

STANDARD TEMPLATE OF FACULTY PROFILE FOR UPLOADING OF UNIVERSITY WEBSITE			
Title	First Name	Last Name	
	Varun	Joshi	
Designation	Professor		
School/ Department Name	University School of Environment Management		
Address	USEM Room No A002 GGS Indraprastha University Dwarka Sector 16C New Delhi 110078		
Phone No.	Office	+91-11-25302369	
	Residence	Optional	
	Mobile	Optional	
Email	varun.joshi@ipu.ac.in	<a href="mailto:varunj63@gmail.com">varunj63@gmail.com</a>	
Web page (If any)			
Subjects Taught	(A). M.Sc. (Environment Management)	1. EM 605: Environmental Geosciences & Natural Disasters 2. EM 610: Environmental Policies, Ethics and Legislation 3. EMGE626: Watershed Management 4. EMOE 733: Disaster Risk Reduction	
	(B). M.Sc. (Biodiversity and Conservation)	1. EMOE 733: Disaster Risk Reduction	
	(C). M.Sc. (Natural Resource Management)	1. EMNRM 605: Earth, Water Resources and Natural Disasters 2. EMNRM 655: Soil, Rock & Minerals 3. EMNRM 657: Seminar/Term paper 4. EMGE 626: Watershed Management 5. EMOE 733: Disaster Risk Reduction	
	(D). PhD	1. PES 917: Watershed Management	
Areas of Interest/ Specialization	Environmental Geology, Watershed Management, Climate Change special reference to Himalaya, Glacial Studies, Environmental Impact Assessment, Disaster Management		
Experience (in years)		Total	
	Teaching	12	
	Research	36	
Educational Qualifications	UG	B.Sc. from HNB Garhwal University, Srinagar (Garhwal), Uttarakhand	
	PG	Geology, from HNB Garhwal University, Srinagar (Garhwal), Uttarakhand	
	Doctorate	Geology, from HNB Garhwal University, Srinagar (Garhwal), Uttarakhand	

	Any other	-
Research Publications in Journals (last 5 years)	<ul style="list-style-type: none"> <li>• Chhillar, N. &amp; <b>Joshi, V.</b> (2022). Spring water quality analysis using water quality index and geospatial technology in the Takoli gad watershed, Tehri Garhwal Uttarakhand, India. <i>Ecology Environment and Conservation</i>. ISSN No: 0971-765X. 28. S239-S256. <a href="http://doi.org/10.53550/EEC.2022.v28i01s.035">http://doi.org/10.53550/EEC.2022.v28i01s.035</a></li> <li>• Prakash, B., Kumar, K., <b>Joshi, V.</b>, Goyal, D. (2021). Causes of the triggering of Chamoli glacier burst of 7th February 2021 in Uttarakhand, India. <i>Disaster Advances</i>. ISSN No: 2278-4543, 14(7). 60-67. <a href="https://www.researchgate.net/publication/352738936_Causes_of_the_triggering_of_Chamoli_glacier_burst_of_7th_February_2021_in_Uttarakhand_India">https://www.researchgate.net/publication/352738936_Causes_of_the_triggering_of_Chamoli_glacier_burst_of_7th_February_2021_in_Uttarakhand_India</a></li> <li>• Prakash, B. &amp; <b>Joshi, V.</b> (2021). Slope instability analysis using SMR approach near Jiribam-Tupul railway tunnel, Manipur, India- A case study. <i>NeBIO-An International Journal of Environment and Biodiversity</i>. ISSN No: 2278-2281, 12(2) <a href="http://nebio.in/2021/05/31/nebio-122-june-2021/">http://nebio.in/2021/05/31/nebio-122-june-2021/</a></li> <li>• Prasad, S., Saluja, R., <b>Joshi, V.</b>, Garg, J.K. (2021). Riverine landscape dynamics of the Upper Ganga River (Haridwar-Narora), India. <i>Environmental Monitoring and Assessment</i>. ISSN No: 0167-6369. 193(96). <a href="https://link.springer.com/article/10.1007/s10661-021-08868-8">https://link.springer.com/article/10.1007/s10661-021-08868-8</a></li> <li>• Prakash, B. &amp; <b>Joshi, V.</b> (2021). GIS Based Bi-Variate Statistical Study for the Assessment of Landslide Susceptibility in the West Sikkim District of Sikkim Himalaya, India. <i>Jour. Ind. Geol. Cong.</i>, 12(2) and 13(1&amp;2).</li> <li>• Prakash, B., Singh. M., Sarma, A.K., <b>Joshi, V.</b> (2021). Assessment of the water inundation area due to the tropical cyclone Bulbul (2019) in the selected districts of West Bengal, India with the application of RS and GIS tools. <i>Proceedings of Indian National Science Academy</i>. ISSN No: 2454-9983, 87. 628-639. <a href="https://doi.org/10.1007/s43538-021-00056-z">https://doi.org/10.1007/s43538-021-00056-z</a></li> <li>• Biswakarma, P., <b>Joshi, V.