

DIRECTORS PROFILE

Bio-Data of Prof. R.K. Khitoliya

Director,
Harcourt Butler Technological Institute,
Kanpur – 208 002 (U.P.)

(0510- 2534000 (O), 0512-2533812 (FAX))

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1. Date of birth: **December 27th 1958**

2. Educational/Professionals Qualifications

Examination Passed	University/Institution	Subjects taken/Topic of Thesis
B. Tech (Civil Engg.)	Institute of Technology, Banaras Hindu University, Varanasi	All Civil Engineering Subjects
M. Tech(Civil Engg.)	I.I.T., Delhi	Thesis :-Building Services: Design and evaluation of lifts and sanitary system.
Post Graduate Diploma: Ecology and Environment	Indian Institute of Ecology & Environment, Delhi	All subjects pertaining to ecology and environment. Thesis : Environmental impact of River Valley Project: Their identification and quantification.
Ph.D (Civil Engg.)	I.I.T. Delhi.	Thesis : Studies on lithography, petrofabrics, strain in rocks and their deleterious effects as construction materials.
L.L.B.(Professional)	University of Delhi	All law subjects
Master of Laws (LL.M)	Kurukshetra University	Administrative Law, Constitutional Law Contract Law, Company Law

		& Jurisprudence Dissertation: The Role of Judiciary and Citizens in Environment Protection and Sustainable Development in India
M.B.A (Executive)	Vinayaka Mission University	Human Resources

- (b) **Professional** : **UNDP Fellowship training – 3 and 1/2 months**
Underwent UNDP fellowship training at University of British Columbia,
Vancouver and University of Alberta, Edmonton, Canada
in the field of soft and sensitive/swelling soil characterization
for Water Resources projects.

4. Details of Employment/Professional Experience

Office/ Institution	Post held	Duration		Scale of pay and basic pay	Nature of duties (in details)
		From	To		
Harcourt Butler Technological Institute, Kanpur	Director	23-12- 2008	Till date	Rs. 18,400- 22,400	Principal Academic and Executive Officer of the Institute
Punjab Engg College (Deemed University) Chandigarh	Professor (Civil Engineering) (Head of the Deptt.) Regular	25-06- 1999	22- 12- 2008	Rs 16400- 22400/= (Last basic drawn- 20450/= as on 01-06- 2008	Teaching, Research and other Administrative duties.
CSMRS, M/0 Water Resources, Govt. of India, Hauz Khas, New Delhi-110016.	Joint Director & Head Soil Discipline <i>Note – The post of Joint Director</i>	22.07.1 997	24.06. 99	-----	Planning, guiding and supervising the field and laboratory investigations in the field of geotechnical and construction materials relevant to River Valley Projects. Formulation of research projects to

	<p><i>(Scale Rs14300-18300/=) was vacant and I was looking after the same in addition to the post of C.R.O (without extra remuneration) as co-ordination work of all technical and administrative matters of Soil Discipline and reporting to Director CSMRS, vide CSMRS office order no. 4/1/97 – Estt – 1/833 dated 22 July 1997</i></p>				<p>be undertaken under different agencies, international and UN aid programmes.</p> <p>Finalization of reports of research projects being handled by the Research Station from time to time.</p> <p>Critical examination of various River Valley projects proposals submitted through Central Water Commission seeking clearance from planning commission.</p> <p>Advising the State Govt. and other Depts. in establishing the material characterization laboratory for river valley projects.</p> <p>Imparting Training to the State Level & Field Engineers including delivering lecturers.</p> <p>Worked as Liaison Officer for SC/ST Category.</p> <p>All other technical, scientific and allied works as may be assigned by the Director.</p> <p>Administration & Establishment of Manpower of Staff of Soil Discipline consisting of officers and staff more than 80 personnel.</p> <p>Coordination with Administration of CSMRS in all recruitment /selection process. Attending various DPCs/Selection Board meetings.</p>
CSMRS, M/O Water Resources, Govt. of India, Hauz	Chief Research Officer & Head Soil Discipline,	10.01.94-	24.06.99	Rs 3700-5000 Pre-revised)	Guiding the Senior Research Officers in formulation of specifications of testing and field equipment, their procurement, installation, operation and

<p>Khas,New Delhi-110016</p>	<p>Regular, Permanent. 10.01.94- 24.06.99</p>			<p>Rs.1350 0/- (Revised) as on (1.10.98)</p>	<p>maintenance.</p> <p>Handled the UNDP assisted project: Soft Soils. The project had been successful executed and the project objectives have been achieved.</p> <p>Establishment of Upgraded Soil Mechanics Laboratory of International standard, Interaction with DST, Evaluation of Research Proposals.</p> <p>Interaction with Design Engineers of Central Water Commission for Evaluation of Project proposals received from various State Governments followed by Interaction with Planning Commission.</p> <p>Preparation of Plan scheme, EFC/SFC, Participation in Budget Meetings in the Ministry of WR on behalf of Director.</p> <p>Associated in financial assistance to different agencies for development and adaptation of improved technologies : Its appraisal, monitoring and steering of the projects under:</p> <p>“INDIAN NATIONAL COMMITTEE FOR ROCK MECHANICS & TUNNELLING TECHNOLOGY”</p> <p>Organized a one week training course which included lectures, practical demonstration of various quality control tests for embankment dams to the newly recruited Assistant Directors of Central water commission.</p>
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					Looked after the work of Joint Director(S) during his deputation to foreign country for 4 months.
CSMRS, M/0 Water Resources, Govt. of India, Hauz Khas, New Delhi-	Senior Research Officer, Regular, Permanent.	17.10.8 5 -	09.01. 94	3000- 4500 Last Basic Rs.3875/ -	<p>Plan, guide, prepare details specifications for procurement, check and supervise installation, maintenance and repair of all Laboratories, drilling and other field equipments.</p> <p>Compilation and analysis of test results and computations. Preparation of estimates and bills of investigation and research works. etc.</p> <p>Organized a one week training course which included lectures, practical demonstration of various quality control tests for embankment dams to the newly recruited civil engineers at Lakhya Dam Project (Kudremukh Iron Ore Co.).</p> <p>Organized a one week training course which included lectures, practical demonstration of various quality control tests for embankment dams to the newly recruited Assistant Directors of Central water commission.</p> <p>Associated in coordination of CBI & P Research Schemes applied to Various River Valley Projects.</p> <p>All other technical, scientific and allied works as may be assigned by the Director/CRO.</p>
CSMRS, M/0 Water Resources, Govt. of India, Hauz Khas, New Delhi	Research Officer, Regular, Temporary.	13.8.85 - 2 months	16.10. 85,	700- 1300)	Field & Laboratory geotechnical investigations including construction material survey of major river valley project and other connected civil engineering structure.

