

## **Dr. Debasis Sarkar**

### **Journal Publications (International):**

- [1] Sarkar, D. and Dutta, G. (2010) “Design and Application of Risk Adjusted Cumulative Sum for Strength Monitoring of Ready Mixed Concrete” *Journal of Construction Engineering and Management, ASCE*. Vol. 136 (6), pp 623 – 631
- [2] Sarkar, D. (2011) “Simulation Application in Project Risk Management for Infrastructure Transportation Project” *International Journal of Project Organization and Management*, Inderscience Publications, UK. Vol. 3(3 /4), pp. 374 -392
- [3] Sarkar, D. and Dutta, G. (2011) “A Framework for Project Risk Management for the Underground Corridor Construction of Metro Rail” *International Journal of Construction Project Management*, Vol. 4(1), pp. 21-38
- [4] Sarkar, D. (2011) “Decision Tree Analysis for Risk Mitigation Options for Underground Corridor Metro Rail Project” *International Journal for Decision Sciences and Risk Management*, Inderscience Publications, UK, Vol. 4, Nos. 1 /2, pp. 25 – 37
- [5] Sarkar, D. and Shah, D (2013) “A framework for Application of Genetic Algorithm in Productivity Optimization of Highway Equipments Using Evolver Software” *European Int. Journal of Science & Technology*, Vol. 2(5), pp. 151 – 163
- [6] Sarkar, D and Yadav, S. (2013) “Combined interpretative structural modelling and expected value method approach for managing project risks in oil exploration projects” *International Journal for Decision Sciences and Risk Management*, Inderscience Publications, UK, Vol. 5(1), pp. 35 - 54
- [7] Sarkar, D. and Bhattacharjee, B. (2014) “Application of Multivariate CUSUM for Quality Monitoring of Ready Mixed Concrete” *Int. Journal of Quality Engineering & Technology*, Vol. 4(2), pp. 161-179. Inderscience Publishers, UK.
- [8] Sarkar, D and Bhusan, M (2014) “Application of Bootstrap Technique and Genetic Algorithm for Resource Optimization of Bridge Projects” *Int. J. of Latest Technology in Engineering Management* , Vol. (III) (III), pp. 109-118.

### **Journal Publications (National):**

- [1] Sarkar, D, (2010) “Effect of Local Environment Factors in Selection of Green Building Materials and Technology: A Case Study of a Commercial Complex in Ahmedabad” *New Building Materials & Construction World*, Vol. 16(2) pp. 132 – 140.
- [2] Sarkar, D. and Shah, M. (2011) “Environmental Analysis of GWR Systems for Residential Projects” *New Building Materials & Construction World*, Vol. 17(4) pp. 170 – 175
- [3] Sarkar, D. and Kamdar, P. (2011) “Application of Simulation in Evaluation of Travel Time Performance of Bus Rapid Transit System, Ahmedabad” *Journal of Institution of Engineers*, Vol. 92, pp 9-13
- [4] Sarkar, D. and Shah, M. (2011) “Grey Water Recycling Systems: A Study of Economic Implications and Potential Applications in Residential and Commercial Projects” *NICMAR Journal of Construction Management*, Vol. XXVI, pp. 5 – 13.

[5] Sarkar, D. and Patel, K. (2012) "Project Risk Management Framework for PPP Models for Indian Highway Projects" *Civil Engineering & Construction Review*, Vol. 25 (3), pp 104 -114

[6] Sarkar, D and Shah, S. (2012) "Evaluating Tower Crane Safety Factors for a Housing Project through AHP" *NICMAR Journal of Construction Management*, Vol. XXVII (II & III), pp. 61 -70.

[7] Sarkar, D and Gunjan, B (2014) "Risk Analysis of Elevated Corridor Project Using Failure Mode and Effect Analysis (FMEA) and Combined Fuzzy FMEA" *NICMAR Journal of Construction Management*, Vol. XXIX (2), pp. 5-21

### **Conference Publications**

[1] Sarkar, D. (2011) "Formulation of Project Risk Management Model for Mass Rapid Transit System Project" *1<sup>st</sup> Annual International Conference on Construction*, Athens Institute of Education & Research (ATINER), Athens, Greece.

