CV-2020
SHUBHRA SHARMA

- **Contact information:** shubhra@bhu.ac.in
- **Current affiliation and corresponding address:** Assistant Professor, Dept. of Geography, Institute of Science, Banaras Hindu University, Varanasi-221005
- **Date of Birth:** 08 April 1985

A. EDUCATION

• **Ph. D Geography** Faculty of Physical Sciences, Himachal Pradesh University (HPU), Shimla-171005 and Wadia Institute of Himalayan Geology, Dehradun-248001	6 March 2017 (Submitted- Oct 2016) **Thesis title:** Palaeo Landslide-Induced Damming and the Resultant Geomorphic Landscape: *Case Study of the Middle Satluj Valley near Sunni/Tattapani (Shimla/Mandi Districts), Himachal Pradesh, India.*
• **M. Phil Geography** HPU, Shimla, India-171005	2009-10 (74.67%) **Dissertation title:** Rural House Types of the Himalayan Beas Basin –A Geographical Analysis
• **MA Geography** HPU, Shimla, India-171005	2007-09 (69.06%) • Gold medalist • Certificate of merit in postgraduate studies
• **BA (Geography, Economics, English)** St. Bedes' College, HPU, Shimla, India-171002	2004-07 (73.4%) • State merit rank • 1st position in Geography in BA
• **Sr. Sec** HP Board (Phy., Chem, Bio, IT, Eng) St. Bedes' CollegeShimla-171002	2001-03 (68.4 %)
• **Matric** ICSE Convent of Jesus and Mary, Shimla	2001 (84.7%)

B. RESEARCH GRANT

- **Core Research Grant (CRG) SERB, Govt. of India:** Dec 2019-2022 (~56 lakhs)
- **INSPIRE Faculty Fellowship, DST, Govt. of India:** Dec 2017-2022 (~35 lakhs)

C. RESEARCH EXPERIENCE (post Ph.D)– More than 2 years

- **INSPIRE Faculty**
DST, Govt. of India IISER Mohali, Punjab-140306, India

Dec 2017-2019 (2 years)
Topic: Paleo-floods in the western Himalaya and their climatic implications
(~35 lakhs)

- **PRL- Post Doctoral Fellowship**
Mentor- Dr. Anil Shukla
Geosciences Division, Physical Research Laboratory, Ahmedabad (PRL), India-380001

April-Dec 2017 (8 months)
Topic: Paleo-floods in the Satluj valley and their climatic implications

D. TEACHING AND RESEARCH SUPERVISION: 2 years+

- Undergraduate and Post graduate teaching in Dept. of Geography, BHU
- **Four full semester teaching** in Dept. of Earth and Env. Sc. IISER-Mohali on Geomorphology/Earth surface process and Quaternary Environments/animal adaptations/Remote sensing and GIS.
- Also **designed two courses** for Earth surface process and Geomorphology and Remote Sensing and GIS
- **Supervised** M. Sc Thesis IISER Mohali, 24 April 2019, *Ascertaining the late Holocene sea-level and climate variability from the mudflats of Kori creek*
- **Interview panel member,** 2018 for Post Doc Fellowship IISER Mohali

E. PUBLICATIONS

1. *__Sharma, S__., Chauhan, G., Shukla, A.D., Nambiar, R., Bhushan, R., Desai, B.G., Pandey, S., Dabhi, M., Bhandari, S., Bhosale, S. and Lakhote, A., 2020. Causes and implications of Mid-to Late Holocene relative sea-level change in the Gulf of Kachchh, western India. *Quaternary Research***,** pp.1-24.

2. Shukla A.D., **Sharma S**., Rana N., Bisht P. 2020 Optical chronology and climatic implication of glacial advances from the southern Ladakh Range, NW Himalaya, India. *Palaeogeography, Palaeoclimatology, Palaeoecology*, 539, 109505

3. Sarkar A., Despande-Mukherjee, A, **Sharma S.** et al., 2020. New evidence of early Iron Age to Medieval settlements from the southern fringe of Thar Desert (western Great Rann of Kachchh), India: Implications to climate-culture co-evolution, *Journal of Archaeological Science: Reports*, 21,1-14.

4. Sati, S.P., **Sharma, S**., Sundriyal, Y.P., Rawat, D. and Riyal, M., 2020. Geo-environmental consequences of obstructing the Bhagirathi River, Uttarakhand Himalaya, India. *Geomatics, Natural Hazards and Risk*, 11(1), pp.887-905**.**

5. Rana N., *__Sharma S__., Ali S.N., Singh S., Shukla A.D. 2019. Investigating the sensitivity of glaciers to climate variability since the MIS-2 in the upper Ganga catchment (Saraswati valley), Central Himalaya, *Geomorphology*, 346, 106854-67.

