

# PUBLICATIONS

## PUBLICATIONS IN INTERNATIONAL JOURNALS

<b>Complete Reference of Journal</b>	<b>Title</b>
MOJ Civil Engineering, MedCrave Publishing, Edmond, Oklahoma, United States, Volume 2 Issue 1 - 2017	Use of Electroplating Industry Sludge as a Construction Material
Geomatics, Natural Hazards and Risk, 2014 (Taylor & Francis, London, UK)	Monitoring of RCC structures affected by earthquakes
Electronic Journal of Geotechnical Engineering, Vol. 18 [2013], pp 923-963	Medium Triaxial Testing of some Rockfill Materials
Electronic Journal of Geotechnical Engineering, Vol. 17 [2012] pp 3221-3232	Prediction of Shear Strength Parameters of Two Rockfill Materials
International Journal of Structural Integrity, Vol 1, No 3, 2010 pp 209-232	Use of vibration measurements in health monitoring of reinforced concrete buildings
International Journal of Engineering Computations Emerald Group Publishing Limited Howard House, Wagon Lane, Bingley, UK, Vol 25, No 7, 2008 pp 677-693	Health monitoring of RCC building model experimentally and its analytical validation
International Journal of Damage Mechanics”, Sage Publication, USA, Volume 16, No. 4, pp. 457-472, 2007	Damage detection of framed RCC buildings using ANN modeling.

## NATIONAL JOURNAL

Complete Reference of Journal	Title
J. Inst. Eng. India Ser. A (Accepted for publication 2016).	Development of Mathematical Formula for the Calculation of Ultimate Load in Beam Column Joints under Opening Moment Using Genetic Algorithm
J. Inst. Eng. India Ser. A (February–April 2013) 94(1): 23–33 DOI 10.1007/s40030-013-0039-6	Finite Element Modeling of Reinforced Concrete Corners Under Opening Bending Moment
Journal on Today's Ideas– Tomorrow's Technologies, Vol. 1, No. 2, December 2013 pp. 113–122	Effect of Steel Fibers on Reinforced Concrete Opening Corners
Journal of Institution of Engineers. India, Vol 88, No 7, 2008 pp 13-17	Evaluation of dynamic parameters of a three storey RCC building model using vibration techniques
RIMT Journal of Strategic management and information technology, Vol. 3 No.3. pp 43-52, 2006	Disaster management – Vibration monitoring of RCC building mode
Journal of Institution of Engineers Volume 86, pp 53-57, 2005	Nondestructive evaluation of dynamic properties of concrete
Journal of New Building Material and Construction World, New Delhi, Vol. 6, Issue 6, December 2000, pp.26-37	Various aspects of High Performance Concrete

## PAPERS PUBLISHED IN CONFERENCE PROCEEDINGS

Title	Name and Place of Conference
Estimation of Seasonal Variations in Land Surface Temperature Using Landsat (TIRS & OLI) through Single–Window Algorithm Method–A Case Study.	International conference on Clean Technology and Sustainable Development, proceedings, NITTTR, Chandigarh, p 466 - 473., 2018
Landslide Hazard Evaluation Methods – A Review.	Paper presented at the 4th Indian Landslide Congress, organized by Department of Earth Science, Indian Institute of Technology Bombay, 2017
Land use and Land cover changes & Urban sprawl changes using geospatial techniques: A case study on Shimla Tehsil.	Paper presented at the 2nd Himachal Pradesh Science Congress on 'Science & Technology for sustainable livelihood in Indian Himalayan, Shimla, 2017
Landslide studies; A review,	Paper presented at the 2nd Himachal Pradesh Science Congress on 'Science & Technology for sustainable livelihood in Indian Himalayan, Shimla, 2017
Structural Health Monitoring of Civil Engineering Structures	National Conference on Sustainable Infrastructure Development held at NITTTR Chandigarh, 2014
Health monitoring of actual RCC buildings by studying its dynamic parameters	International conference on Structural Engineering held at Malaviya National Instt. of Technology, Jaipur, 2012
Artificial Neural Network Modeling of Wind Loads on tall rectangular buildings	Proc. 2nd National Conference on Wind Engineering, VREC Nagpur, 2004
New Construction material	National Conference on Advances in Concrete Technology ACT 2004 Feb 26-27, 2004, TIET, Patiala
Fuel Savings in Road Improvement	National Seminar on “Challenges for Road Transportation in 21 <sup>st</sup> Century Leading to Fuel Economy”, 2001

Geo-environmental Consideration During the Construction of Hilly Roads	National Seminar on “Road Transportation – Issues & Strategies” 2001
Properties of High Strength Concrete	National Conference on “Advances in Concrete Technology”, 2000
Economics of Operating Ready Mix Plant – A Case Study	National Conference on “Advances in Concrete Technology”, 2000
A Conceptual Approach Towards Tackling the Water Logging Problem of Canal Irrigation	National Seminar on Environment Hazards & Sustainable Development, 1999.
Protocol for the selection of the site and technology for Municipal Sewage Treatment and Disposal	National Seminar on Environment Hazards & Sustainable Development, 1999.

