ANNUAL REPORT 2025-26

Department of Earthquake Engineering
Indian Institute of Technology Roorkee
Uttrakhand-247667

ANNUAL REPORT- 2025-26

- **Name of the Department: EARTHQUAKE ENGINEERING**

  The Department of Earthquake Engineering is an interdisciplinary department that was established with the aim of training manpower in the specialized field of Earthquake Engineering to deal with the problems posed by strong earthquakes to engineering infrastructure.

- **Brief description about the department: -** Share information for any MoU/Collaboration/Major Project that has been done in 25-26

  A) **Prof. B.K. Maheshwari** was instrumental in the renewal of a MoU for 5 years between DPRI, Kyoto Univeristy, Japan and CoEDMM, IIT Roorkee.
  B) IIT Roorkee has signed a Memorandum of Agreement (MoA) with the Dedicated Freight Corridor Corporation of India Limited (DFCCIL) on April 15th, 2025, through the Department of Earthquake Engineering (**Prof. Ritesh Kumar**) to jointly develop advanced solutions for railway track system challenges. This MoA is of approximately Rs. 3.7 Crore.
  C) Research Collaboration with Prof. Kyohei Ueda and Prof. Ryosuke Uzuoka at Disaster Prevention Research Institute (DPRI), Kyoto University (KU), Japan.
  D) **Prof. B.K. Maheshwari** has successfully completed a major consultancy project entitled "Estimation of Shear Wave Velocity at Mawblei HE Project, Meghalaya," Sponsored by the Chief Engineer (C), HP & HC, MePGCL, Shillong.
  E) **Prof. B.K. Maheshwari** is working on a major consultancy project of national importance entitled "Study using RCT and CTT on Soil Samples for Narora Atomic Power Station" sponsored by NPCIL through CEG Test House, Research Center Pvt Ltd., Jaipur
  F) Department of Earthquake Engineering is working on a number of projects of Site-Specific Design Earthquake Parameters related to Hydro Electric, Thermal Power, Nuclear, Bridges, and Industrial Complexes.

Total no. of faculty/ Adjunct/ Visiting – teaching faculty	**17**
No. of Post Doc. Fellows	NIL
No. of PMRF	3

- **Kindly provide brief details with photograph about new faculty joined (25-26): -**

  - **Dr. Shiv Prakash**

Dr. Shiv Prakash completed his bachelor's degree in civil engineering from IIT Guwahati in 2018 and his Ph.D. in Structural Engineering from IIT Bombay in 2023, with his doctoral research focused on unbonded fiber-reinforced elastomeric isolators for seismic protection. Following his Ph.D., he pursued postdoctoral research at IIT Bombay and later at the University of Naples Federico II, Italy, where he worked on optimal seismic control of existing bridges and

participated in large-scale experimental campaigns on control systems. He has collaborated internationally with partners like UC Berkeley, ETH Zurich, NTU Athens, Università Parthenope, LNEC Portugal, and others.

His broader research interests span optimal vibration control, passive and semi-active damping systems, supplementary inerter-based devices, structural control using advanced algorithms, and multi-hazard response optimization, with a focus on affordable seismic protection for bridges and buildings. He joined the Earthquake Department in April 2025 and currently teaches Structural Dynamics.

- **Dr. Sourabh Mhaski**

Dr. Sourabh Mhaski completed his B.Tech. and Ph.D. in Civil Engineering at the Indian Institute of Technology Delhi. He received the IIT Delhi Institute Silver Medal for B.Tech and the Prime Minister's Research Fellowship (PMRF) during his doctoral research. His Ph.D. research focused on developing SPH-based computational tools for geohazard analysis, addressing complex phenomena such as debris flows, earthquake-induced liquefaction, internal erosion, slope instability, and subsurface contamination. His current research interest lies in developing multiscale and multiphysics frameworks for geohazard mitigation, with a focus on debris flows and earthquake-induced liquefaction.

