

Resume (Prof A.K. Mahajan)



1. **Full Name** (in Block letters): Prof. AMBRISH KUMAR MAHAJAN

2. **Father's/Husband's Name:** SH KISHORE CHAND MAHAJAN

3. (a) **Address For Correspondence**
(give phone/fax number also, if available)

(b) **Permanent Address**
(give phone/fax number also, if available)

S/o Sh K.C. Mahajan
Vill. Shyamnagar
P.O. Dharamshala- 176215
Distt. Kangra (H.P.)

148/1 Engineers Enclave
GMS Road
Dehradun-248001
Distt. Dehradun

Telephone No(s) : 01892-222083

0135-2625967; 9412348086; 9418648086

E-mail : akmahajan@rediffmail.com

akmahajan@rediffmail.com

4. **Date and Place of birth :** 10-10-1961

Age on the date of this application: **61** Years 08 Months

5. a. **Sex :** Male / Female Male

b. **Identification Mark:** Injury mark on left knee

6. **Marital Status:** Married

7. **Nationality :** Indian

8. (a) **Do you belong to Scheduled Caste/Scheduled Tribe/OBC ?** No

(b) **If yes, please state category:**

(Please enclosed attested copies of documentary evidences)

9. **Academic Qualifications:**

(Commencing with the High School or an equivalent examination).

Examination/ Degree	Subject/ Specialization	year	Division	% Marks/ Grade	University/ College/ Board	Distinction/ Scholarship
Matriculation	Gen Sci., math, Hindi, Eng.,	1979	3 rd	55.6%	H.P. Board of school	Nil

	Soc studies.				Education	
B.Sc	Science (PGB)	1981	1st	60.1%	H.P.U.	Awarded scholarship after topped in University in Geology for M.Sc Study
M.Sc	Geology	1983	1st	69.37%	Jammu Univ.	2nd in M.Sc Geology in Univ.
Ph.D	Seismotectonics and Seismology	1993			PU Chandigarh	
Diploma CERG	Disaster Management	1997	1st	83%	Geneva Univ. Switzerland	
Post Doc Fellow	Seismic Microzonation	2003			ITC, Enschede Netherlands	
Post Doc Fellowship	Disaster Management	2003			Int. Institute for Geo information and Earth Observations (ITC), the Netherlands	Awarded PDF by ITC
Incident Manager	Disaster Management	2008			LBSNAA, Mussoorie	

Ph.D Topic: “Seismotectonic activity of the Dharamsala-Palampur area in relation to Neotectonics”

Diploma in DM: Topic of Dissertation: Segmental behavior of the Himalayan Plate Boundary and its reflection in the Himalayan Seismotectonics and seismic hazard under the guidance of **Prof. Mayor Roza, Zurich, Switzerland**

10 (a) **Has there been any break in your academic career?** yes

(If so, give details thereof with reasons). Dropped in +2 exam

(b) Have you been punished during your studies at College/university? No

(If so, give details).

(c) Have you been punished during your services or convicted by a court of Law? (If so give details). No

(d) Were you at anytime declared medically unfit or asked to submit your Resignation or discharged or dismissed? (if yes, give details in a separate sheet). **No**

11. Experience:

Employment details (in chronological order starting with the first job)						
	Name and address of employer/institution	Designation of post held	From	To	scale of pay	Nature of work and responsibilities
1	HPKVV, Palampur, Dist. Kangra, H.P	Research Fellow	24-4-84	3-07-85	700-1600 Salary was (700/ fixed)	Research work related to Beas-Sutlej Link project
2	Wadia Institute of Himalayan Geology(WIHG), Dehra Dun	Sr. Research Assistant	7-07-1985	1.11. 88	6500-200-7999 (Under DST sponsored project)	Research work
3	Wadia Institute of Himalayan Geology(WIHG), Dehra Dun	Scientist 'B'	July, 1988	1993	8000-275-13500 (Under DST sponsored project)	Research work related to seismic hazard, macroseismic investigations
4	Naddi Seismological Observatory, Dharamshala, a Unit of Wadia Institute of Himalayan Geology(WIHG),	Scientist 'B' and In-charge (Kangra seismic Network)	Nov.1993	Nov. 1998	8000-275-13500 (Under DST sponsored project)	To establish the seismic network in Himachal region and develop Seismological centre at Naddi
5	Wadia Institute of Himalayan Geology (WIHG), Dehra Dun	Scientist 'B' (Direct recruitment)	Nov.1998 -	Nov.2002	8000-275-13500	Seismic hazard analysis and macroseismic investigations
	Wadia Institute of Himalayan Geology (WIHG), Dehra Dun	Scientist 'C' (Direct Recruitment)	November 2002	August 2007	10000-325-15200	Established the methodology on seismic microzonation
6	Wadia Institute of Himalayan Geology (WIHG), Dehra Dun	Scientist 'D'	13 th August, 2007	June 2013	15600-39100 /- + 7600 GP With four advanced increments (Direct Recruitment)	Seismic microzonation studies and development of methodology for seismic Microzonation
7	Wadia Institute of Himalayan Geology	Scientist 'E' (Direct	18 June 2013	Onward	37,400 – 67000 + 8700/- GP	Seismic Microzonation and

	(WIHG), Dehra Dun	Recruitment) On lien to CUHP since Feb 2013				subsurface studies using geophysical methods
8	Central University of Himachal Pradesh, Dharamshala	Professor, Department of Environmental Sciences On lien from WIHG	26 th February 2013	Continue	37,400 – 67000 + 10000/- GP and allowances as admissible to all employees of central Government. Present Basic pay 47920/- +10000 (GP)	Academic Research work Administrative Financial Managerial Purchase Please see annexure-1 (work done at CUHP since 2013.)

Positions held at Central University of Himachal Pradesh:

S.No	Post Held	Pay held	Organisation	Nature of duties	Experience (in years and Months)
1	Secretary to Vice Chancellor				
2	Dean Student Welfare	-----	CUHP	To support student for their welfare	September 2022 to continue
3	Director, IQAC CUHP	---do---	---do---	To prepare and submit NIRF data, AQAR data since 2017-18 and suggesting administrative and academic reforms to HVC	September 2020 –still continuing
4	Chief Vigilance Officer	--do--	---do---	Vigilance related activities to report Chief Vigilance Commissioner, Govt. of India	September 2022 onward- to continue
5	Dean, School of Earth and Environmental Sciences	187200 0/- basic pay as in January 2023	Central University of Himachal Pradesh	Teaching and Administration	20.01.2022 to continue till July 2024 20-01-2020 to August 2020
6	HOD Environmental Sciences		Central University of Himachal Pradesh	Teaching and Administration	20.01. 2022 to continue till July 2024 20-01-2020 to August 2020
7.	Dean, School of Earth and	As mention	---do---	Academic and Administrative	28 Feb 2013 to 28 th Feb. 2016 and then from 15 January 2020 to—

	Environmental Sciences	ed above			Continue = 4 years 05 months
8.	Dean, School of Life Sciences		----do----	Academic and Administrative	28 Feb 2013 to 28 th Feb. 2016 and then from June 2016 to 9 th September 2019 to—Continue = 4 years 05 months
9	HOD Environmental Sciences	--do---	-----do--- --	Academic and Administrative	28 Feb 2013 to 28 th Feb. 2016 and then from 15 th January 2020 to—Continue Total = 4 years 05 months
10	Director, Computational Biology and Bio-informatics (CBB)	---do---	----do-----	Academic and Administrative	28 Feb 2013 to 9 th September 2019 = 06 years 07 month
11	Finance officer (additional Charge)	----do--- -	----do---	Financial administration including budget preparation, allocation of funds, auditing, purchase, salary and pension etc	5 th May 2019 to 1 st February 2020 = Total experience= 10 Month
12	Professor	144800 0/- basic pay as on that day	Central University of Himachal Pradesh	Teaching and Administration	26 Feb 2013 to continue = 08 years 04 months

12. Publication : Total publication

Annexure-2

(Give names of author, title of paper, name of journal, years , volume, pagination etc.)

- (i) Research Papers in Referred Journals **55**
- (ii) Papers in Conference/Symposia (complete papers) (Abstracts published) **18**
- (iii) Books edited and chapters in books Edited of 13th IGC Conference volume proceedings and published as Natural Hazard.
- (iv) Popular articles Two (Published in Hindi in Ashmika) one delivered at Jawahar Lal Nehru Rashtriya Yuva Kendra after Chamoli earthquake
- (v) Others nil

13. Number of Theses supervised:

Topics Listed below

Awarded Submitted In Progress

(i) Ph.D.	awarded	submitted	In-Progress
	01	nil	04

Ph. D. Students awarded/Registered: 01/04

1. **Swati Sharma:** Analytical, observational and empirical slope stability analysis of Tira lines slide zone for Landslide mitigation measures- registered at CUHP, Dharamshala. **awarded**
2. **Pawan Kumar:** Hydro-geochemistry and contamination history of western Himalayan lakes in Himachal Pradesh- registered at CUHP, Dharamshala- **awarded**
3. **Praveen Kumar:** Subsurface characterization of Northwest Himalayan (Kangra valley) using multichannel analysis of surface wave and microtremor system: application for disaster management- registered at CUHP, Dharamshala- **awarded**
4. **Pooja Rajput:** Evaluation of seismic hazard potential of 1905 meizoseismal zone and seismic microzonation of Dharmshala town using surface and sub-surface investigations in – registered at Central University Garhwal in 2011, Uttarakhand- **Ph.D. Awarded**

(ii) M.Phil nil

(iii) M.Tech/M.Sc. 44

M.Tech/M.Sc. Guided at CUHP 37 -see annexure-3

M.Tech/M.Sc. Guided at WIHG Dehra Dun: 07

1. Taukeer Ahmed, 2012. Geophysical Techniques for detection of sub-surface features in Doon valley. Gurukul University, Haridwar.
2. Mampi Karmakar, 2012 Shallow Subsurface Studies using Multichannel Analysis of Surface Waves (MASW), 2011 Adm. No. – 2011MC0080, M. Sc. (Tech.) AGP, 1ST Year, ISM, Dhanbad-826004.
4. Ashish Kumar Bage, 2011. Subsurface Seismic Data Analysis Using Surface Waves (Multichannel Analysis of Surface Waves, MASW, Adm. No. – 2010MC0079, M. Sc. Tech.) AGP, 1ST YEAR, Indian School of Mines University, Dhanbad-826004.
5. Sonalika Chowdhury, 2011. Subsurface Seismic Data Analysis Using Surface Wave, Method (Multichannel Analysis of surface waves, MASW), MSc. 1st Year, Department of Geological Sciences (CAS), Jadavpur University, Kolkata.
6. **Miss Rajeshwari: Landslide hazard zonation using GIS** in Dharamsala town and mitigation measures in 2004. The thesis submitted awarded by Deptt. of Disaster Management School of civil engineering, Sastra Deemed university, Thirumalaisamudram, Thanjavur.
7. **Rajiv Ranjan: Seismic Response Analysis** of Dehradun city, India. Thesis submitted to International Institute for Geoinformation Science and Earth Observation (ITC), Enschede, The Netherlands and awarded the M. Sc degree from University of Netherlands in 2004.

