NAME AJAY PAUL, WIHG, DEHRADUN, INDIA

Google Scholar Page:NIL

RESEARCH GROUP:

GEOPHYSICS

FIELD OF SPECIALIZATION:

SEISMOLOGY

(SEISMICITY MONITORING AND SOURCE CHARACTERISTIC STUDIES)

EDUCATION:

PH.D , UNIVERSITY OF ROORKEE 1998

M.Tech, (Applied Geophysics) 1987, University of Roorkee
B.Sc. Lucknow University, 1984

PROFESSIONAL EXPERIENCE:

Present Position : Scientist E, since 2015
Scientist D : 2010
Scientist C : 2005

Research Scientist : 1998 – 2005, DST Project, Department of Geology, Kumaun University, Nainital

VISITING POSITIONS:

TEACHING EXPERIENCE:

TAUGHT (HONORARILY) FOR SEVEN YEARS (1998 – 2005) M.SC. (FINAL YEAR), GEOPHYSICAL METHODS FOR MINERAL EXPLORATION

SERVICES:

a. **Supervision/Guidance to Ph.D. Students:**
(1)

Rakesh Singh - August 2019
Seismo-tectonic study of Garhwal Himalaya with special reference to evolution of faults in the region: Using Multidisciplinary Approach
Department of Geology, Garhwal University
Guided by : Dr. Ajay Paul , WIHG, Dr. Y.P.Sundriyal, Garhwal University

(2)
Arun Prasath R – April 2019
Seismotectonics of Garhwal Himalaya between Alaknanda and Yamuna Valleys
Department of Earth Sciences, IIT Roorkee
Dr. Ajay Paul , WIHG Dr. Sandeep Singh IIT – Roorkee

(3)

Sanjay Singh Negi, September 2017
Understanding The Crustal Structure of Garhwak-Kumaun Himalaya
Department of Earthsciences, IIT Roorkee
Dr. Ajay Paul , WIHG, Dr. Kamal, IIT – Roorkee

(4)
Vivekananda Pathak , 2009
Seismotectonics of the Dwarahat-Dhaulchhina area with special reference to Neotectonics
Department of Geology, Kumaun University, Nainital
Ajay Paul WIHG, Professor C. C. Pant, Kumaun University

(5)
Gopal Singh Darmwal, 2009
Seismotectonics of the Dharchula, Munsiari and Berinag area with special reference to Neotectonics
Department of Geology, Kumaun University, Nainital
Ajay Paul WIHG, Professor C. C. Pant, Kumaun University

b. Training:

1 Training/Workshop on Earthquake vulnerability and Multi-Hazard Risk Assessment, Kathmandu, Nepal 5-16 March 2007, Organised by International Centre for Integrated Mountain Development (ICIMOD)
2)Workshop on International Training Program for Seismic Design of Structures and Hazard Mitigation 2008 (ITP 2008)
Held at National Centre for Research on Earthquake Engineering,
Taipei, Taiwan , October 20-24 , 2008
3)Training at Nanometrics incorporation, Kanata, Canada
Telemetry Seismic Network
30th September to 11th October, 2002

c. Teaching:

d. Membership:

e. Editorial Board:

f. International/National Seminars/Workshop:

National Workshop on Earth System and Science with special reference to the Himalaya: advancement and Challenges, WIHG, 2018

National Workshop on Status of Natural Hazards in Himachal Pradesh, 2014

15th Symposium on Earthquake Engineering, IIT, Roorkee, 2014

National conference on Earth Sciences in India, Challenges and emerging trends, IIT Roorkee, 7-9 November 2013

Mountain Meteorology and Landslides: A way forward with special reference to Uttarakhand ;WIHG September 1 – 3, 2013

Workshop on Modern prospective in Himalayan Geosciences, WIHG June 11-12, 2013 IGU

International Conference attended : Iceland Arctic Circle : 12-13 October 2013

National Conference on Green Earth with focus on Himalaya, WIHG, October, 2012

National Workshop, November 22-23, 2012 at Central Building research Institute, Roorkee

Third International Geo-Hazard symposium 2012, Department of Physics, Garhwal University, Tehri India

International Symposium on the 2001 Bhuj Earthquake and Advances in Earthquake Science, AES 2011, ISR, Gandhinagar

14th Symposium on Earthquake Engineering, 2010 Department of Erathquake Engineering, IIT Roorkee

Workshop on Seismogenesis to prediction of Earthquakes Himalaya and Indian Shield Perspective, 2009, WIHG

g. External Research Fund received & Project Handled:

1) Title of the Project :Telemetric Seismic Monitoring of Garhwal for developing hazard scenario in Uttaranchal

Sponsored by:	MoES
P.I.:	Dr. Ajay Paul
Date of Commencement:	21/07/2005
Date of completion:	20/07/2010
Sanctioned funds:	Rs. 4.89 crores

2) Title of the Project : Microtremor activity around Siachen Glaciar

Sponsored by:	MoES
P.I.:	Dr. Ajay Paul
Co-PI (SASE Chandigarh)	Dr. Ashwagosha Ganju
Date of Commencement:	10/01/2006