[2] Sarkar, D. (2013) "Proactive Statistical Process Control for Quality Monitoring of RMC" *Proceedings of 1<sup>st</sup> Annual Conference in Civil Engineering and Architecture*, Global Science And Technology Forum, Singapore.

[3] Sarkar, D and Yadav, S. (2014) "A Framework for project risk and uncertainty management for oil exploration projects" *Proceedings of International Conference on Energy & Infrastructure 2014*, Pandit Deendayal Petroleum University, Gandhinagar.

[4] Sarkar, D. (2014) "Development of Sustainable Green Project Risk Management Model For Infrastructure Transportation Project" *Proceedings of Int. Conf. On Sustainable Development*, July 5 -7<sup>th</sup>, Bangkok, Thailand.

[5] Sarkar, D (2014) "Evaluating Crane Safety Factors for Construction of Underground Metro Rail Project" *Proceedings of International Conference on Safety (ICS 2014)*, 3-4<sup>th</sup> December, IIT Gandhinagar,

### **Papers Accepted:**

[1] Sarkar, D. and Panchal, S. (2014) "Integrated ISM and Fuzzy Approach for Project Risk Management of Ports" *Int. Journal of Construction Project Management*, Nova Sc. Publishers, Canada.

[2] Sarkar, D. (2014) "Application of Fuzzy FMEA and Expected Value Method for Project Risk Analysis of Elevated Corridor Metro Rail Project" *International Journal of Decision Sciences, Risk and Management*, Inderscience Publishers, UK.

[3] Sarkar, D. (2014) "A Framework for Development of Lean IPD Model for Infrastructure Road Projects" *International Journal of Civil & Structural Engineering*, IPA, USA.

## **Dr. Tejas Thaker**

### **Journal Publications (International):**

- [1] Thaker, T.P., Rao, K.S. and Gupta K.K. (2010), "Site Specific Ground Response Studies for Coastal Soil, Kutch, Gujarat: A Case Study", *International Journal of Earth Science and Engineering*, Vol. 3(4), pp.543-553.
- [2] Thaker, T.P., Ganesh W. Rathod, K.S.Rao, K.K.Gupta (2012), "Use of Seismotectonic Information for the Seismic Hazard Analysis for Surat City, Gujarat, India: Deterministic and Probabilistic Approach", *Pure and Applied Geophysics*, Vol. 169(1-2), pp. 37-54.
- [3] Rao, K.S., Thaker, T.P. Aggarwal, A, Bhandari, T. and Kabra, S. (2012), "Deterministic Seismic Hazard Analysis of Ahmedabad Region, Gujarat", *International Journal of Earth Science and Engineering*, Vol. 5(2), pp. 206-213.
- [4] Thaker, T.P. and K.S. Rao (2014), "Seismic Hazard Analysis for Urban Territories: A Case Study of Ahmedabad Region in the State of Gujarat, India", *Advances in Soil Dynamics and Foundation Engineering*, GSP240: ASCE, 219-228

### **Book / Book Chapters**

- [1] "Development of Uniform Hazard Response Spectra and Shear Wave Velocity Mapping for Surat City and Surrounding Region, Gujarat, India", *Geotechnical Engineering for Disaster Mitigation and Rehabilitation and Highway Engineering: Geotechnical and Highway Engineering Applications, Challenges and Opportunities*, World Scientific Publisher, Singapore, 2011, ISBN:978-981-4365-14-4.
- [2] "Estimation of Low Strength Parameters for Seismic Microzonation", *Geotechnical Engineering for Disaster Mitigation and Rehabilitation and Highway Engineering: Geotechnical and Highway Engineering Applications, Challenges and Opportunities*, World Scientific Publisher, Singapore, 2011, ISBN:978-981-4365-14-4.