6. Sati SP, *__Sharma, S.,__ Rana N, Dhobal, H., Juyal N. 2019. Environmental implications of the Pancheshwar dam in Uttarakhand (Central Himalaya), *Current Science,* vol. 116 (9), 1483-1489.

7. __*Sharma, S.__ and Shukla, A.D., 2018. Factors governing the pattern of glacier advances since the Last Glacial Maxima in the transitional climate zone of the Southern Zanskar Ranges, NW Himalaya. *Quaternary Science Reviews*, 201, pp.223-240.

8. Ganju, A., Nagar, Y.C., Sharma, L.N., *__Sharma S.,__ and Juyal, N., 2018. Luminescence chronology and climatic implication of the late quaternary glaciation in the Nubra valley, Karakoram Himalaya, India. *Palaeogeography, Palaeoclimatology, Palaeoecology, 502, pp.52-62.*

9. __*Sharma, S__., Hussain, A., Mishra, A.K., Lone, A., Solanki, T. and Khan, M.K., 2018. Geomorphic investigation of the Late-Quaternary landforms in the southern Zanskar Valley, NW Himalaya. *Journal of Earth System Science*, 127(1), p.9.

10. Rana, N. and **Sharma, S**., 2017.Comment on:"Morphotectonic records of neotectonic activity in the vicinity of North Almora Thrust Zone, Central Kumaun Himalaya", by Kothyari et al. 2017, *Geomorphology, 285*, pp. 272–286.

11. __*Sharma, S__., Shukla, A.D., Bartarya, S.K. and Marh, B.S., 2017.The Holocene floods and their affinity to climatic variability in the Western Himalaya, India. *Geomorphology, 290*, pp.317-334.

12. __*Sharma, S__., Bartarya, S.K. and Marh, B.S., 2016. The role of pre-existing topography in the evolution of post-glacial fluvial landforms in the middle Satluj valley, north-western Himalaya, India. *Quaternary International*, *425*, pp.399-415.

13. __*Sharma, S__., Chand, P., Bisht, P., Shukla, A.D., Bartarya, S.K., Sundriyal, Y.P. and Juyal, N., 2016. Factors responsible for driving the glaciation in the Sarchu Plain, eastern Zanskar Himalaya, during the late Quaternary. *Journal of Quaternary Science*, *31*(5), pp.495-511.

14. __*Sharma, S__., Bartarya, S.K. and Marh, B.S., 2016. Post-glacial landform evolution in the middle Satluj River valley, India: Implications towards understanding the climate tectonic interactions. *Journal of Earth System Science*, *125*(3), pp.539-558.

Corresponding author

F. ABSTRACT PRESENTED/PUBLISHED:

1. **Sharma S**., and Shukla, A.D., 2019, Geomorphic and climatic affinity of Holocene mega-floods in the western Himalaya, India. *20th INQUA Congress* in Dublin, Ireland, 25th-31st July 2019.

2. **Sharma S**., and Shukla, A.D., 2019, Response of glaciers since last 20 ka in the transitional climate zone of the Southern Zanskar Ranges (NW Himalaya), *20th INQUA Congress* in Dublin, Ireland, 25th-31st July 2019.

3. **Sharma S**., and Shukla, A.D., 2019, *Geomorphic and climatic affinity of Holocene mega-floods in the western Himalaya, India.* International conferencein Climate Change and Extreme Events in Himalaya workshop, IIT Mandi, India, 18-20 April, 2019.
4. **Sharma S**., and Shukla, A.D., 2019, *Response of glaciers since last 20 ka in the transitional climate zone of the Southern Zanskar Ranges (NW Himalaya)* International conferencein Climate Change and Extreme Events in Himalaya workshop, IIT Mandi, India,18-20 April, 2019.

5. Kumar, A., **Sharma S**., Chauhan G., Bhattacharya F., Nambiar R., Dabhi A., Harsh, Kumar N., Chavan A., Lakhote A., Shukla A., Bhushan R., 2018, Sedimentological and geochemical study of the tidal flat sediments from Kori Creek with emphasis on late Holocene sea level and climate, Second National Conference and Field Workshop on "Recent Studies on Geology of Kachchh Basin", Dept. of Earth and Env.Sc., KSKV Kachchh University, Bhuj, India, 30 Dec'18- 1 Jan '19.

6. **Sharma S**., 2018, *Current understanding of the floods in the Himalayan region and their societal implications,* Mountain Communities and Adaptive Sustainable Livelihood Strategies: National seminar sponsored by ICSSR- JNU, New Delhi, Nov 2018.

