

Annual Report 2012-2013

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, 57 MTech and 41 PhD students were admitted in the above specializations. In the first year, 117 students were on rolls in the B.Tech. The students that graduated from the Department are as follows:

Degree Awarded	
B.Tech	: 75
Dual Degree	: 19
M.Tech	: 39
Ph.D.	: 12

Significant Awards / Distinctions

Bajoria, K.M

Excellent Research Paper Award for the Research Paper: **K M Bajoria** and P A Jadhav (2012), Buckling of Simply Supported Piezoelectric FGM Plates Subjected to Electro-Mechanical loading using Higher-order Shear Deformation Theory” International Conference on Civil Engineering and Materials, Paris France.

Chandiramani, N. K.

Citation in monograph: Paper titled ‘Dynamics of 2-dof Regenerative Chatter During Turning’, J. Sound and Vibration, 290, 2006, 488-464, has been extensively cited in the monograph titled ‘Machine Tool Vibrations and Cutting Dynamics’, authored by Brandon C. Gegg, C. Steve Suh, and Albert C.J. Luo, Springer, New York, 2011.

Choudhury, D.

Adjunct Professor, since Jan 2013 at Academy of Scientific and Innovative Research (AcSIR), New Delhi, connected to CSIR, Central Building Research Institute (CBRI), Roorkee, INDIA'

INAE Young Associate, since Jan 2013, given by Indian National Academy of Engineering (INAE), New Delhi, India.

Deo, M.C.

Fellow, INAE,

The most cited author in civil engineering from India as per Google Scholar (~1400, Nov. 2012)

Director, VJTI, Mumbai from 06/2011 to 05/2012.

Dharamveer Singh

Marquis Who's Who in America, USA, 67th Edition, 2013

Gupta Kapil

UKIERI (British Council) Visiting Fellowship Award, University of Exeter, Exeter, U.K. December 2012

Inamdar, M.

Received Innovative Young Biotechnologist Award (IYBA) for the year 2012 by the Department of Biotechnology, Ministry of Science & Technology, Government of India.

Jothiprakash, V.

Dr. P.K. Patwardhan Technology Development Award 2011, Indian Institute of Technology Bombay, awarded during the Teachers day, 5th September 2012.

Juneja, A.

Awarded the "*Excellence in Teaching Award*" at IIT Bombay during the 2012 Teachers' Day celebration

Awarded the "*Best paper Award on Instrumentation*" by the Indian Geotechnical Society during the IGC 2012, New Delhi.

Krishna Rao K.V.

Awarded the "*Excellence in Teaching Award*" at IIT Bombay during the 2012 Teachers' Day celebration

RAAJ Ramsankaran

DST INSPIRE Faculty Award 2012

Subimal Ghosh

Young Scientist Award 2012 from Indian National Science Academy (INSA) in Engineering and Technology,

Young Investigator Award 2012 from Industrial Research & Consultancy Centre, Indian Institute of Technology Bombay, Mumbai.

R&D Activities

Sponsored Research

Sponsored Research Projects	:75
New	:20
Ongoing	:42
Completed	:13
Faculty Involved	:28

Department received 20 new sponsored projects with a sanctioned outlay of Rs. 4,02,55,201. The list of new sponsored projects is as below:

Sr. No.	PI Name (Prof.)	PI Type	Project Title	Agency Name
1	K V Krishna Rao Tom V Mathew Gopal R. Patil Perumal Vedagiri	PI CPI CPI CPI	Development of Indian Highway Capacity Manual	Central Road Research Institute
2	K V Krishna Rao Tom V Mathew	PI CPI	Development of a Prototype for Activity Based Travel Demand Model in the Context of Developing Economy	Council of Scientific and Industrial Research
3	Alok Goyal Ravi Sinha	PI CPI	Design of Assorted Blast Doors	Defence Research & Development Organisation
4	T I Eldho	PI	Evaluation of the effectiveness of locally available fibres for water storage tank construction in rural villages for watershed management	Department of Science & Technology
5	Siddhartha Ghosh	PI	Design of the floating structure for fishing nets for the purpose of cage fishing	Department of Science & Technology
6	Mandar M Inamdar	PI	Computational modelling of mechanics of de-adhesion of single cell and cell collectives.	Department of Science & Technology
7	R. Balaji	PI	Investigation of trapped waves between perforated barriers.	Department of Science & Technology
8	Deepashree Raje	PI	FAST Track "Water Management Under Uncertainty in Climate Change Impacts on River Basin Hydrology".	Department of Science & Technology
9	Head, Civil Engineering	PI	ENDOWMENT INTEREST FOR CIVIL ENGINEERING DEPT	ENDOWMENT INTEREST FOR CIVIL ENGG DEPT

10	Makarand Chintamani Deo	PI	C V Raman International Fellowship Award for African Researchers (Mr. Shigalla Mahongo)	Federation of Indian Chambers of Commerce and Industry
11	Siddhartha Ghosh	PI	Statistical Characterisation of Expanded Metal Mesh for Structural Design	Institute for Steel Development & Growth
12	Tom V Mathew	PI	Indo-US Science & Technology Forum, New Delhi	Indo-US Science & Technology Forum, New Delhi
13	D N Singh	PI	Studies on Dredging of Sediments and Rocks in Mumbai Harbor	JAISU SHIPPLING COMPANY PVT LTD
14	D N Singh	PI	Studies on Sludge accumulated in Versova Lagoons	Municipal Corporation of Greater Mumbai
15	Satyanarayana Murthy Dasaka	PI	Static and Dynamic Analyses of Earth Pressure Reduction on Retaining Walls Using compressible Geo-inclusions.	MINISTRY OF EARTH SCIENCES
16	D N Singh	PI	Analysis of Soil Sample from ONGC's CLUSTER-7 Mumbai High	OCEANKING Survey Services India Pvt. Ltd.
17	R. Balaji Makarand Chintamani Deo	PI CPI	Numerical modeling of oil-spill dispersion for Maharashtra coast	Rajiv Gandhi Science and Technology Commission
18	D N Singh	PI	Characterization of Soils and Building Materials	Sumer Infrastructure Pvt. Ltd.
19	Kapil Gupta	PI	UKIERI_UK_India Education and Research Initiative	UK India Education and Research Initiative
20	Subimal Ghosh Jothiprakash V	PI CPI	Hydrological Impact of Global and Local changes in a Metro City.	Min. of Water Resources

Consultancy Work

308 consultancy projects worth about Rs. 17,10,92,524 were undertaken during the year by the Civil Engineering Department. 27 faculty members were involved in the above consultancy work.

Patents

Singh D.N

A Methodology to Determine Tensile Strength of the Soil from its Penetration Resistance. (Provisional Indian Patent Application No. 220/MUM/2012)

A Novel method for Determining Cracking Characteristics of Fine-grained Soils Using Laser Microscopy (Provisional Indian Patent Application No. 2578/MUM/2012)

Determination of Swelling Properties of Soils from Suction Measurements (Provisional Indian Patent Application No. 2579/MUM/2012)

A Novel Technique for Determining Elastic Properties of Soils (Provisional Indian Patent Application No. 2580/MUM/2012)

A Methodology to Establish Drying-path Soil Water Retention Curve of Fine-grained Soils (Provisional Indian Patent Application No. 3043/MUM/2012)

A Methodology to Investigate Influence of Thermal Energy on Soil fabric (Provisional Indian Patent Application No. 3046/MUM/2012)

Apparatus and Method for Establishing Soil Water Characteristic Curve and Determining Hydraulic Conductivity of Soils (Provisional Indian Patent Application No. 130/MUM/2013)

Extension Activities

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

Conferences / Workshop

1. “*National Conference on Hydraulics and Water Resources*”, 7th and 8th Dec. 2012 (two days), IIT Bombay.
2. IITB-Purdue workshop on "Droughts and Climate Change" held during March 12-13, 2013, at IIT Bombay, Mumbai
3. International Conference on Transportation Planning and Implementation Methodologies for Developing Countries (10th TPMDC-2012) held during 12-14 December 2012, IIT Bombay, India.
4. Asiafuge-2012, The First Asian International Workshop on Physical Modelling in Geotechnics, Nov. 14-16, 2012.

