Curriculum Vitae of Dr. B.K. Maheshwari

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Summary

Dr. B.K. Maheshwari is a Professor at Dept. of Earthquake Engineering, IIT Roorkee and a former Shamsher Prakash Chair Professor. He is former Head, Centre of Excellence in Disaster Mitigation and Management, IIT Roorkee and currently serving as President, Indian Society of Earthquake Technology. He is working extensively in all areas of Geotechnical Earthquake Engineering. His core areas of research are Dynamic Soil-Structure Interaction, Liquefaction, Pile Foundations, Nonlinear Dynamic Finite Element Modeling, Dynamic Soil Properties, Seismic Slope Stability, Landslides, Earth and Rock-fill Dams, Disaster Mitigation and Management.

Personal Information

Name: Bal Krishna Maheshwari

Nationality: Indian

Date of Birth: September 30, 1969

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Present Occupation

Professor (HAG Scale), Dept. of Earthquake Engineering, IIT Roorkee, India **January 2021~Present**

Courses Taught: Geotechnical Earthquake Engineering (EQ 521), ERD of Foundations (EQ 524), Dynamic Soil-Structure Interaction (EQ 519), Machine Foundations (EQ 572), Finite Element Method (EQ 504)

Research Supervision: Ph.D. Students – 4 (in progress), Master Students – 3 (in progress)

Education

Ph.D. in Geotechnical Earthquake Engineering, Saitama University, Japan **September 1997**

- Thesis Title: Soil-Structure-Interaction on the Structures with Pile Foundations - A Three Dimensional Nonlinear Dynamic Analysis of Pile Foundations
- Supervisor: Prof. Hiroyuki WATANABE (Deceased)

Master in Earthquake Engineering (Soil Dynamics), University of Roorkee, India **January 1994**

- Dissertation Title: Projectile Penetration in Soils
- Supervisor: Prof. D.K. PAUL (Deceased)

Bachelor of Engineering (Civil), University of Jodhpur, India **June 1992**

- Senior Project: Survey and Design of a National Highway Road

Past Research, Teaching and Administrative Experience

Shamsher Prakash Chair Professor **Aug. 2019 ~ July 2022**

Professor, Dept. of Earthquake Engineering, IIT Roorkee, India **April 2014 to Dec. 2020**

Head, Centre of Excellence in Disaster Mitigation and Management, IIT Roorkee, India **Feb. 2015~Feb. 2018**

Associate Professor, Dept. of Earthquake Engineering, IIT Roorkee, India **Oct. 2009 to April 2014**

Assistant Professor, Dept. of Earthquake Engineering, IIT Roorkee, India **Dec. 2004 to Oct. 2009**

Assistant Professor, Civil Engineering Group, BITS, Pilani, India **July 2003-Dec. 2004**

Postdoctoral Researcher, Washington University, St. Louis, USA October 1999-April 2003

- Project: Performance of River Lock Structures (Soil-Pile-Structure-Interaction Analysis).
- Sponsors: Mid-America Earthquake Center (a NSF center) and U.S. Army Corps of Engineers.
- Principal Investigator and Advisor: Dr. Kevin Z. Truman, Professor and Chairman CE department.

Industrial and Professional Experience (2 Years)

Engineer, Katsujima Co., Ltd., Tokyo, Japan December 1997-October 1999

Katsujima is a consulting firm with expertise in geotechnical-earthquake engineering and seismology. It manufactures seismographs, collects and processes ground motion data for multiuse. Responsibilities include analysis, reports, task leader, research and service.

Research Supervision

Ph.D. Total – 14; Completed - 10, In Progress - 4

1. Pavan K. Emani, Title: "Nonlinear Dynamic Soil-Structure Interaction Analysis using Hybrid Methods" (**Awarded 2009**), Co-supervisor - No
2. Rajib Sarkar, Title: "Three Dimensional Seismic Behaviour of Soil-Pile Interaction with Liquefaction", (**Awarded 2009**), Co-supervisor - No
3. Harendra P. Singh, Title: "Liquefaction Studies of Composite Materials", (**Awarded 2010**), Co-supervisor – Prof. Swami Saran
4. Madani Syed N., Title: "Nonlinear Seismic Soil-Structure Interaction using Scaled Boundary Finite Element Method", (**Awarded 2015**) Co-supervisor – No
5. Bablu Kirar, Title: "Dynamic Stiffness Characteristics of Unreinforced and Reinforced Sands", (**Awarded Feb. 2017**), Co-supervisor – Dr. R.S. Jakka
6. Pradeep Muley, Title: "Assessment of Liquefaction Potential using In-Situ and Laboratory Tests", (**Awarded April 2017**), Co-supervisor – Prof. D.K. Paul
7. Sangeeta, Title: "Earthquake and Rainfall Induced Landslide Hazard Assessment of Uttarakhand", (**Awarded April 2021**), Co-supervisor – No
8. Mohd. Firoj, Title: "3D Nonlinear Seismic Raft-Pile-Soil-Structure Interaction for Nuclear Power Plants" (**Awarded March 2023**), Co-supervisor – No
9. Sukanta Das, Title: "Seismic Behaviour of Shallow Foundation on Slopes", **(Awarded June 2023),** Co-supervisor – No.
10. Gowtham P., Title: "Reliquefaction Mechanism and its Mitigation using Prefabricated Vertical Drains", (**Awarded November 2024**), Co-supervisor – No
11. Shantanu Saraswat, Title: "Seismic Behavior of Tunnels in Jointed Rock-Mass", In Progress, Registration July 2021), Co-supervisor – No
12. Tapan Suyal, Title: "Influence of Ground Vibrations and Deformations by High-Speed Trains on the Seismic Performance of Railway Embankments" (In Progress, Registration July 2022), Co-supervisor – No
13. Alok Kumar, Title: "Seismic Behavior of Embankments Dams considering Liquefaction", (In Progress, Registration July 2023), Co-supervisor – No
14. Rohit Rana, Title: "Mitigation of Earthquake Induced Landslides in Himalaya", (In Progress, Registration July 2023), Co-supervisor – No

Master (M. Tech.) Total –58; Completed - 56, In Progress - 2

1. Akshit Arya, "Dynamic Analysis of Pile-Raft Foundation under Vertical and Lateral Loading" (2025)
2. Vivek Yadav, "Effect of SSI on the Response of Structures on Shallow Foundation" (2025)
3. Pankaj Sahu, "Slope Stability Analysis of Embankment Dams", (2025)

4. Pankaj Suthar, “Earthquake Resistant Design of Earth and Rock-fill Dam” (2024)
5. Saubhagya Kr. Majhi, “Modelling of Substructure of Bridge for Seismic SSI” (2023)
6. Rohit Raj, “Seismic Analysis of Embankment, Earth and Rock-fill Dams” (2022)
7. Anchal Kr. Singh, “Mechanism of Stone Columns for Mitigation of Liquefaction” (2021)
8. Suresh Babu, “Effects of Liquefaction on Bearing Capacity and Settlement of Shallow Foundation” (2021)
9. Reddy Atchyut Kumar Naidu, “Spring and Damping Coefficients of Soil for Modelling SSI in Bridges under Earthquake Loads” (2020)
10. Kushal Saha, “Ground Vibration generated by High Speed Railway over Weak Soil” (2019)
11. Khursheed Ahmad Khan, “Effects of Degree of Saturation on Dynamic Soil properties”, (2019)
12. Vatan Sharma, “Comparative Study of Shear Wave Velocity using Field and Laboratory Tests (2019)
13. Pali Bhave, "Effect of Saturation on Dynamic Soil Properties in Low Strain Range" (2018)
14. Prakash Mokha, "Behaviour of Combined Pile-Raft Foundation (CPRF) under Seismic Loading (2018)
15. Suresh Kumar, "Earth Pressure and Seismic Design of Retaining Walls" (2018)
16. Deepak Rawat, "Assessment of a Typical Landslide in Uttarakhand and Mitigation Solutions (2018)
17. Pankaj Rana, "Poisson's Ratio of Soils using Resonant Column Apparatus" (2017)
18. Pravindra Singh Bhan, "Effect of Seismic Load on the Strength of Saturated Fine Grained Soil" (2017)
19. Shahbaz Alam, "Effect of Frequency on Dynamic Soil Properties using Cyclic Triaxial Apparatus" (2017)
20. Upender Pathania, "Landslide Assessment in Himalayan Region: A Study based on Decision Support Software" (2017)
21. Aniruddha Bhaduri. "Seismic Slope Stability for Landslides" (2016)
22. Devendra Shrimal, "Design of Pile Foundations for Earthquake Loads", (2016)
23. Mukesh Petshali, "Evaluation of Liquefaction Resistance using Different Methods" (2016)
24. Saurabh Verma, "Effects of Fines on Liquefaction Potential of Solani Sand using Cyclic Triaxial" (2016)
25. Shinde Ninad S., "Evaluation of Dynamic Properties of Sands using Resonant Column Apparatus' (2016)
26. Ankit Agarwal. "Dynamic Properties of Soil in Low Strain Range" (2015)
27. Atishay Bajaj Jain "Effect of Strong Ground Shaking on Dynamic Soil Properties" (2015)
28. Mohot Kumar Singh "Liquefaction Studies using CPT and CPTu" (2015)
29. Nilay Mohgaonkar "Dynamic Soil-Structure Interaction for Bridges" (2015)
30. Ritesh Kumar "Influence of Correlation Length of Random Soil Properties on Behaviour of Monopiles Subjected to Lateral Load" (2015)
31. Asif Raja, Title: "2-D Nonlinear Finite Element Analysis of Earthen Dam for Earthquake Loads" (2014)
32. Atul Singh, Title: "Seismic Slope Stability Analysis for Earthquake Induced Landslides" (2014)
33. Niraj K. Kumawat, Title: "Liquefaction Potential of IIT Roorkee Campus Based on CPT Resistance" (2014)
34. Rajiv Kumar, Title: "Application of Simplified Dynamic Soil-Structure Interaction", (2014)
35. Manendra Singh, Title "Effects of Liquefaction on Shallow Foundations" (2013)
36. Jai Singh Saini, Title "Modelling and Analysis of Hill Slopes" (2013)
37. Vijay Kumar, Title "Dynamic Soil-Structure Interaction for Nuclear Power Plant" (2013)
38. Satyapriya Senapati, Title "Liquefaction Resistance of Geogrid Reinforced Soil" (2012)
39. Prateek Khare, Title "2-D Finite Element Seismic Analysis of Earthen Rockfill Dam" (2012)
40. Saurabh Chaurasia, Title "Effects of Soil Amplification in Hilly Slopes" (2012)
41. Ganesh M. Pai, Title “Soil-Structure Interaction using Simplified Models” (2011)
42. Suresh S. Kale, Title “Dynamic Soil Properties of Soils under Cyclic Loading” (2010)
43. S.S. Choudhary, Title “Liquefaction Resistance of Soils under Cyclic Loading”, (2010)
44. Madani Syed Nurussyidyn , Title “Effect of Liquefaction on the Response of a Single Pile”, (2009)
45. Shikhare Uday A., Title “Seismic Analysis of an Embankment Dam using Different Methods”, (2009)
46. Adarsh Kumar N.S., Title “Dynamic Analysis of Nailed Open Cuts”, (2009)
47. Kiran A.S., Title “Lateral Capacity of Piles in Liquefiable Soils”, (2009)