### **Conference Publications**

- [1] Thaker, T.P. K.S.Rao, K.K.Gupta (2010), "Use of Multi Channel Analysis of Surface Wave (MASW) Technique for the Development of Average Shear Wave Velocity ( $V_{s30}$ ) Model: A Case Study of Surat City, Gujarat, India", *Proc. of International Conference of Geotechnical Engineering*, November, 2010, Lahor, Pakistan, pp. 251-258.
- [2] Ganesh W. Rathod, Tejas P. Thaker, K. S. Rao and K. K. Gupta (2011), "Estimation of Low Strain Parameters for Seismic Microzonation", *Proc. of The 3rd International Conference on Geotechnical Engineering for Disaster Mitigation and Rehabilitation 2011 combined with The 5th International Conference on Geotechnical and Highway Engineering (GEDMAR), May 2011, Semarang, Central Java, Indonesia.*
- [3] Thaker, T.P., K.S.Rao and K.K.Gupta (2011), "Development of Uniform Hazard Response Spectra and Shear Wave Velocity Mapping for Surat City and Surrounding Region, Gujarat, India" *Proc. of The 3rd International Conference on Geotechnical Engineering for Disaster Mitigation and Rehabilitation 2011 combined with The 5th International Conference on Geotechnical and Highway Engineering (GEDMAR), May 2011, Semarang, Central Java, Indonesia.*
- [4] Thaker, T.P. and K.S.Rao (2011), "Development of statistical correlations between shear wave velocity and penetration resistance using MASW technique", *Proc. of Pan American Canadian Geotechnical Conference-2011, Canada.*
- [5] K.S.Rao, G.W.Rathod, T.P.Thaker (2011), "Seismic Microzonation of Indian Megacities", *Proc. First Indo-Japanese Workshop, Kochi, India. (Invited Paper)*

[6] Thaker, T.P. and K.S. Rao (2013), “Stochastic Modeling of Bhuj (2001) Earthquake and Synthesis of Seismic Scenario for the Surat Region, India”, *Proc. 10<sup>th</sup> International Conference on Urban Earthquake Engineering, 1-2<sup>nd</sup> March, 2013*, Tokyo Institute of Technology, Tokyo, Japan.

[7] Thaker, T.P., K.S.Rao, K.K.Gupta (2010), “Seismic Hazard Analysis for Surat City and Surrounding Region, Gujarat”, *Proc. of Indian Geotechnical Conference -10 (Geotrendz)*, December 2010, Indian Institute of Technology Bombay, Mumbai, India, 163-166.

[8] Thaker, T.P., K.S.Rao, Ganesh W. Rathod and K.K.Gupta (2011), “Estimation of Strong Motions of 2001 Bhuj (Mw 7.7) Earthquake for Surat City, Gujarat using Stochastic Finite Fault Model”, *Proc. of 3<sup>rd</sup> Indian Young Geotechnical Engineers Conference (3IYGEC)*, CRRI, New Delhi, 97-102.

[9] Ganesh W. Rathod, T.P.Thaker, K.S.Rao and K.K.Gupta (2011), “Attenuation of Strong Ground Motion for Northern India”, *Proc. of 3<sup>rd</sup> Indian Young Geotechnical Engineers Conference (3IYGEC)*, CRRI, New Delhi, 109-114.

[10] T. Bhandari, T.P.Thaker and K.S. Rao (2013), “Seismic Hazard Analysis of Ahmedabad Region”, *Proc. Indian Geotechnical Conference*, Indian Institute of Technology Roorkee.

## **Dr. Trudeep Dave**

### **Journal Publications (International):**

[1] Dave, T. N. and Dasaka, S. M. (2013) “In-house calibration of pressure transducers and scale effect on calibration factors”, *Geomechanics and Engineering – An Intl. Journal*, Techno Press, Vol. 5, No. 1, pp. 1-15.

[2] Dave, T. N. and Dasaka, S. M. (2012) “Assessment of portable travelling pluviator to prepare reconstituted sand specimens”, *Geomechanics and Engineering – An Intl. Journal*, Techno Press, Vol. 4, No. 2, June 2012, pp. 79-90.