7. **Sharma, S**., 2016. Palaeo Landslide-Induced Damming and the Resultant Geomorphic Landscape: Case Study of the Middle Satluj Valley near Sunni/Tattapani (Shimla/Mandi Districts), Himachal Pradesh, India, **Thesis Abstracts,** *Ancient TL***,** Vol. *34 (2),* pp. 34-35, Luminescence Dosimetry Laboratory, Department of Physics, East Carolina University (USA).

8. **Sharma S.,** 2016, *Holocene extreme hydrological events and their climatic implications: evidence from the middle Satluj valley, western Himalaya, India*, European Geosciences Union (EGU): April, 2016, Vienna, Austria.

9. **Sharma S.,** Bartarya S.K., Marh B., 2015, *Post-glacial Landform Evolution in the Middle Satluj River Valley, India: Implications Towards Understanding the Role of Climate and Tectonics.* Himalayan Tibetan Karakoram workshop (HKT), Oct 2016, Dehradun, India.

10. **Sharma S.,** Chand P., Bisht P., Shukla A.D., Bartarya S.K., Sundriyal Y.P., and Juyal N., 2015, *Ascertaining the role of Indian Summer Monsoon and Mid-latitude Westerlies in driving the glaciation in Sarchu Plain, Zanskar Himalaya.* XII International Symposium on Antarctic Earth Sc., Goa, India, 13-17 July, 2015.

11. **Sharma S.,** *Rural house types in Himalayan Beas Basin-A Geographical Analysis.* XXXII Indian Geographers meet: India, Jaipur, 17-19 Jan, 2011.

12. **Sharma S.,** Role of pre-existing topography in the post-glacial fluvial landforms evolution, Satluj valley, NW Himalaya, India, Young Earth Scientist (YES) conference, Berlin,9-13 September, 2019

G. AWARDS/ACHIEVEMENTS

- **Editorial Board Member: Open Quaternary Journal (**Ubiquity Press, Open Access) since Oct 2018
- **Reviewer:** (i) Open Quaternary, (ii) Journal of Geological Society of India, (iii) Journal of Earth System Science and (iv) Himalayan Geology (v) Journal of Maps (Taylor & Francis Online) (vi) Basin Research
- **Invited to** first Upper Indus Basin Network India Chapter meeting organized by The International Centre for Integrated Mountain Development (ICIMOD), Kathmandu Nepal, and JNU, New Delhi on 19 April, 2019.
- **Invited as member** for formulating protocol for luminescence dating in India at BSIP, Lucknow, 28 March 2019
- Invited as **INSPIRE mentor** in INSPIRE camp, Jan-2019.
- Selected for **INSPIRE Faculty** Scheme2017 by DST, Govt. of India under Earth and Atmospheric Sciences.
- **National Post-Doctoral Fellowship (NPDF)** by DST, Govt. of India.
- **Special invitee to** Dept of Science and Technology, Govt. of India sponsored Field Training Program "Sedimentation, Tectonics and Quaternary Landforms of Zanskar valley" (2015).
- **Best Poster Award** at XII International Symposium on Antarctic. Earth Science, 13-17 July, Goa, India (2015)
- **Young Scholar Award** at XXXII Indian Geographer's Meet, 2011.

H. Selected WORKSHOPS/ TRAININGS

- Two weeks DST sponsored Summer school on "Mathematical Morphology in Geosciences" organized by ISI, Bangalore (2015).
- "Short course on remote sensing and image interpretation", Indian Institute of Remote sensing, ISRO, Dehradun, INIDA (2014).
- WIHG Winter School on Geo-mathematics, Dehradun, sponsored by Dept of Science and Technology, Govt. of India (2013).

- Dept of Science and Technology, Govt. of India sponsored Field Training Program "Understanding Structures and Tectonic Evolution of the Himalaya through a Transect across Chandigarh-Manali-Leh-Panamik: Indian plate to South Eurasian Plate" (2013).
- Impact of Climate Change on Mountain Environments Workshop, Eurasia-Pacific Uninet Faculty Development Workshop, Bhutan (2012).
- Climate Change and Carbon Assessment for The Benefit of Community Forest in Central and South East Asia, ITC Netherlands Workshop, Kathmandu, Nepal (2012).

I. ACQUIRED TECHNICAL SKILLS

- Worked extensively on OSL dating technique
- Geo-Information System (GIS), Remote sensing, surveying techniques
- Acquainted with radio-carbon dating, elemental analyzer and geochemical analysis