National Hydro-Electric Power Corpn. Faridabad	Engineer (Civil), Regular Temporary.	25.1.85	12.8.85	Scale Rs. (700-1300)	Design of Hydraulic Structure (Power House)
Life Insurance Corp. of India, 86, Janpath, New Delhi	Engineering Assistant, Regular, Permanent.	15.2.83	23.1.85	1368.05 Total (pre-revised)	Execution and Supervision of Civil Engineering Construction
Bharat Construction Company, Agra, UP	Site Engineer	14.8.82	11.2.83	900/- Consolidated	Execution and supervision of Civil Engg. Construction

5. Courses taught at Under Graduate and Post Graduate level

Undergraduate

- a) Environmental Engg
- b) Geo-Technical Engg I
- c) Geo-Technical Engg II
- d) Hydrology & dams
- e) B.Tech Projects

Post Graduate level

- a) Environmental Pollution & Management
- b) Advanced Soil Engg
- c) Environmental Issues, Protection & Law
- d) Environmental Impact Assessment,
- e) Environmental Auditing and
- f) ISO Certification
- g) Highway Materials and Construction
- h) Energy System & Environment

6. Introduction/Development of new courses

Environmental LEGISLATION
Environmental Impacts Assessment
ISO 14000, Environmental auditing
Energy Systems and Environment

7. Research Guidance

M.E.Thesis Supervised---- 80 Nos
Ph.D Students Guided---- 8 Nos

8. Books Authored

Authored Books- 7 Nos.

9. Research Contributions

Research Papers Publication :- 280 Nos

10. Continuing Education

Seminar/Symposium Organised-3 Nos.

Seminar/Symposium Attended (National & International)- 41 Nos.

Short Term Courses/Training attended (National) - 13 Nos.

Long Term Training attended (International)- One No.

Training courses organised –11 Nos

Guidance to the State Government in Establishment of Research Laboratories ----2 Nos

Preparation of State of the Art Report/Bibliography ----4 Nos

Training imparted to Junior officers and various state level engineers from Irrigation Deptts.

(In the field of geotechnical investigation and materials characterization).

11. Administrative positions held:

Dean – Research & Technology Transfer

Dean – Planning & Development

Dean - Students Welfare

Head (Civil Engineering)

Chairman – College Purchase Committee

Member – Research Board of Engineering, Faculty of Engineering & Technology

Member-Board of Studies: Civil Engineering, Punjab University.

Co-coordinator on five occasions: Co-coordinated the Punjab University Examinations (Main & supplementary) held at PEC, guided Superintendent and Deputy Superintendent in smoothly conducting the exams.

Convener-Board of Studies (Post Graduate Environmental Engg.), Punjab University, Chandigarh

12. Acted as University Examiner / Paper Setter for the following subjects:-

- a) Environmental Engg I(Water Supply)– B.E
- b) Geo-Technical Engg I – B.E
- c) Geo-Technical Engg II – B.E
- d) Foundation Engg.-B.E
- e) Environmental Pollution & Management–M.E
- f) Advanced Soil Engg. – M.E
- g) Advanced Foundation Engg.-M.E
- h) Environmental Issues, Policies & Law-M.E
- i) Environmental Impact Assessment
- j) Environmental Auditing and ISO Certification -M.E
- k) Highway Materials and Construction- M.E
- l) Rural construction & Management- M.E
- m)Energy System & Environ, - M.E
- n) Water Resources Projects – B E

13. Membership of Professional Bodies

American Society of Civil Engineers (U.S.A)
American Society of Testing and Materials (U.S.A)
Institution of Engineers (India)
Indian Society of Engineering Geology
Indian Geotechnical Society,
International Society of Soil Mechanics and Geotechnical Engineering (UK)

14. Awards/Recognition/Appreciation

*My name was included in the American Biographical Institute's Directory of Distinguished Leadership in 1997 and 1998.

*Nominated for American Biographical Institute Special Announcement- World Medal of Honor-2003.

* Nominated for inclusion in The Contemporary Who's Who--American Biographical Institute -2003.

*Nominated for the prestigious title MAN OF THE YEAR-2003--American Biographical Institute -2003.

*Honorary appointment to the Research Board of Advisors, The American Biographical Institute.

*In recognition of early completion of Geotechnical Investigation for World Bank assisted projects in Madhya Pradesh, Tipaimukh Projects in Manipur and Tala International project in Bhutan beside Establishment of Research Laboratories at NEHARI, Assam- Appreciation received from project authorities and the Director, CSMRS.

* Awarded the "**RASHTRIYA GAURAV AWARD**". at Chandigarh by the India International Friendship Society, 16, Babar Road, New Delhi- 110001

*Best Paper Award- Indian Buildings Congress for the paper presented in its annual convention 2008 in New Delhi.

15. Other Professional Contributions

I was actively involved with the establishment of 03 (Three) state of the art Environmental Geotechnical Laboratory, CSMRS, Ministry of Water Resources.

Development/Fabrication of New Equipment---One (Horizontal permeability of soil)

Deployment of Mobile Field Geotechnical laboratory: The Mobile Field Geotechnical laboratory procured under the UNDP project, "Establishment of Rockfill materials testing facilities" was deployed in time bound priority projects/in difficult areas in foreign country and the investigation reports submitted before the stipulated time viz. Sawan Bhadon Dam, Rajasthan, Pancheshwar Dam in Nepal and Wangchu Multipurpose H.E. Project, Bhutan. At Sawan Bhadon and Wangchu Dam, I led the investigation teams, finalized and submitted the investigations reports on priority basis.

Handled more than 80 river valley projects for geotechnical investigations and materials characterization, finalized the investigation reports.

OUTSTANDING PROFESSIONAL ACHIEVEMENT OF DR. R.K.KHITOLIYA

Guidance to M.E. Students : 80 Nos.

Guidance to Ph.D Students---8 Nos

Sr.No.	Name of Student/research scholar	Title of thesis	Doctorate or Master's level	Year of completion (or in progress)	Co-guide(s) if any
1.	Gurtej Singh Sidhu	A critical review of the General . Design Concepts for shallow Foundation in Different soil Classified According to IS-1498-1970	Master	2000	P.K.Gupta
2.	Anadi Joshi	Potential Application of Geotextile/Geosynthetics in Highway Engg.	Master	2002	Nil
3.	Shailja Bawa	Environmental Appraisal of Highways Projects	Master	2002	Nil
4.	Vikas Gupta	Study of Transportation BOT Project- A case study	Master	2002	Nil
5.	Manish Sehgal	Traffic and Environmental Impact Study of National Highway at	Master	2003	Dr.Tripta Goel
6.	Ankush Sabharwal	Environmental Impact assessment of major River Valley Projects in Himachal Pradesh	Master	2002	Nil
7.	Dinesh Runiwal	Air Pollution due to Coal Fired Thermal Power Plants in India – A Case Study	Master	2002	Nil
8.	Rohit Mishra	Ecological Disturbance & related Aspects due to Tourism	Master	2002	Nil