14. **Sponsored Research/Consultancy Projects : Six** (*name of the project mentioned below*)

	Completed	In Progress
i) Number of Sponsored Research Projects:		
National	05	01
International	04	
(ii) Number of Consultancy Projects:	09	

Sponsored Research projects (List)

1. **A.K. Mahajan: Principal Investigator:** Seismic microzonation of Chandigarh, Mohali and Panchkulla cities using Geophysical and geotechnical approaches for the upper 30m soil column, Ministry of Earth Sciences 89 lakhs July 2021 to July 2024.
2. A. K. Mahajan: Principal Investigator: Landslide monitoring of Tira Lines slide zone in Dharamshala region, Distt. Kangra (H.P.) Funded by Department of Sciences and Technology, Govt. of India. Cost: 19,99,600/-
3. A.K. Mahajan: Principal Investigator: Subsurface characterization and its environmental implications using Engineering seismographs and Ground Penetration Radar. Cost: 65,28,650/-
4. **Principal Investigator** of the DST sponsored project entitled “Probabilistic seismic Hazard Assessment of Himalayan Arc and its adjoining region between latitude 74-82 degree east and 26-35 degree north.
5. **Co-investigator** of the DST sponsored project entitled “Seismicity, Seismotectonics and Seismic Hazard assessment of NW Himalaya”.
6. **Principal investigator** of the **DST invited** sponsored project entitled “HIM-SCOPE (Himalayan School Observation Programme in Earthquakes)” under **Mission Mode project on Seismology - a awareness programme.**

Consultancy project completed

1. Seismic design parameters of Subansiri Lower project, submitted to Project Oversight committee hazard assessment of Assam region from NHPC in 2015-16.
2. Preparation of **Landslide Hazard and Risk zonation map** of Dharamshala Township and adjoining area. 27/2/99- March 2000.
3. Preparation of Erosional features map of Pong Dam catchments area that leads to high siltation and its mitigation strategies along with action plan. May 2000-March 2003.
 - i.
4. Site investigations by soil profiling (shear wave Velocity investigations) for construction of Building of Head Office of Uttarakhand Environment protection and Pollution Control Board (UEPPCB) at Ajabpur Kalan

5. Report on Seismic hazard status of Dehradun/ Doon valley for members of supreme court in 2011.
6. Checking the blasting pattern and its effect on the houses/structures in Phata-Byung HEP, Ruderprayag district, Uttarakhand- submitted in 2011.
7. Training of three Scientist in Seismic hazard analysis from Mizoram Remote Sensing Application Centre, Chaltlang- 796012, Aizwal, Mizoram in 2011.

International Project Completed:

1. Principal investigator of the project entitled ‘Earthquake Risk Reduction in Himalaya’ with **NORSAR, Norway 2009-2014**
2. **Principal investigator** of the **International collaborative project** with IIRS-ITC-WIHG for seismic microzonation of Dehradun city in 2004-2009.
3. Understanding urban seismic risk Around the World (UUSRAW) with special reference to Dehradun city under the RADIUS a **IDNDR project** September, 1998- April, 1999 as Principal investigator.
4. Co-PI of the project entitled Experimental investigations of shallow earth structures in India, using NEMFIS (near surface Electromagnetic Frequency Induction Sounding) technology under ILTP.

15. Prizes/ Medals / Awards / Honours (some of the honours are highlighted here)

Awards:

1. National Geoscience awards 2017

2. Awarded best paper award for the year 2009-2010
3. Adjudged for **Directors special award** for **scientific** contribution towards “Adoption of Methodology for benefit of society” in 2007.
4. Adjudged for **second best paper award** at **ISPRS International symposium** in 2006.

Honours and Memberships:

1. Member **review core committee, Govt. of India** on the direction of Hon’ble Supreme court dt 16/9/2016 to review the implementation of court order dt 18/12/2013 regarding education of awareness of environmental and its problems related to pollutions should be taught as compulsory subject in different universities and colleges dt 22/9/16.
2. Member committee of experts constituted by Deputy commissioner Kangra to look after the reason for collapse of Kandrori Bridge over Chhonchh Khad on Indora_Damtal Road, Distt Kangra.
3. Member **NAAC committee** to Pariyar Maniammai Institute of Science and Technology University, Thanjavor, Chennai 2-5th November 2015.

4. Member **NAAC committee** to Veer Surendra Sai University of Technology (formerly University College of Engineering), Orisha, 11-16 January 2016.
5. Member **Executive Council, CUHP**, 2016 to 2019
6. Member **Academic Council, CUHP**, August 2013 to August 2016
7. Member **Executive Council, CUHP**, August 2013 to August 2016
8. Member **Academic Council, CUHP** --do—
9. Member **Executive council Indian Geological Congress** for two years since 2016.
- 10 Chairman, Equal Opportunity cell, CUHP
10. Member BOS and School board,
12. Expert member, NIT Uttarakhand selection committee, 17/4/2016
13. Expert Member, Indian Institute of Remote sensing (IIRS) selection Board, 2015.
14. Member, **Bureau of Indian Standards for developing the methodology of seismic microzonation** with reference no. CED 39/ISO/TC98/SC 3
15. Member, **Expert committee, Major research Projects, Environmental Sciences**, University Grant commission vide letter no. D.O. F.2-3/2014-15 (Policy/HRP)
16. Chairman, **Board of studies Department** of Environmental Sciences, CUHP, Dharamshala, from 24th August 2015- 24th August 2018.
17. Member, Board of studies Department of Environmental Sciences, CUHP, Dharamshala, from 24th August 2015- 24th August 2018.
18. Member **Board of studies, Department of Marketing and Supply Chain Management**, Central University of Himachal Pradesh from 24th August 2015- 24th August 2018.
19. Member **Board of studies, Department of Journalism and Creative Writing**, Central University of Himachal Pradesh from 24th August 2015- 24th August 2018.
20. Member, **CUHP University Disciplinary committee**
- 21 Member **Board of studies, School of Mathematic, Computer and information Sciences**, Central University of Himachal Pradesh from Feb 2013 to August 2015.
22. Member Board of studies, School of Physics and Material Sciences, Central University of Himachal Pradesh from Feb 2013 to August 2015.
23. Chairman, Standing Inspection Committee of School of Earth and Environmental Sciences, Central University of Himachal Pradesh.
24. Chairman of Selection Committees for the Post of JRF under the DST/ DBT and MOEs sponsored project of School of Earth and Environmental Sciences, Central University of Himachal Pradesh.
25. Chairman, physical verification committee of all stores at CUHP.
26. Chairman of various Technical Evaluation Committees for Deciding the Technical Specifications of Various Advanced Instruments to be procured for the Laboratory of Department of Environmental Science, Central University of Himachal Pradesh.
27. Chairman of several of Tender Opening Committee of Department of Environmental Science, Central University of Himachal Pradesh.
28. Chairman Equal opportunity cell (EOC) vide letter no F.No. 4-11/CUHP/GA/2011/9028-9033 dt 24/11/2014.

29. Member of panel of Judges for the **Young Scientist Award** committee **2006 During Indian Science** Congress held at Hyderabad.
 30. Member of the **Indian delegation to 34th IGC** held at Brisbane, Australia.
 31. Core committee member for preparation of “**Multicity Hazard scenario for Magnitude 8.0 with epicenter at Kalka**” of National Disaster Management Authority.
 32. **Member advisory committee**, State Disaster Management Authority, Himachal Pradesh from 2004-2009.
 33. **Member** of the **city Disaster Management committee**, Dehra Dun-2004-2006.
 34. Acted as **Chairman** of the first opening session of National conference on Seminar on Landslides at Tanjavur held on 3-5 March, 2004.
 35. Nominated as a **penal member** of the recommendation committee during the final discussion penal of the landslide conference held at Tanjavur in March 5th 2004.
 36. **Visiting Scientist to** International Institute for Geo-information’s and Earth Observations (ITC), Enschede, The Netherlands in April 2004 – June 2004.
 37. Appointed as **External examiner** of the M.Sc dissertation of (EREG Students under NIFT Fellowship) at International Institute for Geo-information’s and Earth Science Observations (ITC) on 13 March, 2003 at **Netherlands**.
 38. Acted as **penal experts** during the Radius symposium at Tijuana, Mexico held during 10-13 October, 1999.
16. **Extra-curricular activities - give details, if any, of proficiency acquired in games, sports and part taken in other extra-curricular or social activities such as NCC, public lectures debates and social service etc.**

- (i) As a Student Badminton Player and worked as General Secretary of student association, Jammu University.
- (ii) After entering into service. Member WIHG cooperative society
Executive Member, resident welfare society of Engineers Enclave.
President Engineers enclave resident welfare Society 2012-2013.

