

Annual Report 2011-2012

Department of Civil Engineering

Introduction

The Department of Civil Engineering with its multifaceted faculty continues to maintain and cultivate its strong links with the building and construction industry and academic and research institutions both within and outside the country. Besides high quality teaching and instruction at both UG and PG levels, the Department is actively involved in basic and applied research and consultancy and provides high quality technical advisory support through various R & D projects and consultancy to various organizations. The department has attracted significant amount of sponsored research funding from government and private agencies.

Academic Programmes

The Department of Civil Engineering offers broad-based undergraduate B.Tech degree programme. A dual degree (B.Tech-M.Tech) programme is also run in structural engineering. Postgraduate M.Tech (admissions through GATE/sponsorships) and PhD (through selections/sponsorships) programmes are offered in the following five specializations:

Transportation Systems Engineering
Geotechnical Engineering
Water Resources Engineering
Structural Engineering
Geodesy and Remote Sensing

This year, 48 MTech and 23 PhD students were admitted in the above specializations. In the first year, 120 students were on rolls in the B.Tech. The students that graduated from the Department are as follows:

Degree Awarded	
B.Tech.	: 47
M.Tech.	: 36
Ph.D.	: 16
Dual Degree	
B.Tech.	: 23
M.Tech.	: 23

Significant Awards / Distinctions

Balaji, R.

R J Garde Research Award by Indian Society for Hydraulics (ISH) in the category of young scientist for outstanding contribution in the field of Hydraulics and Water Resources, 2011-12.

Fellowship from Permanent International Association of Navigational Congress (PIANC) for attending international conference, 2012.

Banerji, P.

Appointed as Director, IIT Roorkee.

Choudhury, D.

Vivekananda's Excellence Award for Young Scientist – 2011, Varaha College of Architecture & Planning, Varaha Lakshmi Narasimha Swamy Educational Trust, Visakhapatnam, A.P., India, September 2011.

Deo, M.C.

Appointed as Director, VJTI, Mumbai

Eldho, T.I.

Jalvigyan Purskar for the year 2011-12, instituted by Indian Society for Hydraulics, for the paper entitled "Meshless Point Collocation Method for 1D and 2D groundwater flow simulation", published in the ISH Journal of Hydraulic Engineering, Published in 2011.

Youtube webcasted the Video Course on "Fluid Mechanics", and rated as popular engineering course video

Janga Reddy, M.

BOYSCAST Fellowship Award, by DST, Govt. of India, (2011)

IIT Bombay Young Investigator Award, by IRCC IIT Bombay, given on 5-Sept-2011

Shri R.N. Prasad Biennial Award, by Indian Geotechnical Society India, for the best paper published in Indian Geotechnical Journal in 2010, given on 14-Dec-2011.

Jothiprakash, V.

ISTE-Maharashtra State National Award for Research Work in Engineering and Technology for the year 2011 awarded by Indian Society for Technical Education, during the 41st Annual Convention of ISTE held at Fatehgarh Sahib, Punjab on 16th Dec 2011.

Surendranath Mukerjee Memorial Gold Medal for the best paper awarded by Institution of Engineers (India), during 26th Indian Engineering Congress held at Bangalore on 16.12.2011

Singh, D. N.

John R. Booker Excellence Award-2011 on May 10, 2011 at Melbourne.

Concept Designer & Jury Member, Birla White Yuvaratna Award-2011 for Civil Engineers.

Subimal Ghosh

Indian National Academy of Engineers (INAE) Young Engineer Award

Institute of Engineers (India) Young Engineer Award

R&D Activities

Sponsored Research

Sponsored Research Projects : 47	
New	: 8
Ongoing	: 33
Completed	: 6
Faculty Involved	: 24

Department received 8 new sponsored projects with a sanctioned outlay of Rs. 1,31,52,856. A list of sample of new sponsored projects is as below:

Project Title	Sponsoring Agency	Status
Seismic fragility of the primary containment considering structural integrity and leakage through the damaged containment	Atomic Energy Regulatory Board	Initiated
Characterisation of Non-Linear Fluid Viscous Dampers to Control High-Velocity Shocks	DRDO	Initiated
Pilot Project to Reuse the Rubble	IRCC	Initiated
Downscaling for projections of indian rainfall and temperature at high spatial resolution.	ISRO	Initiated
Near Real-Time Detection and Assessment of Disbonds in Honeycomb Composite Sandwich Structures using Ultrasonic Guided Waves.	ISRO	Initiated
Seismic Vulnerability Assessment of Building Types in India	National Disaster Management Authority	Initiated
Mw=8.0 Kalka Earthquake Disaster Scenario for Disaster Risk Management	National Disaster Management Authority	Initiated
Evaluation of Coal ash as a landfill liner material for waste containment systems	DST	Completed
Static and Dynamic Analyses of Reduction of Earth Pressure on Retaining Walls Using Compressible Geo-inclusions	Ministry of Earth Sciences	Initiated
Water management under uncertainty in climate change impacts on river basin hydrology	DST	Initiated
Seismic fragility of the primary containment considering structural integrity and leakage through the damaged containment	Atomic Energy Regulatory Board	Initiated

Patents

Singh, D. N. Estimation of Tensile Strength of the Soil from its Penetration Resistance.
(Provisional Indian Patent Application No. 220/MUM/2012)

Consultancy Work

329 consultancy projects worth about Rs. 13.96 crores were undertaken during the year by the Civil Engineering Department. 24 faculty members were involved in the above consultancy work.

Extension Activities

In order to encourage and facilitate interaction amongst practitioners and researchers, the following activities were organized:

Conferences

Organised the 4th National civil engineering students Symposium (AAKKAR), 3-4 March 2012, Civil Engineering Association, IIT Bombay. (CEA Faculty in-Charge : **Prof. P. Vedagiri**)

Short-Term Courses / CEP Courses

Short-term QIP-CEP Course on Advanced Foundation Engineering at IIT Bombay, during 20-24 June 2011. (**Dasaka S. Murty**)

CEP Course (Open), on "Urban Drainage Management- State-of-the-Art " IIT Bombay, 14-16 July 2011. (**Prof. Gupta, K.**)

QIP & Short Term Course on "Hydraulics and the Environment", August 01-05, 2011. (**Prof. Pani, B. S.**)

QIP & CEP Course "Finite Element Method & Applications in Civil Engineering", held during 16-20 August 2011. (**Prof. Eldho T.I. & Prof. Y.M. Desai**)

CEP Short term course on "Refresher Cum Orientation Course on Road works for BMC Engineers" 21-25 November 2011, IIT Bombay. (**Prof. K.V. Krishna Rao and Prof. P. Vedagiri**)

CEP Course for ONGC Engineers "Rainwater Harvesting & Sustainable Water Management", held during 24-26 November 2011. (**Prof. Eldho T.I.**)

CEP Short term course on "Interlocking Concrete Block Pavements (ICBP): Technical and Administrative Aspects" 26 November 2011, IIT Bombay. (**Prof. K.V.Krishna Rao and Prof. P. Vedagiri**)

CEP & QIP Short Term Course on "Coastal Processes and Modeling", held during March 19 - 23, 2012 (**Prof. R. Balaji & Prof. T. I. Eldho**)

QIP & CEP Short Term Course on "Hydraulic Structures", March 12-16, 2012. (**Prof. Pani, B. S.**)

CEP Course "Rainwater Harvesting & Sustainable Water Management", held during 30-31 March 21012. (**Prof. Eldho, T.I.**)