48. Partha J. Deka, Title "Effect of Soil-Structure Interaction on Seismic Response of Buildings", (2008)
49. Malay K. Dutta, Title "Dynamic Analysis of Pile-Supported Foundation", (2007)
50. Jayshankar B.S., Title "Analysis of Buried Pipeline Subject to Permanent Ground Deformation", (2007)
51. Pachipulusu Anuradha, Title "Seismic Slope Stability Analysis of Embankments", (2007)
52. Akhilesh K. Patel, Title: "Effects of Fines on Liquefaction Potential" (2006)
53. R. F. Dorage, Title: "FEM Analysis of Stress Distributions in Embankment of Earthen Dam" (2006)
54. Deepak A. Gunjagi, Title: "Filtration and Clogging Performance of Geotextiles", (2006)
55. Utpal Kumar Nath, Title: "Pile-Soil Interaction in Liquefiable Soils", (2006)
56. M. Venu, Title: "Linear and Nonlinear Dynamic Behavior of Layered Soil Stratum", (2004 at BITS, Pilani)

Sponsored Research Projects (7) – Externally Funded

1. An International Research Project entitled "Effect of Liquefaction on Seismic Behavior of Shallow Foundations in Slopes" sponsored by **DUO-India Fellowship** Programme was awarded in November 2019. The European partner was "Dr. Stuart Haigh, University of Cambridge, U.K". The project could not be started because the unavailability of UK Professor to come to India for a month.
2. Completed as a P.I. Seismology Division, Ministry of Earth Sciences, Govt. of India sponsored research project entitled "Dynamic Properties of Soils using Resonant Column Tests", duration 4 years (October 2014 to September 2018), total outlay of the project: **Rs. 16.6 Lacs**.
3. Completed as a **Co-P.I.** a cooperative research project between IIT Roorkee and Norway, sponsored by Royal Norwegian Embassy in India, project entitled "Seismic Risk and Loss Assessment in Hilly Areas", duration four years, total outlay of the project: about **Rs. 104 Lacs,** started Jan. 11, 2012, P.I. Dr. Y. Singh, DEQ, IIT Roorkee. NGI counterparts: Dr. Rajendra Bhasin and Dr. Amir M. Kaynia. Visited Norwegian Geotechnical Institute, Oslo, Norway for 11 days in Oct.-Nov. 2013 and for another 11 days in November 2014 for joint research work on this project.
4. Completed as a **P.I.,** Seismology Division, Ministry of Earth Sciences, Govt. of India sponsored project entitled "Dynamic Properties and Liquefaction Resistance of Soils using Cyclic Triaxial Tests", duration 3 years, total outlay of the project: **Rs. 64 Lacs**, started from January 2008, completed in June 2012.. Procured an Advanced Cyclic Triaxial System in Dept. of Earthquake Eng., IIT Roorkee from U.K.
5. Completed as a **Co-P.I.** on a cooperative research agreement between IIT Roorkee and Norway, sponsored by Royal Norwegian Embassy in India, project entitled "Earthquake Risk Reduction in Himalaya with Institutional Cooperation between India and Norway", duration four years, total outlay of the project: about **Rs. 44 Lacs,** started Jan. 11, 2007, completed in December 2010, P.I. Prof. D.K. Paul, DEQ, IIT Roorkee. Visited Norwegian Geotechnical Institute (NGI), Oslo, Norway for 10 days in September 2007 and for 9 days in November 2009 for joint research work on this project, NGI counterpart: Dr. Amir M. Kaynia.
6. Completed as a **P.I**. on Engineering Science Division, SERC, Department of Science and Technology, Govt. of India sponsored project entitled "Behavior of Pile-Supported Structures during Strong Ground Motions. Effects of 3-D Nonlinear Soil-Pile Structure Interaction", duration 3.5 years, total outlay of the project: **Rs. 11.62 Lacs**, started on April 28, 2006, one Ph.D. student was supported from this project who have been awarded the degree. Project is successfully completed in October 2009.
7. Completed as a **Post-Doctoral Researcher** on a Mid-America Earthquake Center and U.S. Army Corps of Engineers sponsored project entitled "Performance of Lock Structures (Soil-Pile-Structure Interaction)", duration 3.5 years, total outlay **US$ 1,20,000** completed (Oct. 1999 to March 2003), P.I. Prof. Kevin Z. Truman, Chair, Dept. of Civil Engineering, Washington University, St. Louis, USA.

Patents / Technology Transfer

Following two patents are in the process

1. Maheshwari B.K. and Das S. (2023), "Measurement of Strain and Displacement of Soil Slopes for Dynamic Loads using Digital Image Correlation (DIC)", Filed with the Indian Patent office having Application Number: 202311035891 dated May 24, 2023. Received First Examination Report in Feb. 2025 and the response is submitted.

2. Maheshwari B.K. and Padmanabhan G. (2023), "An Efficient Technique for Estimating Void Ratio of Soil using Digital Image Processing", Application Number: 202311058087, **Granted Patent Number 548753** by the Indian Patent office on August 27, 2024.

Administrative Positions Held

- **Head,** Centre of Excellence in Disaster Mitigation Management, IIT Roorkee (Feb. 9, 2015~Feb. 6, 2018)
- **Chairman,** Dept. Academic Program Committee since August 29, 2019 ~ August 12, 2022
- **President,** Indian Society of Earthquake Technology (Since April 2023 ~ Continue)
- **Vice-President,** Indian Society of Earthquake Technology (Since April 2019 to March 2023)
- **Secretary,** Indian Society of Earthquake Technology (ISET), April 2007 ~ March 2011)
- O.C. Soil Dynamics Laboratory, EQD, since July 2005 ~ Present
- O.C., Annual Reports, Department Information, EQD, January 2013 to March 2019
- Faculty Advisor for Dept. of Earthquake Engineering Cognizance 2011
- Member of Departmental Research Committee
- Member of Dept. Academic Studies Committee
- Member, Institute Academic Programme Committee (IAPC), 2011- 2014 & 2019-2022
- Institute Representative for JEE and GATE

Awards

- **IACMAG** "**John Booker Medal**" presented during 16th Int. Conference of the International Association for Computer Methods & Advances in Geomechanics, Torino, Italy, Aug.-Sept. 2022.
- **Shamsher Prakash Chair Professor,** IIT Roorkee served for 3 years (August 2019~July 2022)
- **Reviewer of the year 2019 (EBM) award** presented during IGC-2020 by IGS, December 2020.
- **IACMAG** Award of "**Excellent Regional Contributions**" presented during 14th Int. Conference of the International Association for Computer Methods & Advances in Geomechanics, Kyoto, Japan, Sept. 2014
- **Shamsher Prakash Research Award 2009** of IIT Roorkee with citation and cash prize of Rs. 50,000
- Qualified and Awarded **EIT** by Ohio State Board (2000), USA
- **Monbusho** (Japanese Govt.) scholarship for doctoral research (1994-1997).
- **Gold Medal** for first rank in M.E. from University of Roorkee (1994).
- University Grant Commission Fellowship (**GATE**) for M.E. course (1992-1994).
- Selected for Dr. K.S. Krishnan Senior Research Fellowship by Bhabha Atomic Research Center (1994).

Publications (194): Refereed Journals (69) + Conferences (125)

International Journals (55)

1. Padmanabhan, G., Ueda, K., Maheshwari, B.K. and Uzuoka, R., (2025c). Influence of Sloping Ground and Pile Group on Sand Reliquefaction Behavior using Centrifuge Modelling. **Canadian Geotechnical Journal,** Vol. 00, pp. 1-21, https://doi.org/10.1139/cgj-2024-0386
2. Padmanabhan, G., Maheshwari, B.K., Ueda, K. and Uzuoka, R., (2025b). Mesoscopic Mechanism behind the Inherent Reliquefaction Resistance subjected to Repeated Earthquakes using Centrifuge Modelling and Advanced Digital Image Processing. **Soil and Foundations,** 65(2), p.101589. https://doi.org/10.1016/j.sandf.2025.101589
3. Das S. and Maheshwari B.K. (2025), "Bearing Capacity of Strip Footings on Slopes under Eccentric and Inclined Loads", **Geotechnical and Geological Engineering,** 43:93, https://doi.org/10.1007/s10706-024-03053-3
4. Maheshwari, B.K. and Padmanabhan, G., (2025). Liquefaction and Reliquefaction Mitigation of Sand Specimen Treated with Prefabricated Vertical Drains: an Experimental Investigation. **Geotextiles and Geomembranes,** pp.295-310. https://doi.org/10.1016/j.geotexmem.2024.09.018
5. Padmanabhan, G. Ueda K., Uzuoka R. and Maheshwari B.K., (2024b). Influence of Foreshock and Aftershock Events on Reliquefaction Potential of Saturated Sand Specimen using Centrifuge Modelling Experiments, **Japanese Geotechnical Society Special Publication** 10 (37), 1401-1406.