- **Academic Activities: - Please provide brief information of courses offered and degree programs. Kindly provide details of new courses offered or started in 2025-26**

The Department of Earthquake Engineering offers postgraduate M.Tech (admission through GATE/sponsorships) and Ph.D (through selections/ sponsorships) programs in the following specializations:

- Soil Dynamics
- Structural Dynamics
- Seismic Vulnerability and Risk Assessment

Programmes Offered	Students on roll	Degrees Awarded
B. Tech/B.Arch	NA	NA
M. Tech/M.Arch	28	32
Ph. D	53	13

- **R & D Activities: -**

Project Status	Total number of Sponsored (Please provide only number)	Total number of Consultancy (Please provide only number)
New	02	64
Ongoing	16	34
Completed	06	35

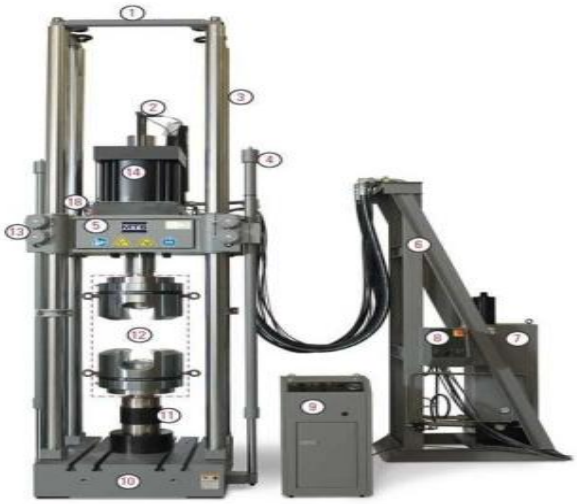
- **Major Facilities: -**

A) 500 kN Fatigue Rated Actuator

A 500kN fatigue rated actuator is a high capacity servo-hydraulic system designed to apply controlled cyclic loads over extended durations, making it suitable for simulating real-life fatigue and seismic loading conditions. It ensures precise load and displacement control with high durability, enabling reliable evaluation of structural performance under repeated loading.

B) Two broadband rotational seismometers have been procured and installed temporarily at seismological observatory. After testing, these shall be deployed in the 18-station seismic network at Tehri.

C) **<u>Dynamic UTM of capacity 500 kN</u>** manufactured by MTS Inc. is installed as infrastructural development under ASHA-India incubation support program

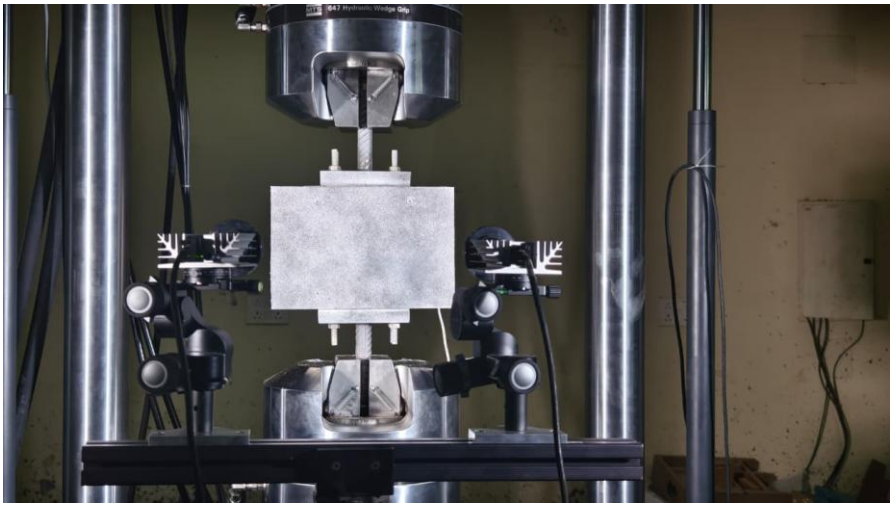


D) **<u>Installation of 25 kN hydraulic actuator</u>** for development of hybrid simulation laboratory

E) **<u>Portable Electro-mechanical Single-Axis Shake Table</u>**

The single-axis shake table reproduces standard cosine motions or custom CSV displacement records with high accuracy. It offers ±220 mm displacement, 25 Hz frequency, and a 75 kg payload, along with safety features like displacement limits, limit sensors, torque-limited shutoff, and an emergency stop.

F) **Digital Image Correlation (DIC)** is a non- contact optical measurement technique used to capture full field displacement and strain by tracking the movement of a speckle pattern applied to the specimen surface. It enables high-resolution monitoring of deformation, crack initiation and strain localization under loading conditions.



