

Curriculum Vitae of Dr. Rameshwar Bali

1. **Name :** **Dr. Rameshwar Bali**
2. **Designation:** Professor and Head
3. **Address:** Center for Advanced Study in Geology, University of Lucknow, Lucknow
4. **Date of Birth:** Sept. 12, 1961
5. **Marital Status:** Married
6. **Experience:** **More than 30 years of Research and Teaching**
7. **Academic Qualification:** M. Sc., Ph.D
8. **Work experience (in chronological order).**

S.No.	Positions held	Name of the Institute	From	To	Pay Scale
1.	Lecturer	Lucknow University	2.2.1992	1.2.2001	2200-4000
2.	Associate Professor	Lucknow University	2.2.2001	1.2.2009	Grade pay 9000, P.B.IV
3.	Professor	Lucknow University	2.2.2009	Till date	Grade pay 10,000 P.B.IV

Research Interest: Glaciology, Morphotectonics and Structural Geology

Major Initiatives Undertaken:

- Have initiated Glaciological Studies in the Department of Geology, Lucknow University. Worked on Gangotri, Pindari and Triloknath glaciers.
- Was instrumental of opening Diploma in Remote Sensing and GIS course in the Department of Geology, University of Lucknow.
- Have contributed in the implementation of the DST- COSIST, FIST, PURSE and UGC SAP programmes. Presently Co-coordinator of UGC CAS programme.

Publications

International Journals

Bali, R., Khan, I., Sangode, S.J., Mishra, A.K., Ali, S. Nawaz, Singh, D.S., and Srivastava, P. (2017). Mid- to Late Holocene Climate response of the Triloknath Glacier, Lahaul Himalaya based on environmental magnetic studies. **Geomorphology** 284, 206-219.

Agarwal, K.K., **Bali, R.** Joshi, G. and Agarwal, A., 2017. A novel Seahorse-shaped, small-scale structure from Almora Crystalline Zone, Uttarakhand, India. **International Journal of Earth Sciences** · DOI: 10.1007/s00531-017-1547-9

Bali, R., Chauhan, M.S., Mishra, A.K., Ali, S. Nawaz, Tomar, A. Khan, I., Singh, D.S., and Srivastava, P. (2016). Vegetation and climate change in the temperate-subalpine belt of Himachal Pradesh since 6300 cal. yrs. BP, inferred from pollen evidence of Triloknath palaeolake. **Quaternary International** dx.doi.org/10.1016/j.quaint.2016.07.057.

Singh, Dhruvsen, Tangri, A.K., Kumar, D., Dubey, C.A., **Bali, R.** (2016). Pattern of retreat and related morphological zones of Gangotri glacier, Garwal Himalaya, India. **Quaternary International** dx.doi.org/10.1016/j.quaint.2016.07.025

Agarwal, A., Agarwal, K.K., **Bali, R.**, Prakash, C. and Joshi, G. (2016). Back-thrusting in Lesser Himalaya: Evidences from magnetic fabric studies in parts of Almora crystalline zone, Kumaun Lesser Himalaya. **Journal Earth System Science** DOI 10.1007/s12040-016-0699-5

Bali, R., Ali, S. Nawaz, Bera S.K., Patil, S.K., Agarwal, K.K . Nautiyal, C.M., (2015). Impact of Anthropocene Vis-a`-vis Holocene Climatic Changes on Central Indian Himalayan Glaciers. In G. Lollino et al. (eds.), **Engineering Geology for Society and Territory** – Volume 1, DOI: 10.1007/978-3-319-09300-0_89, 467-471

Bali, R., Agarwal, K.K., Nawaz Ali, S., Rastogi, S.K. and Krishna, K. Srivastava, P. (2013). Chronology of Late Quaternary Glaciation in the Pindar valley, Alaknanda Basin, Central Himalaya (India). **Asian Jour. Earth Sci.** 66, 221-233.

Bali, R., Agarwal, K.K., Nawaz Ali, S., Rastogi, S.K. and Krishna, K. (2012). Drainage morphometry of Himalayan Glacio-fluvial basin, India: Hydrologic and Neotectonic implications **Environ. Earth Sci.** 66, 1163-1174.

Bera, S.K., Nawaz Ali, S., **Bali, R** and Agarwal, K.K. (2011). Impact of Pollen Rain from the vegetation of Alpine-subalpine belt as a reliable measure for palaeoclimatic interpretation: A case study from Pindari Glacier, Kumaun Himalaya, India. **Inter. Jour. Ear. Sci. and Engin.** 4 (6).