[3] Dave, T. N. and Dasaka, S. M. (2012) “Transition of earth pressure behind rigid retaining wall”, *International Journal of Geotechnical Engineering*, J. Ross Publishers, Vol. 6, No. 4, pp. 427-435.

[4] Dave, T. N. and Dasaka, S. M. (2012) “Universal calibration device for fluid and in-soil calibration of pressure transducers”, *Indian Geotechnical Journal – Springer Publishers*, Vol. 42, No. 3, pp. 212-219.

[5] Dave, T.N. and Dasaka, S. M. (2011) “A review on pressure measurement using earth pressure cell”, *International Journal of Earth Science and Engineering*, Vol. 04, No. 06 SPL, pp. 1031-1034.

### **Conference Publications**

[1] Dave, T. N. and Dasaka, S. M. (2014) “Surcharge induced earth pressure reduction on rigid retaining wall using EPS geofoam”, GSP 242, *Proceedings of GeoShanghai 2014*, ASCE, Shanghai, China, pp. 836-844.

[2] Dasaka, S. M., Dave, T. N., Gade, V. K. and Chauhan, V. B. (2014) “Seismic earth pressure on gravity retaining walls using EPS geofoam”, In *Proceedings of 8<sup>th</sup> International Conference on Physical Modelling in Geotechnics 2014*, Perth, Australia, pp. 1025-1030.

[3] Dasaka, S. M., Dave, T. N. and Gade, V. K. (2013) “Reliability assessment of earth pressure on rigid non-yielding retaining walls”, In *Proceedings of 4<sup>th</sup> International Symposium on Geotechnical Safety and Risk, Hong Kong, China*, pp. 257-261.

- [4] Dave, T. N., Dasaka, S. M., Khan, N. and Murali Krishna, A. (2013) "Evaluation of Seismic earth pressure reduction using EPS geofoam, In Proceedings of 18<sup>th</sup> International Conference on Soil Mechanics and Geotechnical Engineering, Paris, France, pp. 903-906.
- [5] Dave, T. N. and Dasaka, S. M. (2013) "Parametric studies on reduction in surcharge induced earth pressure using EPS geofoam inclusion, In Proceedings of 5<sup>th</sup> International Young Geotechnical Engineering Conference, Paris, France, pp. 543-546.
- [6] Dave, T. N. and Dasaka, S. M. (2012) "Experimental study on EPS geofoam buffer for reduction of earth pressure due to traffic loads", In Proceedings of International conference on Ground Improvement and Ground Control, Wollongong, Australia. pp. 957-963.
- [7] Dave, T. N. and Dasaka, S. M. (2010) "Critical studies on sand bed preparation using rainfall technique", In Proceedings of 6<sup>th</sup> International Congress on Environmental Geotechnics, McGraw Hill Professional Publishers, New Delhi, pp. 1747-1752.
- [8] Dave, T. N., Nagi, V. N., Shukla, A. V. and Kumawat, C. D. (2014) "Settlement behaviour of clay with jute vertical drain", Accepted for oral presentation, Indian Geotechnical Conference 2014, JNTU Kakinada.
- [9] Gade, V. K., Dave, T. N., Chauhan, V. B. and Dasaka, S. M. (2013) "Portable travelling pluviator to reconstitute specimens of cohesionless soils, In Proceedings of Indian Geotechnical Conference 2013, IIT Roorkee, India, pp. 1-4.
- [10] Dave, T. N. and Dasaka, S. M. (2012) "Evaluation of lateral thrust on retaining wall under combined surcharge and seismic loading, In Proceedings of Indian Geotechnical Conference – 2012, pp. 1013-1016.
- [11] Dave, T. N. and Dasaka, S. M. (2011) "Experimental appraisal of pressure cell output using triaxial apparatus", In Proceedings of Indian Geotechnical Conference – 2011, pp. 128-130.
- [13] Dave, T. N., Dasaka, S. M. and Rane, H. D. (2011) "Universal Calibration Device for pressure transducer calibration", In Proceedings of Geo-Frontiers 2011, ASCE, Dallas, Texas, USA, pp. 2605-2610.