Video Course

Choudhury, D.

NPTEL *Phase II*, Video Course on “Soil Dynamics” for National Programme on Technology Enhanced Learning (NPTEL), sponsored by Ministry of Human Resource Development (MHRD), Govt. of India. (See <http://nptel.iitm.ac.in/> for details) (*freely available on you tube since July 2012*).

Eldho T.I

NPTEL & Youtube webcasted the Video Course on “Fluid Mechanics”, and rated as popular engineering course video.

NPTEL & Youtube webcasted the Video Course on “Watershed Management”, and rated as popular engineering course video.

Short-Term Courses / CEP Courses

1. QIP & CEP Course “Finite Element Method & Applications in Civil Engineering”, held during 2-6 July 2012 (**Eldho T.I & Y.M. Desai**).
2. CEP Course & Training to Engineers, Water Resources Department, Govt. Maharashtra, June 25 – July 7, 2012. (**Eldho T.I**)
3. 2nd PMGSY training course, 24-26 August 2012, (**Vedagiri P and S.L.Dhingra**)
4. A training workshop on “Construction and Quality Control of Cement Concrete Pavement” for the Quality Control Personnel of Sion-Panvel Special State Highway Project was conducted at IIT Bombay on 16th January 2013. (**Krishna Rao K.V**)
5. One day workshop on “Rheology and Rheometer for concrete” held on April 10, 2013 (**Prakash Nanthagopalan**)
6. One day workshop on “Offshore structures & sacs applications”, held on 2 April 2013 (**Balaji R.**)
7. CEP Course (Open), on "Urban Drainage Management- State-of-the-Art 2012", IIT Bombay, 4-6 July 2012(**Gupta Kapil**).

Visitors to the Department and their presentations

Name and Affiliation	Date	Lecture Topic
Prof. Shashi Nambisan, Director, Institute for Transportation, Iowa State University.	23 rd July 2012	Ongoing research projects in Institute for Transportation (InTrans), Iowa State University.
C.M. Dordi, Vice President (Technical Services) Gujarat Ambuja Cements Ltd.	09 th August 2012	Ten Golden rules of QA & QC of concrete works.
Prof. Mandar M. Dewoolkar, University of Vermont, USA.	13 th August 2012	Some aspects of liquefaction potential evaluation and residual strength of liquefiable soils.
C.M. Dordi, Vice President (Technical Services) Gujarat Ambuja Cements Ltd.	27 th August 2012	Correct steps of Concrete making.
Shri. Chandra Shekar Sharma, Fosroc India, Bangalore.	04 th October 2012	Repairs and Rehabilitation of Infrastructures.
Dr. Deepak Datye, Senior Engineering Specialist for Civil Engineering at SIMULIA in Providence, USA.	29 th October 2012	Applications of Abaqus for Geo-Technical Applications.
Prof. Pushkin Kachroo, Director Transportation Research Center, University of Nevada, Las Vegas.	08 th January 2013	Feedback & Control for ITS Applications.
Prof. K.S. Rao, Civil Engineering Department, IIT Delhi.	28 th January 2013	Static and Dynamic Stability Analyses of Chenab Bridge Abutments: 2D and 3D Case Studies.
Dr K. Seetharamulu, Retired Professor of IIT Delhi.	06 th March 2013	Conceptualization while Understanding Structures.
Mr. K. Gifford Goodhue, Jr., Director of Technology & Business Development, KB International	22 nd March 2013	The advantages & benefits of slurry polymers & additives for foundation projects.

Visiting Professors

Prof. Chandrakant S. Desai, Regents' Professor (Emeritus), University of Arizona, Tucson, AZ, USA was at IIT Bombay as Distinguished Visiting Professor during 1st January to 28th February 2013. He delivered a lecture series at IIT Bombay during this period on "CONSTITUTIVE MODELING FOR ENGINEERING MATERIALS" highlighting the significance in solution (computer) procedures.

Participation in Conferences/Symposia/Workshops/Seminars

Bajoria K.M

Presented in 6th International Conference on High Performance Structures and Materials, 2012 at New Forest, UK.

Presented in International Conference on Civil Engineering and Materials, Paris France.

ICCEM-International Conference on Civil Engineering and Materials, 7-8 July 2012, Paris, France.

Balaji, R

Treasurer, Hydro-2013 Conference, IIT Bombay.

IIT Bombay and National Institute of Oceanography workshop, NIO Goa, 7-8, Mar. 2013

Workshop on Climate and Drought, IITB-Purdue University, IIT Bombay, 12-13 March 2013.

Seminar on “Emerging trends in development of marine infrastructure”, 28 Feb 2013, DGNP, Mumbai.

2nd International workshop on “Geosynthetics and modern materials in coastal protection and related applications”, 4-5 March 2013, IIT Madras.

National Workshop on Integrated coastal zone management and planning, 16-17, July 2012, IIT Madras.

Workshop on “Coastal and river zone management: Regulations and Development”, IIT Bombay.

Banerjee, Sauvik

Participated and delivered invited lecture on “*Assessment of Infrastructure Using Wave Propagation and Vibration SHM Techniques*” at *IC-IMPACT: Canada-India Workshop on Building Healthy Communities*, February 21 – 22, 2013, Radisson Blu, Nagpur, India

Chandiramani, N. K.

Presented one invited paper and one contributed paper at Fourth International Congress on Computational Mechanics and Simulation, IIT Hyderabad, 9-12 December 2012.

Choudhury, D.

Participated and Delivered Invited Lecture as Humboldt Fellow on February 9, 2013 at *International Humboldt Kolleg on Management of Water, Energy and Bio-resources in Changing Climate Regime: Emerging Issues and Environmental Challenges (IHK-2013)*, held during February 8 - 9, 2013 at Jawaharlal Nehru University (JNU), New Delhi, India.

Participated and Chaired Technical Session VI on January 11, 2013 at 4th *International Seminar on Forensic Geotechnical Engineering (4ISFGE-2013)*, organized by Technical Committee TC 302 of International Society for Soil Mechanics and Geotechnical Engineering (ISSMGE), held during January 10-12, 2013, Bengaluru, India.

Participated, Delivered Keynote Lecture and Chaired a Technical Session 3A on Theme “Geotechnical Engineering” on 20.12.2012 during 2:00 – 3:45 PM at Structural Engineering Convention (SEC-2012), 8th Biennial Conference, held during December 18-20, 2012 at SVNIT, Surat, India.

Participated and Delivered Invited Lecture at *International Workshop on Seismic Requalification of Geotechnical Structures (SRGS)*, jointly organized by UK-India Education and Research Initiative (UKIERI), Indian Geotechnical Society (IGS), IIT Guwahati and IIT Delhi, India, held on December 17, 2012 at IIT Delhi, New Delhi, India.

Participated and Chaired a Technical Session D4 on Theme H “Special Techniques of Earthquake Geotechnical Engineering and Dynamic Foundations” on 15.12.2012 during 12:00 – 13:30 hrs. at Indian Geotechnical Conference (IGC-2012), organized by Indian Geotechnical Society (IGS), New Delhi, held during December 13-15, 2012 at IIT Delhi, New Delhi, India.

Participated, Delivered Invited Lecture and Co-Chaired a Technical Session on November 1, 2012 during *International Conference on Ground Improvement and Ground Control (ICGI-2012): Transport Infrastructure Development and Natural Hazards Mitigation*, organized by Technical Committees TC 211, TC 214, TC 202 and TC 303 of International Society for Soil Mechanics and Geotechnical Engineering (ISSMGE), held during October 30 – November 2, 2012, Wollongong, Australia.

Participated, Chaired Technical Session 7B on September 20, 2012 and Conducted International meeting of ISSMGE Technical Committee TC 212 – Deep Foundations as the Secretary of this committee on September 19, 2012 at *The 9th International Conference on Testing and Design Methods for Deep Foundations, IS-Kanazawa 2012*, organized by JGS, Technical Committees TC 212 and TC 205 of International Society for Soil Mechanics and Geotechnical Engineering (ISSMGE), September 18 – 20, 2012, Kanazawa, Japan.

Participated and attended meeting of Technical Committee TC 207 – Soil Structure Interaction during 12th Baltic Sea Geotechnical Conference (12BC-2012), Infrastructure in Baltic Sea Region, organized by Technical Committee TC 207 of International Society for Soil Mechanics and Geotechnical Engineering (ISSMGE) and German Geotechnical Society (DGGT) during May 31 to June 2, 2012 at Rostock, Germany.

Participated, Presented and Co-Chaired Technical Session 4 on “Performance Based Design in Geotechnical Earthquake Engineering” on May 28, 2012 at *2nd International Conference on Performance-Based Design in Earthquake Geotechnical Engineering (II PBD-2012)*, organized by Technical Committee TC 203 of International Society for Soil Mechanics and Geotechnical Engineering (ISSMGE), held during May 28 – 30, 2012, Taormina, Italy.

Dasaka S. Murty

Fifth Asian-Pacific Symposium on Structural Reliability and its Applications (APSSRA), 23-25 May, 2012, Singapore.

National Conference on Geosynthetics in Infrastructure, 25-26 August, 2012, Hyderabad, India

International conference on Ground Improvement and Ground Control (ICGI 2012), 30 October – 2 November, 2012, Wollongong, Australia.

Deo M.C

Chairman, Hydro-2013 Conference

Chairman, IIT Bombay-Purdue University Workshop on Droughts

Seminar on “EMERGING TRENDS IN DEVELOPMENT OF MARINE INFRASTRUCTURE”, 28 FEB 13, DGNP, Mumbai

CSIR-NIO, Goa - IIT-Bombay workshop, 7-8 February at CSIR-NIO, Goa

Eldho T.I

National Conference on “, Emerging Vistas of Technology in 21st Century 14 - 15 April 2012, GTU, Ahmedabad.

National Conf. on Innovations in Civil Engineering, SCMS College of Engineering, Karukutty, Kerala, 19-20 April 2012.

Fifth National Conference on Recent Advances in Civil Engineering 29 Nov. - 01, December 2012, Cochin, Kerala.

Organizing Secretary, Hydro 2012, IIT Bombay, Hydro 2012, Conference on Hydraulics & Water Resources, 6-7, December 2012.

Chaired a Session in *HYDRO2012 Conference, IIT Bombay.*

Chaired a Session in Fifth National Conference on Recent Advances in Civil Engineering 29 Nov. - 01, December 2012, Cochin, Kerala

Janga Reddy, M.

Served as Organizing Secretary of IITB-Purdue workshop on "Droughts and Climate Change" held during March 12-13, 2013, at IIT Bombay, Mumbai.

Served as Joint-Organizing Secretary of National Conference on "Hydraulic and Water Resources (HYDRO 2012), held during December 7-8, 2012, at IIT Bombay, Mumbai.

Jangid, R.S.

15th World Conf. on Earthquake Engineering, Lisbon, Paper No. 1249, September 24-28, 2012.

Jothiprakash, V.

Basin wise studies for impact of climate change on water resources, Central Water Commission, Ministry of Water Resources, 6th Feb.2012.

Workshop on Basin Management Studies with reference to the Climate Change, SVNIT, Surat on 27th Apr. 2012

II Indo-Italian Workshop on Advances in Fluvial Hydraulics and Water Resources Development and Management, Venice, Italy, 19-20th July 2012.

17th National Conference on Hydraulics, Water Resources, Coastal and Environmental Engineering, HYDRO-2012, Indian Institute of Technology Bombay, Mumbai, 7-8th Nov. 2012.

International Conference on Civil Engineering & Infrastructural issues in Emerging Economies, SASTRA, Thanjavur, 27 and 28 Feb. 2013.

Indian Institute of Technology Bombay and National Institute of Oceanography workshop, NIO Goa, 7-8, Mar. 2013

Workshop on Climate and Drought, IITB-Purdue University, IIT Bombay, 12-13 March 2013.

Juneja, A

18th South East Asian Geotechnical Conference, Singapore (29 to 31 May 2013)

Krishna Rao K.V

As a deputed member from the Institute, attended CUSP Partners' Workshop held during October 15-17, 2012 at Kimmel Center, New York, New York

Attended and presented a paper at the conference CODATU XV (Theme: "The role of urban mobility in (re) shaping cities.") held during 22-25 October, 2012 at Addis Ababa, Ethiopia

One of the organisers (Chairman) of the International Conference on Transportation Planning and Implementation Methodologies for Developing Countries (10th TPMDC-2012) held during 12-14 December 2012, IIT Bombay, India.

Mandal, J. N.

International Conference State of the Art and Practice in Geotechnical Engineering, Geo congress -2012, ASCE, 25-29th March 2012, Oakland, CA, USA.

5th Asian Regional Conference on Geosynthetics, Geosynthetics Asia- 2012, 13 to 15 December 2012, Bangkok, Thailand.

Keynote lecture - Proceedings of First National Conference in the Emerging Vistas of Technology in 21st Century – NCEVT'12, 14-15th April, 2012, Ahmedbad, India, 103-114.

Patil, G. R.,

92nd Transportation Research Board Annual Meeting, Washington D. C. January 2013.

National Conference on Urban Mobility—Challenges, Solutions, and Prospects, IIT Madras, July 2012

Recent Advances in Civil Engineering – RACE2013, KLE Society's M. S. Sheshgiri College of Engineering, Belgaum, May 2013

Rao E.P

Participated in 2012 International SWAT Conference and presented a paper at New Delhi, India, 18-20 July, 2012.

Tom V. Mathew

International Conference on Transportation Planning and Implementation Methodologies for Developing Countries (10th TPMDC-2012) held during 12-14 December 2012, IIT Bombay, India.

Vedagiri P

Participated in the 92nd Annual Meeting of Transportation Research Board, Washington DC, USA. 13-17 Jan 2013.

Participated in the National conference on Urban Mobility – Challenges, Solutions and Prospects, IIT Madras. 13-14 July 2012.

Participated in the National workshop on Using Science and Data in Road Safety and Management, IIT Madras. 15-16 Feb 2013.

Participated in the National Workshop on "Sustainable Transportation for Indian Cities (STIC 2013)" on 22.3.2013 at CSIR-CRRI, New Delhi.

One of the organisers (Co-ordinator) of the International Conference on Transportation Planning and Implementation Methodologies for Developing Countries (10th TPMDC-2012) held during 12-14 December 2012, IIT Bombay, India.

Organised the 4th National civil engineering students Symposium (AAKKAR), 9th March 2013, Civil Engineering Association, IIT Bombay. (CEA Faculty in-Charge)

Viswanadham, B.V.S.

Attended and participated an International Seminar on Centifuge modelling organized by K-water, Daejeon, Korea, during December 12-13, 2012.

Organised and Participated in the First Asian Workshop on Physical Modelling in Geotechnics, Asiafuge 2012 during November 14-16 2012,

Attended and Participated in Geoapps, organised by Indian Geotechnical Society Hyderabad Chapter during March 16, 2013 at IIIT Hyderabad, India.

Invited Lectures

Balaji, R.

Invited talk on “Wave-structure interaction: Beyond regular and random waves” in the one day workshop on “offshore structures & sacs applications” held on 2 April 2013 at IIT Bombay.

Invited talk on “Tides and Currents: A friend or foe for coastal engineers?” in the National Workshop on ICZM held during 16-17, July 2012 at IIT Madras.

Chandiramani, N. K.

Acceleration/Drift Feedback Control of MRD Connected Buildings, Computational Solid Mechanics session – SOM 11, Fourth International Congress on Computational Mechanics and Simulation, IIT Hyderabad, 9-12 December 2012

Choudhury, D.

On 25th March, 2013, at Gujarat Technological University (GTU), Gandhinagar, Gujarat, India during Review week of GTU, on the topic “Need for research on Geotechnical Earthquake Engineering and Research Ethics”, organized by *Gujarat Technological University (GTU), India*.

On 9th March, 2013, at Indian Institute of Technology Madras (IITM), Chennai, India during One Day Seminar on ‘Embankments: Design and Construction’, on the topic “Some Studies on Static and Seismic Stability of Embankments”, jointly organized by *Indian Geotechnical Society Chennai Chapter and IIT Madras, Chennai, India*.

On 9th February, 2013, at Jawaharlal Nehru University (JNU), New Delhi, India during International Humboldt Kolleg (IHK-2013), on the topic “Role of Combined Pile-Raft Foundation and Energy Pile in Climate Change – Piles through Dynamically Liquefied Soil”, organized by *Jawaharlal Nehru University (JNU), New Delhi, India* and supported by *Alexander von Humboldt Foundation, Bonn, Germany*.

On 5th January, 2013, at Department of Civil Engineering, Jadavpur University, Kolkata, India, on the topic “Advances in Seismic Design Issues of Various Geotechnical Structures”, jointly organized by *Indian Geotechnical Society (IGS), Kolkata Chapter and Department of Civil Engineering, Jadavpur University, Kolkata, India*.

On 20th December, 2012, at Sardar Vallabhbhai National Institute of Technology (SVNIT), Surat, India during 8th Biennial Structural Engineering Convention (SEC – 2012), on the topic “Advanced Design Issues of Various Geotechnical Structures Under Earthquake Conditions”, organized by *Applied Mechanics Department of Sardar Vallabhbhai National Institute of Technology (SVNIT), Surat, India*. (This is a Keynote Lecture)

On 17th December, 2012, at Indian Institute of Technology Delhi (IIT Delhi), India during UKIERI International Workshop on Seismic Requalification of Geotechnical Structures (SRGS), on the topic “Seismic Behaviour of Earth Retaining Structures and Design Issues”, jointly organized by *UK-India Education and Research Initiative (UKIERI), Indian Geotechnical Society (IGS), IIT Guwahati and IIT Delhi, India*.

On 31st October, 2012, at University of Wollongong, NSW, Australia during International Conference on Ground Improvement and Ground Control : Transport Infrastructure Development and Natural Hazards Mitigation (ICGI – 2012), on the topic “Modern Design Techniques for Reinforced Soil-Walls to Mitigate Seismic and Tsunami Hazards”, jointly organized by *Centre for Geomechanics & Railway Engineering, and SMART Infrastructure Facility, University of Wollongong, NSW, Australia, ISSMGE TC 211, TC 214, TC 202, TC 303.*

On 8th September, 2012, at Hotel Taj Krishna, Hyderabad, India during ‘Indo-Global Education Summit & Expo 2012’, as panel member for session 11 (Physical Sciences) on the topic “Research and Developments at IIT Bombay : Advances in Earthquake Engineering”, organized by *The Indus Foundation, USA and India.*

Dasaka S. Murty

Delivered an invited lecture during the Workshop on Emerging Trends in Geotechnical Engineering (ETGE 2012), 8th June 2012, held at IIT Guwahati.

Desai, Y.M.

VNIT Nagpur (16th March 2013) ,
VJTI (20th Feb 2013),
Nirma University (13 Feb 2013)

Eldho T.I

Invited Lecture, “Integrated Sustainable Water Resources Management & Scope of Modern Techniques”, International Conference on "Sustainable Development and Governance(ICSDG): Building Commerce and Communities –Amrita University Coimbatore, 13 December 2012.

Invited Lecture (Keynote lecture), “India’s Water Resources and Climate Change”, National Conf. on Innovations in Civil Engineering, SCMS College of Engineering, Karukutty, Kerala, 19 April 2012.

Invited Lecture, “Integrated Water Resources Management – Necessity of Cooperation and Sharing”, Indian Water Works Association, World Water Day Celebration, 21 March 2013.

Invited Lecture, “Coastal Hydrodynamics and Transport Modeling Using FEM”, NIO Goa – IIT Bombay Workshop on Marine Environmental Modeling, NIO Goa, 7th March 2013.

Invited Lecture, “Integrated Coastal Urban Flood Modelling Using Numerical Models, GIS & Remote Sensing”, Dept. Civil Engg., Anna University, 20 November, 2012.

Invited Lecture, “Hydro-Geological Aspects of Rain Water Harvesting”, Dept. Civil Engg., NIT Bhopal, Rainwater Harvesting Course, 12 January 2013.

Invited Lecture, “Rainwater Harvesting & Roof Catchment System”, Dept. Civil Engg., NIT Bhopal, Rainwater Harvesting Course, 12 January 2013.

Invited Lecture, “Applications of GIS & Numerical Methods for Watershed Modeling”, Dept. Civil Engg., College of Engineering, Trivandrum, 28th May 2012.

Invited Lecture “Mathematical Modeling of Water Resources Systems”, Dept. Civil Engg., College of Engineering, Trivandrum, 28th May 2012.

Invited Lecture “Watershed Modeling Using Numerical Methods, GIS and Remote Sensing”, Dept. Civil Engg., College of Engineering, Trivandrum, 29th May 2012.

Gupta Kapil

2 May 2012- National Water Academy, Khadakwasla, Pune, "Urban Flooding and Climate Change"

Inamdar, M.

Sub-cellular, single and collective cell modeling: mechanics across cell-scales. Cell Mechanics Meeting, RRI, Bangalore, India. Invited talk (2013).

Modeling collective cell migration in epithelial sheets: how far can simple mechanics take us? Physics Colloquium, IIT Kanpur, India, Invited talk (2012).

Force production in curling filaments: application to microtubule protofilaments. PhysCell2012, Hyères, France, Poster (2012).

Modeling collective cell migration in response to wound healing. International Conference on Mathematical and Theoretical Biology, Pune, India, Invited talk (2012).

Jothiprakash, V.

“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.

“Water Management Studies in a run-off river basin”, Workshop on Basin Management Studies, SVNIT, Surat on 27th Apr. 2012.

“Reservoir Inflow Modeling Using Artificial Intelligence Techniques and its Use in Real Life” II Indo-Italian Workshop on Advances in Fluvial Hydraulics and Water Resources Development and Management, Venice, Italy, 19th July 2012.

“Genetic Algorithms for Reservoir Operating Policies” TEQIP - STTP on “Genetic Algorithm and Neuro Fuzzy Applications in Engineering (GANEUF AE-2012)”, Government Engineering College, Aurangabad, 20th Dec. 2012.

“Real Time Reservoir Inflow Forecasting Using ANN” TEQIP - STTP on “Genetic Algorithm and Neuro Fuzzy Applications in Engineering (GANEUF AE-2012)”, Government Engineering College, Aurangabad, 20th Dec. 2012.

“Multi-Reservoir Inflow Prediction Using Soft Computing Techniques” TEQIP - STTP on “Genetic Algorithm and Neuro Fuzzy Applications in Engineering (GANEUF AE-2012)”, Government Engineering College, Aurangabad, 21st Dec. 2012.

“Water Resources Management Scenario in India” National Workshop on “Recent Advances in Water Resources Management”, Department of Civil Engineering, Maulana Azad National Institute of Technology Bhopal, 31st Jan. 2013.

"Introduction to Water Resources Systems Modelling Techniques" National Workshop on "Recent Advances in Water Resources Management", Department of Civil Engineering, Maulana Azad National Institute of Technology Bhopal, 31st Jan. 2013.

"Time series modeling using soft computing Techniques" International Conference on Civil Engineering & Infrastructural issues in Emerging Economies, SASTRA, Thanjavur, 27 and 28 Feb. 2013.

"Motivating the Civil Engineering Students with Recent Developments and Future Scope in Civil Engineering" AMACE, Kancheepuram, Tamil Nadu, 26th Feb. 2013.

"Nonlinear Dynamic Analysis of Oceanographic parameters-A Chaotic Approach", Indian Institute of Technology Bombay and National Institute of Oceanography workshop, NIO Goa, 7-8 Mar. 2013

"Meteorological Drought Assessment in Agniar River Basin", IITB-Purdue University Workshop, IIT Bombay, 13, Mar. 2013.

Juneja, A

Lecture on "Centrifuge modelling of tunnelling induced ground deformation", during the Young Indian Geotechnical Engineer's Conference at IIT Madras, Chennai (May 2013)

Lecture on "Embankment failure in residual soils of western coast of India", during the Symposium on Geotechnical Practices, JNTU Hyderabad (November 2012)

Lecture on "Liquefaction and cyclic mobility of sands injected with air bubbles", in the Civil Engineering Department, Kasetsart University, Bangkok (May 2012).

Krishna Rao K.V

Delivered Expert Talk on "Planning of Mass Rapid Transit Systems in Indian Context" at the conference 'Urban Infrastructure' organized by Nashik Center of Association of Consulting Civil Engineers (ACCE) on 13th and 14th July 2012, Nashik, Maharashtra, India.

Delivered a guest lecture on "Flexible Pavement Design" at the 2nd PMGSY Training Course organised as a CEP course at IIT Bombay during 24-26 August 2012.

Delivered Guest Lecture on "Sustainable Urban Transportation Planning Through Transit Oriented Development" at the National Conference on Transportation Infrastructure Needs and Challenges in India (TINCH), 11-12 October 2012, Department of Civil Engineering, Osmania University College of Engineering, Hyderabad, India.

Delivered Invited Talk on "Sustainable Urban Transportation Planning Through Transit Oriented Development" at the International Conference on Transportation Planning and Implementation Methodologies for Developing Countries (TPMDC), 12-14 December 2012, IIT Bombay, India.

Patil, G. R.,

Real Time Traffic Counting System using Video Image Processing, National Conference on Urban Mobility—Challenges, Solutions, and Prospects, IIT Madras, July 2012)

Prakash, Nanthagopalan.

Delivered lecture on “Sustainable development from efficient utilisation of resource”, organised by L&T, Mumbai on (World Environment Day) June 5, 2012.

“Design of cementitious paste and concrete –A conceptual approach”, KSR college of Engineering, Tiruchengode, Tamil Nadu on March 8, 2013.

“Sustainable development in Construction – The way Forward”, National level Technical symposium held in NSN College of Engineering and Technology, Karur, Tamil Nadu on March 9, 2013.

RAAJ Ramsankaran

Invited lecture on Terrestrial Laser Scanning and its Applications in the ISRO sponsored One week special course on Lidar Data Processing and Applications, National Remote Sensing Center, Hyderabad. Nov. 19-23, 2012.

Invited speaker in the DST, DRDO and CSIR sponsored International Meet on the Impacts of Climate Change on Water, Karunya University, Coimbatore. August 17-18, 2012.

Rao E.P

Delivered four lectures to the of CEP short term training course for ‘Irrigation Engineers of Maharashtra’ on “Modelling Techniques for Water Resources Management”, Civil Engineering Department, IIT Bombay, Mumbai, 25 June – 7 July, 2012.

Rastogi, A.K.

Groundwater Modeling of Large Aquifer System for Sustainable Development – delivered at TERI – Business Council for Sustainable Development, Hosted by LAFARGE, October 9, 2012, Mumbai.

Solute Transport Modeling by Finite Element Method – Invited Expert Lecture delivered at Remediation Technology and Modeling of Assessment of Groundwater Contamination - Five days (Jan 21-25) Residential Program – Sponsored by Central Pollution Control Board NewDelhi, conducted at NGRI Hyderabad Jan 21, 2013.

Viswanadham, B.V.S.

An invited lecture entitled “Studies on the Performance of Hybrid Geosynthetic Reinforced slopes” was delivered at Korean Advanced Institute of Science and Technology, Daejeon, Korea, December 10, 2012.

An invited lecture entitled “Centrifuge model studies on slope protection systems” was delivered at K-Water, Daejeon, Korea, December 13, 2012.

An invited lecture entitled “Centrifuge modeling of earthen dams” was delivered on July 7, 2012 at Training programme for Irrigation Engineers at IIT Bombay.

An invited lecture entitled “Use of Geosynthetics in Earthen Dams” was delivered on July 7, 2012 at Training programme for Irrigation Engineers at IIT Bombay.

Honorary Work

Balaji, R.

Reviewed paper for; Journal of Engineering Applications of Computational Fluid Mechanics, ISH Journal of Hydraulics Research and International Journal of Ocean and Climate Systems.

Technical review committee member, 5th Indian National Conference on Harbour and Ocean Engineering, 5-7 February 2014, NIO, Goa.

Banerjee, Sauvik

Reviewed technical papers for international journals: Journal of Nondestructive Evaluation, Nondestructive Testing and Evaluation, Journal of Sound and Vibration, International Journal of Advanced Structural Engineering.

Chandiramani, N. K.

Reviewer for: Journal of Sound and Vibration; ASME Journal of Dynamic Systems, Measurement and Control; Structural and Multidisciplinary Optimization, Applied Mathematical Modeling.

Choudhury, D.

Managing/Handling Editor for June 2012 issue (Volume 6, Issue 3) of 'ISSMGE Bulletin', published by International Society for Soil Mechanics and Geotechnical Engineering (ISSMGE), London, U.K.

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

Editorial Board Member of the following Journals, (i) Disaster Advances' (*ISSN: 0974-262X*) (Quarterly Journal), SCIE and SCOPUS indexed with Impact Factor 0.692, published from India, (ii) Indian Geotechnical Journal (*ISSN: 0046-8983*) (Quarterly Journal), Springer, SCIE and SCOPUS indexed, published by Springer in association with Indian Geotechnical Society, New Delhi, India, (iii) International Journal of Geotechnical Earthquake Engineering (IJGEE) (*ISSN: 1947-8488*) (Semi-Annually Journal), IGI publishing, (iv) Electronic Journal of Geotechnical Engineering (EJGE) (*ISSN: 1089-3032*), SCOPUS indexed, published from USA, (v) Journal of Civil Engineering and Science (JCES) (*ISSN: 2227-4634*), SCOPUS indexed, published from USA, (vi) Journal Dataset Papers in Geosciences (*ISSN: 2314-5323*), SCOPUS indexed, published from USA, (vii) ISRN Civil Engineering Journal (*ISSN: 2090-5114*), SCOPUS indexed, published from USA, (viii) The Scientific World Journal, Civil Engineering, published by Hindwai Publishing Company.

Reviewer of several papers from various Geotechnical Engineering and Earthquake Engineering International and National Journals.

Reviewer for (i) GeoCongress – 2013, Annual Conference of Geo-Institute, ASCE, March 3 – 6, 2013, San Diego, CA, USA organized by Geo-Institute, ASCE, USA, (ii) Indian Geotechnical Conference (IGC-2012), December 13-15, 2012, IIT Delhi, India, Annual Conference of Indian Geotechnical Society, New Delhi, India.

Reviewer for Sponsored Research Project Proposals of 2012 for The Portuguese Foundation for Science and Technology (FCT), Lisbon, Portugal.

Reviewer for NPTEL Phase-II web courses on “Ground Improvement” and “Advanced Geotechnical Engineering” developed by IIT Kanpur, India.

Technical Committee Member, Reviewer for The 9th International Conference on Testing and Design Methods for Deep Foundations, (IS Kanazawa – 2012) during September 18 – 20, 2012, Kanazawa, Japan, jointly organized by Japanese Geotechnical Society (JGS), International Society for Soil Mechanics and Geotechnical Engineering (ISSMGE) and Kanazawa University.

International Scientific Committee Member, Second International Conference on Performance-Based Design in Earthquake Geotechnical Engineering during May 28 – 30, 2012, Taormina, Italy, jointly organized by International Society for Soil Mechanics and Geotechnical Engineering (ISSMGE) Technical Committee TC 203, European Technical Committee ERTC-12 on Application of Eurocode 8 and Italian Geotechnical Society.

Member of Award Nomination Committee of ‘Unsaturated Soils’ Technical Committee of Geo-Institute, American Society for Civil Engineers (ASCE), Reston, VA, USA. Secretary and One of the Key Member of Technical Committee TC 212 – Deep Foundations of International Society for Soil Mechanics and Geotechnical Engineering (ISSMGE), UK to develop ‘International ISSMGE Guidelines for Combined Pile-Raft Foundations’ technical document/code.

Member of International Building Code (IBC) Review Committee for IBC 1808 on ‘Foundations’. Member of Technical Committee on ‘*Earthquake Engineering and Soil Dynamics*’ of Geo-Institute of American Society of Civil Engineers (ASCE), USA.

Member of Technical Committee TC 203 - *Earthquake Geotechnical Engineering* of International Society of Soil Mechanics and Geotechnical Engineers (ISSMGE), U.K.

Reviewer and Expert Member for M.Tech. & Ph.D. Theses evaluation during Research week of Gujarat Technological University (GTU), Gandhinagar, Gujarat, India.

Selection Committee Member and Mentor for INSPIRE Student Award Program of Department of Science and Technology (DST), New Delhi, Govt. of India.

Academic Expert Member, of the Subject Board of UG and PG Courses of Department of Civil and Environmental Engineering, Veermata Jijabai Technological Institute (VJTI), Mumbai, India.

Expert Member, of the Board of Courses and Studies (BOCS) for 4-year B.Tech. course of Department of Civil Engineering, Indian School of Mines, Dhanbad, India, nominated by the Director of ISM, Dhanbad, India.

Model Question paper setter for Civil Engineering Discipline for the Maharashtra Public Service Commission (MPSC), Govt. of Maharashtra. Model question paper, Syllabus setter for Civil Engineering Discipline and Expert Member for the Union Public Service Commission (UPSC), Govt. of India.

Examiner for Ph.D. Theses from University of Technology Sydney (UTS), NSW, Australia and Ph.D. Theses from IIT Delhi, IIT Roorkee, IISc Bangalore, Visvesvaraya Technological University (VTU) of Belgaum - Karnataka, Jadavpur University of Kolkata, India. Also Examiner for M.S. Thesis from IIIT Hyderabad, India.

Dasaka S. Murty

Reviewed Ph.D. theses submitted to NIT Surat and JNTU Hyderabad. Reviewed research papers submitted to Indian Geotechnical Journal and Soils and Foundations.

Deo, M.C.

Member, Maharashtra Coastal Zone Regulation Authority (2012~).

Member, Hydrology Project group, Govt. of Maharashtra.

Member, Governing Council, Central Water and Power Research Station.

Member, Technical Advisory Committee, Central Water and Power Research Station.

Member, Technical Advisory Council, National Institute of Ocean Technology.

Member, Project Management Board, National Institute of Ocean Technology.

Member, World Bank Consultant for an Institutional Review.

Chief Editor, International Journal of Ocean and Climate Systems, Multi-Science Publ., UK.

Associate Editor of ASCE Journal of Computing in Civil Engg.

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

Member, Editorial Board, Applied Ocean Research, Elsevier, UK.

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,

Faculty selection at IITR, IITD (2), IITKGP (2).

Scientists' selections at CSIR-NGRI.

Reviewed a large number of national and international Journal papers.

Reviewed Project Proposals from Professors of Oxford and other British Universities sent by UK Research Council.

Desai, Y.M.

Expert member in various Selection Committees at various IITs, NITs, Universities

Reviewer for PhD / MTech Dissertations for candidates from various IITs, NITs, Universities.

Reviewer for journal papers for various international and national journals

Eldho T.I

Chairman, Board of Governors, IHRD College of Engineering, Adoor, Govt. of Kerala

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 Madras, IIT Delhi, IIT BHU, Anna University. Technical Review Committee Member of ICAR, Rubber Dam project implemented by Indian Rubber Manufacturing Research Association, Thane.

Organizing Secretary of *Hydro2012*, held at IIT Bombay.

Reviewed Project proposal for DST, New Delhi, 2012-13.

Convenor, UGAPEC, IIT Bombay.

Technical Review Committee Member, Int. Conf., Recent Advances in Engineering, Technology and Management, S.P. College of Engineering, Mumbai, May 2012.

Technical Review Committee Member, Int. Conf., on SWAT, IIT Delhi, 2012.

Member, Board of Studies, S.P. College of Engineering, Mumbai, 2012-13.

Chairman, Board of Governors, IHRD Gov. College of Engineering, Adoor, Kerala.

Technical Advisory Committee Member of Water Supply & Rainwater Harvesting, MCGM, Mumbai.

Reviewed research papers for the following Journals in 2011-2012. Journal of Water Management, Institution of Engineers, UK. Journal of Advances in Water Resources. Journal of Scientific Research, Journal of Environmental Earth Sciences, Journal of Hydroinformatics, Journal of Environmental Informatics, 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, Hydrological Sciences Journal, Journal of Natural Hazards, Journal of Geomatics, ASCE Journal of Waterway, Port, Coastal, and Ocean Engineering, International Journal of Engineering Analysis with Boundary Elements, INSA, Journal of Sadhana., Journal Neural Computing and Applications, Journal of Water Science & Technology.

Gupta Kapil

Member -UNESCO Working Group: Sustainable Urban Water Strategies, VII IHP, 2008-2013, Member- Editorial Board: Urban Water Journal. National: Member, Urban Flooding Expert Committee, 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.

Janga Reddy, M.

Reviewed technical papers for Journals: Journal of Hydrologic Engineering (ASCE), Hydrological Science Journal; Water Resources Management; Journal of Hydrology, Environmental Modeling and Software; Water Management Journal, Journal of Earth Science and Systems, Applied Soft Computing, Journal of Hydroinformatics, Journal 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.

Evaluated Ph.D thesis from NIT Surathkal, MNIT Jaipur, SVNIT Surat, Anna University and IIT Kanpur. Reviewer for various International and National Journals.
Member, Interdisciplinary Programmes Committee (Centre for Urban Science and Engineering-(C-USE)) for the year 2013.
National Service Scheme (NSS) Coordinator, IIT Bombay (30-12-2010 to till date).
Member Departmental Policy Committee (Jan 2013 to till Date).
Member DPGC (Departmental Post Graduate Committee) (Jan 2011 to till date).
Member Green Campus Committee (from Feb 2010 to till date).
Executive Council Member (2012-2014) Indian Society for Hydraulics, Pune.

Juneja, A

Reviewer for DST funded project proposals
Reviewer of International Journal papers of high impact factor (e.g. Geotechnical Testing Journal, ASTM;Journal of Materials in Civil Engineering, ASCE;Ground Improvement, ICE;Soils and Foundations, JGS;Canadian Geotechnical Journal, NRC Research Press)
Faculty Advisor (for CE Department) Academic Rehabilitation Programme
Faculty Advisor (for CE Department) Student Mentorship Programme
Moderator of [Events] list supported by Computer Centre IIT Bombay
Warden Hostel-4
Core-member ATC-18 "Deep excavations and Mega Foundations" of ISSMGE
Member TC 305 "MegaCities" of ISSMGE
Member International Society for Soil Mechanics and Geotechnical Engineering (ISSMGE)
Member American Society of Civil Engineers (ASCE)
Life Member Indian Geotechnical Society (IGS)
Life Member Indian Roads Congress (IRC)

Krishna Rao K.V

Member of the Technical Advisory Committee for the project "Capacity Augmentation Work of Mumbai – Pune Corridor" appointed by MSRDC, Maharashtra Government, Mumbai

Mandal, J.N

Editorial board member of journal of civil engineering (JCE) under international academy of science and technology.
Editorial board member of the 'international journal of structural and civil engineering research' (IJSCER).
Editorial Board Member of International Journal of Research in Engineering and Technology (IJRET). Reviewer of Indian Geotechnical Journal (IGJ)
Reviewer of DST Research Proposal
Reviewer of NPTEL Phase-2 Video course.

Patil, G. R

Coordinator for the 10th Transportation Planning and Implementation Methodology for Developing Countries (TPMDC), organized at IIT Bombay in December 2012.

Session Chair at National Conference on *Recent Advances in Civil Engineering – RACE2013* organized by KLE Society's M. S. Sheshgiri College of Engineering, Belgaum in May 2013

Paper reviewed for *Journals*: Transportation Research Record, Network and Spatial Economics, European Journal of Operations Research, International Journal of Advances in Engineering Sciences and Applied Mathematics, Indian Road Congress, *Conferences*: Transportation Research Board annual meeting, Washington DC; The 15th meeting of the Euro Working Group on Transportation

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,
Technical Review Committee Member, International Conference on Rehabilitation and restoration of structures, IIT Madras,
Review of Ph.D. thesis of Jawaharlal Nehru Technological University Kakinada,

RAAJ Ramsankaran

Acted as a reviewer for some articles submitted to the following journals: Journal of Indian Society of Remote sensing. Journal of Hydrology and Hydromechanics.

Raje, D

Reviewer for international journals - Hydrological Sciences Journal, Water Resources Management, Journal of Water and Climate

Rao E.P

Reviewer of
Journal of Hydro-environment Research
The Arabian Journal for Science and Engineering
The Institution of Engineers (India)

Rastogi, A.K.

Director's nominee as Expert in the Faculty Selection Committee, Dept. of Civil Engg, MANIT – Bhopal, March 6, 2013.
Vice-Chancellor's Nominee as Expert in the Faculty Selection Committee in the Centre for Water Engineering and Management Central University of Jharkhand, Ranchi – June 30, 2012.
Board's Nominee as Expert in the Faculty Selection Committee, Dept. of Hydrology IIT Roorkee –, May 2, 2012.
Expert National Board of Accreditation to assess M. Tech. Program of Hydraulic Engineering, College of Engineering – Trivandrum, Feb 8-10, 2013.
Reviewer DST Research Proposal "Delineation of salinity intrusion in selected districts of the Malabar Coast of Kerala and feasibility studies on its alleviation through strategic management of inland fresh water resources".
Reviewer DST Research Proposal "Delineation of Fresh - salt water interface for the coastal aquifer along Coramandel coast confined between Nagapattinam and Kodyakkarai using combined Geo electrical and Geo magnetic surveys and Hydro chemical methods.
Reviewer DST Research Proposal " Performance studies of electrokinetic process for remediation of soil contaminated with heavy metal".
Reviewer DST Research Proposal " Groundwater Seepage and its Impact in Chilika Lagoon and Near Shore Area in Orissa State ".

Reviewer DST Research Proposal " Delineating physico-chemical dynamics of discharging groundwater to sea in coastal areas of the Bay of Bengal ".

Reviewer Indian National Committee on Groundwater Research Proposal "Spatio - Temporal Modeling of Groundwater Quality using Artificial Neural Network".

Reviewer Proposal for 3rd GEM – IITD Indo – French Research Seminar.

Reviewer for Indo - French Centre for the Promotion of Advanced Research- proposal entitled 'Development of multi-objective optimization model for conjunctive use of surface and groundwater resources considering climate change impacts'.

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

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

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 .

Member Technical Programme Committee – International Conference on Green Technologies – ICGT 2012.

Main Convener of the Session: Groundwater Systems Planning and Management; also Chaired the session in AOGS – AGU 2012 Joint Assembly held at Singapore, August 13 – 17, 2012. In Hydrology section 23 sessions were held. Delegates from 60 countries spanning across five continents participated in the international event.

Delivered a key note address entitled - Role of Inverse Modeling in Groundwater System Simulation in Fifth International Groundwater Conference – IGWC2012, held at Aurangabad Dec. 18- 21, 2012. Chaired the Session – Models and its Application in Groundwater Management – Theme V in Fifth International Groundwater Conference – IGWC2012, held at Aurangabad Dec. 18- 21, 2012.

Singh D.N

Launched a new journal and became Editor-in-Chief: Environmental Geotechnics, ICE Publishing, London, UK <http://www.editorialmanager.com/envgeo/>

Subimal Gosh

Editorial board member of The Scientific World Journal.

Reviewer of Intergovernmental Panel on Climate Change Assessment Report 5 report (Working Group II).

Reviewer of Journal of Geophysical Research, Water Resources Research, Journal of Hydrology, Geophysical Research Letters, Climatic Change, Journal of Hydrologic Engineering etc.

Tom V Mathew

Chairman, JEE, IIT Bombay

Member, Research Council, National Transportation Planning and Research Centre, NATPAC, Trivandrum, Kerala (2013-)

Reviewed number of papers from national and international journals.

One of the organisers of the International Conference on Transportation Planning and Implementation Methodologies for Developing Countries (10th TPMDC-2012) held during 12-14 December 2012, IIT Bombay, India.

Viswanadham, B.V.S

Guest Editor(s): For a special issue on Physical modelling in Geotechnics of Geotechnical Engineering Journal of the SEAGS & AGSSEA.

Chairman Asiafuge-2012, The First Asian Workshop on Physical Modelling in Geotechnics, Nov. 14-16, 2012.

Reviewer for papers in the following journals: ASCE Journal of Journal of Hazardous Toxic, and Radioactive Waste Management, ASCE Journal of Materials in Civil Engineering, ASCE Journal of Geotechnical and Geoenvironmental Engineering, Geotextiles and Geomembranes, Geosynthetics International, International Journal of Physical Modelling in Geotechnics, Indian Journal of Geosynthetics and Ground Improvement, Indian Geotechnical Journal, Ground Improvement, Soils and Foundations, Sadhana, Waste Management.

Publications

Books

1. Adarsh, S., and **Janga Reddy, M.** *Optimal Design of Irrigation Canals*. Germany: LAP Lambert Academic Publishing, ISBN 978-3-659-33051-3, 2013.
2. **Desai, Y. M., T. I. Eldho,** A. H. Shah Finite Element Analysis (for Anna University, Pearson publishers 2013).
3. **Rastogi A K,** Jha N and Choudhary P– AEM Application in Groundwater Hydrology and FEM simulation of RC well - LAP LAMBERT Academic Publishing, Saarbrücken Germany, 2012, ISBN 978-3-659-15590-1.

Edited Books/ Monograph

1. “Finite Element Method & Applications in Civil Engineering” – Editors: T.I. Eldho, & Y.M. Desai, Lecture notes for CEP/QIP course, July 2012, IIT Bombay.
2. “Sustainable Water Resources Management – Theory & Practice”, Editor T.I. Eldho, Monograph for CEP/QIP Course, June-July 2012, IIT Bombay.
3. “Modelling Techniques for Water Resources Management”, Editor T.I. Eldho, Monograph for CEP/QIP Course, June-July 2012, IIT Bombay.
4. “Advances in Water Resources & Computer Modeling”, Editor T.I. Eldho, Monograph for CEP/QIP Course, June-July 2012, IIT Bombay.

In book Chapters

1. Ranjan Kumar, **Deepankar Choudhury** and Kapilesh Bhargava (2013); “Recent development in modeling, analysis and design of foundation systems subjected to blast loading considering uncertainties”, *Proceedings of the International Symposium on Engineering Uncertainty: Safety Assessment and Management (ISEUSAM – 2012)*, Edited by, Subrata Chakraborty and Gautam Bhattacharya, published by Springer, (ISBN 978-81-322-0756-6, 978-81-322-0757-3), pp. 927-938. doi: 10.1007/978-81-322-0757-3_63
2. Ricci, F. Monaco, E., Tancredi, S., Lecce, L., **Banerjee, S.**, and Mal, A.K, *Ultrasonic guided waves for hidden damage detection in composite structures: Theory and experiments*, in RLIEM Book Series: Nondestructive Testing of Materials and Structures (Vol. 6), Buyukozturk O. (Editor), Springer, pp. 577-584, 2012, ISBN 978-94-007-0723-8.
3. Ritika Sangroya and **Deepankar Choudhury** (2013); “Stability analysis of soil slope subjected to blast induced vibrations using FLAC^{3D}”, In Geo-Congress 2013: Stability and Performance of Slopes and Embankments III, *Geotechnical Special Publication No. 231*, ASCE, Edited by C. L. Meehan, D. Pradel, M. A. Pando and J. F. Labuz (ISBN 978-0-7844-1278-7), Reston, VA, USA, pp. 472-481, in CD ROM. doi:10.1061/9780784412787.049

Papers in Refereed Journals

1. Adarsh, S., and **Janga Reddy, M.** (2013). "Reliability Analysis of Composite Channels Using First Order Approximation and Monte Carlo simulations." *Stochastic Environmental Research and Risk Assessment*, Vol. 27, No. 2, pp 477-487.
2. Ajay Sharma and **R.S. Jangid**, (2012) "Performance of variable curvature sliding isolators in base-isolated benchmark building", *The Structural Design of Tall and Special Buildings*, USA, Vol. 21, pp. 354-373,.
3. Amey Katdare and **Deepankar Choudhury** (2012); "Effect of Rayleigh wave on seismic active earth pressure behind retaining wall", *Disaster Advances*, (ISSN: 0974-262X) India, Vol. 5, No. 4, pp. 1154-1159.
4. Arunkumar R, and **V. Jothiprakash**, (2012) "Optimal reservoir operation for hydropower generation using non-linear programming model" *Journal of Institution of Engineers (India):Series A*, Vol. 96, No. 2. pp 111-120.
5. Asha, B. S. and **Mandal, J. N.** (2012). "Filtration tests on marine clay – jute geotextile filter sheath systems.(2012)" *The Electronic journal of geotechnical engineering*, Vol.17, Bund.R, 2659-2672.
6. Asha, B.S. and **Mandal, J. N.** (2012). "Absorption and discharge capacity tests on natural prefabricated vertical drains." *Geosynthetic International*, 19(4), 263-271.
7. **Bajoria K M** and P A Jadhav (2013), "Buckling of Simply Supported Piezoelectric FGM Plates Subjected to Electro-Mechanical loading using Higher-order Shear Deformation Theory", *Advanced Material Research*, 622-623, 200-205, Trans Tech Publications, Switzerland.
8. **Bajoria K. M.** and R. L. Wankhade (2012), "Free Vibration of Simply Supported Piezolaminated Composite Plates using Finite Element Method", *Civil Engineering and Materials, Advanced Materials Research*, Volume 587, 2012. Trans Tech Publications, Switzerland.
9. Bameta, T., D. Das, S. Sarkar, D. Das, and **M. Inamdar**, (2012) Broad-tailed force distributions and velocity ordering in a heterogeneous membrane model for collective cell migration. *Europhys. Lett.*, 99:18004–p1-p6.
10. Bameta, T., R. Padinhateeri, and **M. Inamdar**, (2013). Force generation and step-size distributions in a dynein motor. *J. Stat. Mech.* P02030 doi:10.1088/1742-5468/2013/02/P02030
11. Bandivadekar T.P and **R.S. Jangid**, (2012) "Mass distribution of multiple tuned mass dampers for vibration control of structures", *International Journal of Civil and Structural Engineering*, Vol. 3, pp. 70-84, 2012.
12. **Banerjee, S.** and Pol., C. B., (2012) "Theoretical Modeling of Guided Wave Propagation in a Sandwich Plate Subjected to Transient Surface Excitations", *International Journal of Solids and Structures*, 49 (23–24), 3233–3241, 2012.

13. Bhosekar V.V., **Jothiprakash, V.**, and Deolalikar, P.B.. (2012).. “Orifice spillway aerator: Hydraulic design.” *Journal of Hydraulic Engineering, ASCE*, Vol. 138. No. 6, pp.563-572.
14. Bhuyan, P.K, and **Krishna Rao K.V.** (2012) “Defining LoS criteria of urban streets using GPS data: K-means and K-medoid clustering in Indian context”, *Transport*, 27:2, 149-157.
15. Chacko,R., A.T. Kulkarni and **Eldho T.I.** (2012), "Urban coastal flood inundation modelling: a case study of Thane City, India", *ISH Journal of Hydraulics Engineering*, Vol. 18, No.3, pp 194-203.
16. **Chandiramani N.K.** and S. P. Purohit, (2012) Semiactive control using magnetorheological damping with output feedback and distributed sensing, *Shock and Vibration*, 19, 1427-1443,.
17. Chaudhari P., Nikam V. and Gupta K. (2012) “Hydraulic modelling of flows in Mithi River, Mumbai.” *Journal of Indian Water Works Association*, XXXXXIV, 3, 228-235.
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