Bali R., Agarwal, K. K., Nawaz Ali, S., Srivastava, P. (2011). Is the recessional pattern of Himalayan Glaciers suggestive of anthropogenically induced Global warming? **Arabian Journal of Earth Science** DOI 10.1007/s12517-010-0155-9s, **4**, 1087-1093.

Agarwal, K. K., **Bali R.**, Patil, S.K. and Nawaz Ali, S. (2010). Anisotropy of Magnetic susceptibility in the Almora Crystalline Zone Lesser Himalaya, India: A case study. **Asian Jour. Ear. Sci.** 3 (1) 1-10.

Agarwal, K. K., **Bali R.**, Girish Kumar, M., Srivastava, P. and Singh, P. V. (2009). Active Tectonics in and around Kimin-Ziro area, Lower Subansiri District, Arunachal Pradesh, NE India. **Zeitschrift fur Geomorphologie** 53 109-120.

Girish Kumar, M., **Bali, R.** and Agarwal, A.K (2009). GIS Integration of remote sensing and electrical data for hydrological exploration- A case study of Bhakar watershed, India. **Hydrological Sciences Journal** 54 (5) pp 949-960.

Srivastava, P. and **Bali R.** (2006). Proterozoic carbonaceous remains from the Chorhat sandstone: oldest fossils of the Vindhyan supergroup. **Geobios** V. 39, pp. 873-878.

Bali, R., Awasthi, D.D. and Tiwari, N.K. (2003). Neotectonic control on the geomorphic evolution of the Gangotri Glacier Valley, Garhwal Himalaya, **Gondwana Research**, 2003, Vol, 6 (4) pp. 829-838.

Bali R. and Agarwal, K.K. (1999). Microstructures of mylonites in the Almora Crystalline Zone, Kumaun Lesser Himalaya, Geodynamics of the NW Himalaya (Eds. A.K.Jain and R.M.Manickavasagam). **Gondwana Research Mem.** 6. 111-116.

National Journals

Kumar, M.G, **Bali, R.**, and Agarwal. A.K., (2011). Ground water prospects of a part of Vindhyan Supergroup: Case study of Bakhar watershed, India. **Journal of Applied Hydrology.** XXIII (1 & 2), 2010, 25 - 37

Bali, R. and Singh, T.N. (2011). Application of Resistivity survey to infer the subsurface nature of Himalayan Landslide: A case study. Slope stability: Natural and Manmade slope (Ed. T.N.Singh and Y.C.Sharma) Vayu education publication, New Delhi. pp. 244-254.

Bali, R., Agarwal, K.K. Patil, S.K., Nawaz Ali,S., Rastogi, S.K. and Krishna, K. (2011). Record of Neotectonic Activity in the Pindari Glacier valley: Study Based on Glacio geomorphic and AMS Fabric evidences. **Earth Science India** V.4(1) pp 1-14.).

Bali, R. and Srivastava, D. (2010). Urgent need to develop manpower for glaciological investigation. **Current Science** vol. 99 (9). Pp. 1159.

Bali, R. and Nawaz Ali, S. (2010). Dynamics of Pindari glacier during the last 600 years. **Current Science** Vol. 99(10), pp. 1307.

Bali, R. (2009). Advance and retreat of Chaurabari glacier, Garhwal Himalaya in time and space: interpretations based on glaciogeomorphic and archeological evidences. **Current Science**. Vol. 97 (4).

Bali, R. A.R. Bhattacharya and T.N.Singh (2009). Active Tectonics event in the Outer Himalaya: Dating a Landslide event in the Kumun sector. **Earth Science India** Vol. 2 (IV) pp. 276-288.

Bali, R. (2009). Global warming and Hype. **India Insight** Vol. I (23). Pp. 7-8.

Singh R.K., Sengupta, B., **Bali, R.**, Shukla, B.P, Gurunadharao, VVS and Srivastava, R (2009). Identification and Mapping of Chromium (VI) plume in Ground water for Remediation: A case study at Kanpur, Uttar Pradesh, India. **Jour. Geol. Soc. Ind.** Vol.74 pp.49-57.

Sharma, P.K. Khandelwal, M, Singh, T.N. and **Bali, R.**, (2009). Instability evaluation of Amiyan slide, Uttarakhand. **Mining Engineers' Journal** Vol. 11 (5), pp. 22-26.

Girish Kumar, M.,. Agarwal, A.K and **Bali, R.** (2008). Delineation of Potential sites for water harvesting structures using Remote sensing and GIS. **Jour. Ind. Soc. Rem. Sen.** 36, 325-336.

