### Name Dr Vikram Gupta

### Areas of Specialization

Engineering Geology, Applied Geology, Geomorphology, Natural Hazards, Landslides, Disaster Management.

### Academic Qualifications



Sr No	Degree	Subjects	Institution	Year	Division
1	B.Sc. (Hons School) in Geology	Geology (Major), Physics, Chemistry	Panjab University, Chandigarh	1987	First
2	M.Sc. (Hons School) in Geology	Geology	Panjab University, Chandigarh	1988	First
3	M.Phil. (Geology)	Geology	Panjab University, Chandigarh	1989	First with Distinction
4	Certificate Course in French language	French	University of Fribourg, Fribourg, Switzerland	1996	
5	Ph. D.	Geology	HNB Garhwal University, Srinagar -Working full time at Wadia Institute of Himalayan Geology (WIHG), Dehra Dun	1998	
6	PG Diploma in Aseismic Design and Construction (CADAC)	Seismic Hazards	University of St Cyril, Methodius, Skopje, Republic of Macedonia	2004	
7	PG Dip. in Disaster Management & Risk Analysis (CERG)	Disaster Management	University of Geneva, Geneva, Switzerland	2005	

### **Employment Chronology**

Position	Place	Perio	od
FOSITION	Flace	From	То
Geologist	Nathpa Jakhri Joint Venture, Kotla - Himachal Pradesh, India	May 2, 1995	May 20, 1996
Boursier / Post-Doctoral Fellow	Ecole Polytechnique Federale de Lausanne (EPFL), <b>Switzerland</b>	Oct. 7, 1996	Sept. 11, 1998
Post-Doctoral Fellow	University of the Western Cape, Cape Town, <b>South Africa</b>	Sept. 1998	Oct. 2000
Assistant Professor	Fatih University, Istanbul, <b>Turkey</b>	Nov. 1, 2000	Feb. 15, 2003
Scientist 'C'	Wadia Institute of Himalayan Geology, Dehra Dun (Uttarakhand)	Feb. 24, 2003	Feb. 23, 2008
Scientist 'D' and Technical Secretary (TS) to the Director (w.e.f.26.11.2011)	-do-	Feb. 24, 2008	June 15, 2013
Scientist 'E' and TS to the Director	-do-	June 16, 2013	June 15, 2018
Scientist 'F' and TS to the Director;	-do-	June 16, 2018	June 30, 2023
Scientist 'G' and TS to the Director	-do-	July 01, 2023	Till date

### **Research Indicators:-**

Award / Recognition	: National Geoscience Award - 2022 GSI Sesquicentennial Commemorative Award - 2022		
Book (edited jointly)	: 01 Annexure I		
Research Publications	: 82 Annexure I		
Technical Reports	:>40 Annexure II		
Ph.Ds. Guided International Collaboration:	<ul> <li>: 09 (Awarded)</li> <li>: 01 (Submitted)</li> <li>: 04 (Perusing)</li> <li>: 02 (completed) - Annexure IV</li> </ul>		
Externally funded Research Projects	: Annexure V		
Members Important External Committees	: Annexure VI		
Invited Lectures Delivered	: >71 Annexure VII		

### LIST OF PUBLICATIONS

**Books** One (edited) Natural Hazards (Eds: OP Varma, AK Mahajan and Vikram Gupta), Special Publication of Indian Geological Congress, 307 pp.

#### **Research Publications**

- Gupta, V., Ram, P., Tandon, R.S., Vishwakarma, N. (March 2023) Efficacy of Landslide susceptibility maps prepared using different bivariate methods: Case study from Mussoorie township, Garhwal Himalaya, Journal Geological Society of India, 99, 370-376, https://doi.org/10.1007/s12594-023-2319-8
- Sain K., Mehta, M., Kumar, V., Gupta V., and Chauhan P. (2023) A Climatic Surprise

   Slope Instability Triggered by Heavy Rain in Maldevta Region, Dehradun,
   Uttarakhand, on 20 August, 2022, Journal Geological Society of India, Priprint
- Solanki, A., Gupta V., and Joshi M. (Sept 2022 Online) Application of Machine Learning algorithms in landslide susceptibility mapping, Kali valley, Kumaun Himalaya, Geocarto International, <u>https://doi.org/10.1080/10106049.2022.2120546</u>, ISSN: 1010-6049 (IF 3.450)
- Gupta V, Sain K and Tandon RS (Oct 2022) Landslides and slope instability in Mussoorie and Nainital townships (Uttarakhand) in present climate - change scenario. Extreme Natural Events: Sustainable Solutions for Developing Countries (Eds. A.S. Unnikrishnan, F. Tangang, R.J. Durrheim), 391-411, Publisher Springer Singapore, <u>https://doi.org/10.1007/978-981-19-2511-5</u>, ISBN 978-981-19-2510-8
- Wadhawan M., Hazarika D., Paul A., Kumar, N, Gupta V, Agarwal, M. (Oct 2022) Seismic anisotropy and crustal deformation in the Satluj valley and adjoining region of Northwest Himalaya revealed by the splitting analysis of Moho converted Ps phases, Journal of Asian Earth Sciences, 238, 105377, ISSN: 18785786, (Impact Factor 3.374)
- Kumar, S., Sengupta, A., Hermanns, R., Dehls, J., hasin, RK., Penna, I., Gupta V. (2022) Probabilistic Seismic Hazard Analysis (PSHA) to Estimate the Input Ground Motions for Co-Seismic Landslide Hazard Assessment: A Case Study on Himalayan Highways, Sikkim India. Physics & Chemistry of the Earth Journal, Parts A/B/C, 127, 103157, ISSN: 14747065, (Impact Factor 2.712)
- Solanki A. and Gupta V. (August 2022) Implications of geomorphometric parameters on the landslide distribution in Kali Valley, Kumaun Himalaya, India - Catena, 215, 106313. (IF - 6.367). <u>https://doi.org/10.1016/j.catena.2022.106313</u>, ISSN 0341-8162
- Gupta V, Ram, B.K., Kumar, S., Sain, K (May 2022) A case study of the 12 July 2021 Bhagsunath (McLeod Ganj) flash flood in Dharmashala, Himachal Pradesh: A warning against constricting natural drainage. Jour Geological Society of India. 98(5), 607-610. ISSN 00167622, (Impact Factor 1.461)
- Tandon RS., Gupta, V., Venkateshwarlu, B., Joshi, P., (April 2022) An assessment of Dungale landslide using unmanned aerial vehicle, ground penetration radar and Slide & RS 2 softwares, Natural Hazards, 113, 1017-1042. <u>https://doi.org/10.1007/s11069-022-05334-7</u>, ISSN 0921-030X (Impact Factor 3.158)

