

## Curriculum Vitae

**Name:** Dr. Priyanka Singh Rao  
**Present Position:** Assistant Professor  
**Corresponding Address:** Department of Geology,  
School of Earth Sciences,  
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### **Academic Qualifications:**

- Ph.D. from Wadia Institute of Himalayan Geology (WIHG), Dehradun, Uttarakhand with specialization in Active tectonics and Earthquake Geology. Research title for the doctoral degree entitles “Surface Rupture Investigations of The 1950-Meioseismal Zone of Assam Earthquake Along Himalayan Foothill Zone, Arunachal Pradesh-Assam Himalaya”.
- Qualified Joint CSIR-UGC NET (2013) and GATE (2014).
- Qualified Geologist Examination-2013 conducted by Union Public Service Commission.
- MSc. in Geology from Department of Geology, Centre of Advance Study, Lucknow University, Lucknow in 2013
- BSc. (Geology, Zoology and Anthropology) from Lucknow University, Lucknow in 2011
- Intermediate from Lucknow Public Inter College in 2007
- High School from Lucknow Public Inter College in 2005

**Area of Research:** Structure and Tectonics, Neotectonics and Paleoseismology.

I expanded specialization in various aspects like Geological Mapping, Mineral Exploration and Geochemical Mapping in different tectonic domains through the professional field training of 11 months by different Field Training Centres and Field Projects of Geological Survey of India, Ministry of Mines, Govt. of India.

**Areas of Academic Competence:** Geomorphology, Sedimentology, Igneous Petrology, Metamorphic Petrology, Ore Genesis.

**Research Achievements:** I reported primary surface ruptures of the C.E. 1697 and C.E. 1950 great earthquakes in Northeastern India and the evidence of transcontinental transport to the Indian subcontinent of fall out isotope of Cesium related to the Hiroshima-Nagasaki atomic bombing. I contributed in generation of active fault map for Garhwal-Kumaun regions.

### **Professional Experience:**

- 1.9 years of research experience as Junior Research Fellow at WIHG, Dehradun, Uttarakhand(2013-2015).
- 5.1 yearsof research experience as Geologist at Geological Survey of India(GSI; 2015-2020).  
Training (June, 2015 – May, 2016)  
State Unit: West Bengal & Andaman Nicobar, Kolkata, WB (June, 2016 – April, 2019)  
State Unit: Uttarakhand, Dehradun, UK (May, 2019 – July, 2020)

### **Awards and Achievements:**

1. Best paper award for paper entitled “Paleoseismic evidence of a giant medieval earthquake in the eastern Himalaya published in Geophysical Research Letters by Wadia Institute of Himalayan Geology, Department of Science and Technology, Govt. of India, Dehradun for the year 2017.
2. Certificate for Orientation Course for Geologist, Geological Survey of India with ‘A’ Grade.
3. Medal and Certificate of Honor for good performance in Intermediate Examination.
4. Geological Survey of India Examination Qualified.
5. Joint CSIR-UGC NET Qualified.
6. GATE Qualified.

## **Publications:**

1. Jayangondaperumal, R., Mishra, R. L., **Priyanka, R. S.**, Yadav, R. K., Mohanty, D. P., Pandey, A., Singh, I., Anil, A. and Dash, S. (2020) Active Tectonics of Himalaya, Rift Basins in Central India and those Related to Crustal Deformation at Different Time Scales, Proc Indian NatnSciAcad, 86, pp. 445-458.
2. Pandey, A., Singh, I., Mishra, R.L., **Priyanka, R. S.**, Srivastava, H.B. and Jayangondaperumal, R. (2018) Active tectonics in the Assam seismic gap between the meizoseismal zone of AD 1934 and 1950 earthquakes along eastern Himalayan front, India, Journal of Earth System Science, 127:66.
3. **Priyanka, R.S.**, Jayangondaperumal, R., Pandey, A., Mishra, R. L., Singh, I., Bhushan, R., Srivastava, P., Ramachandran, S., Shah, C., Kedia, S., Sharma, A. K. and Bhat, G. R. (2017) Primary surface rupture of the 1950 Tibet-Assam great earthquake along the eastern Himalayan front, India, Scientific Reports 7:5433| doi:10.1038/s41598-017-05644-y.
4. Kumar, A., Asthana, A. K. L., **Priyanka, R. S.**, Jayangondaperumal, R., Gupta, A. K. and Bhakuni, S. S. (2017) Assessment of landslide hazards induced by extreme rainfall event in Jammu and Kashmir Himalaya, northwest India, Geomorphology, 284 (2017) 72–87.
5. Mishra, R. L., Singh, I., Pandey, A., **Priyanka, R. S.**, Sahoo, H. K. and Jayangondaperumal, R. (2016) Paleoseismic evidence of a giant medieval earthquake in the eastern Himalaya, Geophysical Research Letters, 43, 10.1002/2016GL068739.
6. **Book:** Jayangondaperumal, R., Thakur, V.C., Joe Vivek, **Priyanka, R. S.**, Gupta, A. K., Active tectonics of Kumaun and Garhwal Himalaya, Springer (Hard Bound copy)