## **Dr. Manas Bhoi**

### **Journal Publications (International):**

- [1] Kumar, J., and Bhoi, M.K. (2010). "Vertical uplift resistance of a group of two strip anchors in sand from model tests." *International Journal of Geotechnical Engineering* J. Ross Publishing, Vol.4(2), pp. 269-277.
- [2] Kumar, J., and Bhoi, M.K. (2010). "Effect of interference of strip footings and strip anchors on their elastic settlements." *International Journal of Geotechnical Engineering*, J. Ross Publishing, Vol.4(2), pp. 289-297.

## **Mr Rajesh Gujar**

### **Journal Publications**

- [1] Gujar, R. S. and Krupesh, A. C.(2013) "Feasibility of Rice Husk Ash as Optional Mineral Filler in Microsurfacing incorporating Type III Aggregate." *American Journal of Environmental Engineering*, pp. 95-99.
- [2] Gujar, R.S., and Krupesh A. C. (2012) "Application of Copper Slag as Optional Filler in Microsurfacing." *International Journal of Civil, Structural, Environmental, and Infrastructure Engineering Research and Development* . Vol. xx, pp. xx.
- [3] Gujar, R.S., and Krupesh A. C.(2012)"Application of hydrated lime as optional filler in microsurfacing." *International Journal of Civil Engineering and Technology* . Vol. xx, pp.xx.

## **Conference Publications**

[1] Gujar, R.S. (2013) "Application of rice husk ash as optional mineral filler in microsurfacing incorporating Type III aggregate" *1st International Conference On Construction And Building Engineering (Iconbuild) GEOCON2013*, Johar Bahru, Malaysia.

[2] Gujar, R.S. (20xx) "Microsurfacing - An Inevitable Tool for Pavement Maintenance", *International conference on Transportation Planning and Implementation Methodologies for Developing Countries (TPMDC)*, IIT, Bombay.

## **Mrs Niragi Dave**

### **Journal Publications**

[1] Dave, N. (2012) "Experimental Evaluation of Low Calcium Fly Ash Based Geopolymer Concrete", *International Journal of Engineering Science and Technology*, Vol. 4(12), pp-4804-4808.

[2] Dave, N. (2013), "Effect of Sulphate Attack on Properties of Concrete – A Review" *International Journal of Emerging Trends in Engineering and Development*, Vol.1(3), pp- 304 - 310.

[3] Dave,N. (2013),"Utilization of Industrial Byproduct as raw Material in Construction Industry - A Review" *International Journal of Engineering Science and Technology*, Vol.5(2), pp-242-246.

[4] Misra, A. & Dave, N. (2013) "Impact of soil salinity and erosion and its overall impact on India" *international journal of innovative research in engineering and science*, Vol. 3(2), pp- 12-17.

[5] Dave,N. (2013), "Seismic Behaviour and Retrofitting of R.C.C. and Masonry Structures Using new Advanced Technology – A Review" *International Journal of Advances in Science and Technology*, Vol. 5(3) pp-33-35.

[6] Dave, N. and Sahu,V. (2013). "Approches towards industrial by-products utilization: A review towards environmentally safe future", *International Journal of Innovative Research in Science, Engineering and Technology*, Vol. 2(7), pp 2847-2855.

### **Conference Publications**

[1] Dave, N. (2013), "Strength Characteristics of Geopolymer Concrete" *Proc.of International Conference iSPACE-2013*, ITM University, Gurgaon, Haryana. pp- 5-9.

[2] Dave, N. (2011), "Sulphate Resistance of Concrete and Effect of Sulphate Attack" *Proc. International Conference on Current Trends in Technology*, NUiCONE, Nirma University, Ahmedabad. pp- 1-5.

[3] Dave, N. (2011) "Seismic behaviour and retrofitting of R.C.C. and masonry structure using New Advanced Technology" *Proc. National Conference on Advancement in Convergence of Technology*, Amity University, pp - 419-422.