Visitors to the Department and their presentations

Name and Affiliation	Date	Lecture Topic
Dr.-Ing. Shailesh Kumar Singh, Scientist (Hydrology), NIWA (National Institute of Water and Atmospheric Research), New Zealand.	11-05-2011	Robust Parameter Estimation for Model using Data Depth Function
Dr. R. G. Robinson, Associate professor, IIT Madras.	18-07-2011	Testing methods and soil properties
Mr. zeljorad Maricic, Product Development Engineer – GCTS Testing Systems, USA.	18-07-2011	Advancements in Geotechnical/pavement testing
Dr. Paul J Bullock, Fugro Consultants Inc. – Load test, Florida, USA.	15-09-2011	Bi-directional load testing of piles using Osterberg cell (O-cell).
Prof. A. Boominathan, Department of Civil Engineering, IIT Madras	30-09-2011	Microzonation Studies for Chennai city
Dr. Debashis Raha, Australia	03-10-2011	Water and Climate Change
Mr. Vikram Lall, Lall & Associates, New Delhi	08-11-2011	Buddhist Architecture - Evolution of building forms and their architectural/engineering connotations
Dr. Katrin Beyer, Assistant Professor, Ecole Polytechnique Federale de Lausanne (EPFL) in Switzerland.	01-12-2011	Spandrel elements in unreinforced masonry walls – an experimental and numerical investigation
Dr. Amit Kumar Sinha, GIS specialist, Environmental Systems Research Institute Inc, California, USA.	13-12-2011	Esri GIS Practitioners - Perspectives and Partnerships
Ms. Priya Mazumdar, The Vice President of Andalyze, Inc. USA	05-01-2012	New, Easy & Quick Techniques To Test Heavy Elements In Water
Dr. Arnab Chakraborty, Assistant Professor, University of Illinois at Urbana-Champaign.	11-01-2012	Applying Scenario Analysis to Transportation Planning: Lessons for Regional Decision-making

Mr.Sundar Chandramouli, Assistant Director – Projects, DB Hospitality Pvt Ltd. Mumbai.	17-01-2012	Dances with Disasters-Effective project management tools in construction.
Dr. Takashi Tazoh, Chief Research Manager, Institute of Technology, Shimizu Corporation, Tokyo, Japan	23-01-2012	Earthquake Engineering Research on Pile foundations.
Dr. Yutaka Nakamura, Chief Research Engineer, Institute of Technology, Shimizu Corporation, Tokyo, Japan.	23-01-2012	Report on the Effects of Seismic Isolation Methods from the 2011 Tohoku-Pacific Earthquake.
Mr. Cyrus M. Dordi, Head, Marketing , Gujarat Ambuja Cements Limited, Mumbai	07-02-2012	Journey Through the Concrete Jungle
Prof. Ryosuke Kitamura, Professor and Former Vice-Dean of Engineering at Kagoshima University, Japan.	12-03-2012	Soil Mechanics for Unsaturated Soils
Prof. V.Thamizh Arasan, Transportation Engineering Division, Department of Civil Engineering, IIT Madras, Chennai.	02-04-2012	Meeting the Future Demand for Transport: The Way Forward.

Participation in Conferences/Symposia/Workshops/Seminars

Bajoria, K. M.

Participated and chaired a session at EUROSTEEL 2011, Budapest, Hungary, 31 August -3 September 2011.

Balaji, R.

Participated and presented an invited talk in the National conference on Hydraulics and Water Resources (HYDRO), held during Dec 29-30, 2011 at SVNIT, Surat, Gujarat.

Participated in the National workshop on water waves and floating bodies, held during Nov 25-26, 2011 at Dept. of Ocean Engineering and Naval Architecture, IIT Kharagpur.

Participated in the 8th International Conference on Coastal and Port Engineering in Developing Countries (COPEDEC) held during Feb 20-24, 2012 at IIT Madras, Chennai.

Choudhury, D.

Acted as a Panelist and Invited Speaker at Workshop 'Alumniportal Deutschland', March 31, 2012, The Oberoi Hotel, Gurgaon, New Delhi Capital Region, organized by Alexander von Humboldt Foundation, Bonn, Germany.

Participated at Conference on 'New Frontiers: Shifting Trends in the Global Research Landscape and their Impact on Researchers' Career Patterns', March 29-30, 2012, The Oberoi Hotel, Gurgaon, New Delhi Capital Region, organized by Alexander von Humboldt Foundation, Bonn, Germany.

Participated in GeoCongress-2012, Annual Congress of the Geo-Institute of ASCE, March 25-29, 2012, Oakland, California, USA organized by GI-ASCE, USA.

Participated in Indian Geotechnical Conference (IGC-2011) at Kochi, Kerala, India during December 15-17, 2011. Also acted as a Co-Chair of a Technical Session on Numerical and Physical Modeling of IGC-2011.

Participated and delivered Invited Lecture during First Indo – Japan Workshop in Geotechnical Engineering, Theme: Earthquake Geotechnical Engineering, on December 14, 2011, jointly organized by Indian Geotechnical Society (IGS), New Delhi, India and Japan Geotechnical Society (JGS), Tokyo, Japan.

Dasaka S. Murty

Participated in Indian Geotechnical Conference (IGC-2011), Kochi, India, 15-17 December, 2011.

Participated in Geosynthetics India 2011 Conference, IIT Madras, 23-24 September, 2011.

Eldho, T. I.

Participated in Indo-Italian Workshop on "Advances in Fluvial Hydraulics & Water Resources Development, CWPRS, Pune, 15-16 September 2011

Participated in IWM 2011, Indian Water Management in 21st Century, Workshop organized by IIT Bhubaneswar, Abstract volume, 27-29, December 2011, Bhubaneswar.

Participated in Indian Geotechnical Conference -2011, Kochi, December 15-17, 2011.

Participated and Chaired a session in Hydro 2011, NIT Surat, Proc. of Hydro 2011, Hydraulics & Water Resources, 29-30, December 2011.

Ghosh, S

Participated and Chaired a session in the 8th International Conference on Structural Dynamics (EURODYN 2011), Leuven, Belgium, July 04-06, 2011. Also presented a paper in this conference.

Participated in the ArcelorMittal SteelNet Workshop on Seismic Design and Construction, Liège, Belgium, July 13-15, 2011.

Participated with a key-note paper in the International Symposium on Engineering under Uncertainty: Safety Assessment and Management (ISEUSAM-12), Howrah, India, January 04-06, 2012.

Gopal Rao, K

Participated in 16th National Conference on Hydraulics and Water Resources, HYDRO-2011, Sardar Vallabhai National Institute of Technology, Surat, 2-30th Dec. 2011.

Participated in TECHFEST – 2012 : Guest of Honour : Sri Tiwari College of Engg. : Mira Road

Gupta, K.

Participated in the 12th International Conference on Urban Drainage, 11-16 September 2011, Proto Alegre, Brazil

Jothiprakash, V.

Participated in Brainstorming Meeting for TIFAC's "Technology Vision 2035", Indian Institute of Technology Bombay, July, 30th, 2011.

Participated in the 9th R&D Indian National Committee on Hydrology Workshop, Central Water Commission, New Delhi, 19th Aug. 2011.

Participated in the 4th International Ground Water Conference, IGWC-2011, Yadava College, Madurai, Tamil Nadu, India, Sep. 27th to 30th 2011.

Participated in the 16th National Conference on Hydraulics and Water Resources, HYDRO-2011, Sardar Vallabhai National Institute of Technology, Surat, 2-30th Dec. 2011.

Mandal J.N

Attended presented paper and chaired a session in Indian geotechnical conference- IGC - 2011, 15-17th Dec. 2011, Kochi, Kerala.

Attended International conference state of the art and practice in geotechnical engineering- Geo congress -2012, 25-29th March 2012, Oakland, CA, USA, and presented two technical papers.

Delivered keynote lecture at First National Conference in the Emerging Vistas of Technology in 21st Century – NCEVT' 12 14-15th April, 2012, Ahmedbad, India.

Pani B S

Participated and Chaired a session on Jets in the Sixth International Conference on Asian and Pacific Coasts, December 14 – 16, Hong Kong, China

Tom V Mathew

Participated in the Indo-American Frontiers of Engineering, Arlington, VA, USA, March 1-3, 2012.

Participated in the 91st Annual Meeting of Transportation Research Board, Washington D.C., 22-26 January 2012.

Vedagiri, P.

Participated in the 6th IRF Regional Conference on Road Safety Strategy in India – Action Plan", 3-5 October 2011, New Delhi.

