Open Journal of Civil Engineering

Diagram:

- Unit: mm
- Hydraulically-operated jack
- Load cell
- Displacement measure
- 16mm steel pin
- Steel frame
- Dimensions: 500mm and 1200mm
Table of Contents

Volume 5 Number 1 March 2015

Evaluation of Fresh and Hardened Properties of Self-Compacting Concrete
O. S. Olafusi, A. P. Adewuyi, A. I. Otunla, A. O. Babalola.................................................................1

Anisotropic Damage Mechanics Modeling of Concrete under Biaxial Fatigue Loading
A. Saboori, S. Yazdani, D. Tolliver........................................................................................................8

A New Stiffness Matrix for a 2D-Beam Element with a Transverse Opening
M. A. Qissab.............................................................................................................................................17

Flexural Behavior of Laterally Loaded Tapered Piles in Cohesive Soils
M. A. Qissab.............................................................................................................................................29

Green Energy: Examining Their Effects on Heritage Sites and Climate Change Mitigation
M. S. K. Al-Zubaidy.................................................................................................................................39

Bridge Structures with GFRP Composite Deck
B. Stankiewicz........................................................................................................................................53

Case Study: Finding Better Solutions for Municipal Solid Waste Management in a Semi Local Authority in Sri Lanka
B. C. Liyanage, R. Gurusinha, H. Sunil, T. Masafumi...........................................................................63

Design Optimization of Reinforced Concrete Frames
A. A. A. Aga, F. M. Adam.........................................................................................................................74

Development of a Hybrid Pin Joint with a Compressed Wooden Dowel and Metal Pipe
K. Jung, S. Nakamine...............................................................................................................................84

Investigation and Analysis of Urban Spatial Structure around the Train Stations in Kitakyushu by Using Space Syntax and GIS
J. A. Liu, D. H. Wu, F. Hidetosi, W. J. Gao..........................................................................................97

Influence Analysis of a New Building to the Bridge Pile Foundation Construction
J. Ma.........................................................................................................................................................109

Parametric Study for Replacement of Sand by Fly Ash for Better Packing and Internal Curing
S. V. Deo, A. D. Pofale............................................................................................................................118
The Effect of Incorporation of Ferrite Nanoparticles on Compressive Strength and Resistivity of Self-Compacting Concrete

M. A. Ahmed, Y. A. Hassanean, K. A. Assaf, M. A. Shawkey

A Study on Water Repellent Effectiveness of Natural Oil-Applied Soil as a Building Material


The figure on the front cover is from the article published in Open Journal of Civil Engineering, 2015, Vol. 5, No. 1, pp. 84-96 by Kiho Jung and Shunpei Nakamine.
Open Journal of Civil Engineering (OJCE)

Journal Information

SUBSCRIPTIONS


Subscription rates:
Print: $79 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)
E-mail: sub@scirp.org

COPYRIGHT

COPYRIGHT AND REUSE RIGHTS FOR THE FRONT MATTER OF THE JOURNAL:
Copyright © 2015 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 © 2015 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: ojce@scirp.org
Open Journal of Civil Engineering (OJCE) is an international journal dedicated to the latest advancements in civil 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 civil engineering.

Editor-in-Chief
Dr. Hwa-Chung Wu
Wayne State University, USA

Editorial Board
Prof. Alixeza Afshar
Dr. Ayman Batsha
Prof. Fabio Bisagni
Prof. Christopher Chao
Prof. Carlos Chastre
Dr. Cristena Gentini
Dr. Raja Rizwan Hussain
Prof. Jian Kang
Dr. Vojko Kilar
Prof. Kiyoshi Kobayashi

Dr. Triantafyllos Makarios
Prof. George C. Manos
Prof. Ali M. Mamari
Prof. Low Sui Pheng
Prof. Miroslav Premrov
Prof. Nicola Pugno
Dr. Ghan A. Rassati
Dr. Rehan Sadiq
Prof. Evangelos J. Sapountzakis
Prof. Mehdi Selareh

Prof. Wen-Pei Sung
Prof. Chong-Shian Tsai
Prof. Francesco Ubertini
Dr. Roberto Valentino
Dr. Heng Wei
Dr. I-Tung Yang
Prof. Ka-Veng Yuen
Prof. Jun Zhang

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:

- Assemblage and System
- Behavior of Structures
- Behavior of Structures under Seismic Loads
- Building and Environmental Acoustics
- Building Climate Systems
- Building Energy
- Civil and Environmental Engineering
- Coastal Engineering
- Composite Materials
- Concrete Structures
- Construction Economics
- Construction Engineering
- Design and Performance of Green Building
- Design Optimization of Structures
- Earthquake Engineering
- Energy Efficient Building Technology
- Energy Saving Building Materials
- Evaluation of Building Envelope Systems under Structural and Environmental Loads
- Evaluation of Glazing Systems for Energy Performance
- Fire Engineering
- Foundations Dynamics
- Geotechnical Engineering
- Health Monitoring and Life Prediction of Structures
- High Performance Concrete
- Hydraulic Engineering
- Life Cycle Engineering
- Materials and Durability
- Materials Engineering
- Mechanics and Materials Aspects of Advanced Construction Materials
- Municipal or Urban Engineering
- Nondestructive Testing and Evaluation
- Numerical Modelling of Structures
- Optimal Design of Structures
- Properties of Materials and Concrete
- Residential, Commercial, Industrial and Public Works
- Seismic Evaluation of Building Nonstructural Components
- Simulation Optimization and Risk Management
- Soil-Structure Interaction
- Structural Engineering
- Structural Evaluation of Panelized and Masonry Wall Systems
- Structural Reliability Analysis
- Surveying
- Sustainable Structures
- Transportation Engineering
- Ventilation and Indoor Air Quality
- Water Supply and Drainage

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.

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/ojce  E-mail: ojce@scirp.org