17. Academic/ Scientific Visits abroad:

S.No	Country / Venue	Purpose	Date
1	GeoForschung Zentrum, Potsdam, Germany	International Training course in “seismology and seismic Hazard assessment”	15 th Sept.-21 st Oct., 1992
2	Tangshan, China	To present paper in the 3 rd International	1 st -3 rd August, 1996

		IASPEI assembly conference and presented a oral paper	
3	Beijing , China	To attend 30 th International Geological Congress and presented an oral paper.	4 th -7 th August, 1996
4	Switzerland, France, Italy	To attend International course on “Analysis and management of Geological Risk” and also completed the Diploma from University of Geneva.	28 th April-18 th June, 1998
5	Mexico	To present results of the RADIUS project in the international RAIDIUS Symposium. Also Recognized as Penal Expert among twenty three countries.	11 th -14 th October, 1999
6	Nepal	Invited by NSET to deliver the invited talk on disaster management and Chamoli earthquake during National Earthquake Day of Nepal.	13 th - 17 th January, 2000
7	Skopje, Macedonia	To attend 12 week international course on “A seismic design and construction CADAC 2001. at IZIIS, skopje.	15 th Sept.- 15 Dec.,2001
8	ITC, Enschede, The Netherlands	Awarded Post Doctoral Fellowship for three months	January – April 2003
9	ITC, Enschede, The Netherlands	Visiting Scientist to International Institute for Geo-information and Earth Observations (ITC), The Netherlands	7 th April to 26 th June, 2004
10	Nepal	Deputed by Wadia Institute to attend International conference on Seismology and Seismotectonics on 28-29 November, 2006	28 th November to 30 th November, 2006
11	NCREE Taipei, Taiwan	Attended training programme on “Seismic design of structures”	October 19 - 25, 2008
12	Norway	Under Joint. Collaborative project entitled Earthquake Risk Reduction in Himalaya as Principal Investigator	2 nd June-21 st June 2008
	NORSAR, Norway	Earthquake risk Analysis of Himalayan Region Under collaborative project	3 rd June to 24 th June, 2009
	NORSAR, Norway	Earthquake risk Analysis of Himalayan Region Under collaborative project	July, 2010 for two weeks
	Canmore, Canada	To attend 12HKT workshop at	July 11-14, 2011
12	Missisagua, Toronto, Canada	Undertook training on Ground Penetration Radar instrument and processing of data from Sensor and Software Inc.	July 15-23, 2012
13	Brisbane , Australia	To attend 34 th International Geological Congress	August 3-12, 2012
14	NORSAR, Norway	Earthquake risk Analysis of Himalayan Region Under collaborative project	

13	NORSAR Norway, 2014	Earthquake risk Analysis of Himalayan Region Under collaborative project	18-08-2014 to 07-09-2014
15	Italy	Attended training of Microtremor system at Micromed	26 May to 2 nd June 2015

18. Special Training/Assignment/ Any other Relevant Particulars:

Professional trainings			
	Organisation	Period From To	Details of training
	Wadia Institute of Himalayan Geology, Dehradun	March, 1986	Third regional UNESCO sponsored structural training in structural Geology
	NGRI, Hyderabad	11 th December, 1992 to 21 st December, 1992	1 st SERC school on Seismology and Earthquake Processes (SEP)-1)
	GeoForschung Zentrum, Potsdam, Germany	15 th Sept.-21 st Oct., 1992	International Training course in “seismology and seismic Hazard assessment”
	organized by centre of advanced studies in applied Geophysics at New Delhi	30-31 Nov. 1993	Training on Strong motion accelerograph MR 2002
	Department of Geophysics, BHU, Varanasi.	April 14 to May 4 th 1994	II nd SERC school on Seismology and Earthquake Processes (SEP)-III)
	Wadia Institute of Himalayan Geology, Dehradun	March 29 th – April 7 th , 1997	Training course in Palaeo-seismology
	Switzerland, France, Italy	28 th April-18 th June, 1998	International course on “Analysis and management of Geological Risk” and also completed the Diploma from University of Geneva.
	Wadia Institute of Himalayan Geology, Dehradun	April 16-20, 2001	Attended training course on ATR (Automated landslide monitoring system using TDA5005)
	Skopje, Macedonia	15 th Sept.- 15 Dec.,2001	12 week international course on “A seismic design and construction CADAC 2001 at IZIIS, Skopje.
	Wadia Institute of Himalayan Geology, Dehradun	March15 -June15, 2002	Fundamental course on soil Mechanics and its application to Landslides investigations

	NCREE Taipei, Taiwan	19 th October- 25 th October, 2008	Attended training programme on “Seismic design of structures”
	Centre for Disaster Management	18-22 August, 2008	Certified incident Managers programme
	Central soil and material Research station , New Delhi	23 &24 September, 2009	Training course on Seismic aspects of geotechnical characterization .
	Missisagua, Toronto, Canada	15-23 July, 2012	Undertook training on Ground Penetration Radar instrument and processing of data from Sensor and Software Inc.
	CSIR Structural Engineering Research Centre	February 1-3, 2012.	Advance course on Geotechnical Earthquake Engineering
	Italy	26June -30 June , 2015	Training on Microtremor system by Micromed

19. **Specialization :**

(a) Specialization in the degree proceeding to Ph.D.

Diploma in Disaster Management from Geneva University, Switzerland.

(b) Research specialization: _significant contributions- **Annexure-4**

1. Operation of seismological network (analog and digital) from 1985 to 1998.
2. Seismic hazard and seismotectonics studies of NW Himalayan region.
3. Seismic microzonation using shear wave velocity derived through MASW method and SHAKE analysis studies.
4. Disaster Management
5. Handling of important softwares like Surfseis (reflection analysis software); SHAKE (response analysis software); Win Seis (seismic reflection software); scream(data acquisition software in digital seismographs); SEISAN (Seismic record analysis software).
6. Operation of digital broad band seismological network in NW Himalaya. Established 60 sites in Uttaranchal and Himachal and NCR Delhi region.

20. **Present Salary: (Current pay receipt attached in original) –see annexure-5**

Scale of Pay Rs. 47920

Present Basic Pay: Rs. 37400-67000 + 10000(GP)

Present Dearness Allowance: Rs. 76454

Other allowance if any as Present: 5792 (HRA) + 3712 (TA) + 3000 (Hon. Provost)
+ 750 (HCA)
Total: Rs. 147,628/-

21. (a) **Membership/Fellowship of Professional Societies :**

Fellow Indian Geophysical Union
Life member Indian Geophysical Union
Life member Journal of Himalayan Geology
Life member Indian Geologist Association
Member Executive council, Indian Geological Congress
Indian Member Science Congress 2006-2007.

(b) **Knowledge of foreign language : Yes (English)**

(c) **Other Activities/Responsibilities:**

(Applicant may mention any special qualification/experience which have not been included under the heads given above).

International Collaboration

Worked out a proposal for international collaboration between ITC, Netherlands and WIHG in 2003 and MOU was signed by Director, WIHG in 2005.

Principal investigator of the **International collaborative project** with IIRS-ITC-WIHG for seismic microzonation of Dehradun city in 2004.

International collaboration with NORSAR Norway on earthquake risk evaluation of Himalayan region from 2008-2011 and 2011-2016.

National Collaboration

Investigator of the collaboration signed between NGRI and WIHG in 2005. The field work has been executed in October-November 2005 in four different areas for one month. The First results have been produced before the august gathering in December IAS 2005 seminar at Dehradun.

Earth Risk Evaluation Center, IMD, Lodhi Raod, New Delhi: Carried a shear wave velocity investigations using MASW technique in Delhi area on the request of Earthquake Risk Evaluation Center, IMD, New Delhi in 2005-06.

Organization of seminars/conferences at WIHG

- 1) **Organized a “Disaster Management workshop”** under the aegis of Asian Disaster Preparedness Center (ADPC), Bangkok and Deptt. of Science & Technology, New Delhi at Wadia Institute of Himalayan Geology from 6-12th December, 2004 at WIHG
- 2) **Organized**, a Jai Vigyan Mission PAMC meeting of Deptt., Dehradun Science and Technology at Dehradun on 15-16 May, 2003.
- 3) **Organizing Secretary and Secretary Indian Geological Congress** for “National conference on Natural Hazards (Earthquakes and Landslides): Challenges, perspectives and societal Dimensions with focus on the state of Uttranchal and 13th IGC Convention” 26-28 December, 2003 at WIHG, Dehradun
- 4) **Organizing Secretary** of the Workshop on Methodology for seismic microzonation and its applications for society (MSMAS) 10-11 November, 2003.
- 5) **Organized** the visit of Hon’able Chief Minister of Himachal Pradesh in Feb. 1998 independently for the inaugural ceremony of Central Seismic Observatory at Naddi, Dharamshala.
- 6) Interaction meet on Natural Hazard and mitigation with H.P Govt. in 1996.

Seminar Organized in Central University of Himachal Pradesh from 2013 to 2015.

- 7) Organized as a Chairman and organizing secretary, Nation Workshop on “Status of Natural Hazards in Himachal Pradesh (NHHP-14) on November 6-7, 2014”, funded by Ministry of Earth Sciences.
- 8) Organized one day stake holder workshop on 8th November in coordination with Ministry of earthquake Science, Rotary Club Kangra and Himachal Pradesh state Government, funded by Ministry of Earth Sciences.
- 9) Organized Second Phase of Pan-India Debating Competition of Indian geological Congress on 4th February 2015 as regional coordinator” funded and organized in coordination with Indian Geological Congress and Ministry of Earth Sciences.
- 10) Organized Group monitoring committee meeting of Ministry of Earth Sciences for Natural Hazards on 7th November, 2014, funded by Ministry of Earth Sciences.
- 11) Organized **Earth day** on 22nd April, 2013 at School of Earth and Environmental Sciences, CUHP, TAB Shahpur.
- 12) Organized **Earth day** on 22nd April, 2014 at School of Earth and Environmental Sciences, CUHP, TAB Shahpur.
- 13) Organized five days training workshop on Remote sensing and GIS to the students and faculty of Department of Environmental Sciences, School of Earth and Environmental Sciences from 24-28 February, 2014.

