ISSN: 2328-4889 Vol 1, No 1, March 2013



Journal of Building Construction and Planning Research





www.scirp.org/journal/jbcpr

Journal Editorial Board

ISSN Print: 2328-4889 ISSN Online: 2328-4897

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

Editor-in-Chief

Dr. Gwang-Hee Kim

Kyonggi University, South Korea

Regional Editors

Prof. Sudhirkumar V Barai Dr. Chi-kwan Chau Dr. Tsuyoshi Kigawa Prof. Sunkuk Kim Dr. SangHyun Lee Dr. Milan Radosavljevic Dr. Llewellyn Tang Dr. Jian Zuo

Editorial Board

Dr. Joonsuk Ahn Dr. Yong Han Ahn Dr. Sung-Hoon An Prof. Rafik Belarbi Dr. Hanifi Binici Prof. Robert Cerny Dr. Ali Cheshmehzangi Dr. Hunhee Cho Dr. Kyuman Cho Dr. Young-Jun Cho Dr. Hee-Bok Choi Dr. Kunhee Choi Prof. Jui-Sheng Chou Dr. Sutapa Das Dr. Jose L. Fernandez-Solis Dr. Mridul Garg Dr. Jae-Weon Jeong Dr. Jin-Kyu Joo Dr. Seok-Jin Kang Dr. Youngcheol Kang Dr. Jae-Yeob Kim Prof. Jin-Wook Kim Dr. Sangyong Kim Dr. Tae-Hui Kim Dr. Dae-Hyun Koo Dr. Graeme Larsen Dr. Hyung-Sook Lee Dr. Ung-Kyun Lee Dr. Pin-Chao Liao Dr. Sang-Tae No Dr. Kenneth S. Park Dr. U-Yeol Park Dr. Boong Yeol Ryoo Prof. Deok Seok Seo Dr. Kyung Wook Seo Dr. Minho Seo Dr. Yoonseok Shin Dr. Kiyoung Son Dr. Sung Joon Suk Dr. Harun Tanyildizi Dr. Johnny Kwok Wai Wong Dr. Bo Xia Dr. Liang Xia Prof. Keun-Hyeok Yang

Indian Institute of Technology Kharagpur, India The Hong Kong Polytechnic University, China Fukui University of Technology, Japan Kyung Hee University, South Korea University of Michigan, USA University of Reading, UK Unversity of Nottigham (China Campus), China University of South Australia, Australia

Kyonggi University, South Korea Western Carolina University, USA Daegu University, South Korea University of La Rochelle, France Kahramanmaras Sutcu Imam University, Turkey Czech Technical University in Prague, Czech Republic University of Nottingham, China Korea University, South Korea Chosun University, South Korea Cardiff University, UK Jeju National aUniversity, South Korea Texas A&M University, USA National Taiwan University of Science and Technology, Chinese Taipei Indian Institute of Technology Kharagpur, India Texas A&M University, USA CSIR-Central Building Research Institute, India Hanyang University, South Korea Kyonggi University, South Korea Gyeongsang National University, South Korea Florida International University, USA Korea National University of Transportation, South Korea Seoul National University of Science & Technology, South Korea University of Reading, UK Mokpo National University, South Korea Indiana University-Purdue University Indianapolis, USA University of Reading, UK Gachon University, South Korea Kwandong University, South Korea Tsinghua University, China Korea National University of Transportation, South Korea Aston University, UK Andong National University, South Korea Texas A&M University, USA Halla University, South Korea Kyonggi University, South Korea Korea Research Institute of Human Settlements, South Korea Kyonggi University, South Korea University of Ulsan, South Korea Western Carolina University, USA Firat University, Turkey The Hong Kong Polytechnic University, China Queensland University of Technology, Australia University of Nottingham, China Kyonggi University, South Korea



TABLE OF CONTENTS

Volume 1	Number 1	March 2013
Comparison of School Building Construction Costs Estimation Methods Using Regression Analysis, Neural Network, and Support Vector Machine		
GH. Kim, JM. Shin, S. Kim, Y. Shin		
Tests on Alkali-Activated Slag Foamed Concrete with Various Water-Binder Ratios and Substitution Levels of Fly Ash		
KH. Yang,	КН. Lee	8
Crime Prevention in Ethnic Areas Focusing on Crime Prevention through Environmental Design		
SJ. Kang		15

Journal of Building Construction and Planning Research (JBCPR) Journal Information

SUBSCRIPTIONS

The *Journal of Building Construction and Planning Research* (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©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: jbcpr@scirp.org





Journal of Building Construction and Planning Research

ISSN: 2328-4889 (Print) ISSN: 2328-4897 (Online) http://www.scirp.org/journal/jbcpr

Journal of Building Construction and Planning Research (JBCPR) is an open access, scholarly peer reviewed and refereed journal published in electronic form as well as print form. The JBCPR publishes original research, state-of-the-art review articles, discussion papers, innovative industrial application, insightful case studies, and book reviews from experts in the field of building construction and planning. The extensive knowledge, experimental findings, and practical information produced by the journal have become significant resources for innovations in building construction and planning. The journal aims to promote technical and scientific advances in building construction and planning among academia, professionals, consultants and students by stimulating research, encouraging academic exchange and enhancing professional development. The editors welcome high-quality contributions from all over the world.

Subject Coverage

Topics of interest include, but are not limited to the following:

- Applications of Computer Models, Techniques, and Equipment
- Building Conservation
- Building Design and Operation
- Building Heritage
- Building Maintenance and Repairs
- Building Planning
- Building Remodeling
- Building Systems & Components
- Construction Management
- Construction Materials
- Construction Methods
- Construction Safety
- Crime Prevention Design of Building
- Education Relate to Building Construction and Planning
- Emerging Building Technology and Materials
- Energy Consumption & CO₂ Emissions of Materials

& Construction Methods

- Environmental Engineering of Buildings
- Environmental Pollution in Buildings
- Green Building Design & Technology
- High-Rise Building Design and Construction
- History of Construction and Architectural Engineering
- HVAC system for Building
- Landscape Planning and Design for Building
- Other Fields Related to Building Construction and Planning
- Passive House Design and Construction
- Performance of Buildings
- Project Management
- Recycling of Building Materials
- Specification for Building Construction
- Sustainable Development of Building
- Urban Planning and Development
- Urban Renewal

We are also interested in: 1)Short Reports: 2-5page papers where an anthot 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/jbcpr

E-mail: jbcpr@scirp.org

What is SCIRP?

Scientific Research Publishing (SCIRP) is one of the largest Open Access journal publishers. It is currently publishing more than 200 open access, online, peer-reviewed journals covering a wide range of academic disciplines. SCIRP serves the worldwide academic communities and contributes to the progress and application of science, by delivering superior scientific publications and scientific information solution provider that enable advancement in scientific research.

What is Open Access?

rt and Design

Advances in

Advances in Biologica

Entomology

All original research papers published by SCIRP are made freely and permanently accessible online immediately upon publication. To be able to provide open access journals, SCIRP defrays operation costs from authors and subscription charges only for its printed version. Open access publishing allows an immediate, world-wide, barrier-free, open access to the full text of research papers, which is in the best interests of the scientific community.

•High visibility for maximum global exposure with open access publishing model •Rigorous peer review of research papers

•Prompt faster publication with less cost

Engineering

1000

•Guaranteed targeted, multidisciplinary audience



Website: http://www.scirp.org Subscription: sub@scirp.org Advertisement: service@scirp.org