Date of completion: 11/08/2010
Sanctioned funds: Rs. 63 lacs

3) Identification and Characterisation of Future Earthquake Sources in Himalaya
Sponsored by: DST
P.I.: Dr. Ajay Paul
Date of Commencement: 1/11/2004
Date of completion: 31/3/2008
Sanctioned funds: Rs. 11.95 lacs

4) VSAT Linked Seismic Network for Seismic Hazard Studies in Garhwal Himalaya
Sponsored by: MoES
P.I.: Dr. Ajay Paul
Date of Commencement: 21/07/2010
Date of completion: 20/12/2015
Sanctioned funds: Rs. 1.95 crores

5) Seismicity monitoring and evaluation of active faults in Garhwal Himalaya and adjoining Shimla hills region in Himachal Pradesh
Sponsored by: MoES
P.I.: Dr. Ajay Paul
Date of Commencement: 15/01/2016
Date of completion: 31/03/2020
Sanctioned funds: Rs. 1.20 crores

h. Member of important Committees:

AWARDS/FELLOWSHIPS/HONORS/MEMORIAL LECTURES:

a. Awards/Medals/Prizes:

1) Foundation Day Award 2009
Best Scientific Team Award for the year 2008-2009 for their outstanding work Dr. Ajay Paul, Sh. Naresh Kumar and Sh. Gautam Rawat

2) Foundation Day Award 2011
Best Paper Award 2011
Recent earthquake Swarms in Garhwal Himalaya. A precursor to moderate to great earthquakes in the region Ajay Paul and M.L.Sharma
Journal of Asian EarthSciences, 42 (2011) 1179-1186,

b. Fellowships:

c. Memorial Lectures:

d. Recognition/Honors:

COUNTRIES VISITED: Canada, Iceland, Nepal and Taiwan

NATIONAL/INTERNATIONAL - COLLABORATION:

Inside WIHG Collaborator:

PATENT -

SCHOLARSHIPS AWARDED, GATE

PH.D. ADVISOR:

LIST OF PUBLICATIONS

(a) SCI Papers

Publications
2019

1. Central Seismic Gap and Probable zone of large earthquake in North West Himalaya
   Ajay Paul, Anil Tiwari, Rajeev Upadhyay
   Himalayan Geology, Vol.40 (2), 2019, pp. 199-212,
2. Earthquakes in the Garhwal Himalaya of the Central Seismic Gap: A Study of Historical and Present Seismicity and Their Implications to the Seismotectonics
   R. Arun Prasath, Ajay Paul and Sandeep Singh
   Pure Appl. Geophys. Pure Appl. Geophys. 176 (2019), 4661–4685
3. Assessment of seismic hazard in Kumaun-Garhwal region
   Ajay Paul, Vatsal Joshi
   Himalayan Geology, Vol. 40 (1), 2019, pp. 78 -82, 2019

2018

4 Estimation and applicability of attenuation characteristics for source parameters and scaling relations in the Garhwal Kumaun Himalaya region, India
Rakesh Singh, Ajay Paul, Arjun Kumar, Parveen Kumar, Y.P. Sundriyal
Jounal of Asian Earth Sciences, 159 (2018) 42-59

5 Earthquake swarm of Himachal Pradesh in northwest Himalaya and its seismotectonic implications
Rakesh Singh, R. Arun Prasath, Ajay Paul, Naresh Kumar
Physics of the Earth and Planetary Interiors 275 (2018) 44-55.

2017

6 Relevance of seismicity in Kumaun-Garhwal Himalaya in context of recent 25th April 2015 Mw7.8 Nepal earthquake.
Ajay Paul, Rakesh Singh.
Journal of Asian Earth Sciences, v.144 (2017) pp. 253-258.

7. Crustal velocity structure and earthquake processes of Garhwal-Kumaun Himalaya: Constraints from regional waveform inversion and array beam modelling.
Sanjay S. Negi , Ajay Paul , Simone Cesca, Kamal, Marius Kriegerowski , P.Mahesh, Sandeep Gupta.
Tectonophysics, v. 712-713, (2017), pp 45-63.

8. Upper crustal stress and seismotectonics of the Garhwal Himalaya using small-to-moderate earthquakes: Implications to the local structures and free fluids.
R. Arun Prasath , Ajay Paul, Sandeep Singh
Journal of Asian Earth Sciences 135 (2017) 198–211

2016

9. Strain energy budget analysis in the Garhwal-Kumaon region of Central Seismic Gap in Himalaya
Ajay Paul
Journal of Himalayan Geology, Vol.37 (2), 2016, pp.113-120.I.F. 0.314

2015

10. Body Wave Crustal Attenuation Characteristics in the Garhwal Himalaya, India
Sanjay S Negi, Ajay Paul, A. Joshi and Kamal
Pure and Applied Geophysics, v.172 (6), 2015, 1451-1469
DOI 10.1007/s00024-014-0966-9
11. Slip heterogeneities evaluated for earthquakes M>4.0 using waveform modeling in the Garhwal region of Central Seismic Gap in Northwest Himalaya, India
Ajay Paul, ArunPrasath and Rakesh Singh
Journal of Himalayan Geology, Vol. 36(2), 2015, pp. 153-160.
12. Space time clustering properties of seismicity in the Garhwal-Kumaun, Himalaya.
Sanjay S Negi, and Ajay Paul.
Journal of Himalayan Geology, v. 36 (1), 2015, pp. 91-101