Agarwal, K. K. and **Bali, R.** (2008). Small-scale deformational structures as significant shear-sense indicators: An example from Almora Crystalline Zone, Kumaun Lesser Himalaya. **Earth Science India**. Vol. I (III), pp. 161-172.

Agarwal, K. K **Bali, R.** and Singh, P.V. (2008) Morphometric analysis for the neotectonic evaluation of the Pein River Basin, Lower Subansiri district, Arunachal Pradesh., India. **Jour. Ind. Soc. Eng. Geol.** v.xxxv, (1-4), pp. 163-170.

Agarwal, K. K. **Bali, R.** and Singh, P. V. (2008) Geology and Structure of Kimin-Ziro transect, Lower Subansiri District, Arunachal Pradesh. **Him. Geol.**, v. 29 (3), pp. 139-

Bali, R. 2006. Debris cones in Tawaghat Sobala area, Eastern Kumaun Himalaya: their morphotectonic evolution and impact on hill slope stability In *Landslides: A perception* (Eds. A.K. Avasthy, Bhoop Singh and R. Sivakumar. **Indian Society of Engineering Geology**, Kolkata. Pp 151-156.

Bali, R. 2005. Neotectonic and morphotectonic evolution of a part of Northeastern Kumaun Himalaya. In *Himalaya: Geological Aspects* (Ed. P.S.Saklani) pp 291-301.

Singh, T.N. Sarkar, K and **Bali, R.** 2005, A geotechnical investigation of rocks of Amiyan Landslide area, Kumaun Himalaya, Uttaranchal. **Mining Engineer's Journal** pp. 21-26.

Bali, R., Awasthi, D.D. and Tiwari, N.K. 2004. Record of neotectonic activity in the Gangotri glacier valley: Some significant observations. **Geol. Sur. Ind. Spl. Pub. No. 80.**

Awasthi, D.D., **Bali, R.** and Tiwari, N.K. 2004. Relative dating by lichenometric and Schmidt Hammer techniques in the Gangotri glacier valley, Uttarkashi District, Uttaranchal. **Spl. Pub. Pal. Soc. Ind** no. 2 pp. 201- 206.

Awasthi, D.D., **Bali, R.** and Tiwari, N.K. 2004. Growth rate of Lichen Dimelaena Orina in the Gangotri Glacier valley, Uttarkashi District, Uttaranchal: Some Significant Observations **Geol. Sur. Ind. Spl. Pub.** No. 80.

Bali, R. Yudhbir, Sharma A.K. and Ranhotra P.S. 2002. Landslide Hazard Micro-zonation of Tawaghat-Sobala area, Kumaun Himalaya. In **Aspects of Geology and Environment of the Himalaya** (Ed. Pant, C.C. and Sharma, A.K.) pp 199-218.

S.P.Shukla and **Bali, R.** 1993. Geology and structure of Karmi- Loharkhet area, Kumaun Himalaya with special reference to the Main Central Thrust. **Geoscience Journal** Vol. XIV (1-2). Pp. 118 – 125.

Bali, R. and Bhattacharya, A.R. 1989. Strain distribution around North Almora Fault, Kumaun Lesser Himalaya. In P.S.Saklani (Ed.) **Current Trends in Geology** Vol. XII pp 265-175.

Bali, R. and Bhattacharya, A.R. 1988 Geological and Structural studies of Dwarahat – Chaukhutia area, Kumaun Lesser Himalaya with reference to the North Almora Fault. **Geoscience Journal** vol. IX (12) pp. 215-230..

Ph. D. Supervision

Mr. M. Girish Kumar awarded Ph.D thesis entitled “**Delineation of Ground water potential zones and site suitability analysis for selection of water harvesting structures, using remote sensing and GIS techniques in parts of Bakhar watershed, Mirzapur District, U.P. India**” in 2008.

Mr. R.K. Singh awarded Ph.D. thesis entitled “**Development of Strategy for prevention and control of pollution due to Chromium in Groundwater in and around Noriakheda, Panki, District Kanpur (U.P.) India**” in September 2009.

Mr. S. Nawaz Ali awarded Ph.D. thesis entitled “**Late Quaternary palaeoclimatic study using different proxies along upper reaches of Pindar valley, Kumaun Himalaya**” in Sept. 2011.

Mr. Deepak Kumar Agarwal awarded Ph.D. thesis entitled “**Application of Remote Sensing and GIS in Environmental Impact Assessment: With Special Emphasis on Ground Water Management of Babina Block, District Jhansi, U.P.**” in September 2012.