- 14) Attended a meeting of Project advisory and Monitoring committee (PAMC) organized and sponsored by Ministry of Earth Sciences, Govt. Of India at Hyderabad on 20-21.
- 15) Organized one week training programme on Remote sensing and GIS with the help of Geomedia at CUHP campus for the benefit of MSc. students
16. Organized three days training program on Microtremor system at CUHP campus where five Msc students and RD scholars of Department of Environmental Sciences, School of Earth and Environmental Sciences from 27th January, 2015 to 2nd February- 2014.

(f) Any other relevant information, not given above.

Administrative responsibilities at Wadia Institute of Himalayan Geology, Dehradun

1. Worked as scientist- Incharge of Naddi seismic observatory from Nov. 1993 to October 1998. During this period I have first identified the land at Naddi, got it transferred from Forest Land to Wadia Institute. Followed by arrangement of funds to the tune of Rs 15 Lakhs from state authorities and got it constructed through Forest department as deposit work. The Naddi seismology lab was completed and got inaugurated in February 11, 1998.
2. With this other ten observatories were also installed and lab at Jadera was also inaugurated.
3. Run a school awareness programme very successfully and developed a web site for the benefit of students which had very high hits during the entire project period.

LIST OF PUBLICATION

Papers published

2023

1. P Kumar, AK Mahajan, M Sharma, 2023. [Site effect assessment and vulnerability analysis using multi-geophysical methods for Kangra city, NW Himalaya, India](#) Journal of Earth System Science 132 (1), 1-13:IF 1.912

2022

2. P Kumar, KB Prajapati, AK Mahajan, D Pant, NK Meena, A Kumar, 2022. [Evaluating feasibility of biosorption technique for heavy metals removal: limitations and future perspective](#): International Journal of Environmental Analytical Chemistry, 1-25: IF 2.731
3. AK Mahajan, S Sharma, S Patial, H Sharma, DD Pandey, S Negi 2022. [A brief address of the causal factors, mechanisms, and the effects of a major landslide in Kangra valley, North-Western Himalaya, India](#) Arabian Journal of Geosciences 15 (9), 1-12 IF 1.827

2021

4. Kumar P and Mahajan A.K., 2021. New empirical relationship between resonance frequency and thickness of sediment using ambient noise measurements and joint-fit-inversion of the Rayleigh wave dispersion curve for Kangra Valley (NW Himalaya) India Environmental Earth Sciences 79(11) DOI: 10.1007/s12665-020-09000-8: IF 2.180
5. Meena N, K Gaury P.K and Mahajan A.K. 2021. [The Climatic and Anthropogenic Influences on Himalayan Glacial and Non-Glacial Lakes](#) Published May 24, 2021 by CRC Press Quaternary Climate Change over the Indian Subcontinent ISBN 9780367537579
6. Mahajan A.K. Kumar P and Pawan Kumar 2021. Near-surface seismic site characterization using Nakamura-based HVSR technique in the geological complex region of Kangra Valley, northwest Himalaya, India. Arabian Journal of Geosciences (2021) 14:826 <https://doi.org/10.1007/s12517-021-07136-w>. IF 1.327

2020

7. [Swati Sharma and Mahajan A. K 2020. GIS-based sub-watershed prioritization through morphometric nalysis in the outer Himalayan region of India. Applied Water Science \(2020\) 10:163 <https://doi.org/10.1007/s13201-020-01243-x> springer journal. IF 4.40](#)
8. Pawan Kumar and Mahajan A.K. Trophic status and its regulating factor determination at the Rewalsar Lake, northwest Himalaya (HP), India, based on selected parameters and multivariate statistical analysis SN Applied Science <https://www.springer.com/journal/42452/updates/18640480>: IF 2.11
9. Kumar P., Mahajan A.K. and Kumar Praveen 2020. Determining limiting factors influencing fish kills at Rewalsar Lake: a case study with reference to Dal Lake (McLeodganj), western Himalaya, India. Arabian Journal of Geosciences (2020) 13:872: 1.327

10. Mahajan A.K. Kumar P. and Pawan Kumar, 2020. Subsurface site characterization of Donga Fan, Northwest Himalaya using multichannel analysis of surface waves and response analysis. *Current Science*, VOL. 119, NO. 12, 25 DECEMBER 2020.756
11. Kumar, P. **Mahajan A. K.** and Kumar, A. 2020. Correction to: Groundwater geochemical facie: implications of rock-water interaction at the Chamba city (HP), northwest Himalaya, India. *Environmental Science and Pollution Research*, 1-1 <https://doi.org/10.1007/s11356-020-08060-4>. IF: 2.194

2019

12. P Kumar, Mahajan A. K., Kumar A., 2019. Groundwater geochemical facie: implications of rock-water interaction at the Chamba city (HP), northwest Himalaya, India, *Environmental Science and Pollution Research*, 1-15: IF: 2.194
13. Sharma S., Mahajan A. K. (2019). A comparative assessment of information value, frequency ratio and analytical hierarchy process models for landslide susceptibility mapping of a Himalayan watershed, India, *Bulletin of Engineering Geology and the Environment* 78 (4) 2431-2448: **IF : 1.824**
14. Pawan Kumar, Meena NK, Diwate P, **Mahajan AK**, Bhushan R (2019). The heavy metal contamination history during ca 1839-2003 AD from Renuka Lake of Lesser Himalaya, Himachal Pradesh, India, *Environmental Earth Sciences*, 78:549: IF: 1.765
15. Pawan Kumar, Meena NK, **Mahajan AK.** 2019. Major ions chemistry, catchment weathering and water quality of Renuka Lake, north-west Himalaya, India *Environmental Earth Sciences*, 78:319: IF : 1.765
16. **Pawan Kumar**, Mahajan AK, Meena NK. **2019**). Evaluation of trophic status and its controlling factors in Renuka Lake of Lesser Himalaya, India *Environmental Monitoring and Assessment*, 191:105: IF 1.959
17. **Sharma, S. and Mahajan, A.K. 2019.** Information Value Based Landslide Susceptibility Zonation of Dharamshala Region, North Western Himalaya, India. *Spatial Information Research* DOI - 10.1007/s41324-019-00259-z: IF 1.071

2018

18. Mahajan A.K. 2018. Applications of two-dimensional seismic Tomography for subsurface cavity and dissolution features detection under Doon valley, NW Himalaya. *Current Science*: 115 (5), 962-969.
19. Mahajan A.K. and Kumar P. 2018. Site characterisation in Kangra Valley (NW Himalaya, India) by inversion of H/V spectral ratio from ambient noise measurements and its validation by multichannel analysis of surface waves technique. *Near Surface Geophysics*, 16, 314-327.
20. Mahajan A.K. and Kumar P., 2017. Applications of Multichannel analysis of surface waves in detecting underground mine works. *Jour. Indian Geol. Cong.* 9 (2), 127-129.
21. Sharma, S. and Mahajan, A. K.,2018. Comparative evaluation of GIS-based Landslide susceptibility mapping using statistical and heuristic approach for Dharamshala region of Kangra Valley, India. **Geo-environmental Disasters** 5:4, <https://doi.org/10.1186/s40677-018-0097-1>
22. Sharma, S. and Mahajan, A. K., 2018. A Comparative Assessment of Information Value (In V), Frequency Ratio (FR) and Analytical Hierarchy Process (AHP) Models for Landslide Susceptibility

Mapping of a Himalayan Watershed, India. **Bull. of Engineering Geology and Environment** IF **1.901**

23. Gaury PK, Meena N.K., **Mahajan A.K.** 2018. Hydrochemistry and water quality of Rewalsar Lake of Lesser Himalaya, Himachal Pradesh, India. **Environmental Monitoring and Assessment**, 190(2): 84

2017

24. Bungum, H., Lindholm, C.D. and Mahajan, A.K., 2017. Earthquake recurrence in NW and central Himalaya. *Journal of Asian Earth Sciences*, 138:25-37.

2015

25. Mahajan A.K. Subash Chandra V. S. Sarma B. R. Arora, 2015. Multichannel analysis of surface waves and high-resolution electrical resistivity tomography in detection of subsurface features in northwest Himalaya. **Current Science**, 108 (12), 2230-2239.
26. Vikram Gupta, A.K. Mahajan and V.C. Thakur, 2015 A studies on Landslide triggered during Sikkim Earthquake of September 18, 2011. **Himalayan Geology** 36 (1), 81-90.
27. A.K. Mahajan, Rajwant and Umesh Kumar Sharma, 2015. Rainfall accelerated mass movement, on 7th August, 2013 north of Dharamshala town, Kangra district, Himachal Pradesh. **Geological Society of India**, **85(5); 563-569.**

2014:

28. Mahajan A K, 2014. Applications of Multi-channel analysis of surface waves in site characterisation and detecting subsurface anomalies. 15 SEE, Symposium of Earthquake Engineering, 11-13 December, 2014 Department of Earthquake Engineering, IIT Roorkee. Proceedings of the 15th SEE Conference on Earthquake Engineering vol 1, 62-73, Elite publications, New Delhi. ISBN: 81-88901-42-3.

