

CURRICULUM VITAE

OFFICIAL ADDRESS:

Dr. VIPIN KUMAR
HEAD I/C, DEPARTMENT OF GEOLOGY,
Doon University, Dehradun, Uttarakhand, 248001, India

PERSONAL DETAILS:

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EXPERIENCE

- Assistant Professor (2022-present): Doon University, Dehradun, India
- Project Scientist-II (2021-2022): HNB Garhwal University, Srinagar, India
- Post Doc. FNRS Fellow (2020-2021): University of Liege, Liege, Belgium
- Research Fellow (CSIR-NET-JRF) -(2014-2019): Wadia Institute of Himalayan Geology, Dehradun, India
- Engineering Geologist (2012-2013): Cengrs Geotechnica Pvt. Ltd. Noida, India

EDUCATION

- Ph.D. Geology (2015-2019): Wadia Institute of Himalayan Geology, India/HNB Garhwal University, India
- M.Sc. Geology (2010-2012): University of Delhi, Delhi, India
- B. Sc. Geology (2007-2010): Aligarh Muslim University, Aligarh, India

AWARDS/FELLOWSHIPS/GRANT

- **PI, Project (2024):** UK Research and Innovation, **United Kingdom**/Ministry of Earth Sciences, **India**
- Co-Coordinator (Science Promotion), Dehradun, UCOST, Govt. of Uttarakhand, **India**
- Bursary Grant (2024): International Geographical Congress, **Ireland**
- Co-PI, Project (2023): Department of Science & Technology, Govt. of India, **India**
- Young Geomorphologists Grant (2022): International Association of Geomorphologists, **Portugal.**
- International Travel Grant (2022): Science & Engineering Research Board (SERB), **India**
- Post Doc. Fellowship (2020): National Scientific Research Fund (FNRS), **Belgium**
- Best Paper (2019): International Workshop on Climate Change & Extreme Events, IIT Mandi, **India**
- All India Rank-19; NET-JRF (2014): Council of Scientific & Industrial Research (CSIR), **India**
- Institute Research Fellowship (2014): Wadia Institute of Himalayan Geology, DST, **India**

TRAININGS

- “Monitoring and modelling of large landslides” (2018): Chengdu University of Technology, **China**
- “Introduction to Landslide Site Mapping” (2017): Indian Institute of Technology, Kanpur, **India**
- “Landslide Hazards and Related Phenomena” (2016): National Institute of Technology, Hamirpur, **India**
- “Rock-Engineering for the Hilly Regions” (2015): Indian Institute of Technology, Roorkee, **India**