9.	Aarti Sukhija	Waste Management in electroplating industry	Master	2004	Mr. Shakti Kumar Arora
10.	Aishna Mahajan	Study od ISO-14000 Certification processs of consumer healthcare industry- Case study of Glaxo Smithkline, Nabha	Master	2004	Mrs. Madhu Mittal,
11.	Geeta,	Comparison of Models and prediction of dispersion of air pollutants from a thermal plant.	Master	2004	Dr. Sukhmeher Singh, Reader, Deptt. of Chemical Engg., Panjab Univ.,Chd.
12.	Manveen,	Study of ground water pollution around Buddah Nullah in dyeing industry area in Ludhiana City	Master	2004	Mr. Harpreet Singh Rai Lecturer, Civil Engg. Deptt., G.N.E.college, Ludhiana
13.	Nidhi Mahajan,	Environmental Management of a Bulk Drug Industry – A Case Study.	Master	2004	Ms. Harsangeet Lecturer, T.I.E.T, Patiala
14.	Ruhhi Bhateja,	ISO-14001 Certification of a Vegetable oil industry – A Case study of “Pure foods Ltd.” , Abohar.(Punjab)	Master	2004	Mrs. Madhu Mittal,
15.	Aashish Kaushal	Watershed Management for environmental sustainability through public participation- Case study of Sukhna Lake	Master	2004	Shakti Kumar Arora
16.	Ashwani Goyal	Environmental	Master	2004	Mr. Shakti

		conservation through mini hydel project- A case study ar Chakbhai			Kumar Arora
17.	Dinesh Kaundal	Study of Solid waste disposal and its environmental impacts- Case study of Dharamshala Town(H.P.)	Master	2004	Mr. Shakti Kumar Arora
18.	Harinder Sharma	Study of Ambient Air quality in northern India – A Case study of Ludhiana city	Master	2004	Nil
19.	Jatinder Singh	To study the Treatability of effluent from par boiling rice sheller in a high rate bioreactor.	Master	2004	Mr. Harpreet Singh Rai Lecturer, Civil Engg. Deptt., G.N.E.college, Ludhiana
20.	Kabir	Study of methods to control high TDS streams in the bulk drug pharmaceutical industry.	Master	2004	Mr. Shakti Kumar Arora
21.	Manpreet Singh Bedi	Modelling Water supply distribution network under intermittent water supply conditions.	Master	2004	Er. Rajiv Batish S.D.E., P.H.E.Deptt. Chandigarh
22.	Parminderjeet Singh	To study the Treatability of effluent from textile and dyeing industries in a high rate bioreactor.	Master	2004	Mr. Harpreet Singh Rai Lecturer, Civil Engg. Deptt., G.N.E.college, Ludhiana
23.	Randhir Guleria	Solar photovoltaic(SPV) power plants case studies of 1) 50 KWp Grid interactive SPV plant at	Master	2004	Mrs. Madhu Mittal, Lecturer, Civil Engg. Deptt., PEC, Chandigarh

		Chandigarh 2) Grid Interactive / Stand alone SPV plant at Nawanshehar.			
24.	Rahul Kumar	Environmental Ethics: Consciousness in rural areas, Mathematical modeling and analysis.	Master	2004	Nil
25.	Rajeev Jalhotra	Rural Wastewater Treatment: Various options and their comparative study.	Master	2004	Er. S.K.Jain Senior Engineer PSCST, Chandigarh
26.	Ravi Pal	Desalination of Brackish Ground water of the southern districts of Punjab using Reverse Osmosis Treatment Technology: A case study	Master	2004	1.Mr. Shakti Kumar Arora Sr. Lecturer, Civil Engg. Deptt., Punjab Engineering College, Chandigarh. 2.Mr. M.S.Jaggi Addl. Director PSCST, Chd
27.	Sandeep Salhotra	Environment Auditing of cotton textile industries(JCT Ltd., Phagwara- case study)	Master	2004	Nil
28.	Santosh Uppal	Quality investigations of potable water of Ludhiana city.	Master	2004	Nil
29.	Aarti Kalia	Qualitative Improvement in Bituminous Mixes by Crumb Rubber Modified by Bitumen	Master	2004	Mr. A.K. Duggal A.P., NITTR, Sector-26, Chandigarh.
30.	Abhishek	Study of Techno-	Master	2004	Mr. Pradeep

		Economic Feasibility of Fly Ash Utilization in Rural Roads of Punjab			Kr. Gupta Lect.C.E.D, P.E.C
31.	Aseem Sharma	Techno-Economic Evaluation of BOT Highway Road Projects	Master	2004	Mr. Pradeep Kr. Gupta Lect.C.E.D, P.E.C
32.	Ashish Sharma	Development of Techno-Economic Evaluation Methodology for proposed BOT Highway Bridge Project	Master	2004	Mr. Pradeep Kr. GuptaLect.C.E. D, P.E.C
33.	Bikramjit Singh	Effectiveness of Various Traffic Control Devices – A Case Study	Master	2004	Mr. Pradeep Kr. GuptaLect.C.E. D, P.E.C
34.	Gourav Madan	Importance of High Volume Fly Ash Concrete in Infrastructure (Highways) Development	Master	2004	Mr. Pradeep Kr. Gupta Lect.C.E.D, P.E.C
35.	Janesh Kalsi	Study of Legal Aspects in the Sustainability of Highways With Case Study	Master	2004	Dr. Tripta Kumari A.P, C.E.D., PEC
36.	Rajeev Kumar Roychand	Landslide Hazard Modeling and Management through Remote Sensing and GIS.	Master	2004	Mr. Pradeep Kr. Gupta Lect.C.E.D, P.E.C
37.	Sanjeev Sarna	Investigation of the Utilization Potential of Rice Husk Ash in Highways	Master	2004	Mr. Pradeep Kr. Gupta Lect.C.E.D., P.E.C
38.	Sarwan Kumar	Investigation of the Utilization of Fly Ash Lime in Highways	Master	2004	Mr. Pradeep Kr. Gupta Lect.C.E.D, P.E.C
39.	Vishal Gupta	Critical Review of	Master	2004	Nil

		Signalized Intersection on Gurudwara Dukhniwaran Sahib Road, Patiala			
40.	Gurinderjit Kaur	Techno-economic feasibility of Vermi-culture Project.	Master	2005	Dr.U.N.Roy
41.	Gurvinder Singh Brar	To study the Economics and Performance of the Bio-Gas Plants to control Ground-water Pollution	Master	2005	Mr.Sarabjit Singh
42.	Karampal Singh	Study of Nitrate and Chloride Pollution of Ground water in Chandigarh.	Master	2005	Mr.Sarabjit Singh
43	Rupinder Singh Brar	Study on Bio-fuels and their environmental effect.	Master	2005	Mr.Rajesh Grover
44	Sachin Bahl	Development of Simulation Model for Dying Industry Effluent	Master	2005	Mr.Harpreet Singh Rai
45	Sharandeep Singh	Phase separation in an bi-phasic anaerobic reactor for the treatment of complex organic waste.	Master	2005	Mr.Harpreet Singh Rai
46	Shiraz Swan	Monitoring of Ground level ozone in industrial and commercial zones of Chandigarh.	Master	2005	Ms.Madhu Mittal
47	Sushant Kapoor	State of Environment Report of Haryana State in Human Development and	Master	2005	Sh.Shakti Kumar

