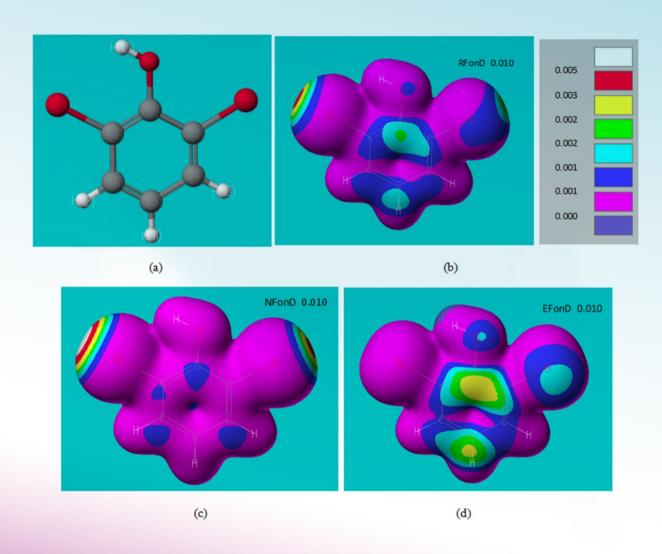


World Journal of Engineering and Technology





Journal Editorial Board

ISSN Print: 2331-4222 ISSN Online: 2331-4249

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

Editors-in-Chief

Prof. James E. Alleman Iowa State University, USA

Dr. Gwang-Hee Kim Kyonggi University, South Korea

Associate Editor-in-Chief

Prof. Sangyong Kim Kyonggi University, South Korea

Topic Editor-in-Chief

Prof. Wahied Gharieb Ali Computers & Systems Engineering Department, Egypt

Dr. Ayman Batisha International Sustainability Institute, Egypt

Dr. Halil Ceylan Iowa State University, USA

Prof. Carlos ChastreUniversidade NOVA de Lisboa, Portugal

Prof. Jan Furch Military Technology and Equipment, Czech Republic

Dr. Cristina GentiliniUniversity of Bologna, ItalyDr. Dong-Hee LeeKyonggi University, South Korea

Prof. Cheuk Ming MakThe Hong Kong Polytechnic University, China

Prof. Antonio Martinez-FerezUniversity of Granada, SpainDr. Yoonseok ShinKyonggi University, South KoreaDr. Youngje SungKyonggi University, South KoreaProf. Stefano UtiliUniversity of Warwick, UK

Prof. Ming-Xing Zhang The University of Queensland, Australia

Editorial Board

Prof. Abdullah M. Al-ShaalanKing Saud University, Saudi ArabiaDr. Eugene Ch'ngUniversity of Nottingham, ChinaProf. M. M. ElshamiUniversity of Dammam, Saudi Arabia

Dr. Negoescu Florin "Gheorghe Asachi" Technical University of Iasi, Romania

Prof. C. P. Huang
University of Delaware, USA
Prof. Junhui Li
Central South University, China
Dr. Mingxin Li
University of Delaware, USA
Dr. Wade R. Marcum
Oregon State University, USA
Dr. Christos Mias
University of Warwick, UK
University of Bologna, Italy

Dr. Ajay Mishra University of Johannesburg, South Africa

Prof. Samy Oraby Port Said University, Egypt

Dr. Hristo SapoundjievDr. Mohammed SazidNatural Resources Canada, CanadaKing Abdulaziz University, Saudi Arabia