- **Student Achievements: -**

Mr. Rituraj Singh Sujawat	Mr. Rituraj Singh Sujawat has been awarded a research fellowship, "LOTUS Fellowship Program" at the School of Environment and Society, Institute of Science, Tokyo, Japan, for one year.
Mr. Mohit Khajuria	Mr. Mohit Khajuria has been awarded a research fellowship, "LOTUS Fellowship Program" at the University of Tokyo, Japan, for one year.
Ms. Aashima Sharma	Won 2nd Position in CII National Corrosion Management Practices Competition & Awards 2025 under the category "Best Case Study on Research for New Technologies and Innovation in Corrosion Management", organized by the Confederation of Indian Industry (CII)
Mr. Tapan Suyal	Mr. Tapan Suyal has been awarded a research internship "FY2025 Disaster Prevention Research Institute (DPRI) Collaborative Research" at Kyoto University, Japan, for three months.

- **Faculty awards & recognition: -**

Dr. M.L. Sharma	1. **National Geoscience Award-** Natural Hazard Assessment 2024, presented by the Ministry of Mines, Government of India
Dr. Ravi. S. Jakka	2. Has been conferred the prestigious IGS (Indian Geotechnical Society) – **Sardar Resham Singh Award for Original and Innovative Research for the year** 2023–2024. The award, comprising a memento, certificate, and a

	cash prize of ₹50,000, was presented on 18th December 2025 during the inaugural ceremony of IGC 2025
Dr. B.K. Maheshwari	1. **Nominated Expert,** State Committee on the Dam Safety, Madhya Pradesh State Dam Safety Organisation, Bhopal, since July 2025, nominated by the Director, IIT Roorkee, through ICED. 2. **President,** Indian Society of Earthquake Technology (ISET) since April 2023. 3. **Chairperson,** 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 to January 2026) 4. **Executive Committee Member** of Indian Geotechnical Society **(IGS)** (since January 2023 to continue) 5. **Member TC212 of ISSMGE**, on Deep Foundations **& TC203 of ISSMGE** Geotechnical Earthquake Eng. and Associated Problems. 6. **Expert Member** of Earthquake Engineering Sectional Committee (**CED 39) &** Soils and Foundation Engineering Sectional Committee (**CED 43)**

- **<u>Webinars/ Symposiums/ Workshops/Conferences</u>/Colloquium: -**

NAME OF THE WEBINAR/ SYMPOSIUM /CONFERENCE /COLLOQUIUM	**SPEAKERS**	**DATES**
Physical and Numerical Modelling of Geohazards in the Himalayan Region	1. Dr. H.S.Negi 2. Dr. Neelima Satyam 3. Dr. S.P.Pradhan 4. Prof. Y.A.Pulpadan 5. Prof. S. S. Subramanian 6. Mr. Rajnish Nath 7. Dr. Ritesh Kumar	April 21, 2025
"Constructive Insights" Workshop on "Steel & New-Age Construction Best Practices", Sponsored by TATA TISCON	1. Prof. Umesh Kumar Sharma 2. Prof. Yogendra Singh 3. Prof. Saurabh Shiradhonkar	September 11 & 12, 2025
Inauguration of 18th SEE Website	Prof. K.K.Pant (Director, IIT Roorkee)-Chief Guest	October 07, 2025

A workshop on Indian codal provisions and standardization procedure	1. Prof. B.K. Maheshwari 2. Prof. Deepak Khare, 3. Prof. Manish Shrikhande 4. Prof. Yogendra Singh 5. Prof. Ritesh Kumar 6. Prof. Brijesh Prasad	October 07, 2025
Workshop on Geotechnical Centrifuge Modelling	1. Prof. Ryosuke Uzuoka 2. Prof. Kyohei Ueda	October 11, 2025
Seventh lecture under the PRIME Lecture series	Shri Alok Kumar Tripathi, Whole-Time Director, NTPC GE Services Ltd. (NGSL)	December 03, 2025
Eighth lecture under the PRIME Lecture series	Shri Vivek Kumar Mitra, Geo-consulting Manager, FUGRO	January 16, 2026
NPTEL Certification Courses were delivered on "Geotechnical Earthquake Engineering" & "Earthquake Resistant Design of Foundations."	Prof. B.K.Maheshwari	Autumn semester 2025 & Spring semester 2026

- **Faculty Entrepreneurship details: -**
  Dr.Yogendra Singh: Startup REALMRISK NG PRIVATE LIMITED was incorporated on 10th March 2026 under the Companies Act, 2013 (18 of 2013), and is a company limited by shares. Corporate Identity Number of the company is U62013UT2026PTC021049. The main business activities of the Company are to engage in the business of designing, developing, and providing software solutions, artificial intelligence (AI), machine learning (ML), and computer vision technologies for structural engineering, health monitoring, and risk assessment. Furthermore, to establish AI-focused research and development facilities, provide expert technical consultancy, and offer advanced parametric modeling and analysis platforms for the construction and civil engineering sectors, and other activities as mentioned in the Memorandum of Association of the Company.