		Agriculture (A Case Study)			
48	Vishal Sharma	Environment Impact Assessment of Parvate State-II Hydro Electric Project, Himachal Pradesh	Master	2005	Nil
49	Amandeep Kaur	Removal of chromium and nickel by using low cost adsorbent from electroplating industrial effluent.	Master	2005	Mr.A.K.Duggal
50	Babita Garg M273/03	Development & verification of software for the design of an effluent treatment plant of a Pharmaceutical industry in C-language.	Master	2005	Sh.Shakti Kumar
51	Kshipra Kapoor	Energy Audit of Pharmaceutical industry (IND SWIFT LAB Ltd., Barwala Road)	Master	2005	Sh.Shakti Kumar
52	Mamta Bhagat	Removal of fluorides from drinking water using low adsorbent by column studies.	Master	2005	Mr.A.K.Duggal
53	Monika Mahajan	Environmental Impact Assessment of Pharmaceutical Industry – A Case Study – Ind. Swift Laboratories Ltd.	Master	2005	Ms.Madhu Mittal
54	Parnita Garg	Environmental Impact Assessment of Thermal Power Plant	Master	2005	Ms.Madhu Mittal
55.	Anil Tayal	Groundwater Pollution around	Master	2005	Mr.Harpreet Singh Rai

		the Hamira Village – A Case Study 2004			
56.	Raman Sharma	Soil Contamination by Landfill Site at Dadumajra	Master	2005	Sh.Shakti Kumar
57.	Ravish Jain	Study of Ozone levels at Points with high Traffic Density in Chandigarh.	Master	2005	Ms.Madhu Mittal
58.	Shakti Singh	Stabilization of Landfills and Application of UASBR	Master	2005	Dr.Surinder Deswal
59.	Abhishek Krishnatrary	Environmental Impact Assessment of a stretch of NH-22 considering water, air(dust), Biological and socio-economic parameters – A Case Study	Master	2005	Nil
60.	Ashish Rana	Study of Environmental Impact Assessment of a Phase of NH-22 on factors; Soil, Ecological, cultural/historical and Noise.	Master	2005	Nil
61.	Kulwant Singh	Interpretation of fly ash based stabilized sub grade improvement data for Techno-Economic impact on Rigid pavement.	Master	2005	Sh.Pardeep Gupta,
62.	Rajinder Kumar	To study the suitability of lime-fly ash concrete mixture for use in highways.	Master	2005	Sh.Pardeep Gupta,
63.	Sanjeev Kumar	Feasibility Studies	Master	2005	Dr.Tripta

	Kaundal	for exploring a Bye Pass in District Bilaspur (Himachal Pradesh) on NH-21 – A Case Study			Kumari
64.	Baljeet Singh	Study of Intersection on a busy urban road stretch.	Master	2005	Sh.Pardeep Gupta
65.	Jitendra Singh	Analysis of Road Accidents for Aligarh City using Geographic Information Systems (GIS)	Master	2005	Dr.Tripta Kumari
66.	Ujjal Singh Ujjal	Mechanical Soil-Stabilization for Pavement Construction.	Master	2005	Sh.Pardeep Gupta,
67.	Maninder Singh	Development of Methodology for Evaluation and Design of a very busy Right angled intersections (A Case Study)	Master	2005	Sh.Pardeep Gupta
68.	Vivek Kumar Bansal	Study of intersections on a busy road section on Himalya Marg along the periphery of a central heavily trafficked city Sector.	Master	2005	Sh.Pardeep Gupta
69.	Pardeep Kumar Gupta	Fly Ash Utilization in Highway Embankment (Design and Developmental Aspects Considering	PhD	2005	Nil

		Indian Conditions			
70.	Tanuj Chopra	Environmental Impact Assessment of a stretch of NH-21 considering water, air(dust), Biological and socio-economic parameters	M.E	2006	Meena Aggarwal
71.	Yash Paul Badpaga	Study of Environmental Impact Assessment of a Phase of NH-21 on factors; Soil, Ecological, cultural/historical and Noise.	M.E	2006	Meena Aggarwal
72.	Shakti Kumar	Study of Impact of Leachate from Active Landfills on Ground water and Soil mass	Ph.D	2007	Prof.A.M.Kalra PEC, Chd
73	Suresh Kumar	State of the Art and Strategy of Implementation of Total Quality Management (TQM) in Building Construction Industry	Ph.D	In progress	Prof.D.D.Sharma NITTTR, Chd
74	S.V.Rao	Studies on Dispersive Soils, Their Characterization and Application in Hydraulic Structures	Ph.D	In progress	Nil
75	Madhu	Measurement of Dry Deposition and Estimation of Deposition of Velocities	Ph.D	In progress	Prof. Baljeet S. Kapoor CCET, Chd

76	Meena Aggarwal	Need of Environmental Impact Assessment in Sustainable Highways	Ph.D	In progress	Nil
77	Anil Kr. Khajuria	Entrepreneurial Performance & Practices of Civil Works Contractors of Northern States	Ph.D	In progress	Dr.Hemant Sood NITTTR, Chd
78	Neeraj Parasher	A Comprehensive & Clinical Study of Solid Waste Management System of a Modern and Planned City of North India	M.E	2007	Mr. Shakti Kumar Assistant Professor PEC. Chd.
79	Mohmeet Kaur	Treatability of Dairy waste- A Case study	M.E	2007	Mr. Shakti Kumar Assistant Professor PEC. Chd.
80.	Abha	Treatability of Dye waste- A Case study	M.E	2007	Mr. Shakti Kumar Assistant Professor PEC. Chd.
81.	Abhineet Kaur	Environmental auditing of Dairy Industry-A Case Study	M.E	2007	Mr. Shakti Kumar Assistant Professor PEC. Chd.
82.	Nitika Gupta	Environmental Impact assessment and Environmental Management Studies of Spinning Mill -A Case Study	M.E	2007	Mr. Shakti Kumar Assistant Professor PEC. Chd.
83.	Akhil Kumar	Energy audit of a Dairy Industry-A Case Study	M.E	2007	Dr. Geeta Arora , Assistant Professor PEC. Chd.

84.	Sunpreet Kaur	Hydrogen Production from Biological Raw Waste (Biogas)	M.E	2008	Dr. Shakti Kumar Assistant Professor PEC. Chd.
85.	Nimrat Kaur Sandhu	Bio Medical waste Management : a Case study of Common Bio Medical Waste	M.E	2008	Dr. Shakti Kumar Assistant Professor PEC. Chd.
86.	Chetal Goyal	A Study of drinking Water Quality in Som Critical Zones of Chandigarh	M.E	2008	Dr. Shakti Kumar Assistant Professor PEC. Chd.
87.	Sikander Jailely	Ground Water Contamination by MSW Landfill : A Case study	M.E	2008	Dr. Shakti Kumar Assistant Professor PEC. Chd.
88.	Tanzin Norgial	A Comparative Study of EIA of Large and Small Dams	M.E	2008	Dr. Shakti Kumar Assistant Professor PEC. Chd.