6. Saraswat S. and Maheshwari B.K. (2024). Seismic Behaviour of Tunnels of Different Shapes in Rocks. **Japanese Geotechnical Society Special Publication** 10 (20), 730-735.
7. Suyal T. and Maheshwari B.K. (2024). Railway Induced Ground Vibrations in Soft Soil. **Japanese Geotechnical Society Special Publication** 10 (35), 1353-1358.
8. Padmanabhan, G. and Maheshwari, B.K., (2024). Reliquefaction resistance of Solani sand subjected to repeated excitations using shaking table experiments. **Bulletin of Earthquake Engineering,** pp.1-26. https://doi.org/10.1007/s10518-024-01937-6
9. Padmanabhan, G., Ueda, K., Maheshwari, B.K. and Uzuoka, R., (2024a). Reliquefaction behavior of sand and response of pile group subjected to repeated shaking sequence using centrifuge model experiments. **Soil Dynamics and Earthquake Engineering,** 182, p.108741. https://doi.org/10.1016/j.soildyn.2024.108741
10. Maheshwari B.K. and Firoj M. (2024), "Seismic response of combined piled raft foundation using advanced liquefaction model", **Soil Dynamics and Earthquake Engineering,** Volume 181, 108694, https://doi.org/10.1016/j.soildyn.2024.108694.
11. Das S. and Maheshwari B.K. (2024), "Influence of Slope Topography on Soil-Structure Interaction during Earthquakes", **Acta Geotechnica,** https://doi.org/10.1007/s11440-023-02186-8
12. Maheshwari B.K. and Das S. (2023), "Experimental and Numerical Study for Seismic Response of Strip Footing on Slopes", **Soil Dynamics and Earthquake Engineering**, 174: 108208.
13. Firoj M. and Maheshwari B.K. (2023b), "Dynamic Impedances of CPRF using Coupled BEM-FEM Approach: A Parametric Study and Application", **Engineering Analysis with Boundary Elements,** 156: 8-19.
14. Maheshwari B.K. and Firoj M. (2023), "Settlement of Combined Piled Raft Foundation of a Nuclear Power Plant in Non-liquefiable and Liquefiable Soils", **Nuclear Engineering and Design,** 413: 112518
15. Das S. and Maheshwari B.K. (2023), "Failure Mechanism of Slopes Subjected to Embedded Strip Footing Loads under Seismic Condition", **International Journal of Geomechanics, ASCE**, 23(9): 04023138
16. Firoj M. and Maheshwari B.K. (2023a), "A new nonlinear spring-dashpot model of CPRF of NPP structure based on coupled BEM-FEM approach", **Earthquake Engineering and Structural Dynamics,** 52(4):932-955, DOI: 10.1002/eqe.3794
17. Sangeeta and Maheshwari B.K. (2022b), "Landslide Susceptibility, Social Vulnerability and Risk Assessment in Kumaun Himalaya, Uttarakhand, India", **Arabian Journal of Geosciences,** 15:1600, https://doi.org/10.1007/s12517-022-10869-x
18. Firoj M. and Maheshwari B.K. (2022), "Effect of CPRF on Nonlinear Seismic Response of an NPP Structure considering Raft-Pile-Soil-Structure-Interaction", **Soil Dynamics and Earthquake Engineering**, 158: 107295 https://doi.org/10.1016/j.soildyn.2022.107295
19. Sangeeta and Maheshwari B.K. (2022a), "Spatial Predictive Modeling of Rainfall- and Earthquake-Induced Landslide Susceptibility in the Himalaya Region of Uttarakhand, India", **Environmental Earth Sciences,** 81(237), pp. 1-24.
20. Muley P., Maheshwari B.K. and Kirar B. (2022), "Liquefaction Potential of Sites in Roorkee Region Using SPT-Based Methods", **International J. of Geosynthetics and Ground Eng.** https://doi.org/10.1007/s40891-022-00374-2
21. Kanth A. and Maheshwari B.K. (2021), "Behaviour of Solani sand under Monotonic and Cyclic loading: Experiments and Finite Element Simulations", **International Journal of Geotechnical Engineering**, https://doi.org/10.1080/19386362.2021.1966225
22. Sangeeta, Maheshwari B.K. and Kanungo D.P. (2020), "GIS-based Pre-and Post-Earthquake Landslide Susceptibility Zonation with Reference to 1999 Chamoli Earthquake", ***J. of Earth System Science*** 129 55, pp. 1-21, https://doi.org/10.1007/s12040-019-1319-y
23. Maheshwari B. K. and Kirar B. (2019), "Dynamic Properties of Soils at Low Strains in Roorkee Region using Resonant Column Tests." ***Int. J. of Geotechnical Eng*.** Vol. 13, No. 5, pp. 399-410
24. Syed N.M. and Maheshwari B.K. (2017), "Nonlinear SSI Analysis in Time Domain using coupled FEM-SBFEM for a soil-pile system", **Géotechnique,** Vol. 67, No. 7, pp. 572–580. [http://dx.doi.org/10.1680/jgeot.16.P.029]
25. Kirar B., Maheshwari B.K. and Muley P. (2016), "Correlation between Shear Wave Velocity (V_s) and SPT Resistance (N) for Roorkee Region", **Int. J. of Geosynthetics and Ground Eng.,** Vol. 2, No. 1, pp. 1-11.