- **Publication: - Please provide details in the below table:**

	Book Published	Book Chapters	Paper in conferences	Paper in Journal	IP (Patent/Copyright, Design/International Patent/ PCT) filed	IP (Patent/Copyright, Design/International Patent/ PCT) granted/Registered
Total	Nil	Nil	22	43	03	01

ANNEXURE-A

LIST OF PUBLICATIONS

(A.1) PEER REVIEWED JOURNALS

DR. B.K.MAHESHWARI

1. Padmanabhan, G., Ueda, K., Maheshwari, B.K., and Uzuoka, R. (2025). Influence of sloping ground and pile group on sand reliquefaction behavior using centrifuge modelling. *Canadian Geotechnical Journal*, **62**, 1-21. https://doi.org/10.1139/cgj-2024-0386
2. Padmanabhan, G., Maheshwari, B.K., Ueda, K., and Uzuoka, R. (2025). Mesoscopic mechanism behind the inherent reliquefaction resistance subjected to repeated earthquakes using centrifuge modelling and advanced digital image processing. *Soil and Foundations*, **65**, 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*, **53**, 295-310. https://doi.org/10.1016/j.geotexmem.2024.09.018
5. Das, S., Saraswat, S., Maheshwari, B.K., and Jakka, R.S. (2025). Geotechnical investigations for land subsidence in Joshimath, Uttarakhand. *Indian Geotechnical Journal*. https://doi.org/10.1007/s40098-024-01153-8
6. Padmanabhan, G., Maheshwari, B.K., and Muley, P. (2025). A review on liquefaction potential assessment with a case study on Roorkee region, Uttarakhand. *Indian Geotechnical Journal*, **55**(1), 119-134. https://doi.org/10.1007/s40098-024-00915-8

DR. DAYA SHANKER

7. Sabah, N., and Shanker, D. (2025). Tsunami multi-hazard modelling in the Indo-Lankan-Andaman Arc and coastal resilience. *Journal of Ocean Engineering and Science*, 1-28. https://doi.org/10.1016/j.joes.2025.11.014
8. Sabah, N., and Shanker, D. (2025). Tsunami hazard forecasting in the Indo-Pacific region: A paradigm shift to physics-based validation. *Journal of Seismology*, 1-53. https://doi.org/10.1007/s10950-025-10319-7

DR. J.P. NARAYAN

9. Vishal, J., Narayan, J.P., and Joshi, L. (2025). Physics-based study on the near-fault variability of ground acceleration due to change of source parameters in the presence of fault roughness and damage zone. *JESS*, **162**, 1-25. https://doi.org/10.1007/s12040-025-02623-0

10. Sharma, M.L., and Mittal, H. (2026). Advancing earthquake hazard mitigation: Ground motion prediction for the Himalayan region. *Soil Dynamics and Earthquake Engineering*, **202**, 110001. https://doi.org/10.1016/j.soildyn.2025.110001
11. Sarkar, P., Shaw, R.L., Mukherjee, B., Dutta, B., Tiwari, A., Roy, P.N.S., Prajapati, S.K., and Sharma, M.L. (2025). TEC variation as earthquake precursor: A statistical and SARIMA-based study from Northeast India. *Advances in Space Research*. https://doi.org/10.1016/j.asr.2025.12.083
12. Pandey, A.K., Gupta, R.K., Pandey, M., Gogoi, A., Tyagi, A., Gaur, C., Pratap, B., Lallawmawma, C., Srivastava, M., and Sharma, M.L. (2025). Aftershock patterns of large earthquakes: Insights from 2001 Bhuj, 2015 Gorkha and 2025 Mandalay. *Current Science*, **129**(7).
13. Shaw, R.L., Mukherjee, B., Sharma, M.L., and Kar, S. (2025). Toward location reliant early earthquake detection: A paradigm deployed deep learning algorithms and clustered seismic indicator. *Journal of Earthquake Engineering*, 1-29. https://doi.org/10.1080/13632469.2025.2565617
14. Shaw, R.L., Mukherjee, B., Tiwari, A., and Sharma, M.L. (2025). b-value and fractal dimension assisted spatiotemporal seismicity pattern assessment along Himalayan seismic belt. *Journal of Seismology*, 1-25. https://doi.org/10.1007/s10950-025-10325-9
15. Mukherjee, B., Shaw, R.L., Sharma, M.L., and Sain, K. (2025). Earthquake prediction using machine learning perspectives in Himalayan seismic belt and its surroundings. *Journal of Asian Earth Sciences*, **293**, 106764. https://doi.org/10.1016/j.jseaes.2025.106764
16. Srivastava, M., and Sharma, M.L. (2025). New regional correlation between shear wave velocity (Vs) and penetration resistance (SPT-N) for the Eastern Indo-Gangetic Plain region. *Indian Geotechnical Journal*, 1-14.
17. Deepak, K., Suresh, G., Sharma, M.L., Dey, S., and Gupta, S.C. (2025). Lithospheric structure beneath the Upper Indus Basin and its adjacent regions from inversion of surface wave dispersion. *Physics of the Earth and Planetary Interiors*, **362**, 107345. https://doi.org/10.1016/j.pepi.2025.107345
18. Modi, R., Sharma, M.L., and Mukhopadhyay, S. (2025). One-dimensional crustal velocity structure for Tehri, Garhwal Himalaya and its implications in improved locations of earthquake hypocentres. *Journal of Earth System Science*, **134**(2), 80. https://doi.org/10.1007/s12040-025-02524-2
19. Srivastava, M., and Sharma, M.L. (2025). Site characterization of Southern Bihar region employing topographic slope as a proxy: Implication to seismic scenario. *Journal of Earth System Science*, **134**(2), 1-19. https://doi.org/10.1007/s12040-025-02578-2
20. Borah, M., Sharma, M.L., and Dubey, R.N. (2025). Assessment of seismic hazard incorporating site-specific study for Assam, North-East India. *Journal of Earth System Science*, **134**(2), 1-33. https://doi.org/10.1007/s12040-025-02556-8

DR. PANKAJ AGRAWAL

21. Gupta, H., Agrawal, P., Mukherjee, M., and Gopalakrishnan, N. (2025). Effect of the diaphragm on the dry-stack stone structures under vertical differential settlements. *Engineering Failure Analysis*, **181**, 109943.
22. Bajaj, M., and Agrawal, P. (2025). Configuration selection of metallic combined damper based on retrofitting criteria of RC frame buildings. *Journal of Earthquake Engineering*, **29**(12), 2532-2554.

DR. P.C. ASHWIN KUMAR

23. Khuptong, L., Kumar, P.C.A., and Sharma, U.K. (2025). Impact of chloride-induced corrosion pits on the mechanical properties of reinforcement bars through 3D scanning and degradation analysis. *Construction and Building Materials*, **470**.
24. Tewatia, D., and Kumar, P.C.A. (2025). Application of IRS 350CR stainless-steel core BRB for retrofitting of RC frame. *Structures*, **81**.
25. Khuptong, L., Kumar, P.C.A., and Sharma, U.K. (2025). Effect of corrosion on TMT bars: Three-dimensional scanning and statistical analysis of mechanical degradation. *Materials and Structures*, **58**(309).
26. Bhat, M.D., Kumar, P.C.A., Sharma, U.K., and Pathak, P. (2025). Mechanical properties of cold-formed steel tubular sections exposed to fire: A reliability-based assessment. *Structures*, **82**.

DR. R.N. DUBEY

27. Borah, M., Sharma, M.L., and Dubey, R.N. (2025). Assessment of seismic hazard incorporating site-specific study for Assam, Northeast India. *Journal of Earth System Science*, **134**, 115. https://doi.org/10.1007/s12040-025-02556-8
28. Bharathi, M., Raj, D., Dubey, R.N., et al. (2025). An experimental study on vibration induced by dynamic pile load in an adjacent building. *Indian Geotechnical Journal*, **55**, 1338-1349. https://doi.org/10.1007/s40098-024-00948-z

DR. RAVI. S. JAKKA

29. Zachariah, J.P., and Jakka, R.S. (2025). Biocementation to enhance the strength and durability of bagasse reinforced sands. *Biogeotechnics*, 100204.
30. Desai, A., and Jakka, R.S. (2025). Uncertainty reduction in MASW inversion and ground response analysis using a-priori information. *Geotechnical Engineering*, **178**(4), 419-431.
31. Roy, N., and Jakka, R.S. (2025). A study on the effect of shear wave velocity (Vs) and layer thickness uncertainty on seismic site response analysis considering statistical randomness. *Journal of Earth System Science*, **134**(3), 133.
32. Das, S., Saraswat, S., Maheshwari, B.K., and Jakka, R.S. (2025). Geotechnical investigations for land subsidence in Joshimath, Uttarakhand. *Indian Geotechnical Journal*, 1-18.

DR. RITESH KUMAR

33. Bilal, M., and Kumar, R. (2025). Physical modelling to map the rheological and morphological dynamics along with entrainment mechanics of debris flow: A comprehensive review of the state of the art. *Geoenvironmental Disasters*. https://doi.org/10.1186/s40677-025-00349-1
34. Sujawat, R.S., Kumar, R., Patil, A.A., and Purkait, A. (2025). Machine learning-based mapping of the vertical scale of fluctuation of spatially varying soils by assimilating the site-specific SPT profiles. *Reliability Engineering & System Safety*. https://doi.org/10.1016/j.ress.2025.111559
35. Kumar, R., Stutz, H.H., and Johari, K. (2025). Localized identification of seepage and ponding in earthen embankment using infrared thermography assimilated with different deep learning frameworks. *Scientific Reports*. https://doi.org/10.1038/s41598-025-13258-y

DR. SHIV PRAKASH

36. Prakash, S., Losanno, D., Vaiana, N., and Serino, G. (2025). Multi-objective optimization of nonlinear passive control systems for seismic response mitigation of bridges. *Computer-Aided Civil and Infrastructure Engineering*, **40**(27), 4865-4883.
37. Prakash, S., and Losanno, D. (2026). Experimental characterization and strain distribution analysis of full-scale U-FREIs combining 3D-DIC with numerical modelling. *Journal of Building Engineering*, 115899.

DR. YOGENDRA SINGH

38. Srivastava, A., Singh, Y., and Bhattacharya, S. (2026). Dynamic response and seismic fragility of a well foundation supporting bridge pier when located on flat and sloping grounds. *Soil Dynamics and Earthquake Engineering*, **204**, 110166. https://doi.org/10.1016/j.soildyn.2026.110166
39. Sharma, M., Singh, Y., and Burton, H.V. (2025). Effect of asymmetric infills on seismic performance of reinforced concrete frame buildings. *Natural Hazards Review*. https://doi.org/10.1061/NHREFO.NHENG-2534
40. Chalavadi, S., Singh, Y., and Singh, M. (2026). Seismic fragility analysis of rock tunnels using multi-stripe analysis. *Rock Mechanics and Rock Engineering*. https://doi.org/10.1007/s00603-026-05375-5
41. Srivastava, A., Singh, Y., and Bhattacharya, S. (2025). Geotechnical capacity of bridge abutments located on C-φ soil slopes under combined gravity and seismic loading. *Journal of Earthquake Engineering*. https://doi.org/10.1080/13632469.2025.258653
42. Srivastava, A., Singh, Y., and Bhattacharya, S. (2025). Structural design of well foundations on slopes for static and seismic conditions considering V-H-M interaction. *International Journal of Geomechanics*. https://doi.org/10.1061/IJGNAI.GMENG-11725
43. Bhat, Z.M., and Singh, Y. (2025). Seismic risk assessment of fly ash brick and AAC block masonry infilled RC frame buildings designed for modern codes. *Journal of Earthquake Engineering*, 1-25.

(A.2) CONFERENCE PROCEEDINGS

DR. B.K. MAHESHWARI

1. Suyal, T., and Maheshwari, B.K. (2025). Effect of geogrid reinforcement on the seismic slope stability of railway embankment. *Proceedings of the 17th International Conference of IACMAG*, Hong Kong, 18-21 December 2025.
2. Kumar, A., and Maheshwari, B.K. (2025). Effect of nonlinear soil behavior on the seismic performance of a zoned embankment dam. *Proceedings of the 1st Geotech Asia Conference*, Goa, India, 7-10 October 2025.

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3. Shanker, D., and Sabah, N. (2025). Tsunami multi-hazard assessment and hotspot identification in the Indo-Sri Lankan-Andaman region. *International Tsunami Symposium (ITS-2025)*, Indian National Centre for Ocean Information Services (INCOIS), Hyderabad, Telangana, India, 12-14 November 2025, ABS-01-0027.
4. Shanker, D., and Sabah, N. (2025). Forecasting tsunami hazards for eastern coastal regions of India and Sri Lanka: A predictive approach to risk mitigation. *CTBT: Science and Technology Conference SnT2025*, Vienna, Austria, 8-12 September 2025 (online), P1.2-077 (E-poster).
5. Shanker, D., Tiwari, R.K., and Paudyal, H. (2025). Spatial-temporal analysis of b-values along fault zones in the Central Himalayas following the 2015 Gorkha earthquake. CTBT: *Science and Technology Conference SnT2025*, Vienna, Austria, 8-12 September 2025 (online), P5.1-020 (E-poster).
6. Shanker, D., and Kapur, N. (2025). Geodynamic controls on Quaternary thrusting in Southern Tibet and the Himalayas. *37th Himalaya-Karakoram-Tibet (HKT) Workshop*, Torino, Italy, p. 120 (abstract volume). https://doi.org/10.3301/ABSGI.2025.02
7. Shanker, D. (2025). Deccan Trap volcanism: A local driver of medium-scale seismic activity in Peninsular India. 2025 *Scientific Assembly of the International Association of Volcanology and Chemistry of the Earth's Interior (IAVCEI)*, Geneva, Switzerland, 29 June-4 July 2025, Poster 140 (2.1.50).
8. Shanker, D., Tiwari, R.K., Chaudhary, S., and Paudyal, H. (2025). Identifying earthquake precursors in the Western Nepal Himalayas using fractal methods. *9th International Workshop on Earthquake Preparation Process: Observation, Validation, Modeling, Forecasting*, Chiba University, Chiba, Japan, 27-28 May 2025 (online).
9. Shanker, D. (2025). 20th anniversary of the December 26, 2004, Indian Ocean tsunami: A reflection on the sustainability of post-disaster measures. *XXI Blischenko Congress: International Law – A Means of Ensuring Peace and Trust*, Moscow, Russia, 12 April 2025 (online).

DR. M.L. SHARMA

10. Tyagi, A., Sharma, M.L., Gaur, C., and Gupta, R.K. (2025). Landslide susceptibility mapping and risk assessment: Zoning and building exposure analysis for Champawat District, India. *EGU General Assembly 2025*, EGU25-15243. https://doi.org/10.5194/egusphere-egu25-15243
11. Gupta, N., Sharma, M.L., Iqbal, M.A., and Tripathi, A. (2025). Dynamic strength of rock under high strain rates. *EGU General Assembly 2025*, EGU25-1033. https://doi.org/10.5194/egusphere-egu25-1033

DR. R.N. DUBEY

12. Gupta, S., Dubey, R.N., and Kumar, P.C.A. (2025). Vertical compression test of stone masonry wall with mud mortar. *Proceedings of the 14th International Conference on Structural Analysis of Historical Constructions (SAHC*), Lausanne, Switzerland. https://doi.org/10.5075/epfl.20.500.14299/258239

DR. R.S. JAKKA

13. Kuili, S., Bharti, A.K., and Jakka, R.S. (2025). Stochastic evaluation of liquefaction severity via second order reliability method. *1st Geotech Asia-2025*, GEOVADIS, 2, 185, Goa, India.
14. Das, D., and Jakka, R.S. (2025). Quarry waste as a sustainable shell material in embankment dam construction. *1st Geotech Asia-2025*, GEOVADIS, 2, 272, Goa, India.

DR. P.C. ASHWIN KUMAR

15. Nambirajan, T., Perka, A.K., Arora, K.S., Rai, V., and Kumar, P.C.A. (2025). Study on crack initiation prediction of similar and dissimilar weldments under ultra low cycle fatigue. *Engineering Mechanics Institute Conference (EMI 2025)*, Anaheim, California, USA.

DR. SAURABH.R.SHIRADHONKAR

16. Gupta, I., and Shiradhonkar, S. (2025). Pre-assessment of real-time hybrid shake table test for evaluation of seismic response of MDOF system. *NZSEE25*, Auckland, New Zealand, 8-10 April 2025.
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