- Gupta, V., Solanki, A., Jagtap, S., Joshi, M., Bhakuni, S.S. (Jan 2022) Morphostructural approach to assess landslides in the Kali river valley, NE Kumaun Himalaya, India - Environmental Earth Sciences, 81:35, (1866-6280) (IF 3.119) https://doi.org/10.1007/s12665-021-10151-5
- Gupta, V, Chauhan, N., Penna, I., Hermanns, R., Dehls J., Sengupta, A., Bhasin, R.K. (Jan 2022 Online) Geomorphic Evaluation of Landslides along the Teesta River valley, Sikkim Himalaya, India. Geological Journal (published online) 1–11. (ISSN:1099-1034). <u>https://doi.org/10.1002/gj.4377</u> (IF 2.128)
- Gupta V, Kumar S, Kaur R and Tandon RS (March 2022), Regional Scale Landslide Susceptibility Assessment for the hilly state of Uttarakhand, NW Himalaya, India. <u>Journal of Earth System Science</u>, 131(1), Article 2. ISSN 2347-4327 <u>https://doi.org/10.1007/s12040-021-01746-4 (Impact Factor 1.912)</u>
- Ram P and Gupta V (2022) Landslide Hazard, Vulnerability and Risk Assessment (HVRA), Mussoorie township, Lesser Himalaya, India - <u>Environment, Development</u> <u>and Sustainability</u>, 24, 473-501. (ISSN 1387585X) https://doi.org/10.1007/s10668-021-01449-2 (IF 3.972)
- 14. Devi M, Gupta V, Solanki A and Sarkar K (2022) Assessment of Slope instability using Kinematic analysis and Finite Element Modelling in the Main Central Thrust zone, Bhagirathi Valley, NW Himalaya. <u>Himalayan Geology</u>, 43(1A), 51-60 (ISSN 0971-8966) (Impact Factor 1.420)
- 15. Kumar S and Gupta V (2021) Evaluation of spatial probability of landslides using bivariate and multivariate approaches in the Goriganga valley, Kumaun Himalaya, India, <u>Natural Hazards</u>, 109, 2461–2488 (0921-030X) IF 3.158. <u>https://doi.org/10.1007/s11069-021-04928-x</u>
- Chauhan GS, Nainwal HC and Gupta V (2021) Geological and geotechnical studies of landslides located near Ichhari Dam Reservoir on Tons valley, Uttarakhand Himalaya. <u>Himalayan Geology</u>, 42(2), 372-381 (0971-8966) (Impact Factor 1.420)
- Gupta V, Paul A, Kumar S and Dash B (2021) Spatial distribution of Landslides visà-vis epicentral distribution of Earthquakes in the vicinity of Main Central Thrust (MCT) zone, Uttarakhand Himalaya, India - <u>Current Science</u> 201 (12), 1927-1932. (0011-3891) (IF 1.169) doi: 10.18520/cs/v120/i12/1927-1932
- Kumar V, Jamir I, Gupta V and Bhasin RK (2021) Inferring potential landslide damming using slope stability, geomorphic constraints and run-out analysis; case study from the NW Himalaya - <u>Earth Surface Dynamics</u>, 9, 351-377 (IF 4.336) (ISSN 2196-632X) https://doi.org/10.5194/esurf-9-351-2021, https://esurf.copernicus.org/articles/9/351/2021/
- 19. Kumar S, Gupta V, Kumar P and Sundriyal YP (2021) Coseismic landslide hazard assessment for the future scenario earthquakes in the Kumaun Himalaya, India. <u>Bull.</u> <u>of Engineering Geology and Environment</u>, 80, 5219-5235 <u>https://doi.org/10.1007/s10064-021-02267-6</u> (IF 4.130), (1435-9529)
- 20. Penna I, Hermanns R, Nicolet P, Morken OA, Dehls J, Gupta V and Jaboyedoff M (2021) Airblasts caused by large slope collapses. <u>GSA Bulletin</u>, 133 (5-6), 939-948 (0016-7606) <u>https://doi.org/10.1130/B35531.1</u>. (IF. 5.410)
- 21. Ramola, N., Sundriyal, YP., Puniya, MK., Gupta V. (2021) Large scale mapping and to assess active and potential landslide zones between Sonprayag to Kedarnath using

geomorphic and kinematic analysis method. <u>Himalayan Geology</u>, 42 (1), 163-174 (0971-8966) (Impact Factor 1.420)

- 22. Tandon, RS., Gupta V and Venkateshwarlu B., (March 2021) Geological, Geotechnical, and GPR investigations along the Mansa Devi hill-bypass (MDHB) Road, Uttarakhand, India. <u>Landslides</u>, 18, 849-863. ISSN 1612-510X (IF 6.153) <u>https://doi.org/10.1007/s10346-020-01546-9</u>
- Bhasin, R., Shabanimashcool, M., Hermanns, R.L., Morken, O.A., Dehls, J.F., Gupta, V. (2020) Back Analysis of Shear Strength Parameters of a Large Rock Slide in Sikkim Himalaya, <u>Journal of Rock Mechanics and Tunnelling Technology</u> (JRMTT) 26 (2) 2020 pp 81-92 ISSN 0972-0057
- 24. Ram P., Gupta, V., Devi, M., and Vishwakarma, N. (2020) Landslide susceptibility mapping using Bivariate Statistical method for the hilly township of Mussoorie and its surrounding areas, Uttarakhand Himalaya, <u>Journal of Earth System Science</u>, 129 167 (IF. 1.912) <u>https://doi.org/10.1007/s12040-020-01428-7</u> ISSN 2347-4327
- 25. Sain, K., Sharma, R., Kumar, S., Dobhal, DP. Gupta, V., Srivastava, P., Perumal RJG and Lokho, K. 2020 Research status at Wadia Institute of Himalayan Geology (WIHG), Dehradun during 2015-2019, In D.M. Banerjee & Sunil Bajpai (Ed.), <u>Proc:</u> <u>INSA</u>, 2015-2019, 86(1), 721-745. (IF 0.681) ISSN 0370-0046
- 26. Jamir, I., Gupta, V., Thong, G.T. and Kumar, V., (2019). Litho-tectonic and precipitation implications on landslides, Yamuna valley, NW Himalaya. Lithotectonic and precipitation implications on landslides, Yamuna valley, NW Himalaya 41(4), 365-388. (IF. 2.075) ISSN - 0272-3646
- 27. Solanki A., Gupta, V., Bhakuni S.S., Ram P., & Joshi, M. (2019) Geological and geotechnical characterization of the Khotila landslide in Dharchula Region, NE Kumaun Himalaya. <u>Journal of Earth System Science</u>, 128.86 ISSN 2347-4327 (IF. 1.104)
- Kumar, V., Gupta V. Jamir, I. & Chattoraj S.L. (2019) Evaluation of Potential Landslide Damming; Case study of Urni landslide, Kinnaur, Satluj valley, India. <u>Geoscience Frontiers</u> 10(2), 753-767 (1674-9871) IF 7.483
- 29. Kumar V., Gupta V, and Sundriyal Y.P. (2019) Spatial interrelationship of landslides, litho-tectonic, and climate regime, Satluj valley, Northwest Himalaya. Geological Journal 54(1), 537-551 (1099-1034) IF 2.128
- Kumar V., Gupta, V. and Jamir I. (2018) Hazard Evaluation of Progressive Pawari Landslide Zone, Satluj Valley, Higher Himalaya, India. <u>Natural Hazards</u> 93 (2), 1029-1047 (0921-030X) IF 3.158
- 31. Chauhan, G.S., Nainwal H.C., Vikram Gupta (2017) Stability analysis of rock cut slopes along the Minas road between Ichhari Dam and Minas Bridge, Tons valley, Garhwal Himalaya. <u>Himalayan Geology</u>, 39(1), 68-84 (0971-8966) IF 0.410
- Jamir I., Gupta V., Kumar V. and Thong, G.T (2018) Evaluation of Potential Surface Instability in Kharsali Village, Yamuna Valley, NW Himalaya. <u>Journal of Mountain</u> <u>Science</u>, 14(8), 1666-1676 (1672-6316) IF. 2.371
- 33. Gupta, V., Jamir, I., Kumar, V., and Devi, M., (2017) Geomechanical characterisation of slopes for assessing rockfall hazards between Janki Chatti and Yamunotri Temple, Yamuna valley, Higher Himalaya, India <u>Himalayan Geology</u>, 38(2), 156-170 (0971-8966) IF 0.420