## **Seminars/Workshop/Abstracts:**

1. **Priyanka, R. S.**, Jayangondaperumal, R., Pandey, A., Singh, I., Evidences of the Great Himalayan Earthquakes in the Eastern Himalaya (2020), accepted in 36<sup>th</sup> International Geological Congress- 2020.
2. Pandey, A., Jayangondaperumal, R., Hetenyi G., **Priyanka, R. S.**, Singh, I. (2019); Primary surface faulting of 1697-1950 great earthquakes along the eastern Himalayan Frontal Thrust; 34<sup>th</sup> Himalaya-Karakorum-Tibet Workshop, Montana State University, Bozeman, Montana, USA.
3. Singh, I., Pandey, A., Mishra, R. L., **Priyanka, R. S.**, Jayangondaperumal, R., Srivastava, H.B., Srivastava, P. (2018); Recent deformation activity along the Main Boundary Thrust in the western flank of eastern Himalayan Syntaxis, Arunachal Himalaya, India; NGEOSM: National Geo Scholar meet.
4. Pandey, A., Jayangondaperumal, **Priyanka, R. S.**, Singh, I., Mishra, R. L., Srivastava, P. (2018); The 17<sup>th</sup> century great earthquake at Hime village, Subansiri River Valley, Eastern Himalayan Front, India; 33<sup>rd</sup> Himalaya-Karakorum-Tibet Workshop, Lausanne, Switzerland.
5. **Priyanka, R. S.**, Pandey, A., Singh, I., Mishra, R.L., Bhat, G., Baruah, H., Srivastava, P., Jayangondaperumal, R. (2015); Primary surface faulting of the A. D. 1697 and A.D. 1950 great earthquakes along the Main Frontal Thrust, Arunachal Pradesh, NE Himalaya. 30<sup>th</sup> HKT workshop, 6-8 October, 2015, WIHG, Dehradun, India
6. Mishra, R.L., Singh, I., Pandey, A., **Priyanka, R. S.**, Jayangondaperumal, R. (2015) Evidence of A.D. 1255 earthquake at Panijhori tea garden, Sikkim Himalaya along the north eastern Himalayan Front, India, 30<sup>th</sup> Himalayan Karakoram Tibet (HKT) workshop, 6-8 October, 2015, WIHG, Dehradun, India (extended Abstract).
7. Pandey, A., Singh, I., Mishra, R.L., **Priyanka, R. S.**, Bhatt, G. R., Srivastava, P., Jayangondaperumal, R., Wesnousky, S. G. (2015) Preliminary palaeoseismic investigations along the Mishmi Thrust at Roing, Arunachal Pradesh, NE Himalaya, India, 30<sup>th</sup> Himalayan Karakoram Tibet (HKT) international workshop, 6-8 October, 2015, WIHG, Dehradun, India (extended Abstract).

## **GSI Projects, Ministry of Mines, Govt. of India:**

1. Reconnaissance survey for Gold in and around Rudra Village, Bankura and Purulia Districts, West Bengal.
2. Reconnaissance survey for Gold and associated Basemetal Mineralization within Granite Gneiss and Amphibolite of Chhotanagpur Gneissic Complex in Purulia District, West Bengal.
3. Specialized thematic mapping in parts of Eastern Ghat Mobile Belt around Balangir and Bargarh districts, Odisha to understand the stratigraphic evolution of the litho ensemble, their characterization and identification of the possible location of REE mineralization.
4. Geochemical mapping in toposheet 53J/07 covering parts of Dehradun, Tehri-Garhwal and Uttarkashi District of Uttarakhand.