

## Curriculum Vitae



**Dr. Pankaj Gupta, Ph.D.**  
**Senior Principal Scientist and HoD**

**Geotechnical Engineering Division, Central Road Research Institute (CRRI), Delhi – Mathura Road, New Delhi, India Pin-110025; Ph: 91-011-26834739 (Off), +91-0120-4525400 (Res), +91-9868321804 (M),  
EMail:[panx22@gmail.com](mailto:panx22@gmail.com) ; [headge.crri@nic.in](mailto:headge.crri@nic.in)**

### RESEARCH / PROFESSIONAL EXPERIENCE

Working as scientist in CSIR-Central Road Research Institute for more than 22 years experience in the research & development, consultancy services

1. Currently working as a **Sr. Principal Scientist**, (Since August 2014) in Geotechnical Engineering Division, Central Road Research Institute (CRRI) – a premier Research Institute of Govt. of India
2. Worked as a **Principal Scientist**, (From August 2008 to August 2014) in Geotechnical Engineering Division, Central Road Research Institute (CRRI) – a premier Research Institute of Govt. of India.
3. Worked as a **Senior Scientist**, (From August 2003 to August 2008) in Geotechnical Engineering Division, Central Road Research Institute (CRRI) – a premier Research Institute of Govt. of India.
4. Worked as **Scientist** from August 1997 to August 2003
5. Worked for 4 months and 24 days (10th March 1997 to 2nd August 1997) as a geophysicist in Pan India Consultants (Pvt. Ltd.) Co. in joint venture with CGG of France and Hampton of England. The work involved Seismic data transcription through PECC Software RAPPORT on Pentium MMX platform, well log digitisation / splicing and the thematic map preparation /interpretation using GIS.
6. More than five and half years (5 years, 9 months and 16 days) as Senior Research Fellow (SRF- Fellowship was awarded by Council of Scientific and Industrial Research, India) during Ph.D. from 1st February 1991 to 16th October 1996 at the Department of Earth Sciences, University of Roorkee, Roorkee. The work was to carry out the research by structural and lithological mapping on 1:50000 scale, large (1:2000) scale mapping of individual landslides with the help of the electronic Distomate and Theodolite. Collection of samples in the extremely rugged terrain of Uttar Pradesh Lesser Himalaya as well as desk study to prepare LHZ maps to delineate the unstable zones and thesis writing.
7. Worked as Research Assistant from 1st Dec. 1990 to 31st Dec. 1990 in consultancy project entitled Hydrogeological and Geophysical Investigations for deep tube well site (s) at Gabaia Sahrai group of villages, water supply scheme, Pilibhit (U.P.). The nature

of work involved to carry out the resistivity survey, data plotting, data interpretation and report writing.

8. Two and half years as Junior Research Fellow (7th Nov.87 to 14th May 1990) under the project 'Thrust Area Programme under solid Earth, sponsored by Department of Science and Technology at the Department of Earth Sciences, University of Roorkee, Roorkee. The nature of work was to carry out the research work by structural and lithological mapping, Collection of samples in the extremely rugged terrain of Kashmir Lesser Himalaya and data for structural and strain analysis and report writing.

## EMPLOYMENT RECORD

- Currently working, as a **Senior Principal Scientist and HoD** in Geotechnical Engineering Division, Central Road Research Institute (CRRRI), New Delhi, INDIA an esteemed research Institute of Govt. of India. The nature of work involves research & development and consultancy work related to **slope stability, landslide modelling and other geotechnical problems** with especial reference to the roads.
- **Worked as Scientist E-I**, since August 2003 in Central Road Research Institute (CRRRI), New Delhi, INDIA carried out and associated with various projects related to landslide and other geological and geotechnical problems.
- **Worked as Scientists-C**, since 04 August 1997 in Central Road Research Institute (CRRRI), New Delhi, INDIA associated with various projects related to landslide and other geological and geotechnical problems.
- **Earlier engagements:** Worked as a geophysicist in Pan India Consultants (Pvt. Ltd.) Co. in joint venture with CGG of France and Hampton of England. The nature of work was:
  1. Seismic data transcription through PECC Software RAPPORT on Pentium MMX platform.
  2. Well log digitisation / splicing.
  3. The thematic map preparation /interpretation using GIS.