Prof. Mehdi Setareh Virginia Polytechnic Institute and State University, USA

Prof. Shey-Huei Sheu Providence University, Chinese Taipei

Prof. Faisal Talib University Polytechnic, India



Table of Contents

Volume 4	Number 3	August 2016
Design and Deve	elopment of Innovative Highland Water Filtration System	
M. H. Razali, S. I	Roslan, A. S. M. A. Halim, A. F. M. Shokeri, N. A. Husin	383
Design and Option	mization of the Geometric Properties of a Crane Hook	
N. Desai, N. Zey	tinoglu	391
	wo Species of Subalpine Conifer Saplings in Response to Soil Warming etition in Mt. Gongga on the South-Eastern Fringe of the Plateau, China	
_	ieng, Y. S. Zhang	398
Designing of Hot	Strip Rolling Mill Control System	
Y. J. Wu		413
Research on Tra	ditional Structural Aesthetics in Construction Realm in China	
S. M. Yu		418
Degradation of A	Aqueous 2,6-Dibromophenol Solution by In-Liquid Dielectric Barrier Micro	oplasma
SI. Kojima, K. K	atayama-Hirayama, T. Akitsu	423
Analysis of Alkal	ine Foam to Water Temperature Model	
Z. Xu, L. H. Zhao	, K. Tan	433
A Theoretical An	alysis of Functionally Graded Beam under Thermal Loading	
A. El-Megharbe	l	437
Design and Deve	elopment of Mechatronic Application in Agricultural Irrigation Device	
M. H. Razali, S. F	Roslan, A. S. M. Abd Halim, H. Basit	450
	Mode of Efficaciously Solving "Agricultural Super-Docking" fficulties in China	
G. S. Xu, H. F. Zh	nang, X. W. Zhang	460
Design of a Fuzzy	y Logic Based Controller for Fluid Level Application	
H. Shahid, S. Μι	ırawwat, I. Ahmed, S. Naseer, R. Fiaz, A. Afzaal, S. Rafiq	469
Experimental Ch	aracterization of Rutting Performance of HMA Designed with	
Aggregate Grada	ations According to Superpave and Marshall Methods	
B. H. Al-Humeid	awi	477
Calculations of H	leat Transfer in Torch Furnaces by Gas Volume Radiation Laws	
A. N. Makarov		488

The figure on the front cover is from the article published in World Journal of Engineering and Technology, 2016, Vol. 4, No. 3, pp. 423-432 by Shin-Ichiro Kojima, Keiko Katayama-Hirayama and Tetsuya Akitsu.

World Journal of Engineering and Technology (WJET)

Journal Information

SUBSCRIPTIONS

The World Journal of Engineering and Technology (Online at Scientific Research Publishing, www.SciRP.org) is published quarterly 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 AND REUSE RIGHTS FOR THE FRONT MATTER OF THE JOURNAL:

Copyright © 2016 by Scientific Research Publishing Inc.

This work is licensed under the Creative Commons Attribution International License (CC BY). http://creativecommons.org/licenses/by/4.0/

COPYRIGHT FOR INDIVIDUAL PAPERS OF THE JOURNAL:

Copyright © 2016 by author(s) and Scientific Research Publishing Inc.

REUSE RIGHTS FOR INDIVIDUAL PAPERS:

Note: At SCIRP authors can choose between CC BY and CC BY-NC. Please consult each paper for its reuse rights.

DISCLAIMER OF LIABILITY

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: wjet@scirp.org



Call for Papers

World Journal of Engineering and Technology (WJET)

ISSN Print: 2331-4222 ISSN Online: 2331-4249

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

World Journal of Engineering and Technology (WJET) is an open access journal published quarterly. The goal of this journal is to provide a platform for scientists and academicians all over the world to promote, share, and discuss various issues and developments in all aspects of engineering and technology.

Subject Coverage

All manuscripts must be prepared in English, and are subject to a rigorous peer-review process. Accepted papers will immediately appear online followed by printed in hard copy. The areas covered by World Journal of Engineering and Technology (WJET) include but are not limited to the following fields:

Aerospace Engineering and Technology

Architectural Engineering and Technology

Artificial Intelligence Technology

Automatic Speech Recognition Technology

Bioprocess Engineering

Chemical Technology

Civil Engineering

Composites Engineering

Control Engineering

Data Engineering

Ecological Science and Technology

Electrical and Computer Engineering

Engineering Education

Engineering Geology

Engineering Physics

Environmental Sciences

Food Science and Engineering

Genetic Engineering and Biotechnology

Green Energy Engineering and Technology

Hydraulic Engineering

Industrial Technology

Information Technology

Manufacturing Engineering and Technology

Materials Science and Engineering

Medical and Biomedical Engineering

Micro-System Technology

Military Technology and Equipment

Nano-System Technology

Naval Engineering

Nuclear Science and Technology

Opto-Mechatronics

Particle Physics

Petroleum Engineering

Pharmaceutical Engineering

Polymer Engineering

Reservoir Engineering

Security Engineering

Structural Engineering

Textile Engineering

Traffic Engineering

Visualization Technology

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.

Email: wjet@scirp.org

Website and E-Mail

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