26. Maheshwari B.K. and Syed N.M. (2016), "Verification of Implementation of HiSS soil model in the coupled FEM-SBFEM SSI Analysis", **International Journal of Geomechanics, ASCE, DOI:** 10.1061/(ASCE)GM.1943-5622.0000511, Vol. 16, No. 1, pp. 04015034-1-8.
27. Muley P., Maheshwari B.K. and Paul D.K. (2015), "Liquefaction Potential of Roorkee Region using Field and Laboratory Tests", **Int. J. of Geosynthetics and Ground Engineering,** Vol. 1, No. 4, pp. 1-13.
28. Syed N.M. and Maheshwari B.K. (2015), "Improvement in the Computational Efficiency of the Coupled FEM-SBFEM approach for 3D Seismic SSI Analysis in the Time Domain", **Computers and Geotechnics,** Vol. 67, pp. 204-2012.
29. Maheshwari B.K. and Emani P.K. (2015), "Three Dimensional Nonlinear Seismic Analysis of Pile Groups using FE-CIFECM coupling in Hybrid Domain and HiSS Plasticity Model", **International Journal of Geomechanics, ASCE, DOI:** 10.1061/(ASCE)GM.1943-5622.0000335, Vol. 15, No. 3, pp. 04014055-1-12.
30. Syed N.M. and Maheshwari B.K. (2014), "Modeling using Coupled FEM-SBFEM for Three Dimensional Seismic SSI in Time Domain", **International J. of Geomechanics, ASCE,** Vol. 14, No. 1, pp. 118-129.
31. Maheshwari, B.K., Singh, H.P. and Saran, S. (2013c) "Closure to Effects of reinforcement on the liquefaction resistance of Solani sand", **J. of Geotechnical and Geoenvironmental Eng., ASCE**, Vol. 139, Issue 9, pp. 1634-1635.
32. Maheshwari B.K., Kale S.S. and Kaynia A.M. (2013b) "Effects of Cyclic Loads on Dynamic Properties of Soils in the Ganga Basin ", **International J. of Geotechnical Engineering,** Vol. 7, No. 2, pp. 149-155.
33. Maheshwari B.K., Mahajan A.K., Sharma M.L., Paul D.K., Kaynia A.M. and Lindholm C. (2013a) "Relationship between Shear Velocity and SPT Resistance for Sandy Soils in the Ganga Basin", **International J. of Geotechnical Engineering,** Vol. 7, No. 1, pp. 63-70.
34. Sharma M.L., Sinvhal A., Singh Y. and Maheshwari B.K. (2013). "Damage Survey Report for Sikkim Earthquake of 18 September 2011", **Seismological Research Letters,** Vol. 84, No. 1, pp. 49-56.
35. Maheshwari B.K. and Sarkar R. (2012) "Effect of Soil Nonlinearity and Liquefaction on Seismic Response of Pile Groups" **International J. of Geotechnical Engineering,** Vol. 6, issue 4, pp. 497-506.
36. Maheshwari, B.K., Singh, H.P. and Saran, S. (2012b) "Effects of reinforcement on the liquefaction resistance of Solani sand", **J. of Geotechnical and Geoenvironmental Eng., ASCE,** Vol. 138, Issue 7, pp. 831-840.
37. Sarkar R. and Maheshwari B.K. (2012b) "Effect of Soil Nonlinearity and Liquefaction on Dynamic Stiffness of Pile Groups" **International J. of Geotechnical Engineering,** Vol. 6, issue 3, pp. 319-329.
38. Maheshwari B.K., Kale S.S. and Kaynia A.M. (2012a) "Dynamic Properties of Solani Sand at Large Strains: A Parametric Study", **International J. of Geotechnical Engineering,** Vol. 6, issue 3, pp. 353-358.
39. Sarkar R. and Maheshwari B.K. (2012a) "Effects of Separation on the Behavior of Soil-Pile Interaction in Liquefiable Soils", **International Journal of Geomechanics, ASCE,** Vol. 12, Issue 1, pp. 1-13.
40. Maheshwari B.K. and Sarkar R. (2011) "Seismic Behavior of Soil-Pile-Structure Interaction in Liquefiable Soils: Parametric Study", **International Journal of Geomechanics, ASCE,** Vol. 11, Issue 4, pp. 335-347.
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29. Kumar R. and Maheshwari B.K., "Simplified Models for Dynamic Soil-Structure Interaction" Proc. of the Indian Geotechnical Conference, Kakinada, December 2014.
30. Kumawat N.K. and Maheshwari B.K., "Liquefaction Potential of IITR Campus using CPT and Piezocones" Proc. of the Indian Geotechnical Conference, Kakinada, December 2014.
31. Gupta I.D. and Maheshwari B.K., "Response of Simple Symmetric Buildings to Torsional Excitation-Rationalization of Accidental Eccentricity", Proc. of the 15th Symposium on Earthquake Engineering, IIT Roorkee, Roorkee, December 2014.
32. Saini J.S., Maheshwari B.K. and Gupta V., "Effect of Joint Strength Parameters on Stability of Rock Slope", Proc. of the Indian Geotechnical Conference, IIT Roorkee, December 2013.
33. Singh M. and Maheshwari B.K., "'Effect of Un-liquefiable Sand Layer on Shallow Foundation", Proc. of the Indian Geotechnical Conference, IIT Roorkee, December 2013.
34. Kumar V. and Maheshwari B.K., "'FE Modelling of NPP for Dynamic Loads considering SSI", Proc. of the Indian Geotechnical Conference, IIT Roorkee, December 2013.
35. Khare P. and Maheshwari B.K., "2 D Finite Element Seismic Analysis of an Earthen Rock-fill Dam", Proc. of the Indian Geotechnical Conference, IIT Delhi, December 2012, Paper No. F 625.
36. Sinvhal A., Sharma M.L., Singh Y. and Maheshwari B.K., "A Brief Report on Damage Survey for Sikkim Earthquake of 2011", Proc. of the ISET Golden Jubilee Symposium, IIT Roorkee, October 2012.
37. Pai G. and Maheshwari B.K., "Soil-Structure Interaction using a Simplified Model: Parametric Study", Proc. of the Indian Geotechnical Conference, Kochi, Kerala, December 2011
38. Syed N.M. and Maheshwari B.K., "Modeling of Boundary for SSI Analysis using SBFEM", Proc. of the 14th Symposium on Earthquake Engineering, IIT Roorkee, Roorkee, December 2010.
39. Singh H.P., Maheshwari B.K. and Saran S., "Effects of Amplitude, Frequency and Relative Density on Liquefaction Resistance of Sand", Proc. of the 14th Symposium on Earthquake Engineering, IIT Roorkee, Roorkee, December 2010.
40. Kale S.S., Maheshwari B.K. and Kaynia A.M., "Dynamic Properties of Solani Sand under Cyclic Loads", Proc. of the 14th Symposium on Earthquake Engineering, IIT Roorkee, Roorkee, December 2010.
41. Bhasin R., Erduran E., Galiana-Merino J.J., Kaynia A.M., Lang D.H., Mahajan A.K., Maheshwari B.K., Mundepi A.K., Paul D.K., Sharma M.L. and Singh Y., "The Indo-Norwegian Institutional Cooperation on Earthquake Risk Reduction", Proc. of the 14th Symposium on Earthquake Engineering, IIT Roorkee, Roorkee, December 2010.
42. Emani P.K. and Maheshwari B.K., "Dynamic Pile-Cap-Soil-Pile Interactions in Triangular Pile Groups", Proc. of the Indian Geotechnical Conference, IIT Bombay, Mumbai, December 2010.
43. Syed N.M. and Maheshwari B.K., "Evaluation of DSC Parameters for Solani Sand", Proc. of the Indian Geotechnical Conference, IIT Bombay, Mumbai, December 2010.
44. Choudhary S.S., Maheshwari B.K. and Kaynia A.M., "Liquefaction Resistance of Solani Sand under Cyclic Loads", Proc. of the Indian Geotechnical Conference, IIT Bombay, Mumbai, December 2010.
45. Shikhare U.A., Maheshwari B.K. and Paul D.K., "Seismic Analysis of an Embankment using Different Techniques", Proc. of the Indian Geotechnical Conference, Guntur, Andhra Pradesh, Feb. 2010.
46. Kiran A.S., Ramasamy G. and Maheshwari B.K., "Lateral Capacity of Piles in Liquefiable Soils", Proc. of the Indian Geotechnical Conference, Guntur, Andhra Pradesh, Feb. 2010.
47. Syed N.M., Maheshwari B.K. and Kaynia A.M., "Numerical Modeling of Liquefaction using Simple Constitutive Models", Proc. of the National Conference on Advances in Concrete, Structures and Geotechnical Engineering (ACSGE-09), BITS Pilani, Rajasthan, India, October 2009.
48. Anuradha P. and Maheshwari B.K., "Seismic Slope Stability Analysis of Earth and Rockfill Dams" Proc. of the Landslide Management, Diamond Jubilee Conference, CBRI, Roorkee, February 2008.

49. Dutta M.K. and Maheshwari B.K. “Dynamic Analysis of Pile Supported Frame Foundation: Impedance Functions”, Proc. of the National Conference on Foundations and Retaining Structures, held at Dept. of Civil Engineering, IIT Roorkee, May 2007.
50. Maheshwari B.K., Sharma M.L. and Narayan J.P. (2006), “Damage to Ports and Lifelines in Tamil Nadu due to Indian Ocean Tsunamis of December 2004”, 1st India Disaster Management Congress, New Delhi.
51. Patel A.K. and Maheshwari B.K. “Behavior of Sand-Silt Mixture during Liquefaction”, Proc. of the Indian Geotechnical Conference -06, IIT Madras, Chennai, India, December 2006.
52. Emani P.K. and Maheshwari B.K. “SSI Analysis of Pile Foundation using Frequency-Time Domain Hybrid Method”, Proc. of the 13th Symposium on Earthquake Engineering, IIT Roorkee, Roorkee, December 2006.
53. Sarkar R. and Maheshwari B.K. “Evaluation of Seismic Ground Response in DEQ Campus of IIT Roorkee using SASW Test”, Proc. of the 13th Symposium on Earthquake Engineering, IIT Roorkee, December 2006.
54. Sarkar R., Maheshwari B.K. and Singh H.P. “Evaluation of Liquefaction Potential of Soil in DEQ Campus of IIT Roorkee”, Proc. of the 13th Symposium on Earthquake Engineering, IIT Roorkee, December 2006.
55. Jayashankar B.S. and Maheshwari B.K. “Study of Dynamic Soil Properties Using a Small Geotechnical Centrifuge: A review”, Proc. of the 13th Symposium on Earthquake Eng, IIT Roorkee, December 2006.
56. Emani Pavan K. and Maheshwari B.K. “Evaluation of Free-Field Seismic Response of Nonlinear Soil Layers for Bridges”, Proceedings of the National Conference on Advances in Bridge Engineering, IIT Roorkee, Roorkee, March 2006.
57. Nath U.K., Maheshwari B.K. and Ramasamy G. “Pile-Soil Modeling Considering Liquefaction – An Overview”, Proceedings of the National Conference on Advances in Bridge Engineering, IIT Roorkee, Roorkee, March 2006.
58. Maheshwari B.K., Sharma M.L., Narayan J.P. (2005). “Geotechnical Damages on the Indian Coastline due to Tsunamis caused by December 26, 2004 Sumatra Earthquake”, Proc. of Symposium on Seismic Hazard Analysis and Microzonation, IIT Roorkee, September 2005.
59. Maheshwari B.K., Truman K.Z., “Nonlinear Seismic Analysis of Structures Supported on Pile Foundations”, Proc. of second conference on Disaster Management Case Histories, BITS, Pilani, India, November 2003.
60. Maheshwari B.K., Watanabe, H., “Effect of Material Damping of Soil on Dynamic Behavior of Pile Foundation.” Proceedings of the 53rd Annual Conference of JSCE, Kobe, Japan, Oct. 1998.
61. Maheshwari B.K., Watanabe, H., “Nonlinear Dynamic Analysis of Pile Foundation.” Proceedings of the 24th JSCE Earthquake Engineering Symposium, Kobe, Japan, July 1997.
62. Maheshwari B.K., Watanabe, H., “A Model to Study Projectile Penetration in Soils.” Proceedings of the 50th Annual Conference of JSCE, Matsuyama, Japan, Sept. 1995.