Participated in 2nd National Conference on Intelligent Transportation System, IIT Bombay, 25-27 August, 2011.

Viswanadham, B.V.S.

Participated in the One day Conference on Geosynthetic Lining Systems and Relative Issues organised by ASCE India Southern region at IISc Bangalore, Bangalore on February 25, 2012.

Participated in Geochallenges, Indian Geotechnical Conference 2012 organised by Indian Geotechnical Society during December 14-16, 2011 at Kochi, Kerala, India.

Participated in the workshop in the memory of Karl Terzaghi's Birthday organised by Indian Geotechnical Society. Kakinada Chapter on October 1, 2011.

Participated in Geosynthetics india' 11 and An introductory course on geosynthetics during September 22-24, 2012 organized by International Geosynthetic Society at IIT Madras.

Participated in the National Workshop on "Recent advances in geotechniques" (rag-11) for infrastructure developments Organized by: Indian Geotechnical Society, Baroda Chapter, Vadodara on June 18, 2011.

Invited Lectures

Choudhury, D.

Earthquake Engineering, on 31st March, 2012, at The Oberoi Hotel, Gurgaon, New Delhi Capital Region, organized by Alexander von Humboldt Foundation, Bonn, Germany.

Need of study for seismic liquefaction and ground response for design of foundations, on 16th March, 2012, at L. D. College of Engineering, Ahmedabad, Gujarat, India organized by Gujarat Technological University (GTU), India.

Recent development in geotechnical earthquake engineering research at IIT Bombay, on 3rd March, 2012, at IIT Kanpur, India during Symposium on 'Recent Development in Geotechnical Engineering', organized by Department of Civil Engineering, IIT Kanpur, India.

Earthquake disasters and mitigations – Indian and International Scenario, on 24th February, 2012, at Bhilai Institute of Technology, Durg, India, organized by Bhilai Institute of Technology, Durg, India.

Seismic liquefaction hazard and site response for design of piles in Mumbai, on 14th December, 2011, at Hotel Park Central, Kochi, Kerala, India during First Indo – Japan Workshop in Geotechnical Engineering, Theme: Earthquake Geotechnical Engineering, jointly organized by Indian Geotechnical Society (IGS), New Delhi, India and Japan Geotechnical Society (JGS), Tokyo, Japan.

Energy Piles – Modern Geotechnics for Sustainable Development, on 21st October, 2011, at Institute for Social and Economic Change (ISEC), Bangalore, India during International

Humboldt Kolleg, organized by Institute for Social and Economic Change (I.S.E.C.), Bangalore, India and supported by Alexander von Humboldt Foundation, Bonn, Germany.

Recent Advances in Earthquake Resistant Design of Earthen Structures, on 8th September, 2011, at GRT Grand Salem, India during Humboldt Kolleg and International Conference (Earth-Future), organized by Periyar University, Salem, India and supported by Alexander von Humboldt Foundation, Bonn, Germany.

Recent Researches on Geotechnical Earthquake Engineering at IIT Bombay, on 12th July, 2011, at Division of Soil Mechanics and Foundation Engineering, Technical University of Kaiserslautern, Germany, organized by Div. of Soil Mechanics and Foundation Engg., Technical University of Kaiserslautern, Erwin-Schroedinger-Str., D-67663, Kaiserslautern, Germany.

Recent Trends of Research on Geotechnical Earthquake Engineering at IIT Bombay, on 26th May, 2011, at International Centre for Geohazards (ICG), Norwegian Geotechnical Institute (NGI), Oslo, Norway, organized by ICG, NGI, Ullevål Stadion, NO-0806, Oslo, Norway.

Deo M C

Delivered invited lecture on “Application of data driven methods to coastal engineering problems” at TU Delft, on Dec. 6, 2012.

Invited lecture at Hydro-2011 conference held at SVNIT Surat during Dec. 29-30 on “Effect of climate change on design waves”.

Dasaka S. Murty

Keynote lecture, National level Workshop on Advanced Foundation Engineering, 27th August, 2011, Department of Civil Engineering, Maharashtra Institute of Technology, Aurangabad, Maharashtra.

Delivered series of lectures as part of an in-house CEP course on Geotechnical Engineering at Institute of Engineering and Ocean Technology (IEOT), ONGC, Mumbai, 12-16 September, 2011.

Invited expert lecture on Effect of Uncertainties in the Field Load Testing on the Observed Load-Settlement Response, National Seminar on Advances in Geotechnical Engineering, SVNIT Surat, 8th October, 2011.

Eldho, T. I.

Keynote Lecture, "Integrated Approach of Numerical Modelling, GIS & Remote Sensing for Water Resources Management ", Hydro 2011, 29th December 2011, NIT Surat.

Invited Lecture, ""Groundwater Pollution, Remediation & Management", IWM 2011, Indian Water Management in 21st Century, in Workshop organized by IIT Bhubaneswar, 27th December 2011, Bhubaneswar.

Invited Lecture, "Applications of Remote Sensing, GIS & Hydrological Models for Integrated Water Resources Management", Indo-Italian Workshop on "Advances in Fluvial Hydraulics & Water Resources Development, CWPRS, Pune, 15September 2011.

Invited Lecture, "Climate Change & Water Management", Kerala State Electricity Board Engineer's Training, Moolamattom, Kerala, 20th May 2011.

Invited Lecture, "Integrated Watershed Modeling Using IRS Data & GIS", IITB-ISRO Workshop, 28th July 2011.

Ghosh, S

On "Research on Heritage Masonry Structures at IIT Bombay", at ENAC, École Polytechnique Fédérale de Lausanne (EPFL), Switzerland, on July 08, 2011.

On "Seismic Design and Construction: Lightweight and Innovative Solutions using Steel", at Université de Liège, Belgium, on July 13, 2011.

Key-Note lecture on "Seismic fragility analysis of the primary containment structure using IDA" at the *International Symposium on Engineering under Uncertainty: Safety Assessment and Management (ISEUSAM-12)*, Howrah, India, January 05, 2012.

Gopal Rao, K

Delivered Guest lecture at College of Engineering, Thiruvananthapuram on Syllabus formulation For M. Tech. GeoInformatics-2010-11.

Delivered Guest lecture at QIP-Short-term Course on Satellite Image Processing and Analysis, CSRE-IIT Bombay, 03-07 January, 2011, 1. Thermal Infrared Remote Sensing and 2. Thermal Infrared Data Processing

Delivered Guest lecture at College of Engineering, Thiruvananthapuram on Remotely Sensed Data and Digital Image Analysis. Theory and Data processing, January. 2012

Delivered two Guest lecture at College of Engineering, Thiruvananthapuram on (i) Remote Sensing : Theory and Applications, (ii) Digital Analysis of Remotely Sensed Data, January. 2011

Delivered Guest lecture at Datta Meghe Institute of Engineering Technology & Research,- Wardha (Maharashtra) on Remote Sensing Methods, Analysis and Applications", during National conference on "Innovative Trends in Technology Development", TECHNOCON-2012, 06-07, January, 2012.

ONGC-Mumbai - Application of ANN in Geotechnical Engg--20.1.2012.

Gupta, K.

Keynote speaker "Cities Resilient to Floods", 12th International Conference on Urban Drainage, 11-16 September 2011, Porto Alegre, Brazil

Jothiprakash V

Delivered lecture on "Introduction to Water Resources Systems Modelling Techniques", Centre for Water Resources, Anna University, Chennai, on 20th Sep. 2011.

Delivered lecture on "Advanced Water Resources Systems Techniques", Centre for Water Resources, SVNIT, Surat, on 20th Nov. 2011.

Delivered lecture on “Introduction to Basic Knowledge of Hydrology- needed for Rainwater Harvesting”, CEP Course on Rainwater Harvesting and Sustainable Water management, IIT Bombay, on 24th Nov. 2011.

Delivered lecture on “Road Drainage – Techniques of surface and sub-surface drainage”, Refresher cum orientation course on Road Works for BMC Engineers, IIT Bombay, on 24th Nov. 2011.

