CURRICULUM VITAE

OFFICIAL ADDRESS:

Dr. VIPIN KUMAR Head, Department of Geology, Doon University, Dehradun, Uttarakhand, 248001, India

PERSONAL DETAILS:

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EXPERIENCE

- Assistant Professor (Nov. 2022-present): Doon University, Dehradun, India
- Project Scientist-II (Dec. 2021-Nov. 2022): Hemvati Nandan Bahuguna Garhwal University, Srinagar, India
- Post Doc. (FNRS) Fellow (March 2020-Nov. 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

- Co-Lead, Project (2024): UK Research and Innovation, United Kingdom/Ministry of Earth Sciences, 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. Jamir, I., Kumar, V., Ojha, A.K., Gupta, V., Martha, T.R., Griffiths, D.V. 2024. Evaluating failure regime of an active landslide using instability and rockfall simulation, NW Himalaya. Environmental Earth Sciences. Accepted. Q2.
- 2. 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.**
- 3. 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
- 4. **Kumar, V.,** Sundriyal, YP., 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**
- 5. 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
- 6. **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**
- 7. **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**
- 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
- 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
- 10. **Kumar V.**, Gupta V., Jamir I. and Chattoraj SL., **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**
- 11. **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**
- 12. **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**
- 13. 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**
- 14. 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**
- 15. 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**
- 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
- 17. 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.

Duration and Funding Agency: 2024-2028, UKRI, UK and 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.