</b>, Kumar, K. (2020). Study of slope failures in and around Yuksom, the first capital of Sikkim, India- a case study. <i>Environment and We International Journal of Science and Technology</i>. ISSN No: 0975-7112. 15. 39-48. <a href="http://www.sedindia.in/ewijst/issues/vol15/ewijst1501042019023.pdf">http://www.sedindia.in/ewijst/issues/vol15/ewijst1501042019023.pdf</a></li> <li>• Baruah, L., <b>Joshi, V.</b>, Sarma, K. (2020). Land Use Mapping and Time Series Analysis of Coal Mining Area in Makum Coalfield, Assam, India. <i>Environment and We International Journal of Science and Technology</i>. ISSN No: 0975-7112, 15. 61-71. <a href="http://www.sedindia.in/ewijst/issues/vol15/ewijst1501062019024.pdf">http://www.sedindia.in/ewijst/issues/vol15/ewijst1501062019024.pdf</a></li> <li>• Biswakarma, P., Barman, B.K., <b>Joshi, V.</b>, Rao, K. S. (2020). Landslide Susceptibility Mapping in East Sikkim Region of Sikkim Himalaya Using High Resolution Remote Sensing Data and GIS techniques. <i>Applied Ecology and Environmental Sciences</i>. ISSN No: 2328-3920. 84. 143-153. <a href="http://www.sciepub.com/AEES/abstract/11846">http://www.sciepub.com/AEES/abstract/11846</a></li> <li>• Kumar, K., <b>Joshi, V.</b>, Biswakarma, P. (2020). Mapping of Vulnerable Landslide Zones by Large Scale Mapping in and around Devprayag Area along National Highway 58, Uttarakhand, India. <i>Environment and We International Journal of Science and Technology</i>. ISSN No: 0975-7112, 15. 145-154. <a href="http://www.sedindia.in/ewijst/issues/vol15/ewijst1502062001926.pdf">http://www.sedindia.in/ewijst/issues/vol15/ewijst1502062001926.pdf</a></li> <li>• Prasad, S., Saluja, R., <b>Joshi, V.</b>, Garg, J.K. (2020). Surface water quality assessment using multivariate statistical technique and water quality index (WQI) modelling in the upper Ganga River, India. <i>Pollution Research</i>. ISSN No:</li> </ul>	

<http://www.envirobiotechjournals.com/PR/v39i420/Poll%20Res-31.pdf>

- Prasad, S., Saluja, R., **Joshi, V.**, Garg, J.K. (2020). Heavy metal pollution in surface water of the Upper Ganga River, India: human health risk assessment. *Environmental Monitoring and Assessment*. ISSN No: 0167-6369, 192. <https://doi.org/10.1007/s10661-020-08701-8>
- Goyal, D. & **Joshi, V.** (2020). Recovery of Topsoil Physico-Chemical Characteristics in Different Aged Landslides in Alaknanda Watershed, Uttarakhand, India. *Proceedings of Indian National Science Academy*. ISSN No: 2454-9983, 86 (4).1397-1410. [https://insa.nic.in/writereaddata/UpLoadedFiles/PINSA/PINSA\\_2020\\_Art81.pdf](https://insa.nic.in/writereaddata/UpLoadedFiles/PINSA/PINSA_2020_Art81.pdf)
- Barman, B.K., Biswakarma, P., Rao, K.S., **Joshi, V.** (2020). Temporal Change Detection of Land Use/Land Cover using Remote Sensing and GIS techniques: A case study of upper Tuirial river basin, Mizoram, India. *NeBIO-An International Journal of Environment and Biodiversity*. ISSN No: 2278-2281, 11(4). <http://nebio.in/2020/12/29/nebio-114-december-2020/>
- Tomar, T., Katyal, D., **Joshi, V.** (2019). Sensitivity analysis of groundwater vulnerability using DRASTIC method: A case study of National Capital Territory, Delhi, India. *Journal of Groundwater for Sustainable Development*. ISSN No: 2352801X, 9. <https://doi.org/10.1016/j.gsd.2019.100271>
- Kumar, P. & **Joshi, V.** (2019). Modelling Surface Run-Off Response using Hydrological Model Swat in the Upper Watershed of River Subarnarekha, India. *Malaysian Journal of Geosciences*. ISSN No: 2521-5035, 3(2). 09-15. <https://ideas.repec.org/a/zib/zbesmy/v3y2019i2p09-15.html>
- Kumar, P. & **Joshi, V.** (2019). A geospatial- statistical approach to alienate priority area of upper watershed of river Subarnarekha using morphometric assessment framework. *Malaysian Journal of Geosciences*. ISSN No: 2521-0920, 3(1). 01-11. <https://myjgeosc.com/archives/1mjg2019/1mjg2019-21-31.pdf>
- Mukula, M., Jadeb, S., Ansaria, Matin, A., **Joshi, V.** (2018). Structural insights from geodetic Global Positioning System measurements in the Darjiling-Sikkim Himalaya. *Journal of Structural Geology*. ISSN No: 0191-8141, 114, 346-356. <https://doi.org/10.1016/j.jsg.2018.03.007>.