Consultancy Works Handled

LIST OF PROJECTS HANDLED (Mostly Water Resources)

1. **Rihand Delhi HVDC Project (Delhi Terminal) at Murad Nagar, U.P.-** Geophysical Investigations.
2. **Rihand Delhi HVDC Project (Rihand Terminal), U.P -** Geophysical Investigations.
3. **Omkeswar Dam Project, M.P. -** Rock Mechanics Investigations (In-situ Direct Shear test)
4. **Sagar Mal Gopa Shakha, (I.G.N.P.), Rajasthan -** Field and Laboratory Geotechnical investigations.
5. **Sarafgarh Dam Project, Orrisa -** Geotechnical Investigation for safety evaluation of World Bank aided project.
6. **Kansbahal Dam Project, Orrisa -** Geotechnical Investigation for safety evaluation of World Bank aided project.
7. **Pagara Dam Project, M.P. -** Geotechnical Investigation for safety evaluation of World Bank aided project.
8. **Pillowa Dam Project, M.P. -** Geotechnical Investigation for safety evaluation of World Bank aided project.
9. **Kotwal Dam Project, M.P. -** Geotechnical Investigation for safety evaluation of World Bank aided project.
10. **Jobat Dam Project, M.P. -** Laboratory Rock Mechanics Testing.
11. **Railway Bridge No.469 near Lucknow, U.P. -** Field and Laboratory Geotechnical investigations.
12. **Barak Valley Project, Assam -** Geotechnical Investigations for findings the causes of sloughing of barak river and suggesting remedial measures.
13. **Spiti Dam Project, H.P. -** Laboratory Geotechnical investigations.
14. **Indira Gandhi International Airport, New Delhi -** Laboratory Geotechnical investigations.
15. **Ramiala Irrigation Project, Orissa -** Geotechnical Investigation for safety evaluation of World Bank aided project.
16. **Remal Irrigation Project, Orissa -** Geotechnical Investigation for safety evaluation of World Bank aided project.
17. **Keonjhari Dam Project, Orissa -** Geotechnical Investigation for safety evaluation of World Bank aided project.
18. **Sunei Dam Project, Orissa -** Geotechnical Investigation for safety evaluation of World Bank aided project.
19. **Upper Indiravati Dam Project, Orissa -** Field and Laboratory Geotechnical Investigations.
20. **Kapur Earthen Dam Project, Orissa -** Field and Laboratory Geotechnical Investigations.
21. **NTPC Project at Dadri, U.P. -** Laboratory Soil Testing.
22. **Anoopgarh-Suratgarh Mini Hydel Scheme, Rajasthan -** Field and laboratory geotechnical investigations.
23. **Wadi Ruwahah Project, Oman -** Laboratory soil testing.

24. **Chandil Dam Project, Bihar** - Field and laboratory geotechnical investigations.
25. **SYL Canal Project, Punjab** - Field and laboratory geotechnical investigations in the failure reaches of canal and suggesting remedial measures.
26. **National Security Guard Complex, Haryana** - Field and Laboratory Geotechnical investigations on Helipad material.
27. **Tipaimukh Dam Project, Manipur** - Field and Laboratory Geotechnical investigations.
28. **Mat River Project, Mizoram** - Field and Laboratory Geotechnical investigations.
29. **Sawan Bhadon Dam Project, Rajasthan** - Field and laboratory geotechnical investigations for finding the causes of failure of Dam and suggesting remedial measures.
30. **Lakhya Dam Project, Karnataka** - Field and laboratory geotechnical investigations for raising the height of the existing dam for storing the Iron Tailings.
31. **Singsara Dam Project, Karnataka** - Field and laboratory geotechnical investigations for proposed new dam for storing the Iron Tailings.
32. **Purulia Pumped Storage Scheme, West Bengal** - Field and laboratory geotechnical investigations.
33. **Ranganadi H.E. Project, Arunachal Pradesh** - Field and laboratory geotechnical investigations.
34. **Doyang H.E. Project, Arunachal Pradesh** - Field and laboratory geotechnical investigations.
35. **Hirakud & Chiplima Project, Orissa** - Field and laboratory geotechnical investigations.
36. **Kota Barrage, Rajasthan** - Field and laboratory geotechnical investigations for assessing the causes of seepage problem in the existing dam and suggesting remedial measures.
37. **Mohini Sagar Dam Project, M.P.** - Field and laboratory geotechnical investigations.
38. **Dudhi (Kanwar Chain Sagar) Project, M.P.** - Field and laboratory geotechnical investigations.
39. **Pancheshwar Multipurpose Project, UP/Nepal** - Field and laboratory geotechnical investigations.
40. **Wangchu Reservoir Scheme, Bhutan** - Field and laboratory geotechnical investigations.
41. **Sankosh Multipurpose Project, Bhutan** - Field and laboratory geotechnical investigations.
42. **Bunakha Hydro Electric Project, Bhutan** - Field and laboratory geotechnical investigations.
43. **Wazirabad Thermal Power, 220 KV Sub-Station, DESU, New Delhi** - Field and laboratory geotechnical investigations for low lying area filled with fly ash.
44. **Nathpa Jhakri Project, Himachal Pradesh** - Field and laboratory geotechnical investigations for shear zone materials.
45. **Embankment Scheme for protection of villages from backwater of Sardar Sarovar Dam, Gujarat near Indore, M.P.** - Field and laboratory geotechnical investigations.

46. **Kochige Hole Valley, Kudremukh, Karnataka** - Field and laboratory geotechnical investigations for the proposed dam for storing the Iron Tailings.
47. **Sagar Water Supply Scheme, M.P.** - Field and laboratory geotechnical investigations.
48. **Chemical Port Terminal at Dahej, Gulf of Cambay, Gujarat** - Laboratory testing on marine soil samples.
49. **Divisional Office Building of R.S.E.B. at Bundi near Kota, Rajasthan** - Field and laboratory geotechnical investigation for finding the causes of failure of buildings due to foundation problems.
50. **Lakhigam Project at Dahej, Gulf of Cambay, Gujarat** - Laboratory testing on marine soil samples.
51. **Chenab Bridge site at Km. 25.25 on Akhnoor-Poonch Road, Jammu (J&K)** - Field and laboratory geotechnical investigations.
52. **Dhiku-Tamlu H.E. Project, Nagaland** - Field and laboratory geotechnical investigations.
53. **T.Surang H.E. Project, Nagaland** - Field and laboratory geotechnical investigations.
54. **Chauli Irrigation Project, Rajasthan** - Field and laboratory geotechnical investigations.
55. **Building and Antenna Towers of VSNL site near Chattarpur, New Delhi** - Field and laboratory geotechnical investigations.
56. **Upper Beda Dam Project, Rajasthan** - Field and laboratory geotechnical investigations.
57. **Vinayak Co-operative Group Housing Society, New Delhi** - Field and laboratory geotechnical investigations.
58. **Tista Ganga Link Canal Project, W.B.** - Field and laboratory geotechnical investigations.
59. **Overhead Water Tank of RSEB, Ramgarh, Jaisalmer, Rajasthan** - Field and laboratory geotechnical investigations for finding the causes of leaking due to foundation problem.
60. **Manas Sankosh Link Canal Project, W.B** - Field and laboratory geotechnical investigations.
61. **Ukaila Saddle Dam, M.P.** - Field and laboratory geotechnical investigations.
62. **Bethali Dam Project, Rajasthan** - Field and laboratory geotechnical investigation for conducting confirmatory tests.
63. **Proposed CSMRS Hostel Building, Delhi** - Field and laboratory geotechnical investigation on foundation materials.
64. **Pernai H.E. Project, Jammu and Kashmir** - Field and laboratory geotechnical investigation on foundation materials.
65. **Kolodyne H.E. Project (Stage-I), Mizoram** - Field and laboratory geotechnical investigations.
66. **Mohar Canal Syphon from Narmada Main Canal, Gujarat** - Laboratory geotechnical investigation for evaluating horizontal permeability.
67. **Greater Shillong Water Supply Scheme, Meghalaya** - Laboratory geotechnical investigations on borrow area materials.