Delivered lecture on “Introduction to Basic Knowledge of Hydrology- needed for Rainwater Harvesting”, CEP Course on Rainwater Harvesting and Sustainable Water management, IIT Bombay, on 30th Mar. 2012.

Delivered lecture on “Application of Soft Computing Techniques for reservoir inflow prediction”, on 16th March, 2012, at L. D. College of Engineering, Ahmedabad, Gujarat, India organized by Gujarat Technological University (GTU), India.

Juneja, A.

Delivered lecture on "Soil mechanics and critical state" to the students at Department of Civil Engineering, National Kaohsiung University of Applied Sciences, Kaohsiung, Taiwan (May 2011).

Delivered lecture on "Small piled rafts in layered deposits", during 5th Asian workshop on ATC-18 Mega Foundations, Hong Kong (May 2011).

Delivered lecture on "Features of landfill closure construction" and "Air intrusion in soil environment", during the CSIR Workshop on Emerging Trends in Geo-environmental Engineering at IPS Academy, Indore (March 2012).

Delivered lecture on "Finite element analysis in geotechnical engineering", during the QIP short-term course on Finite element methods with applications in civil engineering at IIT Bombay (August 2011).

Mandal, J. N.

Delivered Keynote lecture on “Novel Techniques for Ground Improvement in India” , Special Issue of the First National Conference in the Emerging Vistas of Technology in 21st Century, The Indian Journal of Technical Education, 14-15th April,2012, Ahmedbad,India,103-114.

Pani, B. S.

Delivered lecture on “Point source method of predicting the mean flow characteristics of turbulent jets” at NTU, Singapore, 9th Feb, 2012

Delivered lecture on “Basic Fluid Mechanics” at GCET Vallabh, Vidyanagar, Gujarat, 24th and 25th Feb, 2012.

Patil G R

Delivered lecture on “Real-time traffic counting and monitoring system”, 2nd National workshop on Intelligent Transportation Systems, IIT Bombay, September 2011.

Prakash Nanthagopalan

Delivered lecture on “Mixture design for pavement quality concrete”, Refresher cum orientation course on road works for BMC Engineers, November 2011, IIT Bombay.

Rao, E. P.

Delivered a lecture to the participants of QIP and CEP short term course on ‘Coastal Processes and Modelling’, Civil Engineering Department, IIT Bombay, Mumbai, 19-23 March, 2012.

Singh D N

Delivered lecture on “Advances in Instrumentation: Geoenvironmental Engineering”, Association of Consulting Civil Engineers, Hyderabad Chapter, December 2011.

Delivered lecture on “Need Based Instrumentation for Various Geoenvironmental Issues”, at INAE Annual Convention, Hyderabad, December 2011.

Delivered lecture on “Porous Media Characterization Using Various Energy Fields”, at IGS, Hyderabad Chapter, JNTU Hyderabad, December 2011.

Delivered lecture on “Simulation of Various Geoenvironmental Problems” at SVNIT, Surat, October 2011.

Delivered lecture on “Rockfall Protection Systems for Landslide-prone Slum Areas in & Around Mumbai City” at Maharashtra Housing and Area Development Authority (MAHADA), Mumbai, Engineers Day, September, 2011.

Delivered lecture on “Porous Media Characterization Using Various Energy Fields” at IGS, Chennai Chapter, IIT Madras, July 2011.

Delivered lecture on “Sheet Pile Walls & Braced Cuts” at IIT Bombay, June 2011.

Delivered lecture on “Foundations on Problematic Soils” at IIT Bombay, June 2011.

Delivered lecture on “Instrumentation for Characterizing Unsaturated Soils” at IGS Baroda, RAG-2011, June 2011.

Delivered lecture on “Some Studies on Soil-radionuclide Interaction Under Varied Experimental Conditions” in the 13th International Association for Computer Methods and Advances in Geomechanics Conference, 10 May 2011, Melbourne.

Delivered lecture on “Porous Media Characterization Using Various Energy Fields” at Aditya Birla Science & Technology Company, Taloja, Panvel, April 2011..

Raje, D.

Delivered lecture on “Urban Flooding and Climate Change”, in three-day CEP course on ‘Urban Drainage Management:State-of-the-Art’, 14 July, 2011, IIT Bombay, Bombay.

Tom V Mathew

Lecture series on Transportation Systems Engineering to the Masters students of Rajiv Gandhi Institute of Technology, Kottayam, under visiting faculty scheme of the Government of Kerala, March 22-23, 2010.

Lecture series on Transportation Systems Engineering to the Masters students of Rajiv Gandhi Institute of Technology, Kottayam, under visiting faculty scheme of the Government of Kerala, 2011.

Viswanadham, B.V.S.

An invited lecture entitled “Performance of Composite Covers of Landfills subjected to Differential Settlements: Centrifuge Study” was delivered on February 25, 2012 at One day Conference on Geosynthetic Lining Systems and Relative Issues organised by ASCE India Southern region at IISc Bangalore, Bangalore.

A lecture entitled “Slope stability evaluation by Limit Equilibrium Methods” was delivered at Institute of Engineering and Ocean Technology (IEOT), ONGC, Mumbai on Jan 20, 2012.

A lecture entitled “Potential of Geosynthetics in Road Construction” was delivered on November 25, 2011 during Short-term Training course at IIT Bombay for BMC Engineers.

A key note lecture entitled “Application of Centrifuge-based Physical Modelling to Geotechnical Engineering Practice” was delivered on October 1, 2011 during workshop in the memory of Karl Terzaghi’s Birthday organised by Indian Geotechnical Society. Kakinada Chapter.

A lecture entitled “Centrifuge modeling of Geosynthetic Reinforced Soil Structures” was delivered on September 22, 2011 during Introductory course on Geosynthetics during Geosynthetics India 2011 at IIT Madras.

A keynote lecture entitled “Centrifuge based modeling of waste containment systems of landfills and low-level radioactive waste sites” was delivered at Geosynthetics India conference organized by International Geosynthetic Society at IIT Madras during September 23-24 2011.

A Piyush Parikh memorial lecture lecture entitled “Advances in Geosynthetic applications in Geotechnical Engineering” was delivered June 18, 2011 at National Workshop on “Recent advances in geotechniques” (rag-11) for infrastructure developments Organized by: Indian Geotechnical Society, Baroda Chapter, Vadodara.

A lecture entitled “Centrifuge-based Physical model studies on Railway Embankments Constructed with Coal Ash” was delivered on June 14, 2011 at RDSO, Lucknow during Fly ash workshop organized by M/s NTPC Ltd.

Lectures with the following titles i) Modelling techniques in Geotechnical Engineering, ii) Centrifuge modelling of geotechnical structures, and iii) Centrifuge modelling of steel sheet pile walls in clay were delivered on May 27, 2011 during AICTE sponsored short-term training programme organised by the Department of Civil Engineering, Government Polytechnic, Goa.

Honorary Work

Bajoria, K M

Chairman of Indian ASTR (Association of Structural Rehabilitation)

Balaji, R

Reviewed papers for Journal of Engineering Applications of Computational Fluid Mechanics.
Reviewed papers for ISH Journal of Hydraulics Research.

Chandiramani, N. K.

Reviewer for Journal of Sound and Vibration, ASME Journal of Dynamic Systems, Measurement and Control, Applied Mathematical Modeling, Sadhana, ASCE Journal of Computing in Civil Engineering.

Thesis examiner: for PhD thesis from Dept. of Civil Engg., IIT Madras

Choudhury, D.

Editorial Board Member of 'ISSMGE Bulletin' (Quarterly Newsletter), published by International Society for Soil Mechanics and Geotechnical Engineering (ISSMGE), London, U.K.

Editorial Board Member of 'Indian Geotechnical Journal (IGJ)' (ISSN: 0046-8983), Springer.

Editorial Board Member of 'International Journal of Geotechnical Earthquake Engineering (IJGEE)' (ISSN: 1947-8488), IGI publishing.

Editorial Board Member of Journal 'Disaster Advances' (ISSN: 0974-262X), published from India.