AREA OF INTEREST: Engineering Geology/ Georisk/ Environmental Science

PUBLICATIONS

1. Chauhan, N, **Kumar, V**, Sundriyal, Y., Kaushik, S., Subramanian, S.S., Melo, R., Rana, N. **2024**. Debris Flow in Indian Himalaya: A Threat to Emerging Infrastructure. *Bulletin of Engineering Geology and the Environment*, **Accepted**. * **Corresponding author**. (Q1), **IF. 4.2**
2. Negi, R., Sati, S.P., Sharma, V., Samanta, M., **Kumar, V.**, Puniya, M.K., Rana, S.S. and Kanungo, D.P., **2024**. Evaluating instability & failure pattern of landslides, Giri valley, Northwest Himalaya, India. *Bulletin of Engineering Geology and the Environment*, 83(7), 271.
3. Kariminejad, N., Biglarfadafan, M., **Kumar, V.**, Jamir, I., Shafaie, V. and Pourghasemi, H.R., **2024**. Review of multihazards research with the basis of soil erosion. In *Advanced Tools for Studying Soil Erosion Processes* (pp. 295-306). Elsevier.
4. Upreti, P., Sahay, A. and **Kumar, V.**, **2024**. Large Dams and Developmental Dilemma: Watershed Management and Sustainable Livelihood Practices in Rim Areas of Tehri Dam, Uttarakhand, India. In *Recent Advancements in Sustainable Agricultural Practices: Harnessing Technology for Water Resources, Irrigation and Environmental Management* (pp. 247-265). Singapore: Springer Nature Singapore.
5. Jamir, I., **Kumar, V.**, Ojha, A.K., Gupta, V., Martha, T.R. and Griffiths, D.V., **2024**. Evaluating failure regime of an active landslide using instability and rockfall simulation, NW Himalaya. *Environmental Earth Sciences*, 83(8), 256.
6. Sundriyal, Y., Kumar, S., Chauhan, N., Kaushik, S., **Kumar, V.**, Rana, N. and Wasson, R., **2024**. An integrated approach of machine learning and remote sensing for evaluating landslide hazards and risk hotspots, NW Himalaya. *Remote Sensing Applications: Society and Environment*, p.101140. **Q1. IF. 4.7**.
7. Sundriyal, Y., **Kumar, V***, Chauhan, N., Kaushik, S., Ranjan, R. and Punia, M.K., **2023**. Brief communication: The northwest Himalaya towns slipping towards potential disaster. *Natural Hazards and Earth System Sciences*, 23(4), 1425-1431. (Q1), * **Corresponding author. IF. 4.3**
8. **Kumar, V.**, Sundriyal, Y.P., Chauhan N., Puniya, M. Kaushik, S., Kumar, S., Bagri, D.S., Rana, N., **2023**. Ascertaining the potential causes of a hillslope failure associated to human settlement; a case study from Alaknanda valley, Uttarakhand, NW Himalaya, India. *Journal of Geological Society of India*, 99, 1141-1148. (Q2), **IF. 1.3**
9. Sundriyal, Y., **Kumar, V***, Khan, F., Puniya, M.K., Kaushik, S., Chauhan, N., Bagri, D.S. and Rana, N., **2023**. Impact of potential flood on riverbanks in extreme hydro-climatic events, NW Himalaya. *Bulletin of Engineering Geology and the Environment*, 82(196), 1-18. * **Corresponding author. (Q1), IF. 4.2**
10. **Kumar V.**, Cauchie L., Mreyen, A.S., Micu, M., Havenith, H.B. **2021**. Evaluating landslide response in seismic and rainfall regime: A case study from the SE Carpathians, Romania. *Nat. Hazards Earth Syst. Sci.*, 21 (2), 3767-3788. (Q1), **I.F. 4.337**
11. **Kumar V.**, Jamir I., Gupta V., Bhasin R., **2021**. Inferring Potential landslide damming using slope stability, geomorphic constraints and run-out analysis; case study from the NW Himalaya. *Earth Surface Dynamics*, 9, 351-377. (Q1), **I.F. 4.813**
12. Luirei K., Bhakuni SS, Longkumer L., **Kumar V.**, Jamir I., **2020**. Geomorphic assessment of the factors contributing to the evolution of landforms, Ukhaldhunga, Kosi River valley, Kumaun Himalaya. *Geoscience Journal*. DOI: 10.1007/s12303-020-0034-7. (Q2), **I.F. 2.237**
13. Jamir I., Gupta V., Thong GT. and **Kumar V.**, **2019**. Litho-tectonic and precipitation implications on landslides, Yamuna valley, NW Himalaya. *Physical Geography*. Peer reviewed. DOI:10.1080/02723646.2019.1672024. (Q2), **I.F. 2.086**
14. **Kumar V.**, Gupta V., Jamir I. and Chattoraj S.L., **2019**. Evaluation of potential landslide damming: Case study of Urni landslide, Kinnaur, Satluj valley, India. *Geoscience Frontier*, 10 (2), 753-767. (Q1), **I.F. 6.853**
15. **Kumar V.**, Gupta V., and Sundriyal Y.P., **2019**. Spatial interrelationship of landslides, litho-tectonic, and precipitation regime, Satluj valley, Northwest Himalaya. *Geological Journal*, 54, 537-551. (Q1), **I.F. 2.489**
16. **Kumar V.**, Gupta V., and Jamir I., **2018**. Hazard Evaluation of Progressive Pawari Landslide Zone, Kinnaur, Satluj Valley, Higher Himalaya, India. *Natural Hazards*, 93 (2), 1029-1047. (Q1), **I.F. 3.656**
17. Shukla, T., Mehta, M., **Kumar, V.**, Nainwal, H.C., and Dobhal, D.P., **2017**. Application of the Schmidt-hammer with relative-age dating of moraine boulders - a case study from Mandakini River valley, central Himalaya, India. *Himalayan Geology*, 38 (2), 184-192. (Q2), **I.F. 1.293**
18. Jamir, I., Gupta, V., **Kumar, V.**, and Thong, G. T., **2017**. Evaluation of potential surface instability using finite element method in Kharsali Village, Yamuna Valley, Northwest Himalaya. *Journal of Mountain Science*, 14(8), 1666-1676. (Q2), **I.F. 2.071**
19. Gupta V., Jamir I., **Kumar V.**, and Devi M., **2017**. Geomechanical characterization of slopes for assessing rockfall hazards between Janki Chatti and Yamunotri Temple, Yamuna valley, Higher Himalaya, India. *Himalayan Geology*, 38 (2), 156-170. (Q2), **I.F. 1.293**
20. Gupta V., Bhasin R.K., Kaynia A.M, **Kumar V.**, Saini A.S., Tandon R.S. and Pabst T., **2016**. Finite element analysis of failed slope by shear strength reduction technique: a case study for Surabhi Resort Landslide, Mussoorie Township, Garhwal Himalaya. *Geomatics, Natural Hazards and Risk*, 7 (5), 1677-1690. (Q1), **I.F. 3.528**
21. Gupta V., Nautiyal H., **Kumar V.**, Jamir I., and Tandon R.S., **2016**. Landslides hazards around Uttarkashi Township, Garhwal Himalaya, after the tragic flash flood in June 2013. *Natural Hazards*, 80, 1689-1707. (Q1), **I.F. 3.656**