2013:

29. Nath S.K., Thingbaijam K.K.S., Adhikari M.D., Nayak, A., Devaraj N., Ghosh S.K. and Mahajan A.K., Topographic gradient based site characterization in India complemented by strong ground-motion spectral attributes. **Soil Dynamics and Earthquake Engineering** 55(2013), 233–246.
30. G K Ghosh and A K Mahajan, 2013. Intensity attenuation relation at Chamba–Garhwal area in north-west Himalaya with epicentral distance and magnitude. *J. Earth Syst. Sci.* **122**, No. 1, February 2013, pp. 107–122.
31. B.K. Maheshwari, **A.K. Mahajan**, M.L. Sharma, D.K. Paul, A.M. Kaynia and Conrad Lindholm, 2013. Relations between Shear Wave Velocity and Standard Penetration Resistance for Sandy Soils in the Ganga Basin. **International Journal of Geotechnical Engineering** 7(1): 63-70
32. Kalyan Kumar and **Mahajan A.K.**, 2013. Geotechnical characterisation of soil samples from Rohtang area. Proceedings of 4th Indian Young Geotechnical Engineering conference 17-18 May, 2013, Madras, Chennai

2012

33. **Mahajan A. K.**, Vikram Gupta V. C. Thakur, 2012. Macro seismic field observations of 18 September 2011, Sikkim earthquake. **Nat Hazards**, 63: 589–603
34. **Mahajan, A.K.**, Mundepi, A.K. Neetu Chauhan, A.S. Jasrotia, Nitesh Rai and Tapas Kumar Gachhayat, 2012. Active seismic and passive microtremor HVSR for assessing site effects in Jammu city, NW Himalaya, India –A case study. **Journal of Applied Geophysics**, 77, 51-62.
35. Kumar N., Paul, A., **Mahajan, A. K.**, Yadav D. K. and Chandan Bora. 2012 The M_w 5.0 Kharsali, Garhwal Himalayan earthquake of 23 July 2007: source characterization and tectonic implications. **Curr. Sci.** 102(12) 1675-1682.
36. Thakur, V. C., **Mahajan, A.K.** and Gupta, V. 2012. Seismotectonics of 18 September 2011 Sikkim earthquake: a component of transcurrent deformation in eastern Himalaya **Himalayan Geology**, Vol. 33 (1), 89-96.

Papers Published-2011

37. A.K. Mahajan, J. J. Galiana-Merino, C. Lindholm, B. R. Arora, A.K. Mundepi, Neetu Chauhan and Nitesh Rai, 2011. Characterization of the sedimentary cover at the Himalayan foothills: Characterization of the sedimentary cover at the Himalayan foothills using active and passive seismic techniques. **Journ of Applied Geophysics**, 73, 196-206.
38. Galiana-Merino, J.J. Mahajan, A.K. Lindholm, C.J. Herranz, Rosa- Mundepi A.K. & Rai, N 2011. Seismic noise array measurements using broadband stations and vertical geophones: preliminary outcomes for the suitability on f-k analysis. **Bull Earthquake Eng**, 9, 1309-1325.
39. **Mahajan, A.K.**, Shukla A.K., Ajit Pandey, Mukesh Chauhan, Neetu Chauhan and Nitesh Rai, 2011. Shear Wave Velocity investigation for ten representative sites of Delhi National Capital Region, New Delhi, India- **International Journal of Geotechnical Engineering**, 2(1), 29-43, January-June, 2011 29.
40. Ghosh G. K and Mahajan, A. K. 2011. Interpretation of Intensity Attenuation Relation of 1905 Kangra Earthquake with Epicentral Distance and Magnitude in **the northwest Himalayan Region**. **Jour . Geological Society of India**. Vol.77, June 2011.
41. **Mahajan, A.K.**, Subash Chandra, V.S. Sarma, B.R. Arora, and Dewashish Kumar, 2011. Multichannel Analysis of Surface Waves (MASW) And High Resolution Electrical Resistivity Tomography (HERT) in detection of Subsurface Features in NW Himalaya: Case Study-**Near Surface Geophysics**- in press.
42. Mahajan A. K Galiana-Merino J.J., Lindholm, C., Mundepi A.K. and Rai N. A comparative study of active and passive MASW and F-K technique and optimum field parameters for site characterization. 14 SEE earthquake Engineering (Eds Kumar A and Sharma M.L) 1335-1348. Elite publishers.

2010

43. **Mahajan, A.K.**, Thakur V.C., Mukut Lal and Mukesh Chauhan 2010. Probabilistic Seismic Hazard Map of NW Himalaya and its adjoining area, India. **Natural Hazard**, **53**, 443-457.
44. Mundepi, **A.K.** and **Mahajan, A.K.**, 2010. Site response evolution and sediment mapping using horizontal to vertical spectral ratios (HVSr) of ground ambient noise in Jammu city, NW, India- **Geological Society of India** 75, 799-806
45. Mahajan A.K. & Nitesh Rai, 2010 Using MASW to map depth to bedrock underneath Dehradun Fan deposits in NW Himalaya. **Curr. Science**. 100 (2) 233-238.

Published in International Peer reviewed Journals (1993-2009)

46. Kumar, S and **Mahajan, A.K.**, 1993: The Uttarkashi earthquake of 20th October, 1991: Field observations, **Terra Nova** 6(2): 95-99.
47. **Mahajan, A. K.** and Kumar, S. 1994: Linear features registered on the Landsat Imagery in the Dharamsala-Palampur area NW Himalaya, vis-à-vis seismic status of the area, **Geophysika(II)**:15-25.
48. Paul, S.K., Bartarya, S.K., Rautela, P. and **Mahajan, A.K.** 2000. Catastrophic mass movement of 1998 monsoons at Malpa in Kali Valley, Kumaun Himalaya (India) **Geomorphology** **35** : 169-180.
49. Kumar, S. and **Mahajan, A.K.**, 2001. Seismotectonics of the Kangra region, Northwest Himalaya. **Tectonophysics**, 331(4): 359-371
50. **Mahajan A.K.** and Viridi N.S., 2001 Macro seismic field generated by the 29th March Chamoli Earthquake, 1999 and its seismotectonics. **Jour. of Asian Earth science**, 19(4): 507-516.
51. T. Nakata, T. Yoshioka, H. Sato, T. Imaizumi, J. N. Malik, G. Philip, **A.K. Mahajan** and R.V. Karanth, 2001. Extensive surface deformation around Budharmora associated with the January 26, 2001 Republic day (Bhuj) earthquake of India. **Active fault Research**, 20, 127-136.
52. J.N. Malik, T. Nakata, H. Sato, T. Imaizumi, T. Yoshioka, G. Philip **Mahajan , A.K.** and R.V. Karanth, 2001. 26 January, 2001, the Republic day (Bhuj) earthquake of kachchh and active faults, Gujarat, western India. **Active Fault Research**, 20, 112-126.
53. **Mahajan A.K.** Kumar S. and Kamal 2004. Macro seismic field observations of January 26th, 2001 Kachchh Earthquake and its Seismotectonics. **Jour Asian Earth Sciences**, 23 (1), 17-23.
54. Rajwant, **Mahajan A.K.** and Sharma U.K 2004. Deforestation and Geo-environmental degradation in the Baner khad watershed, H.P., India. **Asian Jour. Water and Enviro. and Pollution** 2(1): 39-46

55. **Mahajan A.K.**, Rob Sporry and Chabak, S.K. 2005. Shear wave velocity survey for seismic hazard zonation studies in Dehradun, India. **Near Surface 2005**, Palermo, Italy, 5-8 September, 2005.
56. **Mahajan A.K.**, Siefko Slob, Rajiv Ranjan, Rob Sporry, P.K. Champati ray, and Cees J. van Westen, 2007. Seismic Microzonation of Dehradun city using Geophysical and Geotechnical Characteristics in the upper 30-meters of soil column. **Jour of Seis.11:335-370**.
57. **Mahajan, A.K.** 2009. "NEHRP soil classification and estimation of 1-D site effect of Dehradun fan deposits using shear wave velocity. **Engineering Geology** 104, 232–240.

National Peer reviewed Journals

58. Kumar, S. and **Mahajan A. K.**, 1990: Studies of Intensities of 26th April, 1986 Dharamsala Earthquake and associated tectonics. **Geol. Soc. Ind.** 35:213-219.
59. Kumar, S. and **Mahajan, A. K.**, 1991: Dharamsala Seismotectonic zone-Neotectonic and state of stress in the area. **Jour. Him. Geol.** 2(1):53-57.
60. Extract, 1992: Uttarkashi Earthquake October 20, 1991. **Geol. Soc. Ind.** 39(1): 83-85.
61. **Mahajan, A. K.** Kumar, S., and Chabak, S.K..1995: Local Gravity Survey in the Dharamsala Palampur area, NW Himalaya, **Geol. Soc. Ind.** 50 (1):75-84.
62. Thakur, V. C. Phadtare, B. Rawat, B. S. Kumar, S. and **Mahajan, A. K.** 1996: A report on 30th September, 1993 Latur Earthquake of Maharashtra. **Jour. Him. Geol.** 6 (1):31-49.
63. **Mahajan A.K.**, 1998: The 24th March, 1995 Chamba earthquake (NW Himalaya), field observations and seismotectonics. **Jour. Geol. Soc. Ind.** 51: 227-232.
64. Paul S. K. and **Mahajan, A. K.** 1999. Malpa rock fall disaster, Kali Valley, Kumaun Himalayan. **Current Sci.**, vol. 76(4); 485-487.
65. **Mahajan A.K.** and Pandey H.C. 2002: Macroseismic observation of Chamoli earthquake of 29th March 1999 and its engineering aspects. **Jour. Him. Geo.** vol 23(1&2), 1-6.
66. **Mahajan A.K.** and Viridi N.S. 2002. Sand blows and other secondary effects induced by the January 26, 2001 Bhuj Earthquake. **Bull. Ind. Geol. Assoc.** 35(2) , 1-10.
67. **Mahajan A.K.** and Viridi N.S. 2005. Macroseismic study of shallow earthquakes in the Himachal and Garhwal Himalaya, Northwest Himalaya, India. **Geol. Soc. Spl Vol.** 2005
68. **Mahajan A.K.** Naresh Kumar and Arora B.R. 2006 Quick isoseismal map of 8th October, 2005 Kashmir Earthquake. **Current Science**, 91(3), 356-361.
69. **Mahajan A.K.**, Rob J. Sporry, Champati P. K., Rajiv Ranjan, Siefko Slob and Westen Cees Van, 2007. Methodology for Site response studies using Multi-channel Analysis of Surface Wave (MASW) Technique in Dehradun city. **Curr. Sci** 92(7): 945-955.