Managing/Handling Editor for February 2012 issue (Volume 6, Issue 1) of 'ISSMGE Bulletin', published by International Society for Soil Mechanics and Geotechnical Engineering (ISSMGE), London, U.K.

Member of Award Nomination Committee to shortlist the ASCE Papers for nomination of Awards from UNSAT Technical Committee of Geo-Institute, American Society for Civil Engineers (GI-ASCE), USA.

Reviewer of technical papers for several Journals like (i) Journal of Geotechnical and Geoenvironmental Engineering, ASCE, (ii) International Journal of Geomechanics, ASCE, (iii) Geotechnical Engineering, Proc. of Institute of Civil Engineers (ICE), (iv) Ground Improvement, ICE (v) Geotechnical and Geological Engineering, Springer (vi) Scientia Iranica, Transaction A (vii) Waste Management, Elsevier, (viii) Geotechnical Testing Journal, ASTM, (ix) Soils and Foundations, Elsevier, (x) Earthquake Spectra, EERI (xi) Civil Engineering Journal of Institute of Engineers, IEI, India and (xii) Indian Geotechnical Journal, IGS, India.

Reviewer for GeoCongress 2012: Annual Conference of Geo-Institute (GI), ASCE, USA.

Reviewer for 64th Canadian Geotechnical Conference and 14th ISSMGE Pan American Conference (2011 Pan-Am CGS Geotechnical Conference), October 2 - 6, 2011, Toronto, Ontario, Canada organized jointly by ISSMGE and Canadian Geotechnical Society, Canada.

Reviewer for 13th International Conference of International Association for Computer Methods and Advances in Geomechanics (13IACMAG 2011), May 9-11, 2011, Melbourne, Australia organized by IACMAG, USA.

Reviewer for Sponsored Research Project Proposal of 2011-2012 for SERC Division of Department of Science and Technology (DST), Govt. of India.

Member of Technical Committee TC 203 on Geotechnical Earthquake Engineering of International Society for Soil Mechanics and Geotechnical Engineering (ISSMGE), London, U.K.

Technical Advisory Committee (TAC) Member, 4th International Conference on Grouting and Deep Mixing (Grout2012) during February 15 – 18, 2012, New Orleans, Louisiana, USA, jointly organized by Deep Foundations Institute (DFI) and International Conference Organization for Grouting (ICOG), USA.

Serving as Nominated Expert Member of the Departmental Undergraduate Programme Committee (DUPC) of Department of Civil Engineering, College of Engineering, Pune (COEP), India, since January 2009.

Dasaka, S.Murty

Review of Ph.D. thesis of Jawaharlal Nehru Technological University Kakinada, Reviewer for Journal of Geotechnical Geoenvironmental Engineering (ASCE), Indian Geotechnical Journal, International Journal of Earth Sciences and Engineering, Soils and Foundations, Indian Geotechnical Conference 2011, International Conference on Ground Improvement and Ground Control (ICGI, Wollongong, Australia).

Deo, M.C.

Editor in-chief: 'International Journal of Ocean and Climate Systems', Multi-Science Publishing, U K.

Chairman, Editorial Board, ISH Journal of Hydraulic Engineering, Taylor and Francis, UK

Associate Editor, ASCE Journal of Computing in Civil Engg.

Member, Editorial Board, International Journal of Ships & Offshore Structures, Taylor & Francis

Member, Editorial Board, Open Ocean Engineering Journal, Bentham Press, UK.

Member, Editorial Board, Journal of Advances in Civil Engineering, Hindawi Pub. New York,

Editor, Special issue of the ISH Journal of Hydraulic Engineering -2011

Independent Director, Konkan Railways

Members, Maharashtra Coastal Zone Management Authority

Member, Hydrology project group, Govt. of Maharashtra

Member, Scientific Advisory Committee, CWPRS, Pune

Member, Scientific Advisory Committee, National Institute of Ocean Technology, Chennai

Member, Project Management Board, NIOT, Chennai

Member, Board of Governors, SPCE, Mumbai

Member, faculty selection committee of IIT's

Member, Selection Committees of UPSC, CSIR

Conducted Ph D viva at Delft for the Ph D thesis of University of Delft (TU Delft), in Dec. 6, 2012 by Michael Siek

Reviewed a research proposal from University of Oxford under UK's EPSRC scheme,

Reviewed around 30 papers for various international and national journals.

Reviewed Ph D theses of Delft Univ. Holland, IITM (2), IITR, AU, NIT's,

Eldho, T.I.

Associate Editor of International Journal of Ecology and Development.

Editor-in-Chief of the Journal "International Journal of Water Resources and Environmental Management" published by Research Science Press.

Associate Editor ISH Journal of Hydraulic Engineering, Taylor & Francis.

Editor, Journal of Civil Engineering & Sciences,

Referee Ph.D. Thesis, IIT Khgaragpur, IIT Madras, IIT Delhi, JNTU, Hyderabad, ISI Kolkotta, University of Malaya, Malaysia.

Technical Review Committee Member of ICAR, Rubber Dam project implemented by Indian Rubber Manufacturing Research Association, Thane.

Technical Committee Member of Hydro2011, held at NIT Surat

Reviewed Project proposal for DST, New Delhi, 2011.

Convenor, UGAPEC, IIT Bombay.

Technical Review Committee Member, Int. Conf., on "Advances in Material & Techniques for Infrastructure Development, NIT Calicut.

Technical Review Committee Member, Int. Conf., on SWAT, IIT Delhi.

Reviewed research papers for the following Journals: Journal of Water Management, Institution of Engineers, UK; International Journal of Water and Environmental Management; Journal of Water Resources Management; International Journal of Ecology & Development; Journal of Environmental Modeling & Software; ASCE Journal of Practice of Hazardous, Toxic, and Radioactive Waste Management; ASCE Journal of Irrigation & Drainage; ISH Journal of Hydraulics Engineering; Journal of Institution of Engineers (India) – Civil Engineering Section; ASCE Journal of Hydrologic Engineering; ASCE Journal Environmental Engineering; Journal of Geological Survey of India; Journal of Earth System Science; Internal Journal of Numerical Methods in Fluids; Hydrological Sciences Journal; Journal of European Water; Journal of Hydro-environment Research; Journal of Natural Hazards; Journal of Pedosphere; Journal of Water Soil Research; Journal of Waterway, Port, Coastal, and Ocean Engineering; Journal of Current Sciences; International Journal of Engineering Analysis with Boundary Elements

Gopal Rao K

AICTE-NBA Accreditation expert team member.

Expert Member PhD evaluation, Karunya University, Coimbatore

Gupta, Kapil

Member -UNESCO Working Group: Sustainable Urban Water Strategies, VII IHP, 2008-2013

Member- Editorial Board: Urban Water Journal

Advisor, National Disaster Management Authority, Government of India, New Delhi

Member, Expert committee on drafting the “Urban Drainage Manual”, CPHEEO, Ministry of Urban Development, Government of India, New Delhi.

Ghosh S

Examination of a PhD thesis in the Département ArGenCo, Université de Liège, Belgium, October 24, 2011 .

Review of manuscripts submitted to various journals: ASCE J. of Structural Engineering; ASCE J. of Bridge Engineering; Journal of Steel and Composite Structures; ISET J. of Earthquake Technology; Scientific Research and Essays

Juneja, A.

Reviewer of Geotechnical Testing Journal, ASTM; Journal of Materials in Civil Engineering, ASCE; Ground Improvement, ICE; Soils and Foundations, JGS; Canadian Geotechnical Journal, NRC Research Press; HKIE Transactions

Janga Reddy, M.

Reviewed technical papers for Journals: Journal of Hydrologic Engineering (ASCE), Hydrological Processes; Water Resources Management; Environmental Modeling and Software; Water Management Journal, Journal of Earth Science and Systems, International

Journal of Advances in Engineering Sciences and Applied Mathematics, Applied Soft Computing, Journal of Hydroinformatics, J. of Water Resources Planning and Management

Jangid, R.S.

