



Faculty Details proforma for DU Web-site

Title	Dr.	First Name	Vimal	Last Name	Singh	Photograph
Designation	Assistant Professor					
Address	Department of Geology, Centre of Advanced Studies, Delhi University, Delhi-7					
Phone No	Office	+91-11-27667073				
Residence		+91-11-65155338				
	Mobile	+91-9560714063				
Email	<u>vimalgeo@gmail.com</u>					
Web-Page						

Educational Qualifications		
Degree	Institution	Year
Ph.D.	University of Delhi	2007
M.Phil.	University of Delhi	2001
M.Sc.	Banaras Hindu University, Varanasi	1999
B.Sc.	SSJM Kanpur University, Kanpur	1997
Career Profile		



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- Assistant Professor (Dec, 2009 – Present), Department of Geology, Centre of Advanced Studies, Delhi University
- Assistant Professor (Aug, 2008 - Dec, 2009), Rajiv Gandhi Institute of Petroleum Technology, Raebareli, UP
- Centenary Postdoctoral Fellow (Nov, 2007- Aug, 2008), Indian Institute of Science, Bangalore, Karanataka
- Research Associate, (Dec, 2006 – Oct, 2007), Wadia Institute of Himalayan Geology, Dehra Dun, Uttarakhand

Administrative Assignments



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- Member, Board of Research Studies from 2012 -2014.
- Coordinator, GEOFEST 2013 held at Department of Geology, Delhi University, 28th Feb – 2nd March, 2013.
- Member, Anti-Ragging Committee (2012-13), Department of Geology, University of Delhi.
- Coordinator, GEOFEST 2012 held at Department of Geology, Delhi University, 1st – 2nd March, 2012.
- Faculty-incharge, Computer Lab (2011-12; 2014 onwards), Department of Geology, University of Delhi
- Member, Examination committee 2011-2012, Department of Geology, Delhi University.
- Faculty-incharge of seminars (since 2010) in the department; till now conducted 19 lectures.
- Member, Department Research Committee 2010-2012 and 2014 onwards, Department of Geology, Delhi University.
- August, 2009 – December, 2009: Examination coordinator, Rajiv Gandhi Institute of Petroleum Technology, Raebareli
- August, 2009 – December, 2009: Sports coordinator, Rajiv Gandhi Institute of Petroleum Technology, Raebareli
- September, 2008 – February, 2009: Hostel warden, Rajiv Gandhi Institute of Petroleum Technology, Raebareli
- September, 2008 – August, 2009: Student affairs coordinator, Rajiv Gandhi Institute of Petroleum Technology, Raebareli
- October, 2008 – December, 2009: Faculty recruitment coordinator, Rajiv Gandhi Institute of Petroleum Technology, Raebareli.

Areas of Interest / Specialization



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My main research interest focuses on the Himalayan rivers. Rivers originating in the Himalaya supports millions of people living on the Indo-Gangetic Plains. Therefore, it is important to understand how these rivers have responded to the past to climatic and tectonic changes. The results of such studies could help us to model the future trends of the rivers.

One of the ways these river responses could be studied is by means of quantifying the amount of erosion, intensity of climate, and tectonic uplift. My studies ranges from identification of young faults and quantifying convergence along it, to facies analysis of Quaternary deposits. My work involves extensive field investigations combined with topographic, stratigraphic and structural analysis with geochronology.

Subjects Taught

M.Sc.

- Active tectonics and Geomorphology
- Earth Surface Processes

B.Sc.

- Geomorphology
- Photogeology, Remote Sensing and GIS
- River Science
- Quaternary Geology
- Sedimentary Geology

Research Guidance



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1. *Supervision of awarded Doctoral Thesis*

1. **Rahul Devrani:** River modeling in the Himalaya
2. **Neelam Verma:** Geomorphic evolution of the Ganga River profile

2. *Supervision of Doctoral Thesis, under progress*

1. **Ananya Divyadarshini:** Tectonic Geomorphology of intermontane valleys of Himalayas
2. **Sukumar Parida:** Exploring connectivity in Large River System: Ganga River System
3. **Debojyoti Basuroy:** Sutlej River, Reorganisation and its causes
4. **Arka Prabha Mukherjee:** Sediment Budgeting of a Himalayan River catchment

3. *Supervision of awarded M.Phil dissertations*

Four

4. *Supervision of M.Phil dissertations, under progress*

1. **Mahak Sharma** – The Yamuna tear fault – Its characterization and impact on the adjoining geomorphology

Publications Profile



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List against each head (If applicable) (as Illustrated with examples)

1. Books/Monographs (Authored/Edited)/ Book Chapter

S.K. Tandon, P.P. Chakraborty, **V. Singh** (2014) Geological and Tectonic framework of India: Providing context to Geomorphologic Development. In: Kale V.S. (ed.) Landscapes and Landforms of India, Springer Netherlands, p. 3-14.