Books / Book Chapters

1. Maheshwari B.K. and Firoj M (2023)., “Applications of DSC and HISS soil models in Nonlinear Finite Element Dynamic Analyses of Soil-Structure Interaction Problems” in printing for publication in the book: DSC/HISS Modeling Application to Problems in Mechanics, Geomechanics and Structural Mechanics, Editors: Chandrakant Desai, Yang Xiao, Musharraf Zaman and John Carter, Publisher: CRC Press
2. Jakka R.S., Singh Y., Sitharam T.G. and Maheshwari B.K. (2022), “Earthquake Engineering and Disaster Mitigation, Contributions in the Honour of Late Prof. D.K. Paul”, Springer, eBook ISBN 978-981-99-0081-7, Print ISBN 978-981-99-0080-0
3. Maheshwari B.K. and Bhandari R.K., State of Art Report (SoAR) document entitled “Guidelines for Safer Highways based on Lessons from past Earthquakes”. Published and released in Mid-Term Council of IRC held in Lucknow, October 8, 2022.
4. Maheshwari B.K. (2021), "Disaster Management in India and Characterization for Geohazards", in book Geotechnics for Natural Disaster Mitigation and Management Editors: A. Murali Krishna et al., Publisher Springer

Research Reports

1. Maheshwari B.K., “Three-Dimensional Finite Element Nonlinear Dynamic Analyses for Soil-Pile-Structure Interaction in the Time Domain”, Research Report Submitted to Mid America Earthquake Center (NSF), Dept. of Civil Engineering, Washington University, St. Louis, Missouri, March 2003.
2. Maheshwari B.K., “Behavior of Pile-Supported Structures during Strong Ground motions: Effects of 3-D Nonlinear Soil-Pile-Structure interaction", Research Report Submitted to Engineering Sciences Division, SERC, DST, New Delhi, Project No. SR/S3/MERC/31/2005, Completion Report, February 2010.

3. Maheshwari B.K., "Earthquake Risk Reduction in Himalaya with Institutional Cooperation between India and Norway: Ground Stability Assessment", Research Report Submitted to Royal Embassy of Norway, New Delhi, Project Completion Report, July 2010.
4. Maheshwari B.K., "Dynamic Properties and Liquefaction Resistance of Soils using Cyclic Triaxial Test", Research Report Submitted to Seismology Division, Ministry of Earth Sciences, New Delhi, Project No. MoES/P.O.(Seismo)/23(629)/2006, Completion Report, December 2012.
5. Maheshwari B.K., "Dynamic Properties of Soils using Resonant Column Tests", Research Report Submitted to Seismology Division, Ministry of Earth Sciences, New Delhi, Project No. MoES/P.O.(Seismo)/1(176)/2013, Completion Report, December 2018.

Editor of Conference Proceedings

1. Kumar A., Sarkar R, and Maheshwari B.K., "Seismic Hazard Analysis, Site Characterization and Wave Propagation", Vol. 1 of Proc. of 8th International Conference on Recent Advances in Geotechnical Earthquake Engineering and Soil Dynamics, IIT Guwahati, Dec. 11-14, 2024 published by Springer Nature.
2. Kumar A., Maheshwari B.K. and Sarkar R., "Dynamic Properties and Liquefaction of Soils", Vol. 2 of Proc. of 8th International Conference on Recent Advances in Geotechnical Earthquake Engineering and Soil Dynamics, IIT Guwahati, Dec. 11-14, 2024 published by Springer Nature.
3. Sarkar R., Kumar A. and Maheshwari B.K., "Foundation Dynamics", Vol. 3 of Proc. of 8th International Conference on Recent Advances in Geotechnical Earthquake Engineering and Soil Dynamics, IIT Guwahati, Dec. 11-14, 2024 published by Springer Nature.
4. Sarkar R, Maheshwari B.K. and Kumar A., "Analyses for Retaining wall, Slope Stability and Landslides", Vol. 4 of Proc. of 8th International Conference on Recent Advances in Geotechnical Earthquake Engineering and Soil Dynamics, IIT Guwahati, Dec. 11-14, 2024 published by Springer Nature.
5. Maheshwari B.K., Sarkar R, and Kumar A., "Seismic Design and Performance of Structures", Vol. 5 of Proc. of 8th International Conference on Recent Advances in Geotechnical Earthquake Engineering and Soil Dynamics, IIT Guwahati, Dec. 11-14, 2024 published by Springer Nature.
6. Singh Y. and Maheshwari B.K., Editors of Proc. of 16th Symposium on Earthquake Engineering (16SEE) held at IIT Roorkee during December 20-22, 2018.
7. Thakkar S.K., Bhargava P. and Maheshwari B.K., Editors of Proc. of National Conference on "Advances in Bridge Engineering" held at IIT Roorkee, March 24-25, 2006

Memberships

- Member, American Society of Civil Engineers (ASCE)
- Member, Earthquake Engineering Research Institute (EERI), USA
- Member, International Society of Soil Mechanics and Geotechnical Engineering (ISSMGE)
- Member, International Association of Computer Methods and Advances in Geomechanics (IACMAG)
- Life Fellow, Indian Society of Earthquake Technology (ISET)
- Life Fellow, Indian Geotechnical Society (IGS)
- Life Fellow, The Institution of Engineers (India)
- Life Fellow, Indian Water Resources Society (IWRS)
- Ex-Member, Japan Society of Civil Engineers (JSCE)

Editorship, Peer Reviewer, Committee Member

Chairperson, Subgroup 2 on Structural Safety of Expert Advisory Committee for the Project entitled "Capacity Building of Doctors and Hospital Engineers in Structural and Non-Structural Mitigation Measures for Hospital Safety and Disaster Reliance", funded by the Disaster Management Cell, Ministry of Health and Family Welfare, Govt. of India and executed by Dept. of Hospital Administration, AIIMS New Delhi (since October 2023).

Member TC212 of ISSMGE, on Deep Foundations since April 2023

Executive Committee Member of Indian Geotechnical Society **(IGS)** for two terms of 2 years (since January 2023).

Secretary, TC206 of ISSMGE, on Observational Method in Geotechnical Eng. October 2020 to June 2023

Member TC203 of ISSMGE, on Geotechnical Earthquake Eng. and Associated Problems since October 2019

Associate Editor, International Journal of Geomechanics, ASCE, February 2015 to December 2018

Expert Member of following two committees of Bureau of Indian Standards (**BIS**), New Delhi, since 2013

(a) Earthquake Engineering Sectional Committee (**CED 39)**

(b) Soils and Foundation Engineering Sectional Committee (**CED 43)**

Nominated Member of Following 4 Committees of **Indian Road Congress (IRC),** New Delhi

BSS (Apex): Bridge Specifications and Standards Committee (2018-21)

B-3: Foundation, Sub-Structure, Protective Works and Masonry Structures Committee (2018-21, 2021-23)

H-4: Embankment, Ground Improvement and Drainage Committee (2018-21, 2021-23)

G-6 & G5: Disaster Management Committee (2018-21, 2021-23)

External Member of **Board of Studies (BoS)** for PG Program in Geotechnical Engineering at IIT (ISM) Dhanbad.

Member of Delegation for **India-Japan High-Level Policy Dialogue** on Education, led by MHRD secretary to Tokyo, Japan in July 2016

Editor, ISET Journal of Earthquake Technology (April 2013 to March 2017)

Member, Editorial Board, International Journal of Geotechnical Engineering, Maney Publishing, U.K., January 2013 to December 2015

Member, Editorial Board, Indian Geotechnical Journal (Springer) published by IGS, Feb. 2012 to March 2024

Co-Editor, Indian Society of Earthquake Technology (ISET), April 2005 ~ March 2007

Champion, for an MoU between IIT Roorkee and Saitama University, Japan, signed on June 06, 2019 for 5 years

Champion, for an MoU between IIT Roorkee and NTU, Taiwan (April 2022).

Reviewer of International Grant Proposals: In December 2021, Natural Sciences and Engineering Research Council of Canada (NSERC) requested to review a Discovery Grant proposal submitted by a faculty of University of British Columbia, Vancouver.

In January 2025, Natural Sciences and Engineering Research Council of Canada (NSERC) requested to review a Discovery Grant proposal submitted by a Professor of Civil and Environmental Engineering, Carleton University.

Peer Reviewer MoU with IIT Bombay: In April 2022, on behalf of IIT Roorkee signed an MoU with IIT Bombay to review the teaching research material on Earthquake-Geotechnical Engineering

Reviewer for Following Journals

- Earthquake Engineering and Structural Dynamics
- Soil Dynamics and Earthquake Engineering
- International Journal of Geomechanics, ASCE
- Earthquake Engineering and Engineering Vibration
- International Journal of Geotechnical Engineering
- Indian Geotechnical Journal
- Journal of Engineering Structures
- Journal of Earth System Sciences
- Structural Engineering and Mechanics, Korea
- Natural Hazards
- Sadhana - Academy Proceedings in Engineering Science
- Computers & Geotechnics – An International Journal, Elsevier.
- Institution of Engineers (India), Civil Eng. Journal

NPTEL, Short Term Courses, Conferences, Webinars Organized

- Seminar entitled "Learnings from 2015 Nepal Earthquake", on the 10th Anniversary of Nepal Earthquake, organized by ISET and Dept. of Earthquake Engineering, IIT Roorkee on 25th April 2025. Chief Guest: Shri Krishna S. Vatsa, Member, NDMA.