- Katyal, D., Tomar, T., **Joshi, V.** (2017). Recent trends in groundwater vulnerability assessment techniques: A review. *International Journal of Applied Research*. ISSN No: 2394-7500, 3(5), 646-655. <https://www.allresearchjournal.com/archives/2017/vol3issue5/PartJ/3-5-116-604.pdf>
- Rawat, M.S., Dobhal, R., **Joshi, V.**, Sundriyal, Y.P. (2017). Landslide Hazard Zonation Study in Eastern Indian Himalayan Region. *International Journal of Georesources and Environment*. ISSN No: 2371-9508. 3(1). 35-46. <https://doi.org/10.15273/ijge.2017.01.005>
- Rizvi, N., Katyal, D., **Joshi, V.** (2016). Seasonal and spatial variation in the water quality of River Hindon at NCR, India. *International Journal of Current Research*. ISSN No: 0975-833X, 8(5). 31282-31289. <https://www.journalcra.com/sites/default/files/issue-pdf/14746.pdf>
- Tomar, T., Katyal, D., **Joshi, V.** (2016). Hydrochemical characterization and evaluation of groundwater quality of Delhi region. *Journal of Water Resources Engineering and Management*. ISSN No: 2349-4336, 3(2). 32-41.

	<p><a href="http://engineeringjournals.stmjournals.in/index.php/JoWREM/article/view/1837">http://engineeringjournals.stmjournals.in/index.php/JoWREM/article/view/1837</a></p>
<p>Papers Published in Conference Proceedings (last 5 years)</p>	<ul style="list-style-type: none"> <li>• Sharma, A.K., Prakash, S., <b>Joshi, V.</b> (2016). Geographical Information Systems for Disaster Response and Management. <i>Proceedings of CORDIM 2016, IEEE Workshop on Distributed Systems for Coordinated Disaster Management</i>. Organised by IIM Calcutta, India. 2nd - 3rd January, 2016.</li> <li>• <b>Joshi, V.</b> &amp; Rawat, M.S. (2016). Landslide Hazard Zonation in Rora Chu sub-Watershed of East district of Sikkim, India. <i>Proceedings of the seminar Geo-Environmental Hazards in Himalaya (eds. N.P. Naithani)</i>. Angel Publications, New Delhi. pp.45-56</li> <li>• Rawat, M.S., <b>Joshi, V.</b>, Sundriyal, Y.P. (2016). Slope stability analysis in a part of East Sikkim, using Remote Sensing &amp; GIS. <i>Proc of 2016 2nd International Conference on Next Generation Computing Technologies (NGCT-2016) Dehradun, India 14-16 October 2016</i>. pp 51-60</li> </ul>
<p>Books Authored/Book Volume Chapters</p>	<p><b>Books:</b></p> <ol style="list-style-type: none"> <li>1. Climate Change, Resource Conservation and Sustainable Strategies. Published by DBH Publishers, New Delhi. Eds A. Kaushik, J.K. Garg, P. Bhattacharya, N.C. Gupta, R. Singh and V. Joshi. 2017. pp 173. ISBN 9789384871086</li> <li>2. Training Module-II Natural Disasters preparedness, mitigation and management, building for safer and prosperous Sikkim. V. Joshi, A.K. Sharma, and K. Kumar, K. 2007. G.B. Pant Institute of Himalayan Environment and Development, Kosi-Katarmal, Almora. pp. 65.</li> <li>3. Action plan for disaster mitigation, prevention and preparedness, building for safer and prosperous Sikkim. V. Joshi, A.K. Sharma, K.K. Singh, H.K. Badola and K. Kumar, 2006. G.B. Pant Institute of Himalayan Environment and Development, Kosi-Katarmal, Almora. pp. 44.</li> <li>4. Village Environmental Action Plan (VEAP). K. Kumar, D.S. Rawat, G.C.S. Negi, D.K. Agrawal, P.K. Samal, V. Joshi, G. Satyal and L.M.S. Palni, L.M.S. 2000. G.B. Pant Institute of Himalayan Environment and Development, Kosi-Katarmal, Almora. pp. 85.