#### **AWARD/PRIZE/CERTIFICATE**

1. Research paper entitled, “Finite Element Modeling of Reinforced Concrete Corners Under Opening Bending Moment” awarded with Best paper award by Institution of Engineers **and gave E P Nicolaidis Prize.**
2. “Awarded Excellent Contribution in Education Sector” by CMAI Association of India on April 2017.

## DETAIL OF PATENTS FILED

Sr. No.	Patent Title	Applicants Name	Patent No.	Agency / Country	Status	Patent Published (Link of weekly IPO Database)
1.	Alternative Construction Material made from electroplating industry sludge and method to prepare the same	Dr. Varinder S Kanwar	498/DEL/2015	India	Applied for	<a href="http://www.ipindia.gov.in/writereaddata/Portal/IPOJournal/1_459_1/part1.pdf">http://www.ipindia.gov.in/writereaddata/Portal/IPOJournal/1_459_1/part1.pdf</a>
2.	Camera accessory for photography in moving vehicle	Mr. Vinay Chadha & Dr. Varinder Kanwar	201611006999	India	Applied for	<a href="http://ipindia.nic.in/writereaddata/Portal/IPOJournal/1_2569_1/Part-1.pdf">http://ipindia.nic.in/writereaddata/Portal/IPOJournal/1_2569_1/Part-1.pdf</a>
3.	Process to convert toothpaste industry waste sludge into usable form	Dr Varinder S Kanwar Mr Surinder Kumar Bashisth	201611022362	India	Applied for	<a href="http://ipindia.nic.in/writereaddata/Portal/IPOJournal/1_2585_1/Part-1.pdf">http://ipindia.nic.in/writereaddata/Portal/IPOJournal/1_2585_1/Part-1.pdf</a>
4.	Method of converting lime sludge of paper industry into bricks	Dr Varinder S Kanwar Mr Brij Bhusan Dr Siby John	201711003597	India	Applied for	

## BOOKS PUBLISHED

Name of Book	Publisher name	Year of Publication	
Health Monitoring of RCC Buildings using Vibration Measurements	Lambert Publication, Germany	2017	
Water Supply Engineering	Vikas Publication, New Delhi	2015	

Written Course Material for Continuing Education Programme on the following topics

- (a) Energy generation from waste
- (b) Use of Library Information services as tool for enhancing the knowledge of engineering professionals

## CONFERENCE ORGANIZED AND PROCEEDING EDITED IN LAST 5 YEARS

S.No.	Conference Title	Date and Year
1.	International Conference on Clean Technology and Sustainable Development - 2018	23 <sup>rd</sup> & 24 <sup>th</sup> February, 2018
2.	International Conference on Sustainable Civil Engineering Practices - 2017	2 & 3rd March, 2017
3.	National Conference on Sustainable Civil Engineering Practices - 2016	18 & 19 <sup>th</sup> March, 2016
4.	National Conference on Sustainable Infrastructure Development-2015 (NCSID-2015)	26 & 27 <sup>th</sup> February, 2015
5.	National Conference on Sustainable Infrastructure Development-2014 (NCSID-2014)	13 & 14th March, 2014

## DETAILS OF RESEARCH PROJECTS UNDERGOING

Sponsoring Organization	Title of Project	Project Status	Total Cost
SERB, Department of Science and Technology, New Delhi	Landslide prone area mapping geospatial approach: A case study of Shimla District	Ongoing	₹ 22.25 Lacs
HP State Council of Science Technology and Environment, Shimla	Alternative construction material made from industry sludge containing CaCo3 and a method to prepare the same	Ongoing	₹ 6.25 Lacs
Department of Environment Science and Technology, HP Government Shimla	Use of Industry Sludge containing calcium carbonate for manufacturing hard grade bitumen	Ongoing	₹ 10 Lacs

## **MEMBERSHIP OF COMMITTEES/BOARDS**

- Fellow Institution of Engineers
- Life member Indian Society for Technical Education
- Life Member American Society of Civil Engineering
- Life Member Punjab Science Congress
- Life Member Indian Concrete Institute
- Member Board of Studies, Civil Engineering, Panjab University, Chandigarh
- Executive Member, Indian Concrete Institute, Punjab & Haryana State Centre, Chandigarh from 2015 for five years
- Peer Reviewer for Congent Engineering Journal
- Peer Reviewer for ACI Structural and Materials Journals
- Peer Reviewer for Engineering Structures Journal (Elsevier)
- Peer Reviewer for The Open Civil Engineering Journal
- Peer Reviewer for Hindawi Journal of Advances in Civil Engineering
- Editorial Board Member and Peer Reviewer for American Association for Science and Technology Journal.

## **INTERNATIONAL RESEARCH TIE-UPS**

- Participating in joint research activities carried out by Chitkara University, Glasgow Caledonian University UK and ESTP Paris, France.
- In addition, another joint venture for research with Professors from Edith Cowan University and Federal University Australia is going on.

## **RESEARCH GUIDANCE**

- Supervision of awarded Doctoral Thesis: 02
- Supervision of Doctoral Thesis, under progress: 04
- Supervision of awarded M.E. dissertations: 02