Publication in Proceedings/Books:

70. Kumar, S. and Mundepi, A. K. **Mahajan**, A.K. Pandey, H. C. and Vashistha, L. **1993**: Baumiki, 20th October, 1991 Uttarkashi Bukamp (in Hindi) Vaigyanik:11-12.
71. Viridi, N. S. and **Mahajan, A. K.** , **1999**: Hydrel projects and related developmental activity in Uttrakhand-environmental impact evaluation, Proceedings of seminars on “Developmental needs of Uttrakhand region” Feb, 20-21, 1999 Dehradun.
72. **Mahajan A.K.** Pandey H.C. and Viridi N.S.. **2001**. Co-seismic landslides and Fractures induced by Chamoli earthquake, 1999 and why the people are at risk. Proceedings of workshop on Chamoli and Bhuj (Edited by Wason H.R et. al.. 2001) 197-205.
73. **Mahajan A.K.** and Viridi N.S. **2001**: Slope stability vis -a-vis rapid urbanization. Some case studies around Dharamsala, Distt. Kangra, Himachal Pradesh. Published in Bulletin of Indian Geologist Association, Chandigarh.
74. **Mahajan A.K.** Mihailov, V, and Dojcinovski D, 2002. A Preliminary Probabilistic Seismic Hazard Assessment of the Northwest Himalaya. 12th SEE Conference on Earthquake Engineering, Roorkee December 16-18, 2002, 277-286.
75. **Mahajan A.K.** and Viridi N.S. 2005. Landslide Hazard zonation and risk analysis of Dharamsala town, Himachal Pradesh, Northwest Himalaya. Landslide 2005 : 51-80
76. **Mahajan A. K.** **2006**. Seismicity, Seismotectonics and seismic hazard of 1905 Kangra Earthquake effected region (NW Himalaya), India. In: Environmental Hazards – Science & Society, Eds. Sharma, K.K., Bandooni, S.K. & Negi, V.S., Research India Press, New Delhi, 65-86.
77. **Mahajan, A.K.** and G.K. Ghosh 2007. Statistical analysis of earthquake data from Northwest Himalayan region and its implication for seismic hazards. Natural hazards (Eds O.P. Verma A.K. **Mahajan** and Vikram Gupta) Proceeding of natural hazard (earthquakes and Landslides): challenges, perspectives and social dimensions with focus on the state of Uttarakhand” December 26-28, 2003. 45-56.

Abstract Published in symposia

International Symposia

1. A.K. Mahajan 2012. 34th International Geological congress held at Brisbane and delivered talk on comparison of site amplification using actual thickness of sediments (V_{sz}) versus V_{s30} in tectonically active regions on 10th August, 2012.
2. A.K. Mahajan 2011. Site characterization of the sedimentary cover at the Himalayan Foothills using active and passive seismic sources for estimation of earthquake hazard on July 13-15 2011 during Himalayan –Karakorum_tibet workshop held at Canmore, Canada.
3. **A.K. Mahajan**, A.K. Mundepi and Neetu Chauhan 2008. Shear wave velocity investigations in Jammu city- a step towards microzonation. Presented during International Symposium on

- Mountain Building and Climate-Tectonic Interaction held at Wadia Institute of Himalayan Geology, Dehradun from October 23-25, 2008. Him. Geol. Vol. 29(3), 48p.
4. R. Jayangondaperumal, Senthil Kumar, Wesnousky, Steven G, **A.K. Mahajan**, Vikram Gupta, B.R. Arora and Suresh N., 2008. Late Pleistocene activity of intra-basinal Bhauwala Thrust (BT), Dehradun, NW Himalaya. Presented during International Symposium on Mountain Building and Climate-Tectonic Interaction held at Wadia Institute of Himalayan Geology, Dehradun from October 23-25, 2008. Him. Geol. Vol 29(3), 36P
 5. **Mahajan, A.K.** and Arora, B.R. 2008. **Presented a poster** through Colleague during International Geological Congress held at OSLO Norway in 2008 on “Tracing Sedimentological Evolution of Dehradun, Intermontane Valley, NW Himalaya using Multichannel Analysis of Surface Waves Technique”
 6. **Mahajan A.K.**, 2006. Seismic Hazard analysis of NW Himalaya. Proceedings of the International workshop on Seismology and Seismotectonics, 28-29 November, 2006, Organized by Deptt. of Geology and Mines, Kathmandu, Nepal.
 7. **Mahajan A.K.** et al., 2006 Development of Methodology for Seismic Microzonation using Multi-channel Analysis of Surface Wave Technique (MASW) for Dehradun city. Proceeding of International workshop on Seismic Hazard and Risk Assessment at India Habitat Center, New Delhi, organized by NORSAR, Norway and IIT, Roorkee on 8th March, 2006.
 8. **Mahajan A.K.** and Viridi N.S. 2005. Seismicity, Seismotectonics and seismic hazard of 1905 Kangra earthquake effected region (NW Himalaya), India.
 9. **Mahajan A.K and Rob Sporry . 2004.** A relation between damaged areas as a function of magnitude for Northwest Himalayan Shallow earthquakes. Abstract 32 International Geological Congress August 21-24, 2004, Florence, Italy. P 299-38. Poster presentation by **Rob Sporry**.
 10. **Mahajan A.K.** 2003. Seismotectonic studies for Microseismic zonation of Dehradun region and its surroundings. International workshop on Methodology for seismic microzonation and its applications for society (MSMAS) 10-11 November, 2003:11-12 – **funded by ITC, Netherlands**.
 11. Kamal, **Mahajan A.K.**, S. Kumar and Mansinha L. 2001. Preliminary report of field observations of 26th Gujarat earthquake. Abstract published in International conference of American Geophysical Union to be held at Boulder, Colarado, USA- **Presented by Prof. Man Sinha**.
 12. **Mahajan A.K.** Kumar S. and Kamal, 2001. Macroseismic field observations of Janaury 26, 201 Kutch Earthquake and its seismotectonics, International Conference on Sesimic Hazard with particular reference to Bhuj Earthquake of January 26, 2001, Oct. 3-5 New Delhi, India- **Self presentation**.
 13. **Mahajan A.K,** Thakur V.C. and Viridi N.S. 1999. Comparative analysis of Urban seismic Risk in Dehradun city with other cities of the world (**RADIUS Project**). Attended

- International conference on Seismic Risk assessment organized by IDNDR on internet from 14th-25th June, 1999 with main emphasis on Understanding the Urban Seismic Risk around the world at Tijuana, Mexico- **Funded by UNO.**
14. **Mahajan A.K. 1999.** Chamoli earthquake of 29th March , 1999 Assessment of damage-preliminary report. Nepal Geological Society , Nepal. 1999- **Funded by NSET.**
 15. **Mahajan A.K. 1999.** A new Approach to Earthquake Risk Assessment . Nepal Geological Society, Nepal. 1999- **Funded by NSET and Nepal Geological Society .**
 16. **Mahajan A.K. and Viridi N.S. 1999.** Causes and controls of Landslides around Dharamsala, Distt. Kangra, Himachal Pradesh. Nepal Geological Society, Nepal. 1999- funded by NSET and Nepal Geological Society.
 17. **Mahajan A.K. 1996.** Segmental behavior of the Indian Plate margin and its reflection on the seismotectonics. In abstract vol. Of the 30th International Geological congress, 4-14 August, 1996: p-267(3)- **Funded by INSA and Organizers 30th IGC**
 18. **Mahajan A.K. 1996.** A case study of devastating earthquakes in India with special reference to Khillari earthquake. In abstract vol. of IASPEI Assembly in Asia, Tangshan, China, 1-3 August, 1996: p-214.-**Funded by IASPEI**
 19. **Mahajan A.K. and Kumar S. 1993.** Geology and Tectonics of the Dharamsala-Palampur area of NW Himalaya. In abstract Vol. of the International seminar on Geology and Geophysics, Dehra dun. 22-25 March, 1993. –**In India funded by WIHG**
 20. **Mahajan A.K. 1994.** The Khillari earthquake of September 29, 1993, its fault kinematic analysis and approach to earthquake disaster management. In abstract vol. of the 9th International seminar on earthquake Pragnotic, 16-19 September, 1994. Costa Rica-**only Published abstract could not get funds.**

Lectures delivered in universities/seminars/Industry –Enrolled

2007-2008

1. A.K. Mahajan and B.R. Arora 2007 Shear wave velocity fields from surface waves to detect anomalies in the subsurface using Multichannel Analysis of surface waves. 44th Annual Convention of Indian Geophysical Union and meeting on “Science of Shallow Subsurface” 21-23 November, 2007 pp 18.
2. A.K. Mahajan, P.S. Mishra, A.K. Shukla, Ajit Pandey and Mukesh Chauhan, 2007. Shallow Shear Wave Velocity and Seismic Microzonation of Urban National Capital Region, New Delhi, International conference on Geo-environments: a challenge ahead, April 23-25, 2007, Jammu University, Jammu.
3. A.K. Mahajan, A. K. Mundepi, A.S. Jasrotia, Neetu Chuhan, Tapas Kumar, Abinash Majhi, 2008. Seismic Microzonation of Jammu City Using Masw And Nakamura Techniques – Preliminary Results. Workshop on “8th October, 2005 Kashmir Earthquake and after”, **Jammu university March 22-23, 2008.**

4. A.K. Mahajan 2008 Attended workshop on Landslide inventory, Hazard and Risk Management under Asian Programme for “Regional Capacity Enhancement for Landslide impact Mitigation (RECLAIM-II)” at IIRS, Dehradun 10-11 January, 2008.

