kendoush

Dr. Hong Jin Kim Dr. Samir Mekid Dr. Gordon R. Pennock Dr. Giuseppe Vairo Prof. Yong Zhou Gheorghe Asachi Technical University of Iasi (TUIASI), Romania

University of Genova, Italy

University of Saskatchewan, Canada

Marshall University, USA

Nanjing University of Aeronautics and Astronautics, China

Petroleum Industry Research Engineering Company (PIRE Co.), Iran

Southern Illinois University, USA
University of California, USA
University of Nebraska-Lincoln, USA
Hong Kong Polytechnic University, China
University of North Texas, USA

Augusta Technical College, USA

Samsung Electronics Co., Ltd., South Korea

King Fahd University Petroleum & Minerals, Saudi Arabia

Purdue University, USA

University of Rome "Tor Vergata", Italy Zhejiang Normal University, China

Subject Coverage

All manuscripts must be prepared in English, and are subject to a rigorous and fair peer-review process. Accepted papers will immediately appear online followed by printed hard copy. The journal publishes original papers including but not limited to the following fields:

- Applied Mathematics and Mechanics
- Biomechanics
- Celestial Mechanics and Dynamical Astronomy
- Computational Mechanics
- Computer Methods in Applied Mechanics and Engineering
- Continuum Mechanics and Thermodynamics
- Damage Mechanics
- Engineering Fracture Mechanics
- Experimental Mechanics
- Mathematical Fluid Mechanics

- Mechanics in Medicine and Biology
- Mechanics of Composite Materials
- Mechanics of Materials
- Mechanism and Machine Theory
- Non-Linear Mechanics
- Non-Newtonian Fluid Mechanics
- Numerical and Analytical Methods in Geomechanics
- Rock Mechanics and Mining Sciences
- Solid and Structural Mechanics
- Theoretical and Applied Fracture Mechanics

We are also interested in: 1) Short Reports—2-5 page papers where an author can either present an idea with theoretical background but has not yet completed the research needed for a complete paper or preliminary data; 2) Book Reviews—Comments and critiques.

Website and E-Mail

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

E-mail: mme@scirp.org