- Vikram Gupta, Tandon R.S., Venkateshwarlu, B., Bhasin, R.K., and Kaynia A.M., (2017) Accelerated mass movement activities due to increased rainfall in the Nainital township, Kumaun Lesser Himalaya, India. <u>Zeitschrift fur Geomorphologies</u>, 61 (1), 29-42. (0372-8854) IF 1.573
- 35. Monika Wadhawan, Devajit Hazarika, Arpita Paul, Naresh Kumar, S.S. Thakur, Vikram Gupta (2017) Crustal thickness and Poisson's ratio variation in the Satluj valley, Northwest Himalaya. <u>Himalayan Geology</u>, 38(1), 38-48 (0971-8966) IF 1.420
- 36. Vikram Gupta, Rajinder Bhasin, A.M. Kaynia, Vipin Kumar, A.S. Saini, R.S. Tandon, Thomas Pabst (2016) Finite Element Analysis of failed slope by Shear Strength Reduction technique: a case study for Surabhi Resort Landslide, Mussoorie township, Garhwal Himalaya. <u>Geomatics, Natural Hazards and Risk</u>, 7(5), 1677-1690. (1947-5705) IF 3.922
- 37. Vikram Gupta, Hemlata Nautiyal and Vipin Kumar, Imlirenla Jamir and Ruchika S. Tandon (2016) Landslide hazards around Uttarkashi township, Garhwal Himalaya after the tragic flash flood in June 2013. <u>Natural Hazards</u>, 80 (3), 1689-1707 (0921-030X) IF 3.158
- Vikram Gupta, Rajinder Bhasin, Amir Kaynia, Ruchika Sharma Tandon and B. Venkateshwarlu (2016) Landslide Hazard in the Nainital township, Kumaun Himalaya, India - the case of Sept 2014 Balia Nala landslide. <u>Natural Hazards</u>, 80 (2), 863–877. (0921-030X) IF 3.158
- 39. Ruchika Sharma Tandon, Vikram Gupta and Kaushik Sen (2015) Seismic properties of naturally deformed quartzites of the Alaknanda valley, Garhwal Himalaya, India. Journal of Earth System Science, 124 (6), 1159-1175 (2347-4327) IF 1.912
- 40. Ruchika Sharma Tandon and Vikram Gupta (2015) Estimation of strength characteristics of different Himalayan rocks from Schmidt hammer rebound, point load index and compressional wave velocity. <u>Bull. of Engineering Geology and Environment</u>, 74(2), 521-533, (1435-9529) IF 4.112
- 41. Vikram Gupta and Ruchika Sharma (2015) Kinematic Rockfall Hazard Assessment along a Transportation Corridor in the Upper Alaknanda valley, Garhwal Himalaya, India, <u>Bull of Engineering Geology and Environment</u>, 74 (2), 315–326, (1435-9529) IF 4.112
- Vikram Gupta, A.K. Mahajan and V.C. Thakur (2015) A study on landslides triggered during Sikkim Earthquake of September 18, 2011. <u>Himalayan Geology</u>, 36 (1), 81-90. (0971-8966) IF 1.420
- Vikram Gupta, S.C. Vaideswaran and D.P. Dobhal (2014) Colonization delay of *Rhizocarpon georaphicum*: Study from the Gangotri Glacier, Northwestern Himalaya, <u>Geol. Soc. of India</u>, 84 (3), 335 – 340 (0016-7622) IF 1.466
- 44. Gupta, Vikram, Asthana, A.K.L. and Mazari, R.K. (2013) Slope instability and risk assessment of the Mansa Devi Hills near Haridwar Township, Uttarakhand. <u>International Journal of Fundamental & Applied Research</u>, (2320-7973) Vol.-1 Issue-1 pp 37-47.(IF 1.335)
- 45. Saini J.S., Maheshwari B.K. and Gupta Vikram (2013), "Effect of Joint Strength Parameters on Stability of Rock Slopes", <u>Proc. of Indian Geotechnical Conference</u> (IGC-2013) held at IIT Roorkee, during 22 -24 December 2013