2008-2009

International Seminar

5. A.K. Mahajan and B.R. Arora 2008. **Presented a poster** through Colleague during International Geological Congress held at OSLO Norway in 2008 on “Tracing Sedimentological Evolution of Dehradun, Intermontane Valley, NW Himalaya using Multichannel Analysis of Surface Waves Technique”.

National Seminar

6. A.K. Mahajan, A.K. Mundepi and Neetu Chauhan 2008. Shear wave velocity investigations in Jammu city- a step towards microzonation. Presented during International Symposium on Mountain Building and Climate-Tectonic Interaction held at Wadia Institute of Himalayan Geology, Dehradun from October 23-25, 2008. Him. Geol. Vol. 29(3), 48p.
7. R. Jayangondaperumal, Senthil Kumar, Wesnousky, Steven G, A.K. Mahajan, Vikram Gupta, B.R. Arora and Suresh N., 2008. Late Pleistocene activity of intra-basinal Bhauwala Thrust (BT) , Dehradun, NW Himalaya. Presented during International Symposium on Mountain Building and Climate-Tectonic Interaction held at Wadia Institute of Himalayan Geology, Dehradun from October 23-25, 2008. Him. Geol. Vol. 29(3), 36p.
8. A.K. Mahajan 2008: Attended Geological society silver Jubilee celebration and mobilizes students from different parts of NW Himalayan schools in order to have interaction of students with scientist of the nations at Bangalore from 11-13 October, 2008.
9. A.K. Mahajan 2008. Attended workshop on Landslide inventory, Hazard and Risk Management under Asian Programme for “Regional Capacity Enhancement for Landslide impact Mitigation (RECLAIM-II)” at IIRS, Dehradun 10-11 January, 2008.

2009-2010

International Seminars

10. International Seminar (causes and mitigation of Environmental degradation of planet Earth with special ref. to Uttarakhand at MKP (P.G.) College, Dehradun on 6th-7th April, 2009.
11. International conference Geoflorida-2010 “Geotechnical site characterization by the seismic surface wave method”- abstract submitted and accepted on topic “characterization of the sedimentary cover of the Himalayan foothills: A comparative method of active (MASW) and passive array (MASW and f-k) techniques. Abstract published.

National Seminars

12. A.K. Mahajan, 2009: Attended workshop on Slope stability and Landslides at CRRI, New Delhi on 11/3/2010.
13. A.K. Mahajan, A.K. Mundepi, J.S. Jasrotia, Neetu Chuhan and Nitesh Rai, 2010. Seismic microzonation of Jammu city using different geophysical techniques. Abstract published in the proceedings of the Seismic National seminar on Sedimentation, Tectonics and Hydrocarbon potential in Himalayan Foreland Basin held at Jammu University 22-23 Feb., 2010.
14. A.K. Mahajan, Ajay Paul and D. K. Yadav. 2009. Seismicity and seismotectonics of NW Himalaya: some recent observations on migration of seismic activity. Abstract published in proceedings of National seminar on Seismogenesis to Prediction of Earthquake (SPRED 2009) at WIHG, Dehradun from 23-25th October, 2009, Dehradun.
15. A.K. Mahajan, Neetu Chuhan, A. K. Mundepi, Nitesh Rai and A.S. Jasrotia 2009. Seismic microzonation of Jammu city using Multichannel analysis of surface waves and HVSR Techniques, NW Himalaya. Abstract published in proceedings of 46th IGU meeting and workshop on Evolution of Himalayan foreland basin and emerging explorations. Abstract, 5-7th October, 2009, Dehradun, India, 59.
16. **In-House Lecture:** Characterization of the sedimentary cover at the Himalayan foothills: A comparative study of active and passive Remote MASW and F-K techniques at Wadia Institute of Himalayan Geology, Dehradun on 24th July, 2009.

2010-11

International

17. Attended 26th Himalaya-- - Karakoram-Tibet Workshop Canmore, Alberta, Canada 11th - 14th July 2011 and presented a paper on “ Site Characterization of the sedimentary cover at the Himalayan Foothills using Active and Passive Seismic sources for estimation of Earthquake Hazard, held at Canmore from July11-13, 2011.

National Seminars

18. Attended and delivered an oral presentation in the 14 SEE Symposium on Earthquake Engineering, at IIT Roorkee on the topic entitled “A comparative study of active and passive MASW and f-k technique and optimum field parameters for site characterisation on 18th December, 2010.
19. Attended and delivered an oral presentation in the 14 SEE Symposia on Earthquake Engineering, at IIT Roorkee on the topic entitled “Suitability of seismic refraction equipments for seismic noise array measurements and f-k analysis” on 18th December, 2010.
20. Attended workshop on Geohazard at Ministry of Earth Sciences, New Delhi and presented a paper on “Applications of active and passive MASW in site characterisation deeper than 30m. In proceedings of the workshop Geo-hazard. P 49.
21. Delivered a talk on “Sikkim Earthquake 2011” during Indo-Iceland workshop held at WIHG on 22nd October, 2011 as a special session on Sikkim Earthquake.

In House talk in 2011

22. Site characterization of the sediments cover at the Himalayan foothills using active and passive seismic sources for estimation of earthquake hazard on 29th July 2011.

2011- 2012

International Workshop

23. A.K. Mahajan 2012. Site amplifications using actual thickness of sediments (V_{sz}) versus V_{s30} in tectonically active regions” on 10 the August 2012 during 34th International Geological congress held at Brisbane, Australia.
24. A.K. Mahajan and Nitesh Rai, 2011. Site Characterization of the Sedimentary Cover at the Himalayan Foothills using Active and Passive Seismic sources for estimation of Earthquake Hazard during Himalayan Karakorum-Tibet workshop held at Cannore, Canada, 12-15 July 2011.

National Workshop

25. Delivered a talk on “Is V_{s30} is proxy to site characterization? A cases study from Doon valley” at National conference on Engineering Geophysics for Civil Engineering and Geo-Hazards (EGCEG), November 22 – 23, 2012 at CSIR-Central Building Research Institute, Roorkee – 247667
26. Delivered a talk on “Application of Multichannel analysis of surface waves in detection of ground water Case study: Doon valley, NW Himalaya” during National conference on “Green Earth” with special focus on the Himalaya, 18-19 October, 2012 organized by Indian Geological Congress and Wadia Institute of Himalayan Geology.

2013-15

27. A.K. Mahajan, 2014. “Applications of Multi-channel Analysis of surface Waves in site Characterisation and detecting subsurface anomalies” In Proceedings of 15th Symposium on Earthquake Engineering held at Indian Institute of Technology, Roorkee December 11-13, 2014 M.L. Sharma and Manish Shrikhande (edited) vol. 1, 62-73. ISBN : 978-81-88901-59-3.
28. A.K. Mahajan and Praveen Kumar, 2014. “ Applications of Multichannel analysis of surface waves (MASW) for site amplification in earthquake prone regions abstract published in the proceeding of the abstract volume of National Workshop on Status of Natural Hazard in Himachal Pradesh from 6-8 November, 2014 at Central University of Himachal Pradesh, page 26
29. Swati Sharma, Aditya Awasthi and A.K. Mahajan, 2014, “Geotechnical investigations of shallow rotational landslide at Tira Line for Hazard assessment, abstract published in the proceeding of the abstract volume of National Workshop on Status of Natural Hazard in Himachal Pradesh from 6-8 November, 2014 at Central University of Himachal Pradesh, page 31.

30. Pooja Rajpur and A.K. Mahajan, 2014, "Damagae scenario of 1905 Kangra earthquake if it will repeat in near future using deterministic approach. abstract published in the proceeding of the abstract volume of National Workshop on Status of Natural Hazard in Himachal Pradesh from 6-8 November, 2014 at Central University of Himachal Pradesh, page 15

Invited talks (Since 2007- onwards)

2007-2008

- 1) Invited talk delivered at ITBP Academy on **Disaster Management** to participants of the rank of DIG's on 21 February, 2007
- 2) Delivered an **inaugural address at the Principals conference** on 21st September, 2007 at Mussoorie.
- 3) Invited talk on "**Earthquake and its Management**" at ITBP on 22nd August, **2007** at ITBP academy Mussoorie.
- 4) Invited talk on **Importance of preparedness for Disaster Management and protection scheme**" at Academy of Uttaranchal administration, Nainital, on 30th June, 2007.
- 5) Invited talk on "**Applications of Multichannel Analysis of Surface Waves on Seismic Microzonation: A Dehradun case study**" at A workshop on Microzonation, 26-27 June, 2007,
- 6) Invited talk on "**Seismic Hazards and its Mitigation Measures**" at National Workshop on "Environmental Geo- Hazards (Earthquakes, Landslides, Floods etc.) Management and Mitigation strategy, 4-5 June, 2007 at Mandi, Mandi Distt. Himachal Pradesh.
- 7) Invited talk on "**Earthquake and its Management**" at ITBP on 30th May, **2007** at ITBP academy Mussoorie.
- 8) **Delivered an invited talk on Disaster Management to the high level officials** (Inspector General's) of ITBP at Mussoorie ITBP Academy on 14th January, 2007.

2008-2009

- 9) Delivered invited talk at ITBP on **Disaster Management to high Command officials** on 1st January, 2008 at ITBP Academy, Mussoorie.