PROJECTS

1. **Title:** Assessment of Impact of climate change on the Geodiversity in Uttarakhand Himalaya for five most Disaster-prone districts of Uttarakhand including vulnerability and Risk assessment: Implication for Sustainable Development and Policy Making.
Duration and Funding Agency: 2020-2023, DST (Govt. of India)
2. **Title:** Dynamic risk for cascading Himalayan Hazards (United Kingdom-India Collaborative Project)
Duration and Funding Agency: 2024-2028, Ministry of Earth Sciences, India

CONVENER/COORDINATOR

1. **Role:** Convener
Workshop: National Seminar on Uttarakhand Himalaya: Challenges & Solutions in the Paradigm of Changing Climate
Day and venue: 9 Feb. 2023, Doon University, Dehradun
Participants: Students from various public and private schools of Dehradun
Funding Agency: HDFC Bank Pvt. Ltd., PNB Bank Ltd., and Doon University, Dehradun
2. **Role:** Convener
Workshop: Brainstorming session on the NW & Central Himalayan Natural Disasters
Day and venue: 26th March 2023, Doon University, Dehradun
Participants: Researchers and Students from various universities of Uttarakhand
Funding Agency: Uttarakhand State Council for Science and Technology, Dehradun, Uttarakhand, India
3. **Role:** Coordinator
Workshop: Advanced Drone Mapping & 3D model generation
Day and venue: 28-29th August 2023, Doon University, Dehradun
Participants: Students from Geology, Geography, Computer Science, and Design Departments of Doon University
Funding Agency: Doon University, Dehradun, India
4. **Role:** Coordinator
Workshop: National Seminar on "Traditional Practices of Disaster Management in Uttarakhand Himalaya"
Day and venue: 9 Feb. 2024, Doon University, Dehradun
Participants: Students from various public and private schools of Dehradun
Funding Agency: Doon University, Dehradun
5. **Role:** Convener
Workshop: National Seminar on "Natural Hazards in the Himalayas: Prediction, Mitigation, and Support"
Day and venue: 20-21 March 2024, Doon University, Dehradun
Participants: Academicians/Industrialists/Students from various regions of India.
Funding Agency: Doon University, Dehradun and Pan India Consultants, India.