- 46. Vikram Gupta, D.P. Dobhal and S.C. Vaideswaran (2013) August 2012 cloudburst and subsequent flash flood in the Asi Ganga, a tributary of the Bhagirathi river, Garhwal Himalaya, India, <u>Current Science</u>, 105(2), 249-253 (0011-3891) IF 1.102
- 47. Ruchika Sharma and Vikram Gupta (2013) The control of mineral constituents and textural characteristics on the Petrophysical & Mechanical (PM) properties of different rocks of the Himalaya. <u>Engineering Geology</u>, 153, 125-143 (0013-7952) IF 6.902
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- A.K. Mahajan, Vikram Gupta and V.C. Thakur (2012) Macroseismic Field Observations of September 18<sup>th</sup> 2011 Sikkim Earthquake, <u>Natural Hazards</u>, 63, 589-603. (0921-030X) IF 3.158
- VC Thakur, A.K. Mahajan and Vikram Gupta (2012) Seismotectonics of 18 September 2011 Sikkim earthquake: a component of transcurrent deformation in eastern Himalaya. <u>Himalayan Geology</u>, 33(2), 89-96 (0971-8966) IF 1.420
- 51. Vikram Gupta, R.K. Mazari and Piyoosh Rautela (2011) Engineering Geological Characterization of a landslide on the slope of Mansa Devi Hill near Haridwar, Uttarakhand: In Slope Stability (Natural and Man made) Eds: T.N. Singh and Y.C. Sharma, Publishers Vayu Education of India, New Delhi. pp. 282 - 297
- 52. Ruchika Sharma, Vikram Gupta, B.R. Arora and K. Sen (2011) Petrophysical Properties of the Himalayan Granitoids: Implication on Composition and Source. <u>Tectonophysics</u> 497, 23-33. (0040-1951) IF 3.66
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- 56. Vikram Gupta & M.P. Sah (2010) Field Assessment of Surface Hardness of Rocks using Schmidt Hammer as a Function of Elevation: Study form Satluj Valley, Northwestern Higher Himalaya, India <u>International Journal of Geotechnics and</u> <u>Environment</u>, 2(2), 171-179. (0975-4822)
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- 60. Shipra Choudhry, Vikram Gupta and Y. P. Sundriyal (**2010**) Surface and Sub-Surface Characterization of the Byung Landslide in Mandakini Valley, Garhwal Himalaya, <u>Himalayan Geology</u>, 31 (2), 125 132. (0971-8966) IF 1.420
- 61. Vikram Gupta and R.K. Mazari (**2010**) Slope Stability study of the proposed Madhyamaheshwar Small Hydropower Project (MSHP), District Rudraprayag, Uttarakhand. <u>Indian Landslides</u>, 3 (1), 17-24.
- 62. Vikram Gupta, Ruchika Sharma and M. P. Sah (**2009**) An evaluation of surface hardness of natural and modified rocks using Schmidt hammer: Study from Northwestern Himalaya, India. <u>Geografiska Annaler</u>, 91A(3), 179-188. (1468-0459) Impact Factor 1.881
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- 66. Vikram Gupta and M. P. Sah (**2008**) Formation and breaching of landslide dams and related aspects: Documented examples from the Himalaya. In *Landslide Management* : *Present Scenario and Future Directions* (edited by A. Ghosh, S. Sarkar and D.P. Kanungo), NIDM Publisher, New Delhi, pp. 77-86.
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- 70. Vikram Gupta, K. S. Bist, Bhagwat Sharma and A. K. L. Asthana (2007) Varunavat Landslide in the Bhagirathi Valley, Garhwal Himalaya: Its Causes and Risk assessment In: Natural Hazards (Eds: OP Varma, AK Mahajan and Vikram Gupta), Special Publication of Indian Geological Congress, 97-111
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- 74. Vikram Gupta (2005) The relationship between tectonic stresses, joint patterns and landslides in the higher Indian Himalaya, <u>Journal of Nepal Geological Society</u>, 31, 51-58 (0259-1316)
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- 82. Vikram Gupta, M. P. Sah, N. S. Virdi & S. K. Bartarya (1993) Landslide Hazard Zonation in the Upper Satluj Valley, District Kinnaur, Himachal Pradesh. <u>Journal of</u> <u>Himalayan Geology</u>, Vol.4 (1), pp. 81 – 91. (0971-8966) IF 1.420

# Annexure II

# Technical Reports / Consultancy

Sr No	Authors	Years	Title	Submitted to -
1	Vikram Gupta	July 2023	Geological Feasibility Report - Thana Plaun Hydro-Electric (HE) Project, Beas River, Mandi district, Himachal Pradesh	Himachal Pradesh Power Corporation Limited (HPPCL), Govt of Himachal Pradesh.
2	Vikram Gupta and Gautam Rawat	July 2022	Geological report – Sinking zone on the Nyu Sobla- Sela Tedang road sector, Dharchula, Uttarakhand	Central Public Works Department, Govt of India
3	Vikram Gupta	Oct 2022	Geological Hill slope stability analysis for the IPS II site under Mussoorie Reorganization Water supply Scheme	Uttarakhand Peyjal Nigam, Mussoorrie, Dehardun
4	Vikram Gupta	Oct 2022	Vertting of the Geological Chapter of the Detailed Project Report – Balia Nala stabilization, landslide Nainital	Genstru Consultant Pvt Ltd
5	Vikram Gupta	Sept 2022	Vertting of the Geological Chapter of the Detailed Project Report for the Khairna Barrage Drinking Water Project	Convolution Engineering on behalf of the Irrigation Research Institute, Roorkee
6	Vikram Gupta	July 2022	Mitigation measure of landslides in the Ramganga dam Project site	Irrigation and Water Resource Department, Govt of Uttar Pradesh
7	Vikram Gupta and Gautam Rawat	April 2022	Surface Geological characterization and Resistivity Survey investigation along the proposed Jamrani irrigation Canal in the Gola river	Uttarakhand Peyjal Nigam, Haldwani (Uttarakhand)
8	Vikram Gupta and others Member Expert Committee	2017	Carrying capacity of the Shimla township, Himachal Pradesh	Hon'ble National Green Tribunal (NGT), New Delhi
9	Vikram Gupta and others Member Expert Committee	2017	Carrying capacity of the Shimla township, Himachal Pradesh"	Hon'ble National Green Tribunal (NGT), New Delhi
10	Vikram Gupta and others Member Expert Committee	2016	Recommendations of the construction activities between Kedernath and Rambara region	Department of Disaster Management, Govt of Uttarakhand
11	Vikram Gupta, S.S. Bhakuni and B. Venkateshwarlu)	August 2016	GPR Study and the Engineering Geological Mapping of the Jakhri	Central Scientific and Instruments Organization (CSIO),