Reviewer for research papers of Advances in Structural Engineering, ASCE Journal of Structural Engineering, Bulletin of Earthquake Engineering, Earthquake and Structures, Engineering Structures, International Journal of Physical Sciences, International Journal of Structural Stability and Dynamics, Journal of Engineering for The Maritime Environment, Journal of Seismology and Earthquake Engineering, Journal of Sound and Vibration, Journal of Vibration and Control, Marine Structures, Mechanical Systems and Signal Processing, Structural Control and Health Monitoring, Soil Dynamics and Earthquake Engineering, Proceedings of The Institution of Mechanical Engineers, Part M, Structural Engineering & Mechanics, Sadhana- Academy Proceedings in Engineering Science, Scientific Research and Essays, and The Open Ocean Engineering Journal

Editorial Board Member, The Open Ocean Engineering Journal.

Editorial Board Member, The Open Construction and Building Technology Journal.

Editorial Board Member, Earthquakes and Structures Journal.

Independent Director, ETC Network Limited.

Jothiprakash, V.

Reviewer for various International and National Journals.

Subject Expert, Departmental Post-Graduation Programme Committee (DPCC)-M.Tech (Environmental Water Resources Engineering) College of Engineering, Pune.

National Service Scheme (NSS) Coordinator, IIT Bombay (30-12-2010 to till date)

Member DPGC (Departmental Post Graduate Committee) (Jan 2011 to till date)

Executive Council Member (2012-2014) Indian Society for Hydraulics, Pune

First Adhoc Executive Council Member (2011-2012) International Ground Water Committee (IGWC).

Krishna Rao, K.V.

Member of the Panel for Sustainability, CED 46:P19, Part 11 - Approach to Sustainability, National Building Code 2005, Bureau of Indian Standards

Member of the Standing Technical Advisory Committee on Road Works, Municipal Corporation of Greater Mumbai

Member of the IRC technical committee on Transport Planning, Traffic Engineering & Road Safety (H-1)

Member of the IRC technical committee on Urban Roads (H-8)

Patil, G. R.

Reviewer of Journal of Infrastructure Systems, Transportation Research Record, Transportmetrica, Journal of Advanced Transportation, Research in transportation economics, IATSS Research

Transportation Research Board annual meeting, Washington DC;

Reviewed research Grant Proposal for Fonds de recherche du Québec – Nature et Technologies, Canada

Prakash, Nanthagopalan.

Reviewer for Indian Concrete Institute, KSCE Journal of Civil Engineering, CSIR - Extra Mural Research, Indian Journal of Engineering and Material Science, Sadhana - Academy Proceedings in Engineering Science.

Rao, E. P.

Reviewer of Water Resources Management, Springer.

Rastogi. A. K.

Board Nominee in the Faculty Selection Committee Dept. of Civil Engineering IIT Delhi–, September 21, 2011.

Invited as Expert in the Selection Committee – National Geophysical Research Institute, Hyderabad, August 25, 2011.

Reviewer Natural Environment Research Council (NERC) UK – India Project - “The structure and dynamics of groundwater systems in north-western India under past, present and future climates”

Reviewer DST Research Proposals "Pathogen transport in subsurface: Analysis and Estimation of Transport Parameters" Department of Civil Engineering, IIT Roorkee.

Reviewer DST Research Proposals "Fourier analysis and development of 2-dimensional finite element schemes for shallow water equations and transport- related systems" of Dr Jagdeesh Anmala, Department of Civil Engineering, Birla Institute of Technology & Science, Hyderabad. SR/S3/MERC/001/2011

Reviewer DST Research Proposals “Studies on Sea Water Intrusion in Coastal Aquifers of Visakhapatnam – Kochcherla coast, Andhra Pradesh using Time Domain Electromagnetic methods” of Prof P Rama Rao, Andhra University, Visakhapatnam.

Invited to conduct Ph.D. Viva, Department of Civil Engineering, IIT Roorkee, May 3, 2011.

Member Advisory Committee, Dept. of Civil and Environment Engineering, VJTI, Mumbai

Member Board of Studies of Dept. of Civil and Water Management Engineering SGGGS Institute of Engineering and Technology – Nanded

Invited Expert on academic evaluation process Dept. of Civil and Water Management Engineering, SGGGS Institute of Engineering and Technology –

Member Expert Panel – Indian National Committee on Groundwater, Govt. of India

Member Expert Panel – Indian National Committee on Hydraulics, Govt. of India

External Expert on Research and Recognition Committee for the Board of Studies Civil Engineering appointed by the Vice Chancellor University of Mumbai

Member National Scientific Advisory Committee – Fifth International Groundwater Conference -IGC 2012

Expert Member - BARC/ Department of Atomic Energy (DAE)/ Board of Research in Nuclear Sciences (BRNS) - Technical Program Discussion Meeting (TPDM) to review the protocol on Hydro-geological Studies.

Raje D

Reviewed papers for international journals: Journal of Earth System Sciences, Journal of Hydraulic Engineering, Climatic Change, Hydrological Processes, Water Resources Management.

Life member of The Indian Society for Hydraulics

Singh, D.N.

Editorial Board Member- International Journal of Geomechanics, ASCE

Editorial Board Member- Geotechnical Testing Journal, ASTM International

Editorial Board Member- Geomechanics and Geoengineering (Taylor & Francis)

Editorial Board Member- Korean Society of Civil Engineering (KSCE) Journal of Civil Engineering

Editorial Board Member- International Scholarly Research Network (ISRN) Civil Engineering.

Editorial Board Member- International Journal of Geotechnical Engineering

Editorial Board Member- Geomechanics and Engineering (GAE), An International Journal of Computational and theoretical Geomechanics, Foundation Engineering, Engineering Applications, Site Characterization.

Editorial Board Member- Indian Geotechnical Journal

Editorial Board Member- Acta Geotechnica Slovenica

Special Issue: Recent Developments in Geotechnical Testing: Geotechnical Testing Journal, ASTM International, May 2011 Vol. 34 No. 3.

Special Issue of International Journal of Geoengineering Case Histories (An official Journal of the International Society of Soil Mechanics and Geotechnical Engineering), Volume 2, Issue 1.

Special Issue: Environmental Geotechnology-Contemporary Issues: International Journal of Geomechanics (American Society of Civil Engineers), Guest Editors: D. N. Singh, C. S. Desai\$ and M. M. Zaman#, Volume 11, Issue 2, March/April 2011.

Special Issue: Material and Computer Modeling: International Journal of Geomechanics (American Society of Civil Engineers), Guest Editors: C. S. Desai\$, M. M. Zaman# and D. N. Singh, Volume 11, Issue 6, November/December 2011.

Special Issue: Advances in Instrumentation and Monitoring in Geotechnical Engineering: Journal of Advances in Civil Engineering, Guest Editors: D. N. Singh, Sai Vanapalli* and Nagaratnam Sivakugan**, Volume 2011(2011).

Civil Engineering Department, University of Ottawa, CANADA

Civil & Environmental Engg. School of Engineering and Physical Sciences, James Cook Univ., Australia

Subimal Ghosh

Reviewer of Water Resources Research, Journal of Geophysical Research, Geophysical research letters, Journal of Hydrology, Journal of Hydrologic Engineering, and many more

Involved in the activities of Information Technology Research Academy- Water, a part of Department of Information Technology

Involved in writing state of the art report on “Climate Change and Water” for Ministry of Water Resources, Government of India.

Reviewer of proposals for Ministry of Water Resources

Tom. V Mathew

Member, Scientific Committee, Urban Mobility India (UMI) Symposium, Delhi, 3-5 December 2011.

Member of the International Technical Committee(ITC), IEEE Intelligent Transportation Systems Conference, ITSC 2011, 2011, Washington DC, USA.

Vedagiri. P

Reviewer: ASCE Journal of Transportation engineering, Journal of Transport, Journal of Public Transport, ASCE Journal of Computing in Civil Engineering, Journal of Advanced Transportation.

Reviewer: Conference of Transportation Research Group of India (CTRG), Bangalore, 2011.