## INSTRUMENTS AND SOFTWARES USED

Various equipments are used for testing of “soils” and “Rock” for physical and engineering properties. **Differential Global Positioning System (DGPS), electronic distomate and theodolite** are also used for survey. **SLIDE** and **GEO- 4, Phase-2 (numerical modelling program)** and **other computer program** for FOS analysis, GIS softwares, GPS softwares etc. were used. This software can also be use for **the open cast mining and its planning** to exploit the maximum ore. Moreover, **landslide monitoring equipments viz. rain gauge, pizometer, inclinometer movement gauges** are using for the R&D DST sponsored project

## TRAINING RENDERED

1. Supervised/guided the **2 M.Sc. students to develop the user's friendly window based comprehensive** software package in **Visual Basic (VB)** for their training as a part of fulfilment of their M. Sc. (Mathematics & Computer Sc.) course. **This software may be used to assess the stability for the natural as well as man-made slopes such as open cast mine slopes. The project entitled "Comprehensive Software Development for Talus, Plain and Wedge Failure Analysis**
2. **Supervised one BE student for his training as a part of fulfilment of his BE course.**
3. Supervised and given 6 months training to **two students of** Jamia Millia Islamia, New Delhi as a part of fulfilment of their Advance **Post Graduation Diploma in Remote Sensing and GIS in 2008-09. The Thesis** entitled
  - a) "Landslide Hazard Zonation Mapping" (Micro Scale) of Amparav Area, Nainital Distt., Uttarakhand' and
  - b) Role of Landslides in Building of Topography of Amparav Area, India
  - c) Supervising Guiding one Ph.D. student on the topic "Multi-criteria Based Landslide Hazard Evaluation Study Using Spatio-temporal Data- A case study of Munnar Watershed

## MEMBERSHIP OF PROFESSIONAL BODIES

- Member, Indian Road Congress
- Life Member, Indian Geotechnical Society-Delhi Chapter
- Life Member, Indian Geological Congress
- Member of one of the committee of Bureau of Indian Standards in the field of rock mechanics
- Life Member (LM No. 1902) of Indian Society of Rock Mechanics and Tunnelling Technology (ISRMTT)
- Expert Member of Board of Studies for the design and revising of the courses of the 1) M.Tech(GI-RS), 2) M.Sc.(GIS-RS), 3) M.Sc.(Applied Geology), 4) B.Sc.(Geoinformatics) and 5) B.Sc.(H) Geography for the two years.
- Executive member of the Indian Geotechnical Society (IGS), Delhi Chapter
- Member of the Rock Mechanics Sectional Committee, **CED 48** of Bureau of Indian Standards
- Member of Bureau of Indian Standards (**BIS**) of **CED 56** and attended the tenth meeting of the Hill area Committee of BIS of CED 56

## EXTERNAL EXAMINER AND COMMITTEES

- 1) Examine Ph. **D. Thesis** entitled "Landslide Hazard Evaluation of Hill Slopes around Naini Lake, Nainital, India of Sh. Dhruvajyoti Chakraborty" in 2008, submitted to IIT Roorkee.
- 2) Examine Ph. **D. Thesis** entitled "Spatio-Temporal Changes in the Wetland Ecosystem of Cochin City using Remote Sensing and GIS" in 2012 submitted to Cochin University of Science and Technology.
- 3) External Examiner of graduate level student in 2009 (15<sup>th</sup> May) Bundelkhand University
- 4) One of the **members of Interview Committee** for AcSIR-NISCAIR-Ph.D.

- program for January 2014.
- 5) Appointed Chairman of the Book release committee for International conference on Climate Change and the Himalaya (ICCCH-2013), 28-31 October 2013 at CSIR-NISCAIR, New Delhi, India.
  - 6) Expert member of the selection committee to conduct interview for the post of consultant (landslide and avalanches) in NDMA, New Delhi on 24<sup>th</sup>.12.2019.
  - 7) Examiner \_ Conducted practical exam (paper GP-105) for the 1st semester M. Sc. (Tech) applied Geophysics students, Department of Geophysics, Krukshetra University, Haryana on 4<sup>th</sup> January 2020.
  - 8) Member of reviewing meeting In-house project of (OLP), presented by Sh. Alok Ranjan and headed by DRRI

#### **Training program coordinated**

1. Coordinated the regular training program of the division
2. Many costamised training program were organise on landslides and geotechnical investigation

## **RESEARCH PUBLICATIONS**

**Number of research papers** has been published in the National/International Journals National or International Conferences/Symposium/Workshop.