- Chairman, 8th International Conference on Recent Advances in Geotechnical Earthquake Engineering and Soil Dynamics **(8ICARGEE)** organized by ISET in Association with IIT Guwahati and IIT Roorkee held during December 11-14, 2024 in IIT Guwahati.
- Video Recorded **NPTEL Certification Course** on "Geotechnical Earthquake Engineering", recording is done April-May 2023. Course offered in Autumn 2023 and Autumn 2024.
- Chairman, 1st Webinar Series on Geotechnical Earthquake Engineering organized by IIT Roorkee and ISET held online during December 2021 to December 2022.
- Video Recorded **NPTEL Certification Course** on "Earthquake Resistant Design of Foundations", recording started in August 2019, Course offered in Autumn 2020, 2021, Spring 2023, 2024 and 2025.
- **Organizing Secretary, 16th Symposium on Earthquake Engineering (16SEE)** held at IIT Roorkee during December 20-22, 2018.
- Coordinator, Three Short term Courses on "Enterprises Risk Management (ERM)", held at IIT Roorkee, Sponsored by THDC India Pvt. Ltd. Rishikesh. Module-1: Aug. 31 ~ Sept. 4, 2015; Module-2: Oct. 13-17, 2015; Module-3: Feb. 29 ~ March 4, 2016.
- Co-Chairman, National Workshop on Assessment and Mitigation of Liquefaction Hazards for Seismic Microzonation, Organized by ISET in association with DEQ and CoEDMM at IIT Roorkee, Nov. 27-28, 2015
- Coordinator, AICTE sponsored Short Term Course on "Geotechnical-Earthquake Engineering" held at IIT Roorkee, June 2-6, 2014
- Coordinator PAMC Review Meeting of SERC Division, DST, Govt. of India, IIT Roorkee, April 15, 2009
- Conference Secretary, 12th International Conference of the IACMAG held in Goa, India, October 1-6, 2008
- Joint Organizing Secretary, National Conference on "Advances in Bridge Engineering" held at IIT Roorkee, March 24-25, 2006
- Coordinator, AICTE sponsored Short Term Course on "Geotechnical-Earthquake Engineering" held at IIT Roorkee, December 11-15, 2006
- Coordinator, NPEEE Short Term Course on "Geotechnical-Earthquake Engineering" held at IIT Roorkee, May 29 ~ June 3, 2006
- Coordinator, NPEEE Short Term Course on "Geotechnical-Earthquake Engineering" held at IIT Roorkee, August 29 ~ September 3, 2005

Key Consulting Assignments Undertaken

S. No.	Client/Organization's name	Nature / Title of assignment	Duration of project
As a Principal Investigator (PI)			
1.	Chief Engineer (C), HP & HC, MePGCL, Shillong	Estimation of Shear Wave Velocity at Mawblei HE Project, Meghalaya	March 2025 to March 2026
2.	Chief Construction Er. (R& D) West Armanent Estate, Pashan, Pune	Site Visit of DRDO Facility near Bhuj Airport	November 2024 to March 2025
3.	CEG Test House, Research Centre Pvt Ltd., Jaipur	Study using RCT and CTT on Soil Samples for Narora Atomic Power Station	August 2024 to March 2026
4.	TATA Housing Develop. Company Ltd., Mumbai	Slope stability study for the area of Blocks 1-2 in Myst-Kasauli, Project. H.P.	December 2023 to December 2025
5.	Uttarakhand State Disaster Management Authority (USDMA), Dehradun	The Geotechnical Investigations for determining the Shear Strength Characteristics and Bearing Capacity of the Soil in the Joshimath region	Jan. 2023 to March 2024 (15 Months)
6.	The Executive Engr. Kandi Area Dam Maintenance, Div., Hoshiarpur, Punjab	Seismic Study and Liquefaction Study of Arniala Dam in Kandi Area	April 2023 to March 2025 (2 Years)
7.	Director General, Institute of Seismological Research, Gandhinagar, Gujarat	Study of the Dynamic Properties of the Soil by RCA and CTT	April 2023 to March 2025 (2 Years)
8.	TATA Housing Develop.	Site-visit for the review of slope stability	April 2023 to March

	Company Ltd., Mumbai	for Myst-Kasauli, Project	2024 (1 Year)
9.	Chief Engineer, PWD, Rajasthan, Jaipur	Site Visit for ROB at Railway Crossing No. 168/C on NH-65 at Churu, Raj.	March 2021 to March 2022 (1 Year)
10.	Adani Wind Energy Pvt. Ltd., Ahmedabad	Ground Response and Liquefaction Analysis for Khavda Wind Farm Project Site, Kutch, Gujarat	Jan. 2019 to Dec. 2019 (1 Year)
11.	Additional Chief Engineer, Water Resources Zone, Jodhpur, Govt. of Rajasthan	Vetting of Design of Battisa Nallah Minor Irrigation Project, Distt. Sirohi, Rajasthan	April to October 2018 (6 Months)
12.	MPD, CPWD, LBSNAA, Mussoorie	Feasibility of installation of Lift at Director's Office, LBSNAA, Mussoorie	Oct. to Nov. 2017 (2 Months)
13.	MPD, CPWD, LBSNAA, Mussoorie	Site Visit for STP site at LBSNAA, Mussoorie	August 2017 (1 Month)
14.	Director, CEPO Indian Space Research Organisation, Bangalore	Peer Review of the report on Vibration Control	Aug. 2016 to Jan. 2017 (6 Months)
15.	Nuclear Power Corporation of India Ltd., Mumbai	Preliminary Study: Liquefaction Potential of NPP Site in Hissar, Haryana	September 2013 to August 2014 (1 Year)
As a Co-Principal Investigator (Co-PI)			
1.	NTPC, New Delhi	Nonlinear Time History Analysis of Spring Supported TG Foundation	Jan. 2019 to June 2020 (1.5 Years)
2.	Himachal Pradesh Power Corporation Ltd. (HPPCL) Sujanpur-Tihra, Hamirpur	Soil Profiling at Triveni Mahadev Hydro Electric Project, Himachal Pradesh	May to December 2012 (8 Months)
3.	HES Infra Pvt. Ltd. Hyderabad	Seismic Stability Studies of Kanhar Dam in Dudhi Tahsil, District Sonebhadra, Uttar Pradesh	August 2011 to July 2012 (1 Year)
4.	Uttarakhand Jal Vidyut Nigam Limited (UJVNL)	Soil Profiling using MASW at Bowala Nand-Prayag HEP, Chamoli, Uttarakhand	February to July 2012 (6 Months)
5.	Himachal Pradesh Power Corporation Ltd. (HPPCL)	Soil Profiling using MASW at Thana-Plaun Hydro Electric Project, Mandi, H.P.	July 2010 to Jan. 2012 (1.5 Years)
6.	The Irrigation Dept., Uttarakhand	Soil Profiling using MASW at Tiuni-Palasu HEP project, Dehradun	August 2011
7.	Executive Engr, Janauri Chohal Construction Div., Hoshiarpur, Punjab	Seismic Stability Studies of Nara Dam in Kandi Area Hoshiarpur	Dec. 2010 to June 2011 (7 Months)
8.	Adani Infra (India) Ltd., Ahmedabad	Lateral Dynamic Pile Load Tests at Dahej Coal Fired Power Project	March to June 2011 (4 Months)
9.	Tata Chemical Ltd. Babrala, Dt. Badaun, U.P.	Liquefaction Potential of Babrala, Uttar Pradesh, Site	January to March 2011 (3 Months)
10.	Chief Engr, 2*250 MW Harduaganj Thermal Power Station, Kasimpur, Aligarh	Studies for settlement in Tunnel 3A/B of Coal Handling Plant	Jan. to Feb 2011 (2 Months)
11.	Essar Projects (India) Limited, Durgapur, West Bengal	Dynamic Load Tests on Piles for Ammonia Plant of Matix Fertiliser Project Site at Panagarh, Durgapur, West Bengal	Nov. 2010 to Feb. 2011 (4 Months)
12.	Executive Engr Janauri Chohal Construction Div. Hoshiarpur, Punjab	Liquefaction Studies for fill material of Nara Dam (Low-Earthen Dam) in Kandi Area of Dist. Hoshiarpur, Punjab	July to December 2010 (6 Months)
13.	Dy. General Manager/C-4 Rites Limited, Regional Project Office Lucknow	Field Studies of Ground Improvement for Laying of Railway Infrastructure over deposit of coal ash in Anpara	March to August 2010 (6 Months)
14.	Senior Design Engr Dam-II	Two-Dimensional Numerical Analysis of	Sept. 2009 to May 2010

	Ranjeet Sagar Dam Designs Organization, Chandigarh	Ranjeet Sagar Dam	(9 Months)
15.	AGM (Design-Civil) THDC India Limited Rishikesh	Soil Profiling at Jelam Tamak Hydro Electric Project Site, Uttarakhand	Sept. 2009 to March 2010 (6 Months)
16.	Director, Ranjeet Sagar Dam Design Org. Chandigarh	Evaluation of Shear Wave Velocity of Ranjeet Sagar Dam	July 2008 to July 2009 (1 Year)
17.	Shongtong-Karchham HEP HPPCL-Reckng-Peo Distt. Kinnaur (HP)	Evaluation of Shear Wave Velocity for Shongtong-Karchham HEP	Feb. to July 2009 (6 Months)
18.	Norwegian Geotechnical Institute	Soil Profiling in Phuentsoling city, Bhutan	Feb. to March 2009 (2 Months)
19.	NTPC Hydro Limited, Noida	Liquefaction Studies for Lata Tapovan HE Project (171 MW)	April to August 2008 (5 Months)
20.	GMR Hydro Power Generation Pvt Ltd., Delhi	Liquefaction Potential of Alaknanda HE Project, Uttarakhand	August 2007 to January 2008 (6 Months)
21.	Chief Engineer (Civil) U.P. Rajya Vidyut Utpadan Nigam Ltd., Lucknow, U.P.	Study the effectiveness of ground improvement techniques and possible liquefaction potential for 2*500 MW Anpara-D Thermal Power Project	July 2007 to May 2008 (1 Year)
22.	Various Govt. and Private Agencies	Worked on a number of Site-Specific Earthquake Design Parameter Studies including HEP, TPP	Departmental Project, HoD as a PI

Major Conferences Attended and Important Outside Visits / Meetings

1. Attended 8th International Conference on Recent Advances in Geotechnical Earthquake Engineering and Soil Dynamics in IIT Guwahati during December 11-14, 2024.
2. Reviewed **one Ph.D. Thesis** from Dept. of Civil Engineering, IISc Bangalore November, 2024.
3. Attended 18th World Conference on Earthquake Engineering in Milan, Italy during June 30 to July 5, 2024. Delivered **a research presentation** entitled "Performance of Prefabricated Vertical Drains in Mitigating Reliquefaction" in an oral session.
4. Attended 8th International Conference on Earthquake Geotechnical Engineering in Osaka, Japan during May 7-10, 2024. Delivered **a research presentation** entitled "Railway Induced Ground Vibrations in Soft Soil" in an oral session.
5. Delivered in person invited **7th TS Ramanatha Ayyer Memorial Lecture** entitled Seismic Soil-Structure Interaction: CPRF for Design of NPPs at LBS Institute of Technology for Women, Thiruvananthapuram, Kerala on February 15, 2024.
6. Reviewed a research proposal submitted to Kerala State Council of Science, Technology and Engineering (KSCSTE), December 2023.
7. **Keynote Lectures** on "Geotechnical issues in earthquakes and on Soil-Structure Interaction", during AICTE sponsored ATAL FDP organized by SIT, Tumakuru, Karnataka, Dec. 18, 2023.
8. Delivered in person two invited **Keynote Lectures** on "Geotechnical issues in earthquakes and on Soil-Structure Interaction", during AICTE sponsored ATAL FDP organized by SIT, Tumakuru, Karnataka, Dec. 18, 2023.
9. Served for the evaluation panel for faculty promotion to full Professor at IISc Bangalore, November 2023.
10. Delivered online an invited **Keynote Lecture** entitled "Geotechnical Aspects of Earthquake Engineering", during Short Term Course on "Geotechnics and Soil-Structure Interaction (GSSI-2023)" organized by Aligarh Muslim University (AMU) and National Institute of Disaster Management (NIDM), Sept. 12, 2023.