Reviewer for video based lecture for Urban Transportation Planning, NPTEL.

Publications

Books

Rastogi A K, Snehlata S, Lila Arun and Ajmera, T. (2011). “ANN, SA and GA Application in Groundwater Hydrology” LAP LAMBERT Academic Publishing , Saarbrücken Germany, pp. 361,. ISBN 978-3-8454-7170-9.

Kulkarni, N. H., and **Rastogi, A. K.** (2011). “Numerical Experiments on Solute Transport in Ground Water Flow Systems”, LAP LAMBERT Academic Publishing , Saarbrücken Germany, pp148, ISBN 978-3-8454-4253-2.

Edited Books/ Monograph:

“Finite Element Method & Applications in Civil Engineering” – Editors: T.I. Eldho, & Y.M. Desai, Lecture notes for CEP/QIP course, August 2011, IIT Bombay.

“Rainwater Harvesting & Sustainable Water Management” – Editor T.I. Eldho, Monograph for CEP/QIP Course, November 2011 & March 2012, IIT Bombay.

“Coastal Processes and Modelling” – Editors: R. Balaji & T.I. Eldho, Lecture notes for CEP/QIP course, March 2011, IIT Bombay.

Papers in Referred Journals

Ajay Sharma and **R.S. Jangid**, (2011). “Influence of high initial isolator stiffness on the seismic response of a base-isolated benchmark building”, *International Journal of Structural Stability and Dynamics*, Vol. 11, pp. 1201-1228.

Arpita Mondal, and **Eldho T.I.**, (2011), Closure to Discussion on the paper “Multiobjective Groundwater Remediation System Design Using Coupled Finite-Element Model and Nondominated Sorting Genetic Algorithm II”, *Journal of Hydrologic Engineering*, ASCE, 2011, Vol. 16, No.8, pp. 697-698.

Arunkumar, R., and **Jothiprakash, V.** (2011) “Artificial Neural Network Models for Sivajisagar lake Evaporation Prediction,” *National Journal on Chembiosys*, Vol. 2, No.1. pp 35-42.

Balaji, R. (2011). “Characteristics of wave oscillations between two porous barriers”, *ISH Journal of Hydraulic Engineering*, Vol. 17, No.2, pp. 50-61.

Balaji, R. (2012). “A case study on curtailed tidal hydrodynamic modeling along UAE coast”, *International Journal of Ocean and Climate Systems*, Vol. 3, No.1, pp. 45-56.

Balaji, R. (2012). “Performance of porous breakwaters: application of bouss2d model”, *The Journal of Engineering Research*, Vol. 9, No.1, pp.11-20.

Bera, S., and **Krishna Rao K.V.** (2011). “Estimation of origin-destination matrix from traffic counts: the state of the art”, *Journal of European Transport*, No.49, pp. 2-23.

Bhuyan, P.K, and **Krishna Rao K.V.** (2011). “Defining level of service criteria of urban streets in Indian context”, *Journal of European Transport*, No.49, pp. 38-52.

Chandiramani, N. K. and S. P. Purohit. (2012). “Instantaneous optimal control of seismic response using magnetorheological damping”, *International Journal of Acoustics and Vibration*, Vol. 17, No. 1, pp. 4-13.

Das, B.B., Rout, S.K., **Singh, D. N.** and Pandey, S.P. (2012). “Some Studies on the Effect of Carbonation on the Engineering Properties of Concrete”, *Indian Concrete Journal*, Vol. 86, No. 3, pp. 7-12.

Dasaka, S.M. and Sumesh, K.S. (2011). “Effect of Coir Fiber on the Stress–Strain Behavior of a Reconstituted Fine-Grained Soil”, *Journal of Natural Fibers*, Vol.8, No.3, pp.189-204.

Dasaka, S.M. and Zhang, L.M. (2012). “Spatial variability of in situ weathered soil”, *Géotechnique*, Vol. 62, NO. 5, pp. 375 –384.

Dave, T.N. and **Dasaka, S.M.** (2011). “A Review on Pressure Measurement using Earth Pressure Cell”, *International Journal of Earth Sciences and Engineering*, Vol. 4, No. 6 SPL, pp. 1031-1034.

Deepankar Choudhury and Jaykumar Shukla (2011). “Probability of occurrence and study of earthquake recurrence models for Gujarat state in India”, *Disaster Advances*, Vol. 4, No. 2, pp. 47-59.

Desai, P. and **Kant, T.** (2011), On accurate stress determination in laminated finite length cylinders subjected to thermo elastic load, *International Journal of Mechanics and Solids (IJM&S)* **6**(1), 7-26.

Desai, P. and **Kant, T.** (2011), Stress analysis of finite length cylinders of layered media, *Applied and Computational Mechanics* **5**(2), 129-142.

Desai, P. and **Kant, T.** (2012), A mixed semi analytical solution for functionally graded (FG) finite length cylinders of orthotropic materials subjected to thermal load, *International Journal of Mechanics and Materials in Design* **8**(1), 89-100.

Desai, P. and **Kant, T.** (2012), Accurate stresses in laminated piezoelectric finite length cylinders subjected to electro-thermo-mechanical loadings, *Current Science* **102**(1), 50-60.

Deshmukh, V. B., **D. M. Dewaikar** and **Deepankar Choudhary** (2011). “Uplift capacity of horizontal strip anchors in cohesionless soil”, *Geotechnical and Geological Engineering*, Vol. 29, No. 6, pp. 977-988.

Garudkar A S , Gorantiwar S D, **Rastogi, A. K.**, and **Eldho, T. I.** (2011). “Evaluation of operating policies of irrigation projects in Upper Godavari Basin in Maharashtra”, *Journal of Institution of Engineers (India)*, Agricultural Engineering Division, Vol. 92, pp. 25 – 32.

Garudkar A S, **Rastogi A K**, **Eldho T I** and Gorantiwar S D. (2011). “Optimal reservoir release policy considering heterogeneity of command area by elitist genetic algorithm”, *Water Resources Management*, Vol. 25, pp. 3863–3881.

Ghosh S, Datta D, Katakdhond AA (2011). “Estimation of Park-Ang damage index in planar multi-storey frames using equivalent single-degree systems”, *Engineering Structures*, 33(9):2509-2524.

Jagabandhu Dixit, **D.M. Dewaikar** and **R.S. Jangid**, (2011). “Spatial distribution of surface level free field motion at Mumbai City”, *Electronic Journal of Geotechnical Engineering*, Vol. 16F, pp. 661-677.

Janga Reddy, M. and S. Adarsh (2011). “Slope-stability-constrained design of irrigation canals using particle swarm optimization”, *Irrigation and Drainage*, Vol. 60, pp. 590–599.

Jaykumar Shukla and **Deepankar Choudhury** (2012). “Seismic hazard and site-specific ground motion for typical ports of Gujarat”, *Natural Hazards*, Vol. 60, No. 2, pp. 541-565.

Jeremy Blum and **Tom V Mathew**, (2011). Intelligent Agent Optimization of Urban Bus Transit System Design, *Journal of Computing in Civil Engineering*, ASCE, Vol. 25, No. 5, pp. 357-369.

Jha, B. and **Singh, D.N.**, (2011). “A Review on Synthesis, Characterization and Industrial Applications of Flyash Zeolites”, *Journal of Materials Education*, Vol. 33, No. 1-2, pp. 65-132.

Jothiprakash, V., and Kote, S. A. (2011). “Improving the performance of data driven techniques through data pre-processing while modeling the daily reservoir inflow.” *Hydrological Sciences Journal*, Vol. 56, No. 1, pp 168-186.

Jothiprakash, V., and Kote, S. A. (2011). “Effect of pruning and smoothing while using M5 Model Tree Technique for Reservoir Inflow Prediction.” *Journal of Hydrologic Engineering*, ASCE, Vol.16, No.7, pp 563 - 574.

Jothiprakash, V., Arunkumar, R., and Asokarajan, A. (2011). “Optimal Crop Planning Using Chance Constrained Linear Programming Model.” *Water Policy*, Vol. 13. No. 5, pp 734-749.