#### **Papers in Refereed National / International Journals Published/Accepted**

1. Pankaj Gupta., Anbalagan, R. and Bist, D. S., 1993, "Landslide Hazard Zonation (LHZ) mapping around Shivpuri, Garhwal Himalaya, U.P." Journal of Himalayan Geology, vol. 4, No. 1, Wadia Institute of Himalayan Geology, Dehradun, India.
2. Pankaj Gupta, and Anbalagan, R., 1995. "Landslide Hazard Zonation (LHZ) mapping of Tehri-Pratapnagar Area Garhwal Himalaya" Journal of Rock Mechanics and Tunnelling Technology, pp-41-59. Vol. 1, No. 1, January1995, New Delhi, India **(Best paper awarded)**
3. Pankaj Gupta, and Anbalagan, R.,1997. "Slope stability of Tehri Dam reservoir area, India, using Landslide Hazard Zonation (LHZ) mapping" **Quarterly Journal of Engineering Geology**, Vol-30, pp 27-36, **UK**.
4. Pankaj Gupta, Jain Neelam, Anbalagan R., and Sikdar, P.K., "Landslide Hazard Evaluation and Geostatistical Studies in Garhwal Himalaya" Journal of Rock Mechanics and Tunneling Technology, pp-41-60. Vol. 6, No. 1, May 2000, New Delhi, India **(Best paper awarded)**
5. Kishor Kumar, Pankaj Gupta, S Parsad and Sudhir Mathur, 2008, "Design of suitable corrective measures for stability of a critical slope near Koldam, HP – A Case Study" Journal of Indian Highways, Jan. 2008.
6. R.K. Panigrahi, U.K. Gruvittal, Pankaj Gupta, P.S. Prasad and Sudhir Mathur, 2008, "Geomechanic Classification of Rocks for Hill Slope Failure at Km. 45.0 on

NH150, Mizoram” The Indian Mining & Engineering Journal, pp. 22-32, vol. – 47, No.09, September – 2008.

7. Havanagi, V.G., Sinha, A.K., Gupta, P., and Mathur, S. 2011, “Investigation and Remedial Measures of Hnathial Landslide, Mizoram”, Journal of Disaster & Development” Pub. by National Institute of Disaster Management, New Delhi, Vol. 5, Number 1&2 April & November 2011, PP 201- 211.
8. R.K.Panigrahi, U.K.Guru Vittal, P.S.Prasad, Sudhir Mathur and Dr.Pankaj Gupta, 2011, ‘Investigation and Design for Restoration of Hill Slope in Mizoram’, Indian Geotechnical Journal, Vol.41, No.4, October 2011, pp.215-225 (Received **Shri R.N. Prasad Biannual Award – 2013 “Best Paper Award”** on ‘Slope Stability and Land by the Indian Geotechnical Society).
9. Pankaj Gupta, Havanagi, V.G., Sinha, A.K., and Sudhir Mathur, 2013, “Probable Causes and Corrective Measures of Landslides on Aizwal-Lunglei Road (NH-54), Mizoram”, Pub in Highway Research Journal, pp 44-51, Vol.6 No. 2, July-December 2013. **This paper has been selected for the Commendation Certificate and awarded in 75<sup>th</sup> IRC Annual Session, Bhubaneshwar, Odisha**
10. Gupta, Pankaj, Banerjee, A. and Gupta Neelam J, 2020, “Spatio-temporal Study on Changing trend of Land Use and Land Cover Pattern in Munnar area, Idukki District, Western Ghats India” Indian Journal of Geo Marine Sciences, Vol. 49 (06), June 2020, pp. 1055-1067.