			Landslide, Satluj Valley, Himachal Pradesh,	Chandigarh,
12	Vikram Gupta and others Member Expert Committee		An Interim Draft Report on the feasibility of allowing construction in the Green Areas of Shimla	Hon'ble National Green Tribunal (NGT), New Delhi
13	Vikram Gupta and others (Member of Expert Team)	2015	Landslide Assessment and Technical support to Nepal after the Napal Earthquake	National Disaster Management Authority (NDMA), New Delhi.
14	Vikram Gupta and others Member - Joint Expert Committee		Collateral damages on the selected rim area villages due to the filling and drawdown of the Tehri Reservoir	THDC, New Tehri
15	Vikram Gupta	2017	Final Report on the "International Symposium on Tackling the Challenge of Slope Stabilization and Landslide Prevention"	World Bank published by the GoUK
16	Vikram Gupta	Oct 2014	Pre-Feasibility study for the construction of Tunnels at Shinkhun La, Baralacha La, Tanglang La and Lachung La Report A: Shinkhun La	Border Road Organization (BRO)
17	Vikram Gupta and others Member - Joint Expert Committee	Sept 2014	Report on collateral damages In villages namely Kangsali, Chanti, Ghandyalki, Motana, Siyansu due to the Tehri reservoir & shops near zero bridge & village Mehar due to Koteshwar reservoir	THDC, New Tehri
18	Vikram Gupta and others Member -Joint Expert Committee	2014,	Report on the Collateral damages on the selected Rim area villages due to the Tehri Dam reservoir	THDC, New Tehri
19	Rawat BS and Vikram Gupta	March 2014	Preliminary Geological - Geotechnical site investigation report for the area around Jharipani Toll, Mussoorie, Dehra Dun	MDDA, Dehra Dun
20	Vikram Gupta and others Member - Joint Expert Committee		Collateral damages on the selected Rim area villages due to the Koteshwar reservoir	THDC, New Tehri
21	Rawat BS and Vikram Gupta	May 2013	Preliminary Geological – Geotechnical site investigation report for Dhakpatti, Rajpur, Dehra Dun,	MDDA, Dehradun
22	S.K. Bartarya and	Januar2013	Mass movement activities	PWD, GoUK

	Vikram Gupta		affecting Vasant Vihar Colony and Sports Stadium in Gopeshwar township, district Chamoli, Uttarakhand	
23	Rohtash Kumar, S.K. Ghosh and Vikram Gupta	January 2011	Geological report on Mapping of the Kolodyne Stage II, HEP – (4 x 115 MW), Distt. Lawngtlai, Mizoram	NTPC, Noida
24	M.P. Sah and Vikram Gupta	September 2010	Landslide investigation on Tachla – Naur Motor Marg (NH-94, Km stone-39), Tehri district, Garhwal Uttarakhand	PWD, GoUK
25	Vikram Gupta	February 2010	Project Completion Report - Rock Properties Laboratory - A National Facility	Department of Science and Technology, Govt. of India
26	M.P. Sah, Vikram Gupta and Ajay Pal	November 2009	Development of cracks in Tarsali and adjoining villages during excavation of Phata-Byung HEP, Rudraprayag district, Uttarakhand	District Magistrate, GoUK
27	M.P. Sah and Vikram Gupta	August 2009	Geological feasibility report on parking sites in the Mussoorie township, district Dehra Dun, Uttarakhand,	Mussoorie Dehradun Development Authority (MDDA), Dehradun
28	Vikram Gupta and A.K.L. Asthana	March 2009	Geological report on a part of the Lakhsyari – Ludhera – Kyari - Kachta Motor Marg and the Rani Gaon Link Road district Dehra Dun, Uttarakhand submitted to PWD, Sahiya (Kalsi)	PWD, GoUK
29	Vikram Gupta and A.K.L. Asthana	December 2008	Report on the Kangsali and Vallambitta Landslides on Motna - Madan Negi Motor Marg, New Tehri, Uttarakhand submitted to PWD, New Tehri, Borari	PWD, GoUK
30	R.K. Mazari, K.S. Bist and Vikram Gupta	August 2008	Geological Investigation of open channel section of Madhyamaheshwar Small Hydro Project, District Rudraprayag, Uttarakhand.	Uttarakhand Jal Vidyu Nigan Ltd. (UJVNL), Dehra Dun
31	M.P.Sah and Vikram Gupta	August 2008	Geological Feasibility of a Site for the proposed residential house at Chaman Estate, Mussoorie	Mussoorie Dehradun Development Authority (MDDA), Dehradun
32	M.P.Sah and Vikram	July 2008	Geological Feasibility of	Department of

	Gupta		Rambara Hydroelectric Project (RHEP), Wadia Institute of Himalayan Geology Technical report	Energy, GoUK, Dehra dun
33	N.S. Virdi and Vikram Gupta	January 2008	Excursion Guide 'Hydel Projects in the Yamuna and Tons valleys, Dehra Dun'	Publication of the Panjab University, Chandigarh,
34	R.K. Mazari,, M.P. Sah and Vikram Gupta	May 2007	Report on the relative slope stability in Mussoorie Muncipal Area, District Dehra Dun,	Mussoorie Dehra Dun Development Authority (MDDA) Dehra Dun
35	M. P. Sah and Vikram Gupta	July 2007	Geological Feasibility of a Site for the proposed residential house at Radha Bhawan Estate, New Circular Road, Mussoorie	Mussoorie Dehra Dun Development Authority (MDDA) Dehra Dun
36	M. P. Sah and Vikram Gupta	July 2007	Geological Feasibility of a Site for the proposed residential house at Radha Bhawan Estate, New Circular Road, Mussoorie	Mussoorie Dehra Dun Development Authority (MDDA) Dehra Dun
37	Vikram Gupta and S.S. Bhakuni	July 2007	Stabilization of cut slope at 132 kV Sub-Station, Satpuli (Pauri Garhwal),	Uttarakhand Power Transmission Corporation, Dehra Dun
38	M. P. Sah and Vikram Gupta	March 2007	Geological Feasibility of a Site for the proposed residential house at Radha Bhawan Estate, New Circular Road, Mussoorie	Mussoorie Dehra Dun Development Authority (MDDA) Dehra Dun
39	M. P. Sah and Vikram Gupta	March 2007	Geological Feasibility of a Site for the proposed residential house at Radha Bhawan Estate, New Circular Road, Mussoorie	Mussoorie Dehra Dun Development Authority (MDDA) Dehra Dun
40	M. P. Sah and Vikram Gupta	2006	Report on the Chronic Landslides in Karanprayag and its Environs	PWD Karanprayag, District Chamoli, Uttaranchal, 12 pages and 8 figures.
41	Vikram Gupta and M. P. Sah	2006	Geological Feasibility Report for the proposed Himalayan Yoga Meditation Center at Srinagar Estate Mussoorie.	
42	M. P. Sah and Vikram Gupta	2006	Geological Feasibility Report for the extension of Takle Road in the premises of the Indira Gandhi National Forest Academy (IGNFA), Dehra Dun,	Indira Gandhi National Forest Academy (IGNFA), Dehra Dun