Jothiprakash, V., Ganesan Shanthi, and Arunkumar, R. (2011). “Development of Operational Policy for a Multi-reservoir System in India Using Genetic Algorithm.” *Water Resources Management*, Vol. 25, No. 10, pp 2405-2423.

Jothiprakash, V., Kirty, S., and Tara S. (2011). "Prediction of Meteorological Variables Using Artificial Neural Networks." *International Journal of Hydrology Science and Technology*, Vol. 1. No. 3/4, pp 192-206.

Kailash Golecha, **Eldho T.I.**, S.V. Prabhu (2011), " Influence of the deflector plate on the performance of modified Savonius water turbine, *J. Applied Energy*, Vol. 88(2011), pp. 3207-3217.

Kambekar A R and **M C Deo** (2012). "Wave prediction using genetic programming", *Journal of Coastal Research*, Vol. 28, No. 1, pp. 43-50.

Kant, T. and Desai, P. (2010), Two-dimensional axisymmetric electromechanical response of piezoelectric, functionally graded and layered composite cylinders, *Journal of Solid Mechanics* 2(4), 403-417.

Kant, T. and Desai, P. (2011), On numerical analysis of finite length cylinders under pressure: An elastostatic computational approach, *International Journal of Applied Computational Science and Mathematics* 1(1), 1-22.

Lakshminarayana, B and **Gopal Rao, K** (2010). "Artificial Neural Networks in Classification of Remotely Sensed Multi-Spectral Data - A Spectral-Spatial Approach". *ISH Journal of Hydraulic Engineering*, Vol. 16, No. SP.1, pp 64-73.

Madhekar, S.N. and **R.S. Jangid**, (2011). "Seismic performance of benchmark highway bridge installed with piezoelectric friction dampers", *The IES Journal Part A: Civil and Structural Engineering*, Vol. 11, pp. 191-212.

Magar, R.B., and **Jothiprakash, V.** (2011). "Intermittent reservoir daily-inflow prediction using lumped and distributed data multi-linear regression models." *Journal of Earth System Science*, Vol. 120. No. 6, pp 1067-1084.

Marur, S.R. and **Kant, T.** (2011), Transient dynamic analysis of higher order sandwich and composite arches, *Composite Structures* 93(4), 1201-1216.

Meenal, M., and **Eldho T.I.**, (2011), "Meshless Point Collocation Method for 1D and 2D Groundwater Flow Simulation", *ISH Journal of Hydraulics Engineering*, Vol. 17 (1), pp. 71-87.

Meenal, M., and **Eldho T.I.**, (2012), "Groundwater Remediation Optimization Using a Point Collocation Method & Particle Swarm Optimization", *Journal of Environmental Modelling & Software*, Vol. 32 (2012), pp. 37-48.

Meenal, M., and **Eldho T.I.**, (2012), "Simulation of Coupled Groundwater Flow & Contaminant Transport in Confined Aquifers Using Meshfree Point Collocation Method", *Int. Journal of Ecology & Development*, Vol. 21 (1), pp. 100-119.

Meenal, M., and **Eldho T.I.**, (2012), “Two Dimensional Contaminant Transport Modleing Using Meshfree Point Collocation Method (PCM)”, *Int. Journal of Engineering Analysis with Boundary Elements*, Vol. 36 (2012), pp. 551-561.

Meenal, M., **Eldho T.I.**, (2011), “Simulation of Groundwater Flow in Unconfined Aquifer Using Meshfree Point Collocation Method”, *Int. Journal of Engineering Analysis with Boundary Elements*, Vol. 35 (2011), pp. 700-707.

Motra, G. B., W. Mallik, and **N. K. Chandiramani.** (2011). “Semiactive Vibration Control of Connected Buildings using Magnetorheological Dampers”, *Journal of Intelligent Material Systems and Structures*, Vol. 22, pp. 16, pp. 1811-1827.

Panchal, V.R. and **R.S. Jangid**, (2011). “Seismic response of liquid storage steel tanks with variable frequency pendulum isolator”, *KSCE Journal of Civil Engineering*, Vol. 15, pp. 1041-1055.

Patel, A., Kulkarni, M.P., Bartake, P.P. Rao, K.V. and **Singh, D.N.**, (2011). ”A Methodology for Determination of Resilient modulus of Asphaltic Concrete”, *Advances in Civil Engineering*, Special issue on Advances in Instrumentation and Monitoring in Geotechnical Engineering, Article ID 936395, 6 Pages, doi:10.1155/2011/936395

Patel, C.C. and **R.S. Jangid**, (2011). “Dynamic response of adjacent structures connected by friction damper”, *Earthquakes & Structures*, Vol. 2, pp. 149-169.

Patil, V.B. and **R.S. Jangid**, (2011). “Response of wind excited benchmark building installed with dampers”, *The Structural Design of Tall and Special Buildings*, Vol. 20, pp. 497-514.

Patil, V.B. and **R.S. Jangid**, “Optimum multiple tuned mass dampers for the wind excited benchmark building”, *Journal of Civil Engineering and Management*, Vol. 17, pp. 540-557.

Pendhari, S.S., **Kant, T., Desai, Y.M.** and Venkata Subbaiah, C. (2012), Static solutions for functionally graded simply supported plates, *International Journal of Mechanics and Materials in Design* **8**(1), 51-69.

Phanikanth, V. S., **Deepankar Choudhury** and G. R. Reddy (2011). “Equivalent-linear seismic ground response analysis of some typical sites in Mumbai”, *Geotechnical and Geological Engineering*, Vol. 29, No. 6, pp. 1109-1126.

Pooja Jain, **M C Deo**, G Latha, V Rajendran, and V Sanil Kumar (2011). “Determination of Wave Spectrum with Intelligent Computing”, *International Journal of Ocean and Climate Systems*, Vol. 2, No. 2, pp. 137-152.

Priyanka Ghosh and **Deepankar Choudhury** (2011). “Seismic bearing capacity factors for shallow strip footings by pseudo-dynamic approach”, *Disaster Advances*, Vol. 4, No. 3, pp. 34-42.

Raghunandan, M.E., **Juneja, A.** and Benson-Hsiung, B. C. (2012). "Preparation of reconstituted sand samples in the laboratory", *International Journal of Geotechnical Engineering*, Vol. 6, No. 1, pp. 125-131.

Raisinghani, D.V. and **Viswanadham, B.V.S.** (2011). "Centrifuge model studies on low permeable slope reinforced by hybrid geosynthetics", *Geotextiles and Geomembranes*, Vol. 29, No. 6, pp. 567-580.

Rajesh, S. and **Viswanadham, B.V.S.** (2012). Centrifuge model studies on The performance of geogrid reinforced soil barriers of landfill covers, *Indian Journal of Geosynthetics and Ground Improvement*, 1(1), 20-28.

Rajesh, S., and **Viswanadham, B.V.S.** (2012). Centrifuge modeling and instrumentation of geogrid reinforced soil barriers of landfill covers, *Journal of Geotechnical and Geoenvironmental Engineering*, ASCE, Vol. 138, No. 1, pp. 26-37.

Ranjan Kumar, **Deepankar Choudhury** and Kapilesh Bhargava (2012). "Response of foundations subjected to blast loadings: State of the art review", *Disaster Advances*, Vol. 5, No. 1, pp. 54-63.

Rao, B.H., Venkataramana, K. and **Singh, D.N.**, (2011). "Studies on determination of swelling properties of soils from suction measurements", *Canadian Geotechnical Journal*, Vol. 48, No. 3, pp. 375-387.

Rathore M, Roy Chowdhury A, **Ghosh S** (2011), Approximate methods for estimating hysteretic energy demand on plan-asymmetric buildings, *Journal of Earthquake Engineering*, 15(1):99-123.

Ravishankar, K V R, and **Tom V Mathew**, (2011). Vehicle-type dependent car-following model for heterogeneous traffic conditions, *Journal of Transportation Engineering*, ASCE, Vol. 137, No. 11, pp. 775-781.

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