2009-2010

- 10) Delivered invited Talk on **Seismic microzonation and Probabilistic hazard assessment** to M.Tech students at IIRS, Dehradun on 16/12/2009.
- 11) Delivered invited Talk on "**Case studies on Seismic hazard assessments**" to M.Tech students at IIRS, Dehradun on 16/12/2009.

2010-2011

- 12) Invited talk on **Seismic probability modeling and microzonation** to the participants of International training course on Application of space Technology for Disaster Management support with emphasis on Geological Risk Management (DMS-GRM) On 24.6/2010 at IIRS.
- 13) Invited talk on **Disaster Management: Earthquake** at **National level data users Seminar** organized by LIGHTS, an NGO o at Survey of India on 25/7/2010.
- 14) **Invited as Guest faculty** to deliver an talk on “**Methodology of Seismic Microzonation** “to the trainees of the Training course on Seismic Microzonation organized by Regional Training Institute, GSI, Guwahati on **9/12/2010** to officer of GSI and UNDP.
- 15) **Invited as Guest faculty** to deliver a talk on “**Probabilistic Seismic Hazard Assessment and Seismic Microzonation**” at Indian Institute of Remote Sensing to M.Sc/ P.G. Diploma students (Geo-informatics for Natural Hazards and Disaster Risk Management) on the topic entitled “**on 18/02/2011.**”

2012-2013

- 16) Invited talk at Indian Geophysical union (IGU), Wadia Institute of Himalayan Geology Dehra Dun

2013-15

- 17) Delivered two Guest lectures on 1) Plate tectonics and 2) Earth Surface processes at Kashmir University, Srinagar on 23rd May, 2016.
- 18) Invited for delivering invited talk to be delivered at Kashmir University on 4-5 June during “National Seminar on Environmental Pollution” on the eve of observance of world Environment Day-2016..
- 19) Delivered a Key note talk on “**Application of Environmental Geophysics in dealing with environmental issues**” during National Conference on “Environmental Issues, Concerns and solutions (EICS-2014 from March 24-25, 2014 organized by Department of Environmental sciences of Jammu, Jammu on 25th March 2014.
- 20) Chairman of the technical session “**Environmental Pollution: Prevention and Control on 25th March, 2014 during National Conference** on “Environmental Issues, Concerns and solutions (EICS-2014 from March 24-25, 2014 organized by Department of Environmental sciences of Jammu, Jammu.
- 21) Delivered invited talk on **Sub-surface site characterization and its environmental and engineering implication using multichannel analysis of surface waves during Indian Geophysical Union workshop** organized by Wadia Institute of Himalayan Geology, Dehra Dun in 16-17 June, 2013.
- 22) Invited as Chief Guest to inaugurate the annual function **Navrang 2013-14** of the college at Dranacharya P. G. College of Education, Riat, Distt. Kangra
- 23) Invited for delivering a Talk on “**Applications of active and passive Multichannel**

analysis of surface waves for subsurface characterisation” during 2nd India-Norway joint Workshop held at Prithvi Bhawan, MoES during Feb.13-14, 2014.

- 24) Delivered an talk on use of “**Environmental Geophysics for near surface studies”** during two days national seminar on **Implications of Climate change on Himalayan Environment organised at Central** University of Himachal Pradesh in collaboration with Wadia Institute of Himalayan Geology, from 20-21st March, 2014

Significant Contributions in research

I (Prof. Ambrish Kumar Mahajan), presently, Professor and Head, Department of Environmental Sciences & Dean, School of Earth and Environmental Sciences & School of Life Sciences, Central University of Himachal Pradesh, India joined the university with a motive to establish both the Departments to have fillip to high end research and place the university on world map. I (Prof. Mahajan) have also been working as the Director, Centre of Computational Biology and tried to provide high end facilities to the computational departments for high academic research to be achieved by faculty and researchers, which is well reflected by their publications (see annexure -1)

I had been focusing on development the capabilities for assessment of earthquake hazard and efforts have been made to know the expected peak ground motion using the probabilistic method for the northwest Himalaya, further step forward, as we understand from different earthquake during past that soil amplification plays a big role in shaping the disaster of any region. Efforts have been made to carry out seismic **Microzonation studies of Dehradun city using Shear wave** velocity as one of the geotechnical component. To achieve this target a **latest method MASW** has been applied to know the shear wave velocity which goes as input to the site response analysis programme to calculate the site response and amplification of each site. Under this effort a seismic microzonation map of Dehradun city has been prepared giving values of spectral acceleration for different story buildings at each site. The study was followed at NCR Delhi region, Jammu city and Donga Fan of Doon valley. Presently, Dharamshala city covering Kangra basin is under progress. This will provide input to the local people as well civil engineers and development authorities in land use planning.

These are the two major achievements in 2003-2004 i.e. **the seismic Hazard map of Northwest Himalaya and seismic Microzonation map of Dehradun city, Jammu city, NCR Delhi region and characterization of sediments using different active and passive seismic methods.** .

Shallow seismic reflection and refraction studies have also started to **unveil the hidden faults** in the foothills using Engineering seismograph.

Besides this no. of earth damage scenario has been studied to know the seismotectonic behavior of the region like macroseismic investigations for **1986 Dharamsala earthquake**, 1991

Uttarkashi earthquake, 1993 Latur Earthquake, 1995 Chamba Earthquake, 1997 Sundernagar Earthquake, 1999 Chamoli earthquake and 2001 Bhuj Earthquake.

Extensive study of **1905 Kangra epicentral zone** and the work is highly referred.

Worked with IDNDR on one of the major project for risk evaluation **RADIUS** and evaluated the **seismic risk of Dehradun city** and compared the city with other cities of the world. The report had been released by Secretary General, UNO in 2000.

Carry out **Landslide Hazard zonation of Dharamsala town.**

Seismic instruments (Analog and Broad Band) for micro earthquake survey had been installed in NW Himalaya. Involved in planning and selection of sites for telemetry seismic network in **Northwest Himalaya. Ten seismic observatories** in Kangra region had been established.

Array of ten **seismic instruments had been established in Arunachal Pradesh** for short term study of seismicity for northeastern region under joint collaboration with NGRI.

1905 Kangra earthquake epicentral zone has been studied extensively for seismotectonic studies

International collaboration: Formulated different project for international collaboration and worked in international collaboration with **ITC, Netherlands for the years 2003-2004 and 2004-2005. Collaboration has been again signed in 2005** with ITC itself for joint work on Dehradun city.

Co-ordinated ICNHMM delegation visit to Dharamsala area for geological field work on 16th March, 2001.

Establishment of Naddi seismological Laboratory, right transferring of land from state Govt. to arranging of funds from state Govt. for the construction of Observatory from 1993-1998.

Software handled

Complete Knowledge of microsoft office (a basic necessity)

GIS software **ILWIS** and **ERDAS**.

Earthquake response analysis software “**SHAKE**” and “**EDUSHAKE**”

Seismic Reflection software “**WINSEIS**” of KGS, USA

Recently developed seismic reflection software “**SurfSeis 1.5**” of KGS, USA

Seismic Hazard software “**SEISRISK**”, Haz 81 etc.

Organization of workshop/symposiums:

Organized a “Disaster Management workshop” under the aegis of Asian Disaster Preparedness Center (ADPC), Bangkok and Deptt. of Science & Technology, New Delhi at Wadia Institute of Himalayan Geology from 6-12th December, 2004 at WIHG

Organized, a Jai Vigyan Mission PAMC meeting of Deptt., Dehradun Science and Technology at Dehradun on 15-16 May, 2003.

Organizing Secretary and Secretary Indian Geological Congress for “National conference on Natural Hazards (Earthquakes and Landslides): Challenges, perspectives and societal Dimensions with focus on the state of Uttranchal and 13th IGC Convention” 26-28 December, 2003 at WIHG, Dehradun

Organizing Secretary of the Workshop on Methodology for seismic microzonation and its applications for society (MSMAS) 10-11 November, 2003.

Organized the visit of Hon’able Chief Minister of Himachal Pradesh in Feb. 1998 independently for the inaugural ceremony of Central Seismic Observatory at Naddi, Dharamsala.

Interaction meet on Natural Hazard and mitigation with H.P Govt. in 1996.

Contribution in Disaster Management and public awareness

Seismic Hazard Assessment of Himalaya – a methodology delivered at Department of Soil Mechanics, Technical University Delft, The Netherlands on 21st February, 2003

Taught one full course module of **Disaster Management** as visiting faculty at ITC (International Institute for Geo-information and Earth Observations), The Netherlands for three weeks course in March, 2003.

Delivered Invited lecture at the **Disaster Management** course run by Regional Training Institute, DRDO, Raipur on Earthquake effects and their management on 13th November, 2003

Key note address on seismic Hazard and Microzonation of Dehradun city at the Dehradun UEVP city consultation workshop organized by MDDA and UNDP at Dehradun, October 29-30, 2003. Construction of earthquake resistant buildings at Regional Training Institute (DRDO), Dehradun, 29th July, 2002.

Remote sensing and GIS applications for earthquake Disaster Management at IIT, Roorkee, 2nd July, 2002.

Invited lecture at IIRS (Indian Institute of Remote Sensing), Dehradun to the participants of the International refresher course on disaster management organized by ITC Netherlands and IIRS Dehradun on 19th December, 2001.

Earthquake preparedness and risk management at regional Training Institute, DRDO, Raipur, Dehradun on 4th May, 2000.

Natural Disasters its preparedness and mitigation measures to the District authorities of Kangra distt., Himachal Pradesh, 2000.

Delivered eleven lectures to the participants of the **UNESCO International course on seismology and seismic hazard** jointly organized by Deptt. of Earthquake Engineering and GoeForschungZentrum, Potsdam , Germany at DEQ , IIT Roorkee in November, 1998.

Lecture notes on Earthquake Disaster management (Practical aspects and Maethodology) has also been delivered to ITBP Academy, Mussoorie, Distt. Dehradun.