11. Delivered online an invited **Keynote Lecture** entitled "An Overview of Seismic Soil-Structure Interaction during Short Term Course on “Geotechnics and Soil-Structure Interaction (GSSI-2023)” at NIT Hamirpur, September 1, 2023.
12. Reviewed **one Ph.D. Thesis** from Dept. of Civil Engineering, IIT Guwhati and examined the defense on July 27, 2023.
13. Reviewed **one Ph.D. Thesis** from Dept. of Civil Engineering, IIT Bombay in March 2023.
14. Participated in a NDMA project on “Development of Resource Material on Earthquake Engineering” at Dept. of Civil Eng., **IIT Bombay**. Visited IITB in Oct. 2022 and Feb. 2023.
15. Attended Academia Meet as an Invited Eminent Expert at CSIR-CBRI, Roorkee on January 12, 2023
16. Delivered a talk entitled “Recent Advances in Nonlinear Seismic Soil-Structure Interaction: Raft, Piles and CPRF” in Civil Engineering Dept., IIT Bombay as a part of CEA Seminar on October 17, 2022.
17. Attended 16th International Conference of IACMAG (International Association of Computer Methods and Advances in Geomechanics) in Torino, Italy during August 30 to September 2, 2022. Delivered **a research presentation** entitled “Seismic Settlement of CPRF of NPP on Soft Soil” in both oral and poster sessions. Also **chaired two sessions** on “Applications in Geotechnical Engineering: Earthquake and Dynamics” on Sept. 2, 2022 along with Prof. S. Foti, Politechnico Di Torino.
18. Part of a **multi-institutional team** constituted by USDMA (Uttarakhand State Disaster Management Authority) to undertake geological and geotechnical investigation around Joshimath town in Chamoli district of Uttarakhand. Had field visit to Joshimath during August 16-18, 2022.
19. Delivered a **talk** entitled "Nonlinear SSI Analysis for Nuclear Power Plants on Raft, Pile Group and CPRF” as an **invited speaker** during Symposium on Socio-Technological Aspects of Seismic Disaster Management, **IIT Guwahati**, June 23, 2022.
20. Delivered online presentation entitled "Seismic Behavior of Strip Footings on Slopes”, in 20th International Conf. on Soil Mechanics and Geotechnical Engineering **Sydney, Australia**, May 1-5, 2022.
21. Delivered online an invited **Keynote Lecture** entitled "Geotechnical Properties for Dynamic Loads for Sustainable Development”, during e-Short Term Course on “Advances in Transportation and Environmental Geotechnics” at NIT Hamirpur, April 7, 2022.
22. Presented online the research paper entitled "Equivalent Linear Spring-Dashpot Model for Embedded Foundations of NPP”, in 7th World Conference on Earthquake Engineering, Sendai, Japan, September 28, 2021.
23. Delivered online an invited **Keynote Lecture** entitled "Geotechnical Earthquake Engineering: An overview”, during FDP course on “Recent Advances in Earthquake Engineering” at M.M.M. University of Technology, Gorakhpur (U.P.), September 21, 2021.
24. Delivered online an invited **Keynote Lecture** entitled "Seismic Design of Dams and Embankments including Guidelines for Dam Safety during course on Dam Safety & Risk Mitigation Techniques in Hydro Power / Irrigation Projects, organized by NPTI (ER), Durgapur, September 20, 2021.
25. Delivered online an invited **Keynote Lecture** entitled "Earthquake Resilient Development" during Webinar on “Earthquake Risks Reduction and Resilience for the ONGC Personnel” organized by NIDM New Delhi as a resource person, August 2, 2021.
26. Attended online the selection committee meeting for faculty promotions in Dept. of Coastal Disaster Management, Port Blair Campus, Pondicherry University on 15th July 2021.
27. Delivered an invited **Theme Lecture** entitled "A State of Art: Seismic Soil-Structure Interaction for Nuclear Power Plants" during 7th International Conference on Recent Advances in Geotechnical Earthquake Engineering (7ICRAGEE) held at IISc Bangalore on July 14, 2021.
28. Resource person for online faculty development program (FDP) on “Soil-Structure Interaction and its Application”, organized by Dept. of Civil Eng., GB Pant Institute of Engineering and Technology, Pauri-Garhwal, Uttarakhand, India, September 2020.
29. Reviewed **one Ph.D. Thesis** from Dept. of Civil Engineering, IIT Guwahati and examined the defense on July 11, 2020.

30. Reviewed **one Ph.D. Thesis** from Dept. of Civil Engineering, BITS Pilani and examined the defense in May 2020.
31. Delivered an invited **Key Note Lecture** entitled "Recent Advances in Liquefaction of Soils" during Indian Geotechnical Conference (IGC-2019) held at SVNIT Surat on December 20, 2019.
32. Visited IISc Bangalore to deliver two lectures in a short-term course "Seismic studies for Dam", sponsored by DRIP during August 19-20, 2019.
33. Attended and delivered a presentation entitled" Models for Research Collaborations for Geo-hazard Disaster Risk Reduction" in *Third Indo-Japan Workshop on Disaster Risk Reduction*, at **Vigyan Bhawan**, New Delhi on March 18, 2019 as an invited speaker.
34. Attended the meeting of **B-3 Committee** at Indian Road Congress, New Delhi on March 2, 2019.
35. Attended the meeting of National Committee on Seismic Design Parameters (NCSDP) at CWC, New Delhi on February 26, 2019.
36. Visited IIT Kanpur to deliver two lectures in a short-term course on Geotechnical Earthquake Engineering during February 18-19, 2019.
37. Reviewed **one Ph.D. Thesis** from Dept. of Civil Engineering, IIT Delhi, February 2019.
38. Attended the meeting of **G-6 Committee** at Indian Road Congress, New Delhi, January 30, 2019.
39. Visited Dept. of Civil Engineering, IIT Bombay to **examine one Ph.D. Thesis** on November 29, 2018.
40. Attended a meeting as a member of Subcommittee of IS:1893 (Part 3) of CED39 (Earthquake Engineering Section) of Bureau of Indian Standards (**BIS**) at New Delhi on November 28, 2018.
41. Visited Aligarh Muslim University (AMU) to deliver a lecture in 3rd National Workshop on Reliability and Structures during September 22, 2018.
42. Attended the meetings of **G-6 Committee** (Disaster Management) and **B-3 Committee** (Foundation, Sub-Structure, Protective Works and Masonry Structures) as a member at Indian Road Congress, New Delhi on July 27-28, 2018.
43. **Chaired a Session** on Geotechnical Earthquake Engineering during 16th European Conference on Earthquake Engineering, held at Thessaloniki, Greece, June 18-21, 2018.
44. Reviewed **one Ph.D. Thesis** from Dept. of Civil Engineering, MNIT Jaipur, May 2018.
45. Visited Dept. of Civil Engineering, IISc Bangalore to **examine one Ph.D. Thesis** on May 1, 2018.
46. Attended the meeting of Bridge Specifications and Standards **(BSS) Apex** Committee as a member at Indian Road Congress, New Delhi, April 25, 2018.
47. Attended a meeting as a member of CED39 (Earthquake Engineering Section) of Bureau of Indian Standards (**BIS**) at New Delhi on April 13, 2018.
48. Invited to deliver a **Keynote Lecture** in National Symposium on Disaster Mitigation and Management at DIT University, Dehradun on April 12, 2018.
49. Visited IIT (ISM) Dhanbad to attend the invited meeting of Board of Courses and Studies **(BOCS)** as an external member on March 10, 2018.
50. Attended the meeting of **B-3 Committee** (Foundation, Sub-Structure, Protective Works and Masonry Structures) as a member at Indian Road Congress, New Delhi, Feb. 24, 2018.
51. Invited to deliver a **Two Lectures** on Disaster Management and Geotech EQ Eng. at DIT University, Dehradun on December 29, 2017.
52. Invited to deliver a **Key Note Lecture** entitled "Nonlinear Seismic Soil-Structure Interaction", in 62nd Congress of "Indian Society of Theoretical and Applied Mechanics (ISTAM)" held at Osmania University, Hyderabad on December 15, 2017.
53. Invited to deliver a **Key Note Lecture** entitled "Disaster Management in India and Characterization for Geohazards" in Third Indo-Japan Workshop on "Geotechnics for Natural Disaster Mitigation and Management" held at IIT Guwhati on December 13, 2017 (pre IGC 2017).
54. Invited to deliver a **Key Note Lecture** entitled "Geotechnical issues during earthquakes in Uttarakhand" in a program "Disaster Resilient Infrastructure in the Himalayas: Opportunities and Challenges" organized by Disaster Mitigation and Management Centre (DMMC), Dehradun on November 22, 2017.
55. Invited to deliver a **Key Note Lecture** entitled "Seismic Design of Dams and Embankments including Guidelines for Dam Safety" in a National Seminar on Dam Safety and Disaster Management at Chandigarh by National Power Training Institute (**NPTI**), Nangal, Min. of Power, Govt. of India, Nov. 2, 2017.

56. Attended second meeting of National Platform for Disaster Risk Reduction at **Vigyan Bhawan**, New Delhi during May 15-16, 2017 as a delegate from IIT Roorkee.
57. Attended 10th meeting of Governing Body **(GB) of NIDM**, at MHA, North Block, New Delhi on April 11, 2017 on behalf of Director, IIT Roorkee. The meeting was chaired by Union Home Secretary.
58. Delivered **invited talk** and address Railway officials going to Japan **through SKYPE** at IRICEN Pune, Ministry of Railways on March 10, 2017
59. Attended a meeting as a member of CED39 (Earthquake Engineering Section) of Bureau of Indian Standards (**BIS**) at New Delhi on February 27, 2017
60. 16th World Conference on Earthquake Engineering (16WCEE) held in **Santiago, Chile** during Jan. 09-13, 2017 delivered an oral presentation.
61. Invited to deliver a **Key Note Lecture** entitled "Geotechnical Issues and Foundation Design of Tall Buildings" in Conference Planning and Design of Tall Buildings Including Earthquake and Wind Effects Organized by Indian Association of Structural Engineers at New Delhi on December 7, 2016
62. Invited to deliver a **Special Presentation Lecture** entitled "Recent Advances in Nonlinear Soil-Structure Interaction for Earthquake Loads" in 6th International Conference on Recent Advances in Geotechnical Earthquake Engineering and Soil Dynamics held at Extension Centre, IIT Roorkee at Greater Noida on August 5, 2016
63. Visited Japan as a part of **High Level Policy Dialogue on Cooperation in Education**, led by Shri V.S. Oberoi, **Secretary, MHRD, Govt. of India** during July 6-9, 2016.
64. Visited Dept. of Geology and Geophysics , IIT Kharagpur to **examine one Ph.D. Thesis** on July 4, 2016.
65. Attended a meeting as a member of CED39 (Earthquake Engineering Section) of Bureau of Indian Standards (**BIS**) at New Delhi on June 16, 2016
66. Visited **Manipur** during January 6-11, 2016 for **Earthquake Damage Survey** along with Prof. Y. Singh and Prof. M. Shrikhande on the invitation of Govt. of Manipur.
67. **Co-Chairman** for 2-Day National **Workshop** on Assessment & Mitigation of Liquefaction Hazards for Seismic Microzonation' held at IIT Roorkee, Nov. 27-28, 2015
68. Attended TIFAC-IDRiM international conference on Disaster Management in New Delhi as a **member of organizing core committee** during October 28-30, 2015. Also **chaired a session** on Earthquake Hazards.
69. Invited at **Rail Bhawan** by Ministry of Railways to address the prospective candidates going to Japan for attending training-cum studies in Japanese Universities on October 07, 2015. Also delivered a presentation on the behalf of Saitama University (alma-matter for Ph.D.) who requested to represent them.
70. Delivered **Key note lecture** entitled "Numerical Modeling for Seismic Soil-Structure Interaction" in a National Conference at Ludhiana. Being invited by IGS's Ludhiana Chapter. Also attended the meeting of TC-8 (Physical and Numerical Modeling) of IGS on October 03, 2015.
71. Invited as a **Guest of Honor** at Govt. P.G. College, Kotdwar, Uttarakhand in a workshop on IPR on September 19, 2015
72. Delivered **Key note lecture** entitled "Earthquake Induced Landslides: Evaluations and Protection Measures" in a National Conference on Natural Disaster and Management. Being invited by IGS's Indore Chapter, also attended the meeting of TC-3 (Natural Disaster Management) of IGS on September 12, 2015.
73. Attended a meeting as a member of CED39 (Earthquake Engineering Section) of Bureau of Indian Standards (**BIS**) at New Delhi on March 27, 2015
74. Visited Dept. of Civil Engineering, IISc Bangalore to **examine a PhD thesis** on January 20, 2015
75. Visited Dept. of Civil Engineering, Jadavpur University to deliver 2 **invited lectures** in a short-term course on January 19, 2015
76. Delivered **Invited Talk** in Preliminary Session entitled "Recent Advances in Seismic Soil-Structure Interaction" during Indian Geotechnical Conference, Kakinada, Andhra Pradesh, December 18, 2014.
77. 14th International Conference of the International Association for Computer Methods and Advances in Geomechanics, Kyoto, Japan, September 2014. Delivered **Oral Presentation**.
78. Delivered **Invited Talk** entitled "Seismic Slope Stability and Design of Retaining Walls", in the training programme for Engineers of Rural Engineering Service Department, Govt. of Uttarakhand, Dehradun, March 01, 2014.
79. Delivered **Invited Talk** entitled "Seismic Soil-Pile-Structure Interaction", in the workshop held by AERB, BARC, Mumbai, January 24, 2014.

80. Visited Nainital for **discussion meeting** on research project with Norwegian Colleagues in Nainital during May 22-26, 2013.
81. Post IGC 2012: International Workshop on Seismic Requalification of Geotechnical Structures held at IIT Delhi on December 17, 2012. Delivered **Key Note** Presentation entitled "Soil-structure interaction considerations in the seismic design of Pile foundations".
82. 15th World Conference on Earthquake Engineering, Lisbon, Portugal, September 2012. Delivered one Oral and three poster presentations.
83. Visited Bangalore on the invitation of President, the University of Tokyo on the Opening Ceremony of its India office on February 27, 2012.
84. Delivered **Invited Talk** entitled "Earthquake an Overview" in Regional Workshop on Earthquake: Risk to Resilience, Organized by State Disaster Management Authority, Lucknow, February 23, 2012.
85. 4th International Conference on Structural Stability and Dynamics, MNIT, Jaipur, January 2012. Delivered **Key Note** Presentation.
86. First Indo-Japan Symposium on Geotechnical Earthquake Engineering, Kochi, Kerala, December 14, 2011, Delivered **Key Note** Presentation.
87. Post-SMiRT-21 Conference Seminar on Advances in Seismic Design of Structures, Systems and Components of Nuclear Facilities, AERB, BARC, Mumbai, India, November 2011. Delivered **Invited Talk**.
88. 21st International Conference on Structural Mechanics in Reactor Technology (SMiRT-21) New Delhi, India, November 2011. Delivered Oral Presentation.
89. 13th International Conference of the International Association for Computer Methods and Advances in Geomechanics, Melbourne, Australia, May 2011. Delivered Oral Presentation.
90. **Key Note Lecture** entitled "Seismic Design of Deep Foundations" at National Workshop on Seismic Design of Earth Structures and Foundations held at IIIT Hyderabad on June 26, 2010
91. 14th World Conference on Earthquake Engineering, Beijing, China, October 2008. Delivered two Oral and two poster presentations.
92. 12th International Conference of IACMAG, Goa, India, October 2008. Delivered two Oral and one poster presentations.
93. Visited SS Engineering College, Bhavnagar to deliver three lectures in a short-term course on Geotechnical Earthquake Engineering during Nov.2006.
94. 8th U.S. National Conf. on Earthquake Eng., San Francisco, USA, April 2006. Poster presentation entitled "Geotechnical Damages on the Indian Coastline due to Tsunamis caused by Dec. 26, 2004 Sumatra EQ".
95. Visited Silvassa (Dadra and Nagar Haveli) to deliver four Guest Lectures for training programme of NPCBEERM (MHA), October 2005.
96. Visited Jodhpur to deliver four invited lectures for training programme of NPEEE (MHA), July 2005.
97. 13th World Conference on Earthquake Engineering, Vancouver, B.C., Canada, August 2004. Oral presentation entitled "3-D Finite Element Nonlinear Dynamic Analysis for Soil-Pile-Structure Interaction".
98. 7th U.S. National Conference on Earthquake Engineering Boston, MA, USA, July 2002. Oral presentation entitled "Nonlinear Kinematic Response of Single Piles".
99. ITeach, Integrating Technology into your teaching, Washington University in St. Louis, MO, January 2002.
100. 26th Annual Meeting of Deep Foundation Institute, St. Louis, MO, USA, October 2001.
101. Fourth International Conference on Recent Advances in Geotechnical Earthquake Engineering and Soil Dynamics, San Diego, CA, USA, March 2001. Poster presentation entitled "Effect of Plasticity of Soil on Seismic Response of Pile Foundation: Parametric Study."
102. Geotechnical Earthquake Engineering in Mid-America, Seminar of Mid-America Earthquake Center, Memphis, Tennessee, USA, March 2001.
103. Tenth International Conference on Computer Methods and Advances in Geomechanics, Tucson, Arizona, USA, Jan. 2001. Oral (theme) presentation entitled "Nonlinear Dynamic Analysis of Pile Foundation: Effect of Plasticity of Soil."
104. 53rd Annual Conference of JSCE, Kobe, Japan, Oct. 1998. Oral presentation entitled "Effect of Material Damping of Soil on Dynamic Behavior of Pile Foundation."
105. 50th Annual Conference of JSCE, Matsuyama, Japan, Sept. 1995. Oral presentation entitled "A Model to Study Projectile Penetration in Soils."