

## Detailed CV

1. Name in full (Surname followed by first and middle name in block letters)

**KUMAR ABHISHEK**

2. Present institutional address and number of telephone, fax and email:

**Associate Professor, N-208, Department of Civil Engineering, Indian Institute of Technology Guwahati, Assam. 91-8812865465, 91-361-258-3329/ 91-361-2258-2440/ abhiak@iitg.ernet.in**

3. Address for correspondence and number of telephone, fax, email.

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4. Date of Birth: **09/05/1985**

5. Academic qualification: (Beginning with the Bachelor's degree in a tabular form)

<b>Degree</b>	<b>Institute/University</b>	<b>Year</b>	<b>Division</b>	<b>Remarks</b>
B.E.	Aligarh Muslim University, Aligarh	2007	First Position (87.53%)	University Medal for standing First position in Civil Engineering University Medal for standing First among all Engineering Branches
M.E.	Indian Institute of Science, Bangalore	Joined in 2007 and converted to Ph.D. in 2008	6.8/10	Joined in 2007 and converted to Ph.D. in 2008
Ph.D.	Indian Institute of Science, Bangalore	2012	NA	-

6. Details of employment and nature of duties: (in reverse chronological order)

<b>Position Held</b>	<b>Affiliation</b>	<b>Duration</b>
Associate Professor	Civil Engineering, Indian Institute of Technology Guwahati	19 January, 2019-present

Assistant Professor	Civil Engineering, Indian Institute of Technology Guwahati	May 2014- 18 January, 2019
Assistant Engineering Manager	Larsen and Toubro	September 2013-April 2014
Junior Research Associate	Civil Engineering, Indian Institute of Science, Bangalore	July 2012- August 2013

7. Awards and other recognitions received (if any)

Sr. No.	Name of Award	Awarding Agency	Year
1.	International Travel Support (ITS) for presenting paper during 16 World Conference on Earthquake Engineering (16WCEE) held between 9 and 13 January 2017 at Santiago, Chile	Department of Science and Technology, Government of India	2017
2.	Young Engineer Award in Geotechnical Earthquake Engineering	Indian National Academy of Engineers (INAE)	2015
3.	Young Engineer Award in Civil Engineering	Institution of Engineers of India	2015
4.	INSPIRE Faculty Award	Department of Science and Technology.	2014
5.	Institute Grant for attending Geo-Congress 2012 at Oakland, USA	Indian Institute of Science, Bangalore.	2012
6.	Third Best Paper presentation award in the Third Indian Young Geotechnical Engineers Conference (3IYGEC)	Indian Geotechnical Society, Delhi Chapter.	2011
7.	MHRD scholarship for Ph.D.	MHRD, Government of India.	2008-2012
8.	MHRD scholarship for M.E.	MHRD, Government of India.	2007
9.	AIR 73, GATE exam	MHRD, Government of India.	2007
10.	University Medal for standing first position at the B.E. (Among all Branches)	Aligarh Muslim University, Aligarh.	2007
11.	University Gold Medal for standing first position at the B.E. (Civil)	Aligarh Muslim University, Aligarh.	2007

12.	Build India Scholarship	Larsen and Toubro	2007
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## Other Activities

### *Position held at the Institute Level*

1. Head, [Centre for Career Development](#) (October 2020- December 2022)
2. Faculty Coordinator for Placement, [Centre for Career Development](#) (March 2020-September 2020)
3. Faculty Coordinator for internship, [Centre for Career Development](#) (October 2019-Feb 2020)
4. Warden, Hostel Manas (June 2018-July 2019)
5. Associate Warden, Hostel Dibang (Sept. 2016-May 2018)

### *Position held at Departmental Level*

1. Laboratory In-Charge, [Geotechnical Specialisation](#) (July 2020-present)
2. DUPC representative of Geotechnical Specialization (June 2018-July 2020)
3. Departmental Time Table Coordinator (Dec. 2015-June 2018)
4. Library Committee representative of Geotechnical Specialization (Aug. 2014-Dec. 2015)

### **As External examiner**

1. PhD Thesis Examiner of Mr Bhanu Pratap Chamoli, Centre for excellence in Disaster Mitigation and Management, IIT Roorkee (July 2021).
2. PhD Thesis Examiner of Mr Pankaj Kumar, Centre for excellence in Disaster Mitigation and Management, IIT Roorkee (July 2020).
3. External examiner for Mtech (Structural dynamics and earthquake engineering discipline) for the session 2019 at NIT Silchar.