#### Ph.D. theses supervised

Sr No	Name	Supervisors	Title of thesis	University	Status	Present Position
1	Ruchika Sharma	Vikram Gupta (WIHG), Prof. YP Sundriyal (HNB Garhwal University), Srinagar	An integrated study of physical, mechanical and acoustic properties of rocks of the Bhagirathi and Alaknanda valleys and their inter-relationship	H.N.B. Garhwal University, Srinagar	Awarded 2012	Sr. Geologist, Uttarakhand Govt, Dehradun
2	Monika Wadhawan	Devajit Hazarika (WIHG), Vikram Gupta (WIHG) and Mandira Agarwal (UPES)	Shear wave velocity and Crustal structure along Satluj valley, Northwest Himalaya	University of Petroleum and Energy Studies (UPES), Dehradun	Awarded 2018	Scientist, National Center for Seismology, (MoES), New Delhi
3	Vipin Kumar	Vikram Gupta (WIHG), Prof. YP Sundriyal (HNB Garhwal University), Srinagar	Landslide susceptibility Zonation and slope stability analyses between mooring and Rampur, Satluj valley, Himachal Pradesh	H.N.B. Garhwal University, Srinagar	Awarded 2019	Asst Prof. Doon University. Dehradun
4	Imlirenla Jamir	Vikram Gupta (WIHG), Prof G.T. Thong (Nagaland University, Kohima)	Slope stability analyses in part of the Yamuna valley, Garhwal Himalaya	Nagaland University, Kohima	Awarded 2019	Scientist, National Geophy Res. Inst. (NGRI), Hyderabad
5	GS Chauhan	Prof. HC Nainwal (HNB GU) and Vikram Gupta (WIHG)	Study of Landslides between Ichhari Dam Site & Atal along Tons River Valley, Uttarakhand Him.	H.N.B. Garhwal University, Srinagar	Awarded 2020	Guest Faculty –
6	Neeraj Ramola	Prof. YP Sundriral (HNB GU) and Vikram Gupta	Large scale Engineering Geol. & Geotech. mapping of Kali Ganga and Mandakini valley	H.N.B. Garhwal University, Srinagar	Awarded 2020	Guest Faculty –
7	Meenakshi Devi	Vikram Gupta (WIHG) and Dr K Sarkar (IIT ISM Dhanbad)	Landslide hazard zonation in the Bhagiratji valley, Garhwal Himalaya	IIT - ISM Dhanbad	Awarded Aug. 2022	Guest Faculty –
8	Sandeep Kumar	Vikram Gupta (WIHG), Prof. YP Sundriyal (HNB Garhwal University), Srinagar	Role of lithology in landslide distribution and dynamic slope stability analysis of active landslides in Goriganga river valley, Uttarakhand, India	H.N.B. Garhwal University, Srinagar	Awarded Nov 2022	Project Scientist – HNB Garhwal University, Srinagar
9	Pratap Ram	Vikram Gupta (WIHG), Dr Neeraj Vishwakarma (NIT Raipur)	Landslide hazard, Risk & Vulnerability Ass of the Mussoorie and Nainital township, NW Himalaya	National Institute of Technology, Raipur	Awarded Dec 2022	Geologist, Rajasthan PWD
10	Ambar Solanki	Vikram Gupta (WIHG), Prof. M. Joshi (BHU Varanasi)	Geomorphic control of landslides in the Kali valley. Kumaun Himalaya	Banaras Hindu University, Varanasi	Submitted – Feb 2023	

Continuing - for their Ph.D.s

- 1. Ms Ramandeep Kaur jointly with Prof. B.S. Choudhury (KU Kurukshetra)
- 2. Sh Mohd Sawej (Registered in ACSiR, Ghaziabad)
- 3. Sh Anand Kumar Gupta (Registered in ACSiR, Ghaziabad)
- 4. Ms Priya Maurya (Registered in ACSiR, Ghaziabad)

## Annexure IV

# International Collaboration

Sr No	Collaborators	Project	Status
1	<ul> <li>Dr Reginald L. Hermanns and Dr John F. Dehls)</li> <li>Geological Survey of Norway (NGU) - Trondheim</li> <li>Dr R.K. Bhasin Norwegian Geotechnical Institute-(NGI)</li> <li>- Oslo</li> <li>Prof. Aniruddha Sengupta Indian Institute of Technology - Kharagpur</li> <li>Dr Vikram Gupta Wadia Institute of Himalayan Geology - Dehradun</li> </ul>	Landslide hazard assessment in NE India along the Gangtok- Tsomgo/Changu Lake and Gangtok- Chungthang-Lachen corridors	Completed
2	Dr Dominik Lang (NORSAR Norway) Dr. Amir M. Kaynia (NGI Norway) Dr. Rajinder K. Bhasin (NGI Norway) Prof. B.K. Maheshwari (IIT Roorkee Dr. Vikram Gupta (WIHG Dehardun)	Earthquake Hazard and Risk Reduction on the Indian Subcontinent (Chapter on Mass Movement)	Completed

## Annexure V

# Externally Funded (Extra Murals) Projects

Sr No	Title of the Projects	Role and Duration	Funding from and amount	Status
1	Rock Properties Laboratory – A National Facility	Co-PI 07.04.2005 – 31.01.2009	DST ~ 17 Lakh	Completed
2	Earthquake hazard and risk reduction in the Indian subcontinent (RRISC)	Coordinator 19.04.2012 – 18.04.2017	Govt of Norway ~ 50 Lakhs	Completed
3	Damage assessment mapping of Yamunotri valley with special reference to extreme rainfall events of the June 2013, Uttarakhand	Coordinator 26/09/2013 – 31/12/2014	DST 25 Lakhs	Completed
4	Damage assessment mapping of Bhagirathi valley with special reference to extreme rainfall events of the June 2013, Uttarakhand	Member 26/09/2013 – 31/12/2014	DST 25 Lakhs	Completed
5	Geotechnical characterization of soil / rocks with special reference to active landslides in the Mandakini valley, Garhwal Himalaya	PI 23/04/2015 – 22/04/2017	DST ~21 Lakhs	Completed
6	Status of geo-resources and impact assessment of geological (exogenic) processes in NW Himalayan Ecosystem under National Mission for Sustaining the Himalayan Ecosystem (NMSHE) -	Co-PI 03/06/2016 – 02/06/2021	DST > 10 Crore	Completed
7	Landslide Hazard Assessment in NE India along the Gangtok-Tsomgo / Changu Lake and Gangtok – Chungthang – Lachen Corridor	Co-PI 24/05/2017 – 23/05/2021	MoES >1 Crore	Completed