2013

13. Seismicity and reservoir induced crustal motion study around the Tehri Dam,India.
S.Chaudhary, Param K. Gautam and Ajay Paul.
Acta Geophysica , v. 61 (4), Aug. 2013, pp 923-934
14. One-Dimensional Reference Velocity Model and Precise Locations of Earthquake Hypocenters in the Kumaon–Garhwal Himalaya,
P.Mahesh, S. S. Rai, K. Sivaram,Ajay Paul, Sandeep Gupta, Rajagopala Sarma, and V. K. Gaur
BSSA, Vol. 103, No.1, pp. 328–339, 2013,

2012

15. The *Mw* 5.0 Kharsali, Garhwal Himalayan earthquake of 23 July 2007: Source characterization and tectonic Implications.

Naresh Kumar, Ajay Paul, A. K. Mahajan, D. K. Yadav and Chandan Bora,
Current Science, Vol. 102, No. 12, 2012 pp1674 – 1682.

2011

16. Recent earthquake swarms in Garhwal Himalaya: A precursor to moderate to great Earthquakes in the region.
Ajay Paul and M.L.Sharma,
Journal of Asian Earth Sciences, 42 (2011) 1179-1186.
doi:10 .1016/j.jseaes.2011.06.015
17. Source Mechanism studies around Karakorum fault in Siachen region, NW Himalaya
Ajay Paul, Kamal, A.Ganju, V.Rana, D.K.Tyagi, Vikas Juyal, M.Gosain and N.Thakur
Journal of Himalayan Geology Vol. 32(2), 2011 pp.149-157
18. Amplification of Seismic Waves in the Central Indo-Gangetic Basin, India
D. Srinagesh, S. K. Singh, R. K. Chadha, A. Paul, G. Suresh, M. Ordaz, and R. S. Dattatrayam
BSSA, October2011, Vol. 101, No. 5, pp. 2231–2242,

2010

19 Estimates of source parameters of M4.9 Kharsali Earthquake using waveform modeling.
Ajay Paul and Naresh Kumar,
Journal of Earth System Science Vol. 119, No.5, October 2010, pp 731-744.
20 Evaluation and implications of seismic events in Garhwal-Kumaun region of Himalaya,
Ajay Paul
Journal of Geological Society of India, October 2010, pp414-418
21 Microseismicity in central part of Inner Kumaun Lesser Himalaya : implication to active seismotectonics
Ajay Paul, S.S. Bhakuni, Charu C. Pant, G.S.Daramwal, V. Pathak,
Journal of Himalayan Geology, Vol. 31, No.2, 2010 pp107-116
2009
22 Recent Seismicity and Stress Pattern in NW Himalaya
D.K.Yadav, N.Kumar, Ajay Paul
Journal of Himalayan Geology, 2009, Vol.30, No.2, pp139-146
2007
23 Estimation of Site Amplification at Various Litho-Units in NW-Himalaya Using Horizontal vertical Ratio,
A.K.Mundepi, Kamal and Ajay Paul,
Journal Geological Society of India, 2007, Vol. 70, pp 605-609
24 Recent Trends in Seismicity of Uttaranchal,
Charu C. Pant and Ajay Paul,
Journal Geological Society of India, 2007, Vol. 70, pp619-626
2005
25. On the seismicity and seismic hazard estimation of the Kumaun Himalaya
Ajay Paul and Charu C. Pant, 2005
Paleontological society of India, sp. Pub No. 2005, pp. 41-51
26 Seismicity pattern of Uttaranchal (1999 – 2004) as recorded by DTSN in Kumaun Himalaya
Geological survey of India special Publication 2005, 85, pp 89-93
2004
27 Seismotectonic implications of data recorded by DTSN in the Kumaun region of Himalaya

Ajay Paul, H.R.Wason, M.L.Sharma, C.C.Pant, A.Nirwan and H.B.Tripathi
Journal of Geological Society of India, July 2004, vol. 64, pp 43-51

2003

28 Seismic Hazard estimation in Northeastern Kumaun Himalayas
Ajay Paul and P.D.Pant
Journal of Geological Society of India, April 2003, vol. 61, pp 477-482

29 Coda Q estimates for Kumaun Himalaya
A.Paul, S.C.Gupta and C.C.Pant
Earth and Planetary Science, December 2003, vol. 112, No.4, pp 569- 576

1998

30 Estimation of Focal Parameters for Uttarkashi earthquake using peak ground horizontal accelerations
A.Paul, M.L.Sharma and V.N.Singh
ISET journal of earthquake Technology, 1998, vol. 35, no. 1-3, Mar.-Sept., pp 1-8

(b) Non-SCI Articles

(c) Chapter in Books

(d) Books-authored/Edited volume:

(e) Abstract volume:

(f) Reports/Other Documents:

(g) Articles in Proceeding Volumes