#### **National or International Conferences/Symposium/Workshop**

11. Anbalagan, R., Pankaj Gupta, and Sharma, S., 1992. "Landslide Hazard Zonation (LHZ) mapping of Kathgodam, Nainital, Kamaun Himalaya, India" Proc. of Asian Regional Symposium on Rock Slopes, 7-11 Dec., New Delhi, India.
12. Anbalagan, R. and Pankaj Gupta, 1996. "A Geotechnical Appraisal of Chilla Landslide, Oortter Garhwal Himalaya, India" Proc. of the seventh International Symposium on Landslides, 17-21 June **Trondheim, Norway**.
13. Pankaj Gupta., Anbalagan, R., and Murty, A.V.S.R., 1998 “Analytical studies of Potentially Unstable Zones, Identified by, "Landslide Hazard Zonation (LHZ) Mapping in Parts Tehri Garhwal Himalaya (UP), India” Proc. of the International workshop-cum-Training Programme on Landslide Hazard and Risk Assessment and Damage Control for Sustainable Development, pp 83-95. November 6-11, New Delhi, India.
14. Sikdar, P. K., j Gupta, P. and Bhagwan. J., 2001 ” A Study of Road Damages Due to Chamoli Earthquake in Garhwal Region, India” Proc. of the National Workshop on Application of Rock Engineering in Nation’s Development (In honour of Prof Bhawani Singh), April 27-28, 2001, University of Roorkee, Roorkee, Uttaranchal, India.
15. Kishor Kumar, Pankaj Gupta., Yadav, O.P. and Bandara, R.M.S., “Comparative Landslide Hazard Zonation Study in Garhwal Himalaya - A Case Study” Proceedings of National Seminar on Geodynamics and Environment Management of Himalaya

(GEM-H-2000), December 4-5, 2000, Srinagar Garhwal, India

16. Pankaj Gupta., Jain Neelam and Mathur, S., "GPS Technology and its Applications", The Asian GPS Conference, Indian International Center, New Delhi, 23-24, October, 2002, pp. 17-20.
17. Sikdar, P. K., Pankaj Gupta and Bhagwan, J., "A Study of Road Damages due to Chamoli Earthquake in Garhwal Region, India", Paper Presented in PIARC G2 Session IV, Natural Disaster on Roads, 7<sup>th</sup> World Roads Congress, 3-8 October 1999, **Kuala Lumpur**.
18. Pankaj Gupta, Neelam Jain and Sudhir Mathur, "Application of GIS in the study of Narayanbagar Landslide-A Case Study", Map India 2003, 28-31 January, 2003
19. Pankaj Gupta, Neelam Jain, Kishor Kumar and P. K. Sikdar, "Geographical Information System for Transportation Planning", **Map Asia, Malaysia**, 2003
20. Pankaj Gupta, Deepak Mukherjee, P. K. Sikdar, Kishor Kumar, "Investigation and Control of Narayanbagar Landslide, District Chamoli, Uttaranchal, India – A Case Study" **Fifth International Conference on Case Histories in Geotechnical Engineering New York**, April 13-17, 2004
21. Neelam Jain, Pankaj Gupta. P. K. Jain, P. K. Nanda and Anang Pal, "Socio-Economic Impact of PMGSY on Rural Roads", Sadak Darpan, CRRI, New Delhi, 2005
22. Kishor Kumar, Pankaj Gupta, Sudhir Mathur and P. K. Sikdar, "Devastating Events of Cloudburst Leading Landslide Disaster and its Consequences in Garhwal Himalaya", proceedings of Seminar on Disaster Management with Specific Reference to Landslides and Avalanches, pp 276-282, 29 Oct 2003, New Delhi
23. Irfan-Ullah, M. and Gupta, P. (2006). Landslides: Geologic and Geomorphic Controls. Symposium-Workshop on Landslide Ecology – A Perspective from Tropical Mountainscapes. Association for Tropical Biology and Conservation (ATBC), July 18 – 21, 2006. Xinhua Tropical botanical Gardens, Kunming, China.
24. Pankaj Gupta, Neelam J. Gupta and Sudhir Mathur, 2010, "Naryanbagar Landslide – its Impact on Society", International Road Federation, Portugal, 25-28 May 2010.
25. Havangi V.G., Sinha A. K., Pankaj Gupta and Mathur S, 2011, 'Investigaton of Hnathiyal Bazar Veng landslide at 173.5 km Aizwal – Lunglai road, Mizoram', Proceedings of National Conference on landslide hazards – Consequences & Challenges, CBRI, Roorkee, February 2011.
26. Gupta, P., Singh. B., Kanaujia, V. K. and Singh. K, 2013, "Human Negligence Leads to Amparav Landslide on National Highway", Proceedings of INDOROCK-2013, 4<sup>th</sup> Indian Rock Conference, 29-31 May 2013, pp471-476.
27. Santosh, K. M., Sunderesan, J. and Gupta, P., 2013, "An assessment of NDVI on Himalaya by using Geospatial Technology", Proceeding of Internatioal Conference on Climate Change and the Himalayas: Current Status and Future Perspective (ICCCH-2013), 28-31<sup>st</sup> October 2013, CSIR-NISCAIR, New Delhi, India
28. Gupta, P, Santosh, K. M., and Sunderesan, J., 2013, "Climate Change and