### **As Expert Member**

1. Delivered Theme Lecture titled “Forward and Inverse Ground Response Analysis: An Introduction and Need” during Indian Geotechnical Conference, held between 14 to 16 December 2023 at IIT Roorkee, India.

2. Speaker delivering lecture titled “[Seismic Hazard: Components and Effects](#)” in Faculty Development Program on Emerging Trends in Geotechnical Engineering, Under AICTE Training And Learning (ATAL) Academy September 6 – 10, 2021, CHARUSAT, Changa, Gujarat.
3. Special Lecture titled “[Importance of Site-Specific Observations at Various Stages of Seismic Microzonation Practices](#)” at the 7th International Conference on Recent Advances in Geotechnical Earthquake Engineering (7ICRAGEE) held between 12 and 15 July 2021 in virtual mode.
4. Delivered expert lecture titled “Importance and assessment of local site effect in seismic microzonation practice” in online course certificate on “Application of Remote Sensing and GIS in Natural Disasters”, held from 19 to 23 July 2021 at IIT Guwahati.
5. Delivered expert lecture titled “Seismic microzonation: Importance of site specific observations” in online course certificate on “Application of Remote Sensing and GIS in Natural Disasters”, held from 19 to 23 July 2021 at IIT Guwahati.
6. Delivered invited lecture in ATAL Faculty Development Program titled “Underground Space Utilization”, held from 18 Jan- 22 Jan 2021 at the Department of Civil Engineering, Zakir Hussain College of Engineering and Technology, Aligarh Muslim University, Aligarh.
7. Expert lecture titled “Local site effects” Importance and quantification” in TEQIP short term course on “Recent Advances in Geotechnical and Geoenvironmental Engineering”, held from 17 to 23 Dec. 2020 at IIT Guwahati.
8. Expert lecture titled “Ground motion simulation for seismic hazard analysis” in TEQIP short term course on “Recent Advances in Geotechnical and Geoenvironmental Engineering”, held from 17 to 23 Dec. 2020 at IIT Guwahati.
9. Expert lecture titled “Application of site specific seismic scenarios in various applications” in TEQIP III sponsored virtual Faculty Development Program cum workshop on “Recent Advances in Earthquake and Environmental Engineering” held between 7 and 11 September 2020 at NIT Silchar.
10. Invited Expert for Third Curriculum Development Workshop, Department of Civil Engineering, National Institute of Technology Uttarakhand (July 2020).
11. Session Chair during TC 102 workshop committee held on 26 and 27 April 2019 at the Department of Civil Engineering, IISc, Bangalore.
12. Invited lecture and session Chair during Indian Conference Geotechnical and Geoenvironmental Engineering, 1-2 March, 2019 at NIT Allahabad.

## Research Contribution:

### a) List of papers published in journals

1. Joy K. Mondal, **Abhishek Kumar** (2023), New Frequency Domain Framework of inverse ground response analysis for the determination of dynamic soil properties of multilayered system, *Indian Geotechnical Journal*, <https://link.springer.com/article/10.1007/s40098-023-00791-8>.
2. Surender Singh, **Abhishek Kumar**, T G Sitharam (2023), Investigating the strength and durability properties of alkali activated red mud for tailings pond embankment material, *Geomechanics for Energy and the Environment*, <https://doi.org/10.1016/j.gete.2023.100500>.
3. Abhishek Kamishetty, Indu S. R. G., **Abhishek Kumar** (2023), Combined effect of fly ash and fiber on spreadability, strength and water permeability of foam concrete, *Journal of Building Engineering*, <https://doi.org/10.1016/j.jobe.2023.107607>.
4. Joy K. Mondal, **Abhishek Kumar** (2023), A New Frequency Domain Framework of Inverse Ground Response Analysis for the determination of dynamic soil properties in a two layered system, *International Journal of Geomechanics (ASCE)*, 23 (11), <https://doi.org/10.1061/IJGNAL.GMENG-852>.
5. Surender Singh, **Abhishek Kumar**, T G Sitharam (2023), "Stability Assessment of a Tailings Pond Considering the Effect of Staged Construction and Embankment Raising Rate: a Numerical Study", *Mining, Metallurgy and exploration*, 40, 851-869, [2023] , <https://link.springer.com/epdf/10.1007/s42461-023-00772-8?>.
6. Surender Singh, **Abhishek Kumar**, T G Sitharam (2023), "Stability investigation of embankment of a tailing pond for its dry closure: An Indian case study ", *Sadhana*, 48-89, [2023] , <https://link.springer.com/epdf/10.1007/s12046-023-02157-5?>.
7. Surender Singh, **Abhishek Kumar**, T G Sitharam (2023), "Mechanical, microstructural and durability properties of soil stabilized with Alkali-Activated Jarofix for Road applications", *Journal of Hazardous, Toxic and Radioactive waste (ASCE)*, <https://ascelibrary.org/doi/full/10.1061/JHTRBP.HZENG-1236?>
8. Niranjan Borah, **Abhishek Kumar** (2022), Probabilistic seismic hazard analysis of the North-East India towards identification of contributing seismic sources. *Geomatics, Natural Hazards and Risk*, 14(1), 1-38. <https://doi.org/10.1080/19475705.2022.2160662>.
9. Alik Ismail-Zadeh, **Abhishek Kumar** (2021), Deterministic, Probabilistic and Data enhanced models of Seismic hazard assessment with some applications to Central Asian Regions, *Journal Geological Society of India*, 97, 1508-1513, DOI: 10.1007/s12594-021-1906-9.
10. Joy Kumar Mondal, **Abhishek Kumar** (2021), A Systematic Review on Inverse GRA Methodologies Developed for the Determination of Dynamic Soil Properties Using Downhole Seismic Array Records, *Indian Geotechnical Journal*, <https://doi.org/10.1007/s40098-021-00571-2>.

11. Niranjana Borah, **Abhishek Kumar**, Rajat Dhanotiya (2021), Seismic source zonation for NE India on the basis of past EQs and spatial distribution of seismicity parameters, *Journal of Seismology*, <https://doi.org/10.1007/s10950-021-10037-w>.
12. Surender Singh, **Abhishek Kumar** (2021), Methodologies Available for the Determination of Seismic Active Thrust Acting on Retaining Walls: A Critical Review, *Indian Geotechnical Journal*, <https://doi.org/10.1007/s40098-020-00495-3>.
13. Joy Kumar Mondal, **Abhishek Kumar** (2021), New Frequency Domain–Based Inverse Ground Response Analysis Framework for the Determination of Dynamic Soil Properties, *International Journal of Geomechanics (ASCE)*, [https://doi.org/10.1061/\(ASCE\)GM.1943-5622.0001973](https://doi.org/10.1061/(ASCE)GM.1943-5622.0001973).
14. Harinarayan N H, **Abhishek Kumar** (2020), Ground motion prediction equation for north India, applicable for different site classes, *Soil Dynamics and Earthquake Engineering*, <https://doi.org/10.1016/j.soildyn.2020.106425>.
15. Baro O, **Abhishek Kumar**, Ismail-zadeh A (2020) Seismic hazard assessment of the Shillong Plateau using a Probabilistic approach. *Geomatics, Nat Hazards Risk* 11(1): 2210-2239, <https://doi.org/10.1080/19475705.2018.1494043>
16. Harinarayan N H, **Abhishek Kumar** (2020), Determination of path attenuation and site characteristics of the North-west Himalayan region and adjoining regions within the Indian Territory using generalized inversion method, *Annals of Geophysics*, DOI: <https://doi.org/10.4401/ag-8225>.
17. **Kumar Abhishek**, Haldar Suman (2020), Design Response Spectra and Site Coefficients for Various Seismic Site Classes of Guwahati, India, Based on Extensive Ground Response Analyses, *Geotechnical and Geological Engineering*, DOI: <https://doi.org/10.1007/s10706-020-01434-y>.
18. Safik Khan, **Kumar Abhishek** (2019), Identification of Possible Liquefaction Zones Across Guwahati and Targets for Future Ground Improvement Ascertaining no Further Liquefaction of Such Zones, *Geotechnical and Geological Engineering*, DOI: <https://doi.org/10.1007/s10706-019-01128-0>.
19. Baro Olympa, Kumar Ashok, **Kumar Abhishek** (2019), Suitability of Widely Followed Earthquake Early Warning Systems to Seismically Active Regions of India, by Considering Destructive Intensity as a Parameter, *Geosciences Research*, DOI: 10.22606/gr.2019.41001 .Harinarayan N H, **Abhishek Kumar** (2019), Estimation of source and site characteristics in the North-West Himalaya and its adjoining area using generalized inversion method, *Annals of Geophysics*, DOI: <https://doi.org/10.4401/ag-7922>.
20. Baro Olympa, Kumar Ashok, **Kumar Abhishek** (2019), Suitability of Widely Followed Earthquake Early Warning Systems to Seismically Active Regions of India, by Considering Destructive Intensity as a Parameter, *Geosciences Research*, DOI: 10.22606/gr.2019.41001.
21. **Abhishek Kumar**, Niranjana Borah, Sambit Prasanjit Naik, Baro Olympa, (2018), Detailed review on methodologies available to find preinstrumental missing earthquakes of the present catalogue with the relevance to seismicity assessment of the Northeast India, *Indian Geotechnical Journal*, <https://doi.org/10.1007/s40098-018-0336-0>.

22. Olympa Baro, **Abhishek Kumar**, Alik Ismail-Zadeh (2018), Seismic hazard assessment of the Shillong Plateau, India, **Geomatics, Natural Hazards and Risk**, 9, 1, 841-861.
23. **Abhishek Kumar**, NH Harinarayan, Vishal Verma, Saurabh Anand, Uddipana Borah, Mousumi Bania, (2018), Seismic Site Classification and Empirical Correlation Between Standard Penetration Test N Value and Shear Wave Velocity for Guwahati Based on Thorough Subsoil Investigation Data, **Pure and Applied Geophysics**, <https://doi.org/10.1007/s00024-018-1858-1>.
24. Soham Banerjee, **Kumar Abhishek**, (2018), Determination of seismic wave attenuation in Delhi, India, towards quantification of regional seismic hazard, **Natural Hazards**, [doi.org/10.1007/s11069-018-3238-7](https://doi.org/10.1007/s11069-018-3238-7).
25. Harinarayan N.H. and **Kumar Abhishek** (2018), Determination of NEHRP site class of seismic recording stations in the Northwest Himalayas and its adjoining area using HVSR method, **Pure and Applied Geophysics**, 175 (1), 89-107.
26. **Kumar Abhishek**, Suman Halda, Olympa Baro, (2018), Approximation of equivalent linear ground response analysis by strain dependent linear ground response analysis for Delhi, India, Accepted as ASCE special publication in Geotechnical Earthquake Engineering and Soil Dynamics Conference organized by ASCE.
27. **Kumar Abhishek**, Olympa Baro, (2018), Effect of the size of Shillong Plateau on relative weightage of selected attenuation relations for seismic hazard analysis, Accepted as ASCE special publication in Geotechnical Earthquake Engineering and Soil Dynamics Conference organized by ASCE.
28. Harinarayan N.H. and **Kumar Abhishek** (2017), Establishing Seismic site class for 8 recording stations in Tarai region of Uttarakhand based on HVSR, GINV and site specific response analyses, **Geotechnical and Geological Engineering**, [doi 10.1007/s10706-017-0399-1](https://doi.org/10.1007/s10706-017-0399-1).
29. Banerjee Soham and **Kumar Abhishek** (2017), Determination of S and Coda Wave Attenuation in Selected Regions of Lower and Northern Assam Within North Eastern India, **Indian Geotechnical Journal**, [doi 10.1007/s40098-017-0259-1](https://doi.org/10.1007/s40098-017-0259-1).
30. Olympa Baro, **Kumar Abhishek** (2017), Seismic Source Characterization for the Shillong Plateau in Northeast India, **Journal of Seismology**, 21 (5), 1229-1249.
31. **Kumar Abhishek**, Joy K. Mondal, (2017), Newly developed Matlab based code for Equivalent linear site response analysis, **Geotechnical and Geological Engineering** 35 (5), 2303-2325.
32. **Kumar Abhishek**, Vivek Srinivas (2017), Easy to use empirical correlations for liquefaction and no liquefaction conditions, **Geotechnical and Geological Engineering**, 35 (4), 1383-1407.
33. Banerjee Soham, **Kumar Abhishek** (2017), Determination of Seismic Wave Attenuation for the Garhwal Himalayas, India, **Geosciences Research** Doi: [10.22606/gr.2017.22005](https://doi.org/10.22606/gr.2017.22005).
34. **Kumar Abhishek**, N. H. Harinarayan, Olympa Baro, (2017), Nonlinear soil response to ground motions during different earthquakes in Nepal, to arrive at surface response spectra, **Natural Hazards**, 87 (1), 13-33.
35. Harinarayan NH, **Kumar Abhishek** (2017), Site Classification of the Strong Motion Stations of Uttarakhand, India, based on the Model Horizontal to Vertical

- Spectral Ratio, Proceedings of Geotechnical Frontiers, GSP 281, Orlando, Florida, (ASCE special Publication).
36. Mondal Joy K, **Kumar Abhishek (2017)**, Impact of Higher Frequency Content of Input Motion Upon Equivalent Linear Site Response Analysis for the Study Area of Delhi, **Geotechnical and Geological Engineering**, 35 (3), 959-981.
  37. Banerjee Soham, **Kumar Abhishek (2016)**, Determination of Seismic wave attenuation: A Review, **Disaster Advances**, 9 (6), 10-27.
  38. **Kumar Abhishek**, Olympa, Baro, Harinarayan N H (2016), Obtaining the surface PGA from site response analyses based on globally recorded ground motions and matching with the codal values, **Natural Hazards**, 81 (1), 543-572.
  39. **Kumar Abhishek**, Harinarayan N H, Olympa Baro (2015), High Amplification factor for Low Amplitude Ground Motion: Assessment for Delhi, **Disaster Advances**, 8 (12), 1-11.
  40. Olympa, Baro, **Kumar Abhishek (2015)**, A review on the tectonic setting and the seismic activity of the Shillong plateau in the light of past studies, **Disaster Advances**, 8 (7), 34-45.
  41. Anbazhagan P., Smitha C V and **Kumar Abhishek (2014)**, Representative Seismic Hazard Map of Coimbatore, India, **Engineering Geology**, 171, 81-95.
  42. Anbazhagan P., **Kumar Abhishek** and Sitharam, T. G. (2013), Ground Motion Predictive Equation Based on recorded and Simulated Ground Motion Database, **Soil Dynamics and Earthquake Engineering**, 53, 92-108.
  43. **Kumar Abhishek**, Anbazhagan P. and Sitharam, T. G. (2013), Seismic Hazard Analysis of Lucknow considering Seismic gaps. **Natural Hazards**, 69, 327-350.
  44. Anbazhagan, P., **Kumar Abhishek** and Sitharam, T., (2013), G. Seismic Site Classification and Empirical Correlation between Standard Penetration Test N value and Shear wave velocity for Deep Soil Sites in Indo-Gangetic Basin, **Pure and Applied Geophysics**, 170 (3), 299-318.
  45. **Kumar Abhishek**, Anbazhagan, P. and Sitharam, T. G., (2013) Liquefaction Hazard Mapping of Lucknow- A Part Of Indo-Gangetic Basin (IGB), **International Journal of Geotechnical Earthquake Engineering**, 4(1), 17-41.
  46. Anbazhagan, P., Smitha, C. V., **Kumar Abhishek** and Chandran Deepu, (2013), Estimation of design basis earthquakes using specific Mmax for NPP site at Kalpakkam, Tamil Nadu, **Nuclear Engineering and Design**, 259, 41-64.
  47. **Kumar Abhishek**, Anbazhagan P. and Sitharam T.G. (2012), Site Specific Ground Response Study of Deep Indo-Gangetic Basin Using Representative Regional Ground Motions, Proceedings Geo-Congress2012, Oakland, California, (ASCE special Publication).

**b) Papers in Conferences:**

1. Chaudhury, H., **Kumar, A.**, and Bharti, R., (2022). Detection of Liquefaction Phenomenon from the 2017 Tripura Earthquake Using Remote Sensing Data, IGRASS.
2. Chaudhury, H., **Kumar, A.**, and Bharti, R., (2022). Detection of Liquefaction Phenomenon from the 2015 Nuweiba Earthquake using Remote Sensing Data, 17th Symposium on Earthquake Engineering.
3. Niranjan Borah, Joy K. Mondal, **Abhishek Kumar** (2022), Seismic Hazard Analysis Considering the Effect of the Shape, Size and EQ Distribution of Seismic Sources for Different Locations in Sikkim, NE India. 17SEE, IIT Roorkee.



4. Abhishek Kamisetty, Indu Siva Ranjani Gandhi, **Abhishek Kumar** (2022), Exploring the suitability of using Foam concrete as pore pressure dissipation measure for slope Stability: A state of art review, International Conference on Advances in Construction Materials and Structures 2021, NIT Calicut, Materials Today: Proceedings 65 (2022) 1399–1403.
5. Niranjan Borah, Joy K. Mondal, **Abhishek Kumar** (2021), Determination of site-specific response spectra for Site Class D and E for Guwahati city, NE India region, Proceedings of Indian Geotechnical Conference 2021, MIT Tiruchirapalli.
6. Arunsiva R, **Abhishek Kumar** (2021), Impact of low frequency ground motions on local site effect, Proceedings of Indian Geotechnical Conference 2021, MIT Tiruchirapalli.
7. Vineet Gamajer, **Abhishek Kumar** (2021), A comprehensive review on rainfall induced slope failures: Mechanism, models and influencing factors, Proceedings of Indian Geotechnical Conference 2021, MIT Tiruchirapalli.
8. Hrik Chaudhary, **Abhishek Kumar**, Rishikesh Bharti (2021), A review on the evaluation of soil liquefaction potential using geospatial technology, Proceedings of Indian Geotechnical Conference 2021, MIT Tiruchirapalli.
9. Niranjan Borah, **Abhishek Kumar**, (2021), Assessing if foreshocks and aftershocks are dependent events of the mainshock for North-East India, Proceedings of 17 World Conference on Earthquake Engineering, Sendai, Japan.
10. **Abhishek Kumar**, T G Sitharam, Prem S Kumar, (2021), Site-specific empirical correlation between PHA and MMI values for Chamoli, India for the selection of GMPEs, Proceedings of 17 World Conference on Earthquake Engineering, Sendai, Japan.
11. Surender Singh, **Abhishek Kumar**, Sitharam T. G. (2021), Effect of embankment raising rate and beach widths on the stability of embankment for the Tailing Pond, Proceedings of the Eighth Indian Young Geotechnical Engineers Conference, Paper No. 130.
12. Surender Singh, **Abhishek Kumar**, Sitharam T. G. (2021), Stability investigation of embankment of a tailing pond with varying embankment raising rate, Proceedings of Taling and Mine Waste Conference, 2021.
13. Surender Singh, **Abhishek Kumar**, Sitharam T. G. (2021), A comparative study on the stability analysis of embankment of a Tailing Pond under Transient and steady-state seepage condition, Proceedings of Indian Geotechnical Conference 2021, MIT Tiruchirapalli.
14. Alik Ismail-Zadeh, Baro Olympa, **Abhishek Kumar** (2020), Deterministic versus probabilistic seismic hazard assessment for the Shillong Plateau, Invited Abstract to EGU General Assembly 2020.
15. **Abhishek Kumar**, Prem Kumar, T G Sitharam (2020), Potential applications of InSAR for continuous and systematic monitoring of the Ridgecrest seismic activity, Abstract accepted, 36 International Geological Congress, New Delhi, India.
16. Harinarayan NH, Joy Kumar Mondal, **Abhishek Kumar** (2019), Establishing seismic site class for 4 recording stations in Uttarakhand based on Generalized Inversion and 1-D Equivalent linear site specific response analysis, Proceedings of Indian Geotechnical Conference 2019, NIT Surat.

17. Olympa Baro and **Abhishek Kumar** (2019), A Review on the Seismic Vulnerability of Oil and Gas Pipelines in Guwahati City, Proceedings of Indian Geotechnical Conference 2019, NIT Surat.
18. Suman Haldar, Joy Kumar Mondal, **Abhishek Kumar** (2019), Empirical correlations for strain dependent linear 1D ground response analysis for Guwahati, India based on detailed analyses, Proceedings of 7th International Conference of Earthquake Geotechnical Engineering (7ICEGE), 17-20 June, 2019, Roma, Italy.
19. Niranjan Borah, **Abhishek Kumar** (2019), Finding liquefaction features by using satellite data for North-East India region, Proceedings of Indian Conference on Geotechnical and Geoenvironmental Engineering, NIT Allahabad
20. Sujata Das, **Abhishek Kumar** (2019), Numerical modeling of a typical excavation in Guwahati considering on in-situ field data in Plaxis 2D, Proceedings of Indian Conference on Geotechnical and Geoenvironmental Engineering, NIT Allahabad
21. Harinarayan NH, **Abhishek Kumar** (2018), Site Classification of strong motion stations of Uttarakhand, India, based on Standard Spectral Ratio and Horizontal to Vertical Spectral Ratio methods, Proceedings of Indian Geotechnical Conference 2018, IISc Bangalore
22. Niranjan Borah, **Abhishek Kumar** (2018), Studying and comparing the declustered EQ catalogue obtained from different methods for Guwahati region NE India, Proceedings of Indian Geotechnical Conference 2018, IISc Bangalore
23. Olympa Baro, **Abhishek Kumar** (2017), Estimation of probable financial loss occur due to future earthquakes in the Shillong Plateau, Proceedings of Indian Geotechnical Conference 2017, IIT Guwahati, India.
24. Harinarayan NH, **Abhishek Kumar** (2017), Site Classification of the Strong Motion Stations of Uttarakhand, India, based on Generalized Inversion and Horizontal to Vertical Spectral Ratio Methods, Proceedings of Indian Geotechnical Conference 2017, IIT Guwahati, India.
25. **Abhishek Kumar**, Harinarayan NH, Olympa Baro, (2017), Effects of earthquake motion and overburden thickness on strain behavior of clay and sandy soils, Proceedings of 16th World Conference on Earthquake Engineering, 9-13 January, Santiago, Chile.
26. **Abhishek Kumar**, Olympa Baro, (2016), In-direct estimation of local soil response in the light of past as well as recent earthquakes in the Shillong plateau, Proceedings of Indian Geotechnical Conference, 15-17 December, IIT Madras, Chennai, Tamil Nadu, India.
27. Soham Banerjee, **Abhishek Kumar**, (2015), Attenuation of P and S waves for Chamba region, Proceedings of Indian Geotechnical Conference, 17-19 December, COEP Pune, Maharashtra, India.
28. Olympa Baro, **Abhishek Kumar**, (2015), An insight into the Shillong plateau seismicity: A review, Proceedings of Indian Geotechnical Conference, 17-19 December, COEP Pune, Maharashtra, India.
29. Joy Kumar Mondal, **Abhishek Kumar**, (2015), Impact of frequency content of input motion upon local soil effect, Proceedings of Indian Geotechnical Conference, 17-19 December, COEP Pune, Maharashtra, India.

30. Olympa Baro, Ashok Kumar, **Abhishek Kumar**, (2015), A new approach towards earthquake early warning in India, Proceedings of 6th International Geotechnical Symposium, 21-23 January, 2015, IIT Madras, Chennai, India.
31. **Abhishek Kumar**, Kumaran M and Vetrivelan, A. V., (2014), Site specific response based on global data, liquefaction potential assessment and determination of target values for ground improvement for shallow region in India, 15th Symposium on Earthquake Engineering, 11-13 December, IIT Roorkee, Uttarakhand, India.
32. **Abhishek Kumar**, Kumaran M and Vetrivelan, A. V., (2014), Global data based site response analysis and output filtering for liquefaction assessment of shallow regions in India T02P17, Indian Geotechnical Conference, 18-20 December, JNTU Kakinada, AP, India.
33. **Abhishek Kumar**, Olympa Baro, Narayan, L. M., (2014), Estimation of surface PGA and determination of target value for no liquefaction at Guwahati city, Proceedings of Geo-Innovations, October 30-31, Indian Institute of Science, Bangalore, India.
34. **Abhishek Kumar**, Anbazhagan, P., (2014), Seismic Micro-zonation, Building Safety and Design Considerations Incorporating the same in L & T GeoStructures, Invited Lecture at Administrative Training Institute, Mysore, India.
35. Sitharam, T.G., **Abhishek Kumar** and Anbazhagan, P., (2013), Comprehensive Seismic Microzonation of Lucknow city With detailed Geotechnical and Deep Site Response Studies, Invited Keynote lecture during Indian Geotechnical Conference organized by IIT Roorkee, India.
36. Anbazhagan P, Sreenivas M, **Abhishek Kumar** and Sindhura R.,(2013), Suitable Seismic Hazard Map for Geotechnical Seismic Microzonation, Proceedings of International conference of Earthquake Geotechnical Engineering, Paper ID 186, Istanbul.
37. Anbazhagan P., **Abhishek Kumar** (2012), Indian Seismic Zonation Map – Past, Present and Future, Proceedings of CESAR-II-October 2012, Guest Lecture Extended Abstract.
38. **Abhishek Kumar**, Anbazhagan P. and Sitharam T.G. (2012), Site Specific Ground Response Study of Deep Indo-Gangetic Basin Using Representative Regional Ground Motions, Proceedings Geo-Congress2012, Oakland, California, (ASCE special Publication).
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