[4] Dave, N. (2012). "Fly Ash Based Geopolymer Concrete" *Proc. National Conference on Latest Developments in Pollution Control and Prevention Techniques*, NITTTR, Chandigarh, pp-155-160

## **Akshay Jain**

### **Journal Publications**

[1] Sharma, S, Singh, A. K. and Jain, A. (2013). "Flood simulation using HEC-HMS for ungauged Lower Tapi Basin, India". *Journal of Geomatics*, Vol. 7(2), pp.186-190.

### **Conference Publications**

[1] Sharma, S., Jain, A and Singh, A. K. (2011). "Mapping and prediction of surface run-off using SCS-CN method under climate change condition" *Proceedings of Indian Society of Geomatics-2011*. ISG-Ajmer.

## **Ashu Kedia**

### **Conference Publications**

[1] Kedia, A., Katti, B.K. (2014) "Mode Choice Modeling Approach using Fuzzy Logic in Indian Metropolitan Context" *Proceedings of International Civil Engineering Symposium, ICES 2014*, ASCE India Section, Southern Region, VIT University. IC-108, pp. 316-324.

[2] Kedia, A., Saw, K., Katti, B.K. (2014). "Mode Choice Modeling for Work Trips in an Indian Metropolitan City Using Soft Computing Technique" *Int. Conference 'Transportation Planning and Methodologies for Developing Countries' Indian Institute of Technology-Bombay*.

[3] Kedia, A., Azizi, S., Errampalli, M., Joshi, G.J. (2014). "Evaluation of Public Transport Policy for Surat City: A Comparative Study through MNL and FRBS." *Proceedings of Transportation Young Researchers Symposium, TYRES - 2014*. NIT Warangal, India.

[4] Kedia, A., Katti, B.K. (2014). "Discrete Mode Choice Modelling through FRBS: A Case Study of Metropolitan City." *Proceedings of Colloquium on Transportation Systems Engineering and Management, CTSEM-2014*. NIT, Calicut, India.

## **Sharan Baswa**

### **Journal Publications**

[1] Baswa, S. and Modhera, C. D,(2014) "Shear Strength of Non-flexural Deep beams" *International Journal of Advanced Research in Civil, Structural Engineering*, Vol.1(3), pp.xx

### **Conference Publications**

[1] Baswa, V. Sarathy, Sundareson A (2014) "Response of an asymmetric building for various earthquake resistance factors- Parametric Study, " *International conferences in advances in civil engineering*", SRM university, Chennai.

## **Shivam Kapoor**

### **Journal Publications**

[1] Bansal, A.K. Kapoor, S. Agrawal, M. and Singh, K. (2013) "The road to zero waste: anaerobic digester", *International Journal of Environmental Engineering*, Vol. 3(5), pp. 1390-1397.

### **Conference Publications**

[1] Shah, A. Kapoor, S. and Khambete, A.K. (2012) "Determination of Water Quality Index with different methods for Mindhola River in Gujarat", *2nd International Science Conference (ISC- 2012)*, BMEC, Vrindavan, Mathura, India

[2] Kapoor, S. R.A. Christian and S. Sharma (2014) "Leachate Potential of Fly Ash for toxic elements in and around Ash Disposal sites", *International Conference on Energy Technology, Power Engineering & Environmental Sustainability (ETPEES-2014)*, JNU, New Delhi.

[3] Sharma, S. and Kapoor, S. (2014) "Contaminants of Emerging Concern-A Review", *International Conference on Energy Technology, Power Engineering & Environmental Sustainability (ETPEES-2014)*, JNU, New Delhi.

[4] Kapoor, S. "Status of Water Supply and Domestic Wastewater Management in Kanpur City, First National Students' Conference on River Basin Planning (BRiP-2011)", 2011, IIT Kanpur, India

## **Sushanshu Dixit**

### **Journal Publications**

[1] Dixit, S. and Patel, P.L. (2014) "Characterization of flow turbulence in mobile boundary channels" *ISH Journal of Hydraulic Engineering*, Taylor & Francis, Vol. Xx, pp.xx