Multiple Hazards in Mountain Region”, Proceeding of International Conference on Climate Change and the Himalayas: Current Status and Future Perspective (ICCCH-2013), 28-31<sup>st</sup> October 2013, CSIR-NISCAIR, New Delhi, India

29. Gupta, P., Gupta, N. J, and Sunderesan, J., 2013, “A Case Study of Narayanbagar Landslide”, Proceeding of International Conference on Climate Change and the Himalayas: Current Status and Future Perspective (ICCCH-2013), 28-31<sup>st</sup> October 2013, CSIR-NISCAIR, New Delhi, India
30. Jain, Madhvi, Havanagi, V. G. and Gupta, P, Gupta, “A Statistical Analysis to Study the Effect of Solar Activity on Gangotri Glacier”, Proceeding of International Conference on Climate Change and the Himalayas: Current Status and Future Perspective (ICCCH-2013), 28-31<sup>st</sup> October 2013, CSIR-NISCAIR, New Delhi, India
31. Gupta, P, and Sunderesan, J., 2013, “Landslide and Cloudburst in Indian Himalayan Region (IHR) during June 2013 – Historical Perspectives and Remedial Measures”, Proceeding of International Conference on Climate Change and the Himalayas: Current Status and Future Perspective (ICCCH-2013), 28-31<sup>st</sup> October 2013, CSIR-NISCAIR, New Delhi, India
32. Sundaresan, J. Gupta, P., and Santosh, K. M., 2013, “Algoritham to identify climate change induced multiple hazards in mountain regions – Indian Himalayan Region (IHR)”, presented in International conference,”Atmosphere and Cryosphere Assembly – DAVOS, Switzerland, 8-12 July 2013. Published in the International eighth Indian Rock Conference
33. U. K. Guruvittal, Pankaj Gupta and Nitesh K. Goyal., 2016, “Using locally available materials for rural road construction”, International Conference, CRRI, New Delhi.
34. Pankaj Gupta and Aaqib, “Investigation & remedial measures of rotational failure at NH-87, Amparav, District, Nainital, Uttarakhand”, 04-05 November 2019, pp 294-302.

#### Books/Articles

- 1) Wrote a **Feature Article** entitled “**Tracing Himalayan Landslide**”, **Published in Times of Disaster Management, January 2010, pp18-20. Authors are Dr. Pankaj Gupta, J. Ganesh, Sudhir Mathur and Dr. Bhoop Singh, 2010.**
- 2) Wrote a chapter entitled “**Application of GIS and Remote Sensing IN landslide**”, for the book entailed “**Geospatial Technologies and Climate Change**”,(e-book) published in 2013 by the **Springer International Publishing Switzerland.**
- 3) Wrote a chapter entitled “**An assessment of normalized difference vegetation index in Himalaya by using Geospatial Technology**”, for the book entitled “**Climate Change & Himalaya Ecosystem – indicator, Bio & Water Resources**”, published in 2013 by the Scientific Publishers (India), 5 A, New Pali Road, P.O.Box91, Jodhpur – 342 001 (India). Authors are K. M. Santosh, J. Sunderesan, and **Pankaj Gupta.**
- 4) Wrote a chapter entitled “**Natural hazards due to clomate change in Himalaya and multicriteria decision analysis to identify vulnerable zone**”, for the book

entitled “**Climate Change & Himalayan Informatics**”, published in 2013 by the Scientific Publishers (India), 5 A, New Pali Road, P.O.Box91, Jodhpur – 342 001 (India). Authors are **Pankaj Gupta**, J. Sunderesan and K. M. Santosh.

- 5) Wrote **three chapters** for the book entitled “**Climate Change and Himalaya**” published in 2013 by the Scientific Publishers (India), 5 A, New Pali Road, P.O.Box91, Jodhpur – 342 001 (India). The chapters are as follows:
- Landslides and cloudburst in Indian Himalayan Region (IHR) during June 2013 – Historical perspectives and remedial measures;** Authors are **Pankaj Gupta** and J. Sunderesan
  - Landslides and its impact on society – A case study of Narayanbagar landslide;** Authors are **Pankaj Gupta**, Neelam J. Gupta and J. Sunderesan
  - A statistical analysis to study the effect of sloar activity on Gangotri Glacier;** Authors are Madhavi Jain , Vasant G. Havanagi & **Pankaj Gupta**

### **MAIN RESEARCH / CONSULTANCY PROJECTS (Completed / ongoing)**

Worked in many Research and Development (R&D) project as a Project Leader, Co-project Leader and also as an active member. Some of the projects are listed below:

- Project entitled Detailed Geological, Geotechnical Investigation, Instrumentation and Monitoring of Amparav Landslide, Uttaranchal State.
- **Bilateral program on ‘GEOHAZARD’ between the NGI, Norway and Department of Science and Technology (DST), New Delhi.**
- Technical audit of PMGSY roads in AP, Orissa, Rajasthan and UP.
- Use of fly ash for construction of approach embankment (eastern side) of II Nizamuddin bridge, sponsored by P.W.D. Delhi
- Preliminary Survey of Chamoli Earthquake (March, 1999) affected area in Garhwal region (UP), India
- Landslide Hazard Zonation Study around Belakuchi Area, Alaknanda Valley, Garhwal Himalaya, India.
- Investigations, analysis and correction of landslide on Dimapur-Kohima-Maram Road (NH-39), Nagaland
- Investigations of NH-39 regarding mitigation (North-East development project
- Application of Jute/Coir geotextiles in stabilizing hill slopes
- Pradhan Mantri Gram Sadak Yojana (PMGSY) Activities At CRR1
- Failure Potential Evaluation of Narayanbagar Landslide and Adjoining Areas to Assess the Socio-economic Problems due to the Landslide – A GIS Approach
- Investigation & Recommendations of Suitable Corrective Measures for Prevention of Road Cut Slopes along Access Road from Naihar Village to Bridge Point, Koldam, HP
- Investigation, instrumentation and Monitoring of Landslide in Patalganga, Uttaranchal
- Investigation of landslide on AIZQAL LUNGLAI Road (Border Road Organisation)
- Studies of landslide problems Rajban (H.P.)
- Detailed investigation for monitoring of sinking/slope/movement/landslide in Bhutan
- Landslide Invistigation and Remedial Measures for Stabilization of slopes at Km 42.0 on NH-150, Khawruhlian, Mizoram.
- Investigation & remedial measures of rotational failure at NH-87, Amparav, District,



Nainital, Uttarakhand

- Development of Geological and Geotechnical Specimen Gallery and data bank.
- Investigation, Design and Remedial Measures for Protection of Slopes at Bailey Bridge, Pumbai Valley, Uttarakhand.
- Investigation and the design of Landslide Remediation measures in Nilambur-Gudalloor Road, Kerala.

## PERSONAL DETAILS

Father's Name: Late Shri Diwjendra Nath Gupta  
Date of Birth: May 22nd, 1963  
Marital Status: Married  
Nationality: Indian  
Passport No. : B5144934  
Resident Address: B-506, Designers Park, Sahkari Awas Vikas Samiti, B9/1A, Sec.62, Noida (UP)

## EDUCATIONAL DETAILS

**Ph. D.** in Engineering Geology, awarded in 1997 from Department of Earth Sciences, **University of Roorkee (Presently known as IIT Roorkee)**, Roorkee, India.

**M. Tech.** with first division in Applied Geology with specialisation in structural geology (**A three year Post Graduate course with Dissertation, 1984-87**) from Department of Earth Sciences, **University of Roorkee (Presently known as IIT Roorkee)**, Roorkee, India.

**B. Sc.** with first division from Meerut University, India.

## PURSUED SPECIAL COURSES DURING M.TECH COURSE

**Geophysical Well Logging, Petroleum Geology**, Rock Mechanics and Soil Mechanics, Numerical Methods and Computer Programming

## DISSERTATIONS

**Ph.D.** Landslide Hazard Zonation Mapping, considering the Geoenvironmental conditions of parts of Bhagirathi river valley, Garhwal Himalaya, U.P., India.

**M. Tech.** Strain Analysis of Dhanjori Green Stone Belt, Singhbhum, Bihar, India.

## AWARDS AND DISTINCTIONS

1. Received Scholarship in the M. Tech. course in the final year (3<sup>rd</sup> year).
2. Received **Junior Research Fellow** under the project 'Thrust Area Programme under solid Earth, sponsored by Department of Science and Technology at the Department of Earth Sciences, University of Roorkee, Roorkee and worked for two and half years. The

nature of work involved structural and lithological mapping, Collection of samples in the extremely rugged terrain of Kashmir Lesser Himalaya and data for structural and strain analysis.

3. Received **Senior Research Fellowship (SRF)** for four years duration by the Council of Scientific and Industrial Research (CSIR), India in 1991.
4. Received **Best Paper Award** in the category of Application of Rock Mechanics in Hill Development by the Indian Society for Rock Mechanics and Tunnelling Technology (ISRMTT) on 17 September 98. The paper entitled 'Landslide Hazard Zonation, Mapping of Tehri-Pratapnagar area Garhwal Himalayas' was published in the Journal of Rock Mechanics and Tunneling Technology, pp-41-59. Vol. 1, No. 1, January 1995, New Delhi, India.
5. Received **Best Paper Award** in the category of Application of Rock Mechanics in Hill Development for the year 2000 by the Indian Society for Rock Mechanics and Tunnelling Technology (ISRMTT). The paper entitled 'Landslide Hazard Evaluation and Geostatistical Studies Garhwal Himalayas' was published in the Journal of Rock Mechanics and Tunneling Technology, pp-41-60. Vol. 1, No. 1, New Delhi, India.
6. Received **Shri R.N. Prasad Biannual Award – 2013 (Best Paper Award)** on 'Slope Stability and Land by the Indian Geotechnical Society for the research paper by R.K.Panigrahi, U.K.Guru Vittal, P.S.Prasad, Sudhir Mathur and **Dr.Pankaj Gupta, 2011**, 'Investigation and Design for Restoration of Hill Slope in Mizoram', Indian Geotechnical Journal, Vol.41, No.4, October 2011, pp.215-225. Award was presented during Indian Geotechnical Conference (IGC 2013) at Roorkee in Dec 2013.
7. Worked as one of the **organising secretary** and organised An International Conference on Climate Change and the Himalayas: Current Status and Future Perspective (ICCCH-2013), 28-31<sup>st</sup> October 2013, CSIR-NISCAIR, New Delhi, India
8. Worked as editor for **three books** namely
  - 1) Climate Change and Himalaya,
  - 2) Climate Change & Himalayan Informatics and
  - 3) Climate Change & Himalayan Ecosystem-indicators, Bio & Water Resources.All the books are published (2013) by the Scientific Publishers (India), 5 A, New Pali Road, P.O.Box91, Jodhpur – 342 001 (India).
9. Selected as a **Reviewer** for the **Fifth International conference** on case Histories in Geotechnical Engineering, **New York**, NY April 13-17, 2004.
10. **Coordinated the multidisciplinary and multi institutional (CRRI, IIT Roorkee, Gharwal University, and DST New Delhi)** team of five persons to have as on—the—spot assessment of the nature of landslide and identify the parameters responsible for huge landslides in the villages of Agunda, Marwadi, Medh and Koti located around Budakedar in Bal Ganga valley, a tributary of Bhilanga River. Later, a report entitled "**Report on Landslides around Budha Kedar Area in Tehri District (Uttaranchal) from 5-8 September, 2002- By an Expert Team**" prepared and submitted to Department

of Science and Technology (DST), New Delhi.

11. Technical input, editing and also interviewed to describe the landslide in Department of Science and Technology (DST), sponsored film in Hindi. The film entitled in Hindi such as “Bhuskhalan ek jamini succhai”

## **TRAINING/SHORT COURSES ATTENDED**

- Attended, a specialist short course on **Civil Engineering of Hill Development**, organized by the Institute of Engineers at Roorkee local center.
  - Attended short course on **Landslide Analysis and Control** sponsored by Department of Science and Technology and organized by Indian Geotechnical Society, Roorkee.
  - Attended short course on **Instrumentation for Design, Construction and Performance Monitoring of Important Civil Engineering Structures** from 14<sup>th</sup> to 16<sup>th</sup> Dec. 1998, organized by the Advance Technology & Engineering Services (A division of AIMIL).
  - Attended a 10 days training programme on **Geographic Information Systems** from June 28<sup>th</sup> to July 7<sup>th</sup>, 2001 organised by Center for Remote Sensing Department of Civil Engineering, University of Roorkee, India.
  - Attended a 4 days training programme on **Global Positioning Systems** from September 4<sup>th</sup> to 8<sup>th</sup>, 2001 organised by Center for Remote Sensing Department of Civil Engineering, University of Roorkee, India
- 1) Received two weeks training on “**Geohazards**” at **Norwegian Geotechnical Institute, Oslo, Norway in the bilateral program between the NGI, Norway and Department of Science and Technology (DST), New Delhi**. Training program mainly includes the visit laboratory and NGI library to get an exposure to the NGI testing capabilities, introduction and training on Software, Limit Equilibrium Slope Stability Methods and Finite Element Methods, which includes mainly followings
    - i) Universal Distinct Element Code UDEC-BB
    - ii) Phase – 2
    - iii) PLAXIS
    - iv) Rock- Plane
    - v) SLIDE

Also visited world’s largest man-made cavern i.e. Norway’s underground Olympic stadium at Gjovic city of Norway during the training.

## **OTHER DISTINCTIONS**

1. Received certificate '**B**' Senior Division **National Cadet Core (Army Wing)** and held the post of **Corporal**.
2. Received **Blue One, belt** in Teck-wondo (a Koriyan style of unarmed combat).
3. Underwent **Rock Climbing Training** at N.T.M.C. National in April 1989 and was awarded '**A**' **Grade** Certificate.

4. Participated in a **400 km Rowing Expedition in Chambal River** (from Maharana Pratap Sagar Dam, near Kota, Rajasthan to Dholpur, M.P. 1989-90).
5. Worked in a **Telefilm** entitled 'Venturing out with Photography' for UGC countrywide classroom programs.
6. Undertook the **Himalayan Social Ecology Expedition-91 (HSEE-91)** as a **'Co-Group Leader'** to 'Kalindi Pass' in Garhwal Himalayas.
7. Served as **Co-ordinator** of **'Himalayan Explorers Club'** `University of Roorkee' Roorkee, India.
8. Won many awards for preparing the posters and advertisement brochures for the division as well for the Institute.
9. Selected for two weeks training program on **"Geohazards"** at **Norwegian Geotechnical Institute, Oslo, Norway** in the bilateral program between the **NGI, Norway** and **Department of Science and Technology (DST), New Delhi** in June 2007.
10. Participated and successfully completed **Vodafone Delhi half marathon 07 in 1 hour 57 minutes on 28<sup>th</sup> Oct 2007.**
11. Participated and successfully completed, **Airtel Delhi half marathon 09 in 1hour 47 minutes on 25<sup>th</sup> Oct 2007**
12. Participated and successfully completed, **Vodafone Delhi half marathon 07 in 1hour 58 minutes on 27<sup>th</sup> Nov. 20011**
13. Participated and successfully completed **Goa Biking expedition (14<sup>th</sup> to 22<sup>nd</sup> Dec.2011).**
14. Participated and successfully completed Jolari pass biking expedition May 2012
15. Participated and successfully completed Mizoram
16. Participated and Completed **National Himalayan Mountain Biking Expedition , Leh 2013"** (12-20<sup>th</sup> September 2013)

## **HOBBIES**

Photography, Swimming, Long distances Cycling, Trekking and games etc.

**(Pankaj Gupta)**  
**Tuesday, 14<sup>th</sup> July 2020**