Dr. Imran Khan is working as Dr. D. S. Kothari Post Doctoral Fellow under my mentorship. His topic of research is **Palaeoglacial Reconstruction and Chronology of glaciations in Parvati valley, Central Himalaya.**

Major Research Projects Awarded

2013-2017 Chronology of Glaciation and Palaeoclimate reconstruction along the Triloknath Glacier Valley, Lahul Himalaya (**Principal Investigator**) (**DST**)

2007 - 2011 Palaeoglacial reconstruction in Pindar valley and monitoring of Pindari glacier , Kumaun Himalaya. (**Principal Investigator**). (**DST**)

2006- Dec. 2009. Study of thrust systems in area around Kimin-Ziro-Tamen, upper Subansisri district, Arunachal Pradesh, with special reference to the neotectonics movements. (**Principal Co-Investigator**). (**DST**)

2002 – 2005. Geological, Geotechnical investigation and monitoring of Amiyan Landslide, Kumaun Himalaya. (**Principal Investigator**) (**DST**)

2001. Study of Amiyan Landslide, Kumaun Himalaya. (**Principal Investigator**) (**DST**)

1997-2000. Proxy record of Quaternary palaeoclimatic changes in moraines and terraces of Gangotri glacier valley, Garhwal Himalaya (**Principal Co-Investigator**). (**DST**)

1995 - 1998. GIS based Landslide hazard Evaluation of Chalthi - Dharchula region- Kumaun Lesser Himalaya. (**Principal Investigator**) (**DST**)

International Conferences Attended

Besides attending several National and International conferences organized in India, presented papers in the following International conferences:

- **International Symposium on Earth's disappearing Ice: Drivers, Response and Impact at Byrd Polar Research Centre, The Ohio State University, USA, August 8-14, 2010.**
- **American Geophysical Fall meeting, 9-13 December, 2013 at San Francisco, USA**

Conferences Organised

- **Organising Secretary, *National Seminar on Late Quaternary Geology of the Himalayan Orogen and the Foreland Basin***, organised by the Centre of Advanced Study in Geology, University of Lucknow, Lucknow, on Feb. 16-17, 2011.
- **Organising Secretary, *National Seminar on Glacial Geomorphology and Palaeoglaciacion in Himalaya***, organised by the Centre of Advanced Study in Geology, University of Lucknow, Lucknow, held on March 14-15, 2008.

Award

Director's Special award in International Symposium on Mountain Building and Climate-Tectonic Interaction (MBCT-2008) on presented **Poster** entitled "**Geology and Structure of the Kimin - Ziro Transect, Lower Subansiri district, Arunachal Pradesh**" by K.K.Agarwal, **R. Bali** and P.V.Singh, held at Wadia Institute of Himalayan Geology on October 23-25, 2008

Academic and Administrative Assignments

- **Deputy Coordinator**, CAS Programme of the Department of Geology, University of Lucknow.
- Have been **Associate Editor, *Earth Science India***, an International *Open & Free Access quarterly* e-Journal
- Have been **Reviewer** for reviewing research papers of various *National and International Research journals*.
- **Vice President, Society of Earth Scientists, Lucknow**
- Have been **Reviewer** for evaluating major research projects of DST, New Delhi
- **Member, District Level Environment Impact Assessment Authority (DEIAA), District Barabanki, Uttar Pradesh.**
- **Member, Peer Review committee for Ground water & Surface water Monitoring to review the Word Bank aided UP Sodic land reclamation Project III**
- **Judge** for the Earth Science section of the 6th Uttarakhand State Science and Technology (USSTC) Congress held in Almora on Nov. 14-16, 2011

- President, Nirala Nagar Delegacy, Lucknow University

Membership of Societies:

Life Member Indian Society of Remote sensing, Dehradun
Life Member Indian Society of Geomatics, Ahmedabad
Life Member of the Palaeontological Society of India, Lucknow
Member American Geophysical Union, USA, 2013

Invited Lectures

Delivered several invited lectures on a number of topics related to Climate change, Impact of Urbanisation, Landuse changes, Role of anthropogenic activity on climate change, Climate change during recent geological past, Natural hazards and ecotourism, etc. in various National institutes like:

- Wadia institute of Himalayan Geology, Dehradun
- National Institute of Technical Teachers Training and Research, Chandigarh.
- Jawaharlal Nehru University, New Delhi
- Department of Environmental Science Babasahib Bhimrao Ambedkar University. Science city, Lucknow
- Uttar Pradesh Remote Sensing Applications Centre, Lucknow.
- Integral University, Lucknow

Present Assignments

Presently, Chairing the Department of Geology, University of Lucknow and incharge/ Coordinator of the DST PURSE and DST FIST programmes running in the department. Also am the Deputy coordinator of the UGC CAS programme.