</li> <li>5. Perspectives of the Mountain Risk Engineering in the Himalayan Region. HIMAVIKAS Occasional Publication no. 10, GyanodayaPrakashan, Nainital. 1997. By- D.K.Agrawal, A.P.Krishna, V. Joshi, K.Kumar and L.M.S.Palni. GyanodayaPrakashan, Nainital.</li> </ol> <p><b>Book Chapter:</b></p> <ol style="list-style-type: none"> <li>1. Kumar, P. and Joshi, V. (2017). Application of hydrological model SWAT on upper watershed of river Subarnarekha to study climate change impact on water availability. In Climate Change, Resource Conservation and Sustainable Strategies. Published by DBH Publishers, New Delhi. Eds A. Kaushik, J.K. Garg, P. Bhattacharya, N.C. Gupta, R. Singh and V. Joshi. ISBN No:9789384871086, pp 10-18</li> <li>2. Rizvi, N., Katyal, D. and Joshi, V. (2017). A multivariate statistical approach for water quality assessment of river Hindon. In Climate Change, Resource Conservation and Sustainable Strategies. Published by DBH Publishers, New Delhi. Eds A. Kaushik, J.K. Garg, P. Bhattacharya, N.C. Gupta, R. Singh and V. Joshi. ISBN No:9789384871086, pp 44-52</li> <li>3. Katyal, D., Tomar, T. and Joshi, V. (2017). GIS based DRASTIC model for</li> </ol>

	<p>assessing groundwater vulnerability in National Capital Territory (NCT) of Delhi, India. In Climate Change, Resource Conservation and Sustainable Strategies. Published by DBH Publishers, New Delhi. Eds A. Kaushik, J.K. Garg, P. Bhattacharya, N.C. Gupta, R. Singh and V. Joshi. ISBN No:9789384871086, pp 69-74</p> <p>4. Tyagi, S., Areendran, G., Krishna, R., Joshi, V. and Sarma, K. (2017). Site suitability of smart city; a case study of Gurgaon district, Haryana, using geospatial technology. In Climate Change, Resource Conservation and Sustainable Strategies. Published by DBH Publishers, New Delhi. Eds A. Kaushik, J.K. Garg, P. Bhattacharya, N.C. Gupta, R. Singh and V. Joshi. ISBN No:9789384871086, pp 159-166</p> <p>5. Rizvi, N. and Joshi V. (2021) Landslide susceptibility analysis: A review on analysis of recent models. Geology and Natural Resources of Himalaya, Ed R.A. Singh &amp; P.K. Singh, ASR Publications, ISBN No: 978-93-83247-95-0, pp 113-123.</p> <p>6. Chhillar, N. and Joshi V. (2021) Assessment of Physiochemical Quality of Spring water in Takoli Gad watershed, Tehri Garhwal District, Uttarakhand, India. Geology and Natural Resources of Himalaya, Ed R.A. Singh &amp; P.K. Singh, ASR Publications, ISBN No: 978-93-83247-95-0, pp 10-23.</p> <p>7. Tomer, T., Katyal, D. and Joshi V. (2021). Assessment of groundwater quality status by using Water Quality Index (WQI) method in National Capital Territory, Delhi, India. Environment Health and Society, ISBN: 978-93-83931-24-8, pp. 218-229.</p>		
o. of Conferences		Attended	Organized
	National	50	-
	International	10	-
Research Guidance		PG	Doctorate
	Awarded	44	05
	Undergoing	04	08
Research Projects	Completed	18	
	Undergoing	02	
Awards & Distinctions			
Administrative Assignments Handled	1. Coordinator of M.Sc. (Natural Resource Management) August 2012 to July 2017 and September 2021 till date		
Association with Professional Bodies	<p>Life Member:</p> <ol style="list-style-type: none"> <li>1. Geological Society of India</li> <li>2. Sikkim Science Society</li> <li>3. Nepal Geological Society</li> <li>4. Wadia Institute of Himalayan Geology</li> <li>5. Soil and Water Conservationist</li> </ol>		
Any other Achievements	-		