

## Brief-Biography

### ***Basanta Raj Adhikari, PhD***

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## Professional Experience(academic)

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- (From November 2011 to date) Assistant Professor of Engineering Geology, Department of Civil Engineering, Central Campus, Pulchowk Institute of Engineering, Tribhuvan University, Responsible for teaching engineering geology, landslide, supervise students in field as well as in lab to conduct research. Course coordinator of landslide for M.Sc. in Disaster Risk Management. Course coordinator of engineering geology for M.Sc. in Geo-technical Engineering
- (From June 2015 to 2018) Deputy Director, Centre for Disaster Studies, Institute of Engineering, Tribhuvan University, Responsible for Training, research and development in different kinds of disaster in Nepal and abroad.
- (From 2011 to 2014) Visiting Associate Professor of Engineering Geology, School of Engineering, Pokhara University, Pokhara, Responsible for teaching engineering geology and supervise students in field.
- (From January 2010 to November 2011) Assistant Lecturer of Geology, Department of Geology, Tri-chandra Campus, Tribhuvan University, responsible for teaching geology (structural, physical, engineering and environmental geology), supervise students in field to conduct research works

## Academic Background

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PhD, 2009, University of Vienna, Nepal

Master, 2003, Tribhuvan University, Nepal

Bachelor, 2001, Tribhuvan University, Nepal

## Award and Scholarship

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- “Young Affiliates” Third World Academy of Sciences (TWAS) 2017-2021.
- "Young Scientist" Integrated Research on Disaster Risk, 2017
- "Established Scientist Award" in European Geoscience Union (EGU)-2016.
- NFP for short course on “Rock and Soil Mechanics in engineering geology”, University of Twente, The Netherlands, January 7-March 8, 2012.
- Nepal BiddhyaBhusan Nepal (Ka), 2010, Ministry of Education, Government of Nepal.

## General Research Interest Areas

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Engineering geology and disaster risk reduction

## Specific Research Interest Areas

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Evolution of Himalaya • Engineering Geology • Geo-technical engineering • Sediment transport in the Nepal Himalaya • Change in River Morphology • Natural hazards in the Himalaya • Structural geology • Disaster Risk Management • Disaster Risk Reduction

## Experienced Research Areas

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- Engineering Geology • Geo-technical engineering • Sediment transport in the Nepal Himalaya
- Change in River Morphology • Natural hazards in the Himalaya • Disaster Risk Reduction

## Key Publications (Only 4/5)

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- Stolle, A., Schwanghart, W., Andermann, C., Bernhardt, A., Wittmann, H., Merchel, S., Rugel, G., Fort, M., **Adhikari, B.R.** and Korup, O., 2017. Catastrophic valley fills record large Himalayan earthquakes, Pokhara, Nepal, *Quaternary Science Reviews*, 117, pp. 83-103.
- Schwanghart, W., Bernhardt, A., Stolle, A., Hoelzmann, P., **Adhikari, B. R.**, Andermann, C., Tofelde, S., Merchel, S., Rugel, G., Fort, M., Korup, O., 2015. Repeated catastrophic valley infill following medieval earthquakes in the Nepal Himalaya. *Science* 10.1126/science.aac9865
- Moss, R.E.S.; Thompson, E.M.; Kieffer, D.S.; Hashah, M.A.Y.; Acharya, I.; **Adhikari, B.**, Asimaki, D.; Clahan, K.B.; Collins, B.D.; Dahal, S.; Jibson, R.W.; Khadka, D., MacDonal, A.; Madugo, C.L.M.; Mason, H.B.; Pehliyan, M.; Rayamajhi, D. and Uprety, S. 2015, Geotechnical Effects of the 2015 Magnitude 7.8 Gorkha, Nepal Earthquake and Aftershocks, *Seismological Research Letters*, 86 (6), pp. 1514-1523.
- **Adhikari, B. R.** and Wagreich, M., 2013. Microfacies analysis and paleoenvironmental significance of palustrine carbonates in the Thakkhola-Mustang Graben (Nepal Himalaya), *Journal of Asian Earth Sciences*, 77, pp. 117-126.
- **Adhikari, B. R.** and Wagreich, M., 2011. Facies analysis and basin architecture of the Neogene Thakkhola-Mustang Graben, central Nepal, *Journal of Austrian Earth Sciences*, 104/1, pp. 66-80.
- **Adhikari, B. R.** and Wagreich, M., 2011. Provenance evolution of collapse graben fill in the Himalaya - the Miocene to Quaternary Thakkhola-Mustang Graben (Nepal), *Sedimentary geology*, 233, pp. 1-14.

## Professional and Social Affiliations

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- Secretary, Geomorphological Society of Nepal, 2017-2019.
- Editor, Journal of Nepal Geological Society, 2016-2017.
- Regular member of Geotechnical Extreme Events Reconnaissance, USA
- Executive member of Nepal Tunneling Association

- Editor, Journal of Nepal Geological Society, 2012-2014.
- Life member of Nepal Tunneling Association
- Life member of Nepal Geological Society, LM 535
- Member of American Geophysical Union, 2009.
- Member of European Association of Geoscientists & Engineers, 2009
- Member of International Association of Sedimentologists, 2009.
- Member of European Geosciences Union, 2008-2009.

## Research Projects

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### 1. Accomplished research projects

- Threshold calculation for floods and Landslides in Selected Watershed/Sub-watersheds and Deliver Community Based EWS Trainings for Two Communities in Sindhupalchowk and Surkhet Districts, Nepal
- Dynamic Flood Topographies in the Terai, Nepal; community perception and resilience.
- Enhancement of urban disaster resilience through activities of local participatory platform, Nepal
- Detail study of earthquake triggered landslides and liquefaction in the different part of Nepal.
- Detail study of earthquake triggered landslides and liquefaction in the different part of Nepal.

### 2. On-going research projects

- A study on Reliability and Effectiveness of Flood Early Warning System in Nepal: Lessons learnt and Way forward, Nepal
- Soil Hydraulic Assessment for slope stability using Slope Index Map at Kavre District
- Landslide hazard mapping in the Nepalese Himalaya
- Perturbation of Earth Surface Systems by Earthquakes