S.K. Tandon, **V. Singh** (2014) Duns: Intermontane basins in the Himalayan Frontal Zone. In: Kale V.S. (ed.) Landscapes and Landforms of India, Springer Netherlands, p. 135-142.

S.K.Tandon, M.R.Gibling, R.Sinha, **V. Singh**, P.Ghazanfari, A.Dasgupta, M. Jain and V.Jain (2006). Alluvial valleys of the Gangetic Plains, India: Timing and Causes of Incision. In: Dalrymple, R.D., Leckie, D.A., and Tillman, R., (eds.), Incised-Valley Systems in Time and Space. *SEPM* Special Publication no. 85; 15-35.

2. Research papers published in Refereed/Peer Reviewed Journals

a) Research papers published in Refereed/Peer Reviewed Conferences

- Kaushal, R., **Singh, V.**, Mukul, M., and Jain, V., (2017) Identification of deformation variability and active structures using geomorphic markers in Nahan salient, NW Himalaya, India. *Quaternary International* v.462; 194-210.
- Divyadarshini, A., and **Singh, V.**, (2017) Identifying active structures in the Chitwan Dun, Central Nepal, using longitudinal river profiles and SL index analysis. *Quaternary International* v.462; 176-193.
- Srivastava, P., and **Singh, V.**, (2017) Quaternary of Himalaya. *Geomorphology* v. 284; 1-4.
- Parida, S., Tandon, S.K., and **Singh, V.**, (2017) Controls on channel width in an intermontane valley of the frontal zone of the northwestern Himalaya. *Geomorphology* v. 278; 12-27.
- Elizabeth Dingle, Hugh D. Sinclair, Mikael Attal, David T. Milodowski, and **Vimal Singh** (2016) Subsidence control on river morphology and grain size in the Ganga Plain. *American Journal of Science* v. 316(8); 778-812.
- Divyadarshini, A., **Singh, V.**, (2016) Seismic Threat to the Chitwan and Hetauda Duns, Central Nepal. *Current Science* v. 111(8); 1309.
- Malay Mukul and **Vimal Singh** (2016) Active Tectonics and Geomorphological Studies in India During 2012- 2016. *Proc Indian Natn Sci Acad* **82** No. 3 July Spl Issue.
- Rahul Devrani, **Vimal Singh**, SM Mudd, HD Sinclair (2015) Prediction of flash-flood hazard impact from Himalayan River profile. *Geophysical Research Letters* 42 (14); 5888-5894.
- **Vimal Singh** (2015). Commentary on The Indian Critical Zone – A case for priority studies. *Current Science*, vol. 108 (6); 1045-1046.
- S.K. Tandon, P.P. Chakraborty, **V. Singh** (2014) Geological and Tectonic framework of India: Providing context to Geomorphologic Development. In: Kale V.S. (ed.) Landscapes and Landforms of India, Springer Netherlands, p. 3-14.
- S.K. Tandon, **V. Singh** (2014). Duns: Intermontane basins in the Himalayan Frontal Zone. In: Kale V.S. (ed.) Landscapes and Landforms of India, Springer Netherlands, p. 135-142.
- Verma, N., Devrani, R., **Singh, V.** (2014). Is Ganga the longest river in the Ganga Basin, India? *Current Science* v. 107 (12); 2018 – 2022.
- Rahul Devrani and **Vimal Singh** (2014). Evolution of valley-fill terraces in the Alaknanda Valley, NW Himalaya: Its implication on river response studies, *Geomorphology* v. 227; 112-122.
- Rahul Devrani and **Vimal Singh** (2013). Determining the geomorphic changes in Srinagar (Garhwal) valley, NW Himalaya in last two centuries using landscape painting. *Zeitschrift für Geomorphologie*.
-
- **Vimal Singh**, Rahul Devrani, and Zabiullah Ansari (2012). Estimation of the rate of erosion of valley fill deposits in a part of the NW Lesser Himalaya. *Episodes* v. 35 (3); 445 - 452.
- Kumar, S., Wesnousky, S.G., Perumal, R.J.G., Nakata, T., Kumahara, Y., and **Singh, V.**, (2010). Paleoseismological evidence of surface faulting along the northeastern Himalayan front, India: Timing, Size, and Spatial Extent of Great Earthquakes. *Journal of Geophysical Research* v. 115. B12422; doi:10.1029/2009JB006789.
- **Vimal Singh** and S.K. Tandon (2010). Integrated analysis of structures and landforms of an intermontane longitudinal valley (Pinjaur dun) and its associated mountain fronts in the NW Himalaya. *Geomorphology* v. 114 (4); 573-589.
- **Vimal Singh** and S. K. Tandon (2008). The Pinjaur Dun (intermontane longitudinal valley) and associated active mountain fronts, NW Himalaya: Tectonic Geomorphology and Morphotectonic evolution. *Geomorphology* v. 102 (3-4); 376-394.



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Conference Organization/ Presentations (in the last three years)

List against each head (If applicable)

1. *Organization of a Conference/Workshop*

- Organized DST sponsored field-training workshop on “Stratigraphy, Sedimentology and Tectonics along Jammu-Leh-Shyok transect” from 20th June – 7th July 2014.

2. *Participation as Paper/Poster Presenter*

Sinclair, H.D., **Singh V.**, Devrani, R., Mudd, S., Dingle, L., and Attal M., 2014. Learning from the reconstruction of major floods in the Himalaya: examples from Ladakh and Uttarakhand. EDINBURGH INDIA INSTITUTE INAUGURAL CONFERENCE 15-16 MAY 2014 on ‘Innovative Engagement for Sustainable Development: the Edinburgh-India Story’ at University of Edinburgh.

Vimal Singh and Rahul Devrani, 2014. Role of high magnitude events in the valley fill deposits of the Alaknanda Valley. Conference on *Climate change and environmental sustainability: Geological records from Poles to Tropics* held at Department of Geology, University of Lucknow on September 9 – 10.

Research Projects (Major Grants/Research Collaboration)



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Sponsoring Agency	Title of project	Amount of grant (in Rupees)	Period	Co-investigators
				(if any)
Delhi University	What controls the variability in geomorphology of the Ganga Plains?	3.0 lakhs	2015-16	-
Delhi University	Understanding controls on geomorphic development of the Indo-Gangetic Plains	2.4 lakhs	2014-15	-
Delhi University	Comparing response of the Sutlej and the Ganga River to Last Glacial Maxima	2.8 lakhs	2013-2014	(completed) -
Delhi University	Study of Geomorphic variability in the Indo-Gangetic Plains near Central Himalayan Front	2.00 lakhs	2012-2013	(Completed)
Department of Science & Technology DST (DST Fast track scheme)	Investigation of the postulated piedmont fault between Ganga and Yamuna River	14.7 lakhs	2010-2014	-
Department of Science & Technology (DST)	Morphotectonic Variability along the NW Himalayan Front: Tectonics-Climate Coupling	7.5 lakhs (Total: 29.75 lakhs)	2009-2014	Dr. Vikrant Jain, Dr. M. Mukul, Prof. R. Sinha,
Delhi University	Study of geomorphic evolution of the Ganga River	2.25 lakhs	2010-2011	(completed)
				-
Delhi University	Study of geomorphic evolution of Pipalkoti area, NW Himalaya	1.5 lakhs	2009-2010	(completed) -



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Awards and Distinctions

Honors

- Centenary Postdoctoral Fellowship 2007, Indian Institute of Science Bangalore, Bangalore, Karnataka
- UGC-Junior Research Fellowship for Lectureship, Jan 2001

Association With Professional Bodies



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1. *Editing*

NA

2. *Reviewing*

International Journals

- Reviewer, Science
- Reviewer, Basin Research
- Reviewer, Geological Journal
- Reviewer, Earth Science Reviews (Elsevier)
- Reviewer, International Journal of Earth System Science (Springer)
- Reviewer, Geomorphology (Elsevier)
- Reviewer, Tectonophysics (Elsevier)
- Reviewer, Quaternary International (Elsevier)
- Reviewer, Episodes

National Journals

- Reviewer, Current Science
- Reviewer, Himalayan Geology

3. *Advisory*

NA

4. *Committees and Boards*

- *Member, Board of Research Studies, University of Delhi*
- *Member, International Geoscience Program (IGCP) Scientific Board*

5. *Memberships*

- *Member Indian Association of Sedimentologists*
- *Fellow, Geological Society of India*

6. *Office Bearer*

NA