68. **Tala Hydro Electric Project, Bhutan** - Field and laboratory geotechnical investigations for foundation problems of various building viz. Office, School, Executive and Staff Hostel and residential buildings of senior officers.
69. **Pagladia Dam Project, Assam** - Field visit for geotechnical investigations.
70. **Shah Nehar Project, Himachal Pradesh** - Field and laboratory geotechnical investigations.
71. **Dhaman Ganga - Pinjal Link Canal Project, Maharashtra/Gujarat** - Field and laboratory geotechnical investigations.
72. **New Ottu Weir Project, Haryana** - Field and laboratory geotechnical investigations.
73. **Pressure Meter testing at RITES Site, Talchar, Orissa** - Pressure Meter Testing.
74. **Ghagra-Yamuna Link Canal Project, U.P.** - Field and laboratory geotechnical investigations.
75. **Western Yamuna Link Canal Project, Haryana** - Field and laboratory geotechnical investigations.
76. **Sarda-Yamuna Link Canal Project, U.P.** - Field and laboratory geotechnical investigations.
77. **Upper Chanmari Landslide Site, Sikkim** - Laboratory testing on soil samples.
78. **Fortis Health Care Ltd., New Delhi (Heart Hospital and Research Centre, Mohali, Punjab)** - Laboratory testing on foundation materials.
79. **Ambedkar Udyan Project, U.P.** - Field and laboratory geotechnical investigations.
80. **New Jammu Township Project, Jammu** - Laboratory Testing on soil samples.
81. **Krishna-Almatti Pennar Link Canal, Karnataka** - Field and laboratory geotechnical investigations.
82. **Barak & Irang H.E. Project, Manipur** - Foundation and Borrow Area Geotechnical Investigations.
83. **Mahanadi-Godavari Link Canal Project, Andhra Pradesh** - Foundation and Borrow Area Geotechnical Investigations.
84. **North Eastern Hydraulic & Allied Research Institute (NEHARI), Brahmaputra Board, Assam** - Establishment of "A" Level Research Station.
85. **Kudremukh Iron Ore Company, Karnataka** - Establishment of Quality Control Laboratory at site for raising the height of Lakhya Tailings Dam.

OTHER ACTIVITIES

Authored Books

Authored seven books as sole author and authored one chapter in a book.

Research Guidance:

Guidance to M.E. Students : 80 Nos.

Guidance to Ph.D Students---8 Nos

Continuing education programmes conducted :

Organised as Co-ordinator – Three weeks Orientation Programme for Teachers of Punjab Engineering College, Chandigarh`

Short Term Courses/Workshops/Seminars Etc. Organised

Symposium Organised:

For the first time, a National level Symposium on "Geotechnical and Construction Materials Investigations for **River Valley Projects** (in Hindi) was organised at CSMRS during Feb. 1997. The Symposium was inaugurated by the then Hon'ble Minister of Water Resources. As the *Organising Secretary*, the undersigned was fully responsible in bringing out the symposium proceedings containing 28 research papers. About 115 participants from different parts of the country attended the symposium. Lively discussions and close interaction between the experts and the participants could be achieved during this symposium.

The symposium was a great success.

b) Awards ,Patents, Prizes And Recognition

*My name was included in the American Biographical Institute's Directory of Distinguished Leadership in 1997 and 1998.

*My name was included in the “Prominent Personalities of India” published by Global Publishing House, New Delhi in the year 1998.

*My name was included in the “Indo-American Who’s Who (Vol. II)” published by F.I. Publications, Rohini, New Delhi in the year 1998.

*My name was included in the “Asian-American Who’s Who ” published by Rifacimento International Publications, Kashmere Gate, New Delhi in the year 1998.

*My name was included in the “Asia-Pacific Who’s Who ” published by Rifacimento International Publications, Kashmere Gate, New Delhi in the year 1999.

*Nominated for American Biographical Institute Special Announcement- World Medal of Honor-2003.

* Nominated for inclusion in The Contemporary Who’s Who--American Biographical Institute -2003.

*Nominated for the prestigious title MAN OF THE YEAR-2003--American Biographical Institute -2003.

*Nominated for the Honorary appointment to the Research Board of Advisors, The American Biographical Institute.

*In recognition of early completion of Geotechnical Investigation for World Bank Assisted projects in Madhya pradesh, Tipaimukh Projects in Manipur and Tala International project in Bhutan beside Establishment of Research Laboratories at NEHARI, Assam- Appreciation received from project authorities.

Awarded the “**RASHTRIYA GAURAV AWARD**”. at Chandigarh by the

India International Friendship Society

16, Babar Road,
New Delhi- 110001

I was invited to serve as Panelist in the Panel, Session E.8(SS) :

Energy System for National Economic Development in the International Conference on Infrastructure Development and the Environment (ICIDEN- ABUJA 2006 , South Africa).

Trainings courses Attended

1. Course on "**Computer Programming (BASIC)**" at Shramik Vidhapeeth, Delhi during 19.8.85 to 8.10.85.
2. Refresher Course on "**Computer Programming in FORTRAN IV and Application**" at CWC, Delhi during 4.11.85 to 15.11.85.
3. A course on Investigating, Presenting and Inquiry Officers, organised by Central Water Commission at Delhi during 24.2.86 to 28.2.86.
4. Course on "**Personal Computers**" at IIT, Delhi during 1.6.87 to 14.6.87.
5. Course on "**Introduction to Computer Graphics**" at CMC Ltd., New Delhi during July 27 to July 29, 1987.
6. Course on "**Programming in Fortran**" at CMC Limited, New Delhi during Nov.16 to November 27, 1987.
7. "31st Appreciation Programme on Reservation in Services for SC/STs at ISTM, JNU, Delhi, M/O Personnel & Training during 29.5.89 to 31.5.89.
8. Course on "**Computers in Project Management**" at CMC Limited, New Delhi during Sept. 25th to Sept. 27th, 1990.
9. Course on "Establishment Rules" at ISTM, JNU, M/O Personnel & Training during 4.2.91 to 8.2.91.
10. Laboratory practices in "Environmental Engineering" from 14-7-2003 to 18-7-2003.
11. Low Cost Sanitation & Environment from 15-9-2003 to 19-9-2003 at TTTI, Chandigarh. .
12. Solar Passive Buildings from 14-10-2003 to 15-10-2003, Chandigarh.
13. **Short Term QIP Course "Recent Development in Geotechnical Engineering – Geo-environmental Engg. & Landfills, Nov.28- Dec.2nd 2005, IIT Delhi**
14. **R & D, Patenting, and Industry-Institute Interaction, 12-16 February, 2007 at NITTTR, Chandigarh.**
15. **Assocham Conference on "Climate Change and sustainable Development- A Global Perspective". Oct. 15. New Delhi.**
16. **Legislation on Hazardous Waste Management, 24-25 Oct.2007, New Delhi. FICCI & MoEF, Govt. of India.**
17. **Short Term QIP programme on Energy Conservation at IIT-Delhi from 2-8 Dec. 2007.**
18. IBC Seminar on Recent Trends in High rise Buildings, May 8-10, 2008, New Delhi.