## Annexure VI

# Members External Committees (Important only)

Role	Committee	Purpose
Member	Expert Committee	Constituted by the Hon'ble National Green Tribunal (NGT) to understand the carrying Capacity in Mussoorie (Uttarakhand)
Member	High Power Committee	Constituted by the Supreme Court of India to look into the Environmental degradation due to the Char Dhan Yatra Project - continuing
Member	Expert Committee	Constituted by the Ministry of Environment, Forest and Climate Change to formulate the guidelines for muck disposal in hilly areas of Uttrakhand and Himachal Pradesh - continuing
Member	Expert Committee	Constituted by the Hon'ble National Green Tribunal (NGT) to understand the carrying Capacity and construction related activities in Shimla
Member	Special Expert Committee	Constituted by the Hon'ble National Green Tribunal (NGT) regarding construction related activities in Kasauli
Member	Oversight Committee	Constituted by Hon'ble National Green Tribunal (NGT)
Member	Committee of Experts	Constituted by Hon'ble National Green Tribunal (NGT) to advise Amarnath Shrine Board on environmental degradation
Member	Working Committee of Experts	Constituted by National Disaster Management Authority (NDMA), New Delhi for the upgradation of landslide hazard map of India
Member	School Board of Earth Sciences	Constituted by Hon'ble Vice Chancellor, HNB Garhwal University, Srinagar

## Annexure VII

### **Invited Lectures delivered**

Sr No	Date	Title	Venue
1	02.06.2023	Landslide hazard in the present climate change scenario in Kinnaur district of Himachal Pradesh	Indian Institute of Engineers, HP Chapter, Shimla
2	08.05.2023	Landslide and its mitigation measures	Indian Academy of Highway Engineering (IAHE), Noida
3	05.04.2023	Landslides and related hazards in the Himalayan hilly townships	Administrative Training Institute, Nainital – conclave on urbanization and development in fragile mountain ecosystem
4	24.02.2023	Promoting ecofriendly tourism models and sustainable structures for mountain tourist destinations rather than emulating multi-storied concrete structures – regulations thereof: in the one day workshop on 'Disaster Resilience in Mountains: Need for Capacity Building'	Administrative Training Institute, Nainital
5	09.02.2023	Landslide and related hazards in the present climate change scenario in the Himalaya: a way forward for sustainable development	Doon University, Dehradun
6	16.11.2022	Landslide and related hazards in the present climate change scenario in the Himalaya: a way forward for sustainable development	3rd Triennial Congress of Federation of Indian Geosciences Association on Geosciences of Himalaya for Sustainable Development at WIHG, Dehradun
7	02.11.2022	Landslide Hazards, risk and their mitigation measures in the Himalaya	National Conference on Landslide Risk Assessment and Mitigation in India – Jamia Milia Islamia University, New Delhi
8	19.07.2022	Landslide Hazard Assessment and Modelling	Online – Refresher course in Geography - Jawaharlal Nehru University, New Delhi
9	10.06.2022	An overview of Landslide Hazard in the Himalaya in the present climate change scenario	6 <sup>th</sup> National Geo Research Scholars Meet (NGRSM) at University of Ladakh, Leh
10	01.06.2022	Landslide Hazard in the Himalaya: Characterization and Assessment	Webinar on the possibility of "Indo-

			Norwegian Collaboration on Geo- Hazards and geo-resources in the Himalaya" on June 01, 2022 where three scientists from WIHG and three representatives from NTNU, University of Oslo presented their work
11	07.02.2022	Increased incidences of landslides in the Himalaya: way forward to mitigate their impact	(Invited lecture) - A brief session on changing climate, seismicity and potential disater, Uttarakhand Himalaya, India organised byy HNB Garhwal University, Srinagar (Uttarakhand)
12	30.12. 2021	Landslide hazards in the present climate change scenario and their mitigation strategies	(Webinar) - Indian Academy of Highway Engineering, Noida
13	18.12.2021	Landslide Hazards in the present climate change scenario in the Himalaya	Regional Conference on 'Secure Himalaya and Safe India' at Shimla
14	25.11.2021	Landslides vis-à-vis development in the Himalaya	Seminar on 'Infra Development in Middle Sector' Army Cantonment, Dehradun
15	09.09.2021	Landslide Hazard in the Himalaya - Himalayan Diwas	Wadia Institute of Himalayan Geology, Dehradun
16	24.08.2021	Landslide Hazard in the present day changing climatic scenario in the Himalaya	(Webinar) - Indian Academy of Highway Engineering, Noida
17	21.08.2021	Career opportunities in Geosciences	(Webinar) - Graphic Era Hill University, Dehradun
18	23.03.2021	Landslide hazard assessment in NE India – Sikkim Himalaya along the Gangtok- Tsomgo/Changu Lake and Gangtok-Chungthang-Lachen corridors	(Webinar) -
19	18.12.2020	Landslide Hazards Assessment and Mitigation' in the training program on Training Program on 'Landslides Risks Reduction and Resilience'	(Webinar) - National Institute of Disaster Management, New Delhi
20	10.12.2020	Landslide Hazards:-Landslide Disaster Risk Reduction (L-DRR) Strategy and Impact of climate change in the Himalaya	(Webinar) - Kurukshetra University, Kurukshetra (Refresher Course on 'Earth System Sciences for Mitigating Disaster and

			climate Change')
21	20.11.2020	Landslides in the Himalaya and impact of climate change in the International Webinar on 'Natural Hazard and Management'	(Webinar) - Bundelkhand University, Jhansi, Institute of Geology, Petrozavodsk, Russia and Govt Degree College Almora.
22	09.11.2020	Recent Examples of Landslides in the Himalaya and impact on climate change	(Webinar) - National Institute of Disaster Management, New Delhi on 'Climate Resilient Development with special reference to Landslide'
23	09.10.2020	Landslide Disaster Risk Reduction (L-DRR) Strategy: Some fundamental concepts	(Webinar) - Wadia Institute of Himalayan Geology, Dehradun - 'Himalayan Day'
24	24.06.2020	Landslides research - the recent trends	(Webinar) - Wadia Institute of Himalayan Geology, Dehradun - National Geo-Research Scholars Meet
25	12.06.2019	'An overview of landslide hazards in the Himalaya'	NGU Trondheim, Norway
26	21.11.2019	Landslides: the Indian scenarios - Invited Lectures in the Satellite Seminar on "Western Ghat and Dam Management"	National Centre for Earth System Sciences (NCESS), Thiruvananthapuram, Kerala
27	27.09.2019	Landslide vis-à-vis Climate Change in the Himalaya - Invited Lectures CAP-RES- 22 Int Symposium on Disaster Resilience and Green Growth for Sustainable Development	National Institute of Disaster Management, New Delhi
28	09.08.2019	Landslide Hazards and their mitigation measures in the Himalaya	Indian Academy of Highway Engineering (IAHE), Noida
29	10.01.2019	Landslide hazards in the Garhwal Himalaya" - Invited Lectures	National Centre for Earth System Sciences (NCESS), Thiruvananthapuram, Kerala
30	31.01.2019	Landslide Hazards in the Himalaya and its possible mitigation measures"	Indian Academy of Highway Engineering (IAHE), Noida
31	24.09.2018	'An overview of landslides in the Garhwal Himalaya' in a seminar "use of technology for reducing landslide induced losses" - Invited Lectures	Disaster Mitigation and Management Centre (DMMC), Dehradun, Govt. of Uttarakhand
32	17.01.2018	Series of lectures on the various aspects of landslides and mass movement in the Himalaya	Indian Academy of Highway Engineering (IAHE), Noida
33	05.01.2018	Series of lectures on the various aspects of landslides and mass movement in the	Indian Academy of Highway Engineering

		Himalaya	(IAHE), Noida
34	29.12.2017	Mineral constituents of different rocks" to the probationers of Indian Forest Services	Indira Gandhi Forest National Academy (IGFNA), Dehradun
35	27.12.2017	The mighty Himalaya: source of natural resources and disasters" - to the probationers of Indian Forest Services	Indira Gandhi Forest National Academy (IGFNA), Dehradun
36	26.10.2017	Various aspects of Landslide hazards in the Himalayan terrain" - to the delegates of joint Indian Academy of Highway Engineers (IAHE) Noida and Japan International Cooperation Agency (JICA), Japan	Wadia Institute of Himalayan Geology (WIHG), Dehradun
37	28.04.2016	Landslide problems in the North-western Himalaya" - Kick off meeting of the of the Indo-Norwegian Project on Hazard Assessment in the Garhwal Himalaya	National Geotechnical Facility, Dehradun
38	12.03.2016	Series of lectures on the "Various Geotechnical issues and Engineering Geology"	University of Petroleum of Energy Studies (UPES), Dehra Dun.
39	02.12.2015	"Landslide Hazard scenarios in the hilly township of Mussoorie and Nainital, Uttarakhand Himalaya"	India Habitat Center, New Delhi
40	03.07.2015	General hazard scenario in the Indian Himalaya" - Scientific exchange workshop on Vulnerability, Risk and Hazards and adaptation: Indian Himalayan region	New Delhi.
41	18.06.2015	(i) Landslide and various Geotechnical issues in the Himalaya and (ii) Geotechnical issues for landslide mitigation in the Himalaya to the officers of the Geological Survey of India (GSI)	NGF, Dehra Dun.
42	29.04.2015	Towards establishing rainfall threshold for the Uttarakhand Himalaya" - International symposium on "Tackling the challenge of slope stabilization and Landslide Prevention"	Civil Service Institute, Dehra Dun
43	24.04.2015	'Surabhi Landslide - revisited' - Indo-Norwegian bilateral Project Meeting	NGF Dehra Dun.
44	17.12.2014	Series of lectures on rock mechanics and landslide studies in the Himalaya	University of Petroleum of Energy Studies (UPES), Dehra Dun
45	10.12.2014	Geological and geomorphological set up along with associated hazards of the Uttarakhand Himalaya	Office Sena Nayak SDRF Vahini, Haridwar
46	09.12.2014	Mitigation of landslide hazards in India" - Indo-Norwegian Joint Committee on Science and Technology "DST-NGI (ICG) Institutional co-operation program.	Wadia Institute of Himalayan Geology (WIHG), Dehradun
47	03.12.2014	Landslide disasters in the Himalayan region with special reference to the 2013 Uttarakhand disaster" - Regional meeting under Asian Programme for Regional	ADPC, Bangkok, Thailand

		Capacity enhancement for landslide impact mitigation (RECLAIM) at Bangkok, Thailand	
48	10.11.2014	Geotechnical properties of rocks and soil vis-à-vis landslides" - Geotechnical Orientation Programme (Indian Society of Engineering Geology, the National Group of the International Association of Engineering Geology and Environment (IAEG))	National Geotechnical Facility, Dehra Dun
49	19.09.2014	Application of Engineering Geology for tunnelling - for the Senior level Officers of the Border Road Organization	Wadia Institute of Himalayan Geology (WIHG), Dehradun
50	08.07.2014	Landslide factors, causes and their management in the Himalaya" - training programme on "Forestry in Landslide Risk Management"	Forest Research Institute (FRI), Dehra Dun
51	07.06.2014	Landslide Hazards and related issues in Uttarakhand Himalaya" - Conference on Indian Building Code	Forest Research Institute (FRI), Dehra Dun
52	30.04.2014	Slope Stabilization using facilities developed at National Geotechnical Facility" - for the officials of the GoUK, Dehra Dun	National Geotechnical Facility, Dehra Dun
53	16.12.2013	Geological Disaster in the Himalayan regions and their mitigation	Oil and Natural gas Commissions (ONGC), Dehradun
54	17.09.2013	Various Engineering Geological issues in the Himalayan terrain	National Security Council (NSC), New Delhi
55	18.10.2012	Landslides as a primary and secondary hazards in the Himalaya	WIHG, Dehradun
56	22.06.2012	Landslides in Highway of Uttarakhand- Char dham Yatra route	Uttarakhand Academy of Administration, Nainital
57	30.03.2012	Natural Disasters in the Himalaya	Aligarh Muslim University, Aligarh
58	19.02.2011	Landslides and related disasters in Uttarakhand	Headquarter of Uttaranchal sub area Dehradun
59	27.07.2010	Landslides and their management in the Himalaya	Lal Bahadur Sashtri National Academy of Administration (LBSNA), Mussoorie
60	25.06.2008	Landslide and mitigative measures	Administrative Training Institute (ATI), Nainital
61	19.12.2007	Landslide hazards in the Satluj valley	National institute of Disaster Management (NIDM), New Delhi
62	12.12.2007	Parent material and rock types	Indira Gandhi national Forest Academy (IFNFA), Dehradun

63	22.09.2007	Application of Remote Sensing and GIS	Administrative Training Institute (ATI), Nainital
64	10.08.2007	Natural Disasters with special reference to landslides and their management in the Himalayan terrain	Lal Bahadur Sashtri National Academy of Administration (LBSNA), Mussoorie
65	10.06.2007	Development activities in the Himalayan terrain vis-à-vis natural disaster	Institutions of Engineers, Dehradun
66	13.12.2006	Natural Hazards and their management in the Himalaya	ITBP, Dehradun
67	25.05.2006	Natural and man-made disasters in the Himalaya	Kendriya Vidyalaya, FRI Dehradun
68	05.07.2005	Natural Hazards and their management in the Himalaya	ITBP, Mussoorie
69	19.05.2005	Natural Hazards with particular reference to Uttaranchal	WIHG, Dehradun
70	10.10.2004	Natural Hazards with special reference to landslides in the Himalayan terrain	Ins of earthquake Eng. St Cyril, Rep of Macedonia
71	15.06.2004	Landslide hazards in the Himalayan terrains	Kendriya Vidyalaya Birpur, Dehradun