Scientific achievements (At CSMRS, New Delhi and PEC, Chandigarh)

- i) *Geotechnical Investigations for River Valley Projects and Safety Evaluation of existing dams:*
Headed the largest discipline of CSMRS viz. Soil Mechanics and Foundation Engineering including Soil Dynamics, Geotextiles and Rockfill Technology. Handled successfully more than 80 River Valley

- Projects/Civil Engineering structures investigation works including interpretation of field and laboratory tests results, preparation of feasibility reports, remedial measures for the rehabilitation of existing River Valley projects under the World Bank assistance on the time bound and priority basis.
- ii) ***Establishment of Rockfill Technology Laboratory:***
Associated in establishing the World Class Rockfill Testing facilities under the UNDP assisted project "Rockfills".
- iii) ***Establishment of Upgraded Soil Mechanics Laboratory:***
Closely associated in establishing the Upgraded Soil Mechanics Laboratory under the UNDP assisted project "Soft Soils". The laboratory is fully air-conditioned, with temperature control, humidity control and dust free environment.
- iv) ***Establishment of Environmental Geotechnology laboratory***
An advanced soil research laboratory viz. Environmental Geotechnology Laboratory has been established with all the state-of-the art facilities installed to undertake research in the mentioned field. The laboratory is fully air-conditioned. Soil samples from various sites have already been tested using the above facilities.
- v) ***Development/Fabrication of New Equipment***
* Government of Gujarat had taken up the construction of Narmada Main Canal which crosses seven major rivers and Mohr river is one of them. The site was encountered with huge thickness (about 30 m) depth of clay layer (CH). In view of above, the foundation soil was expected to undergo settlement failure problem during construction/post construction stages. To accelerate consolidation of clay layers, it was proposed to introduce vertical sand drains. For the design/spacing of vertical drains, horizontal permeability of clay layer was required. To evaluate the co-efficient of horizontal permeability, the problem was referred to CSMRS. Undisturbed soil samples were collected at different depths. After reviewing of the literature, fabrication of special equipment was done .
Sizes (i) 150 mm dia and 50 mm height
(ii) 250 mm dia and 90 mm height
Testing of undisturbed clay layers was carried out successfully by utilising the above moulds. The evaluated K_h values were recommended to the project authorities for adoption in the design.
- vi) ***External examination in Universities***
- Acted as an External Examiner in the field of Geotechnical Engineering for a large number of undergraduates students of Jamia Millia Islamia, Deptt. of Civil Engg., Faculty of Engineering and Technology, New Delhi.

- Acted as an External Examiner in the field of Environmental Engineering & Sciences of Postgraduates students of Jamia Millia Islamia, Deptt. of Civil Engg., Faculty of Engineering and Technology, New Delhi.
- Acted as an External Examiner in the field of **Environmental Engineering & Sciences** of **Doctoral** students of Jamia Millia Islamia, Deptt. of Civil Engg., Faculty of Engineering and Technology, New Delhi.

vii) ***Training courses organised:***

Training course organised and training was imparted to a number of state level young engineers in the areas of field and laboratory geotechnical investigations for river valley projects.

- a) Training Course for Engineers from IRCON, New Delhi.
- b) Training on Quality Control tests to Lakhya Dam personnel, Karnataka at site.
- c) Training Course to the Engineers from Delhi Development Authority, Delhi in the field of Soil Mechanics.
- d) Training course for engineers from Assam Irrigation Department, Assam.
- e) Training imparted to two UNDP fellows from Sri Lanka.
- f) 12th Induction training Course for the newly recruited Assistant Directors of Central Water Commission.
- g) Organised a Training Course at CSMRS, for engineers of Doyang Dam Project, Nagaland on behalf of Bhageeratha Engg. Ltd., New Delhi. During this training, lectures were arranged besides trainees were given demonstration on various soil testing in the laboratory and field.
- h) Organised 13th Induction Training Course at CSMRS, for newly recruited Assistant Directors of Central Water Commission. During this training, various technical lectures followed by laboratory visits were arranged covering all the Disciplines of CSMRS.
- i) Organised a training course for Research Staff of NEHARI, Brahmaputra Board at NEHARI, Assam. During this training technical lectures/demonstration in the laboratory were delivered covering all the Disciplines of CSMRS
- j) Organised a training to the 2nd year students of School of Building Science and Technology, Ahmedabad in conducting various tests on soil samples.
- k) Organised as Co-ordinator – Three weeks Orientation Programme for Teachers of Punjab Engineering College, Chandigarh`

.viii) ***Seminars/ Workshops/Conferences Attended***

- * 55th Research and Development Session of Central Board of Irrigation and Power held at Srinagar, J&K, June, 1989.
- * Workshop on Blasting Technology for Civil Engineering Projects, Nov. 1992, Delhi (Presented Paper)
- * International Conference on "Recent Advances in Tunnelling Technology" March, 1996, New Delhi.

- * Inaugural Function of North Eastern Hydraulic and Allied Research Institute (NEHARI), Brahmaputra Board at Guwahati, Assam, December, 1996.
- * Indian Building Congress Seminar "Built Environment and Natural Hazard", Feb., 1997, New Delhi.
- * National Level Symposium on Geotechnical and Construction Materials Investigations for River Valley project (in Hindi) at CSMRS, Feb., 1997. (Organising Secretary)
- * Indo-US Workshop on Ground Improvement using Geosynthetics - organised by Central Road Research Institute, New Delhi, March, 1997.
- * Seminar on Fifty Years of Building Industry in India - Retrospect's and Vision Ahead, June, 19-20, 1997, Chandigarh. (Presented Paper)
- * First National Seminar on "Geoenvironmental Indicators" University of Delhi, Delhi, Aug. 1997. (Presented Paper)
- * 2nd International R&D Conference on Water & Energy, CBI&P, Oct., 21-24, 1997, Vadodara. (Presented Paper)
- * National Seminar on Emerging Technology in Surface Mining and Environmental Challenges, , Mangalore, Oct. 16-18 1997
- * National workshop on "Role of MOWR and its organisations, organised by MOWR" at CSMRS, New Delhi. During this workshop the undersigned Co-ordinated the Group/Panel discussion on one of the four Themes viz. Adequacy or otherwise of existing constitutional and legal arrangements between the states and the union of India on the subject of water, Oct., 1997.
- * Workshop on Tailings Dams - Organised by Technical Committee (TC-7) on Tailings Dams, IGS, New Delhi, Nov., 1997.
- * National Workshop on "Reclamation of water logged saline and Alkaline lands and prevention thereof" organised by MOWR at CSMRS, New Delhi. During this workshop the undersigned co-ordinated the Group Discussion on one of the 4 themes viz. Magnitude and Methodology being used to tackle the problem of water logging, soil and water salinity and alkalinity measures and reclamation with case studies, Nov., 1997.
- * CBRI Golden Jubilee Conference on Urban Habitat and Natural Hazard, Nov., 1997, Delhi. (Presented Paper)
- * International Conference on Habitat, 1-2 Dec., 1997, New Delhi. (Presented Paper)
- * International Conference on Fly Ash Disposal and its Utilisation, New Delhi, Jan, 1998. (Acted as General Rapporteur)
- * Seminar on No. - Dig. - India'98, Feb., New Delhi, 1998.
- * Workshop on "Pre-construction investigation for proposed Pagladiya Dam Project, Assam, Feb. 97, Delhi.
- * International Conference - Environment India '98, April, 98, New Delhi.
- * International Conference on Hydro Power Development in Himalayas, April, 1998, Shimla. (Presented Paper)
- * Workshop on "Austrian Hydrel Power Construction Methodology", May, 1998, New Delhi.

- * 14th National Convention of Environmental Engineers, Aug., 1998, Hyderabad. (Presented Paper)
- * Indian Building Congress - Seminar on Pre-fabrication and Mechanisation in Building Construction, Pune - Oct., 1998. (Presented Paper)
- * UNDP - Govt. of India International Workshop on Landslide hazard and Risk Assessment and Damage Control for Sustainable Development, Nov., 1998, Delhi.
- * ICOLD - Symposium on Rehabilitation of Dams, Nov., 1998, Delhi.
- * Indian Geotechnical Conference - 1998, Dec., Delhi. (Presented Paper)
- * National Seminar on Privatisation Policy - Successes & Failures, Feb.1999, Delhi.
- * International Conference - Environment India '99, April, 99, New Delhi.
Indian Buildings Congress Seminar on Total Quality Management in Building Construction, April, 99, New Delhi.
- International Conference - Environment India '2000, April, 2000, New Delhi.
- * Indian Building Congress Seminar on Education & Training of Building professional New Delhi April 2000.
- * International Conference on Construction Industry, Disaster Management and Environment Management held at Chandigarh, Nov. 18-20, 2000.
- * Seminar on Advances in Building Materials & Technologies held at New Delhi, October, 29-30, 2001.
- * One day awareness programme on Environmental Management System “ISO 14000: 1996” on 1-2-2002 at Chandigarh.
- * Seminar on Urban Infrastructure Development held at New Delhi, June 14-16, 2002
- Brain Storming session of the AICTE on Review of UG Engineering Education, 25th-26th July 2003 at Chandigarh
- . National Technical Day – 2005 9th Nov. 2005, CSIO, Chandigarh
- . Workshop on Revising the Curriculum of Diploma Programme in Civil Engg. for J & K State 6-8 Dec. 2005 NITTTR Chandigarh
- . Seminar on Safety in Construction 30-31, May 2005, Chandigarh
- . IBC Seminar on Water Management in Urban Centres, July 21-23, 2005 New Delhi
- . National Level Scientific & Technical Symposium organized by TBRL, 23-24 Nov.2005, Chandigarh
- . Seminar on Human Resource Management in Building Industry, June 15-17, 2006, New Delhi.
- . National Seminar on Sustainable Development for Tsunami Affected Areas, Nov.15-16 ,SPA, New Delhi.
- . National Level Scientific & Technical Symposium organized by TBRL, 23-24 Nov.2006, Chandigarh

- . ASSOCHEM Conference on Climate Change and Sustainable Development., 15th October, 2007. New Delhi.
- . World Congress on Urban Infrastructure in Developing Countries, 12-14 November, 2007, New Delhi.
- . Seminar on Recent Trends in High Rise Buildings, May 8-10, New Delhi.
- . National Seminar on Geotechnology for Infrastructure Development (GID 2008), October 31st, 2008. Chandigarh.

ix) Affiliation to Professional Bodies : Fellow/Life
 Member/Member/Associate Member
 *American Society of Civil Engineers
 (U.S.A),
 *American Society of Testing and Materials
 (U.S.A),
 *Instt. of Engineers (India),
 *Indian Society of Engg. Geology,
 * Indian Geotechnical Society,
 *International Society of Soil
 Mechanics
 and Geotechnical Engineering.(UK)

x) *Technical comments offered in BIS Codes and various State Governments project proposals received through Central Water Commission*

- * Critically examined various BIS Codes pertaining to Soil Mechanics etc. and State Government project proposals received through Central Water Commission and offered comments.

xi) *Guidance to the State Government in Establishment of Research Laboratories:*

- * Guided the Lakhya Dam Authorities in Establishment of Quality Control Laboratory for embankment dams.
- Guided Brahmaputra Board authorities in Establishment of North Eastern Hydraulic & Allied Research Institute at Guwahati, Assam.
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xii) *Preparation of State of the Art Report/Bibliography*

- Report entitled “Comprehensive review on the theories of failure of Concrete covering Uni-axial and Multi-axial states of Stresses” consisting of fifteen chapters.
- State of the art report on “Studies on shotcrete”.
- Bibliography Report – The Indian Contributions to Geo-Synthetics.

- State of the art report on “Characterisation of Expansive Soil and Remedial measures”.
- xiii) Member:** Regional Technical Board, Housing and Urban Development Corporation (HUDCO), Chandigarh.
- xiv) Expert Member :** Selection Board of Nathpa Jhakri Power Corporation Ltd. For selection Environmental Engineers.
- xv) *UNDP Fellowship Training - 3 1/2 months*
Underwent UNDP fellowship training at University of British Columbia, Vancouver and University of Alberta, Edmonton, Canada in the field of soft and sensitive/swelling soil characterisation for river valley projects.

KEY NOTE ADDRESS DELIVERED

Delivered Key Note Address during the Training Programme on Practical Aspects of Hand-Held Environmental Monitoring Instruments & Mitigation Devices, Nov. 4th, CSIO, Chandigarh.

EXPERT LECTURE

Delivered Expert Lectures (i) Soil Stabilization for Low Cost Roads, and (ii) Construction Quality Control for Road Project, during the orientation/training programme for JE/AEs of Punjab State at CYPAC, Chandigarh on 28-29 Oct., 2003.

Environmental Impact Assessment for Development/Infrastructure Project at CSIO, Chandigarh , 9th Nov. 2005

1. Environmental Impact Assessment and Analysis in Short term Course on Crisis and Disaster Management on 22-05-2008 at NITTTR, Chandigarh.
2. Environmental Impact Assessment in the workshop on Ecology and Environment on 30-06-2008 at Govt. Polytechnic for Women, Sector-10, Chandigarh organized by NITTTR, Chandigarh.

Other Academic And Corporate Activities

Held Various Administrative positions like

Head- Civil Engg. Department., Punjab Engg. College, Chandigarh.

Dean – Research & Technology Transfer

Dean – Planning & Development

Dean - Students Welfare

Chairman – College Purchase Committee

Member – Research Board of Engineering, Faculty of Engineering & Technology, Panjab University

Member-Board of Studies : Civil Engineering, Panjab University.

President – Punjab Engineering College Teachers Services Association

Convenor-Board of Studies, Post Graduate Environmental Engg., Panjab University-
Chandigarh

Professor & Head – Post Graduate Environment Deptt.

Professor & Head – Post Graduate Highway Deptt.

Convenor- Solid Waste Management Project in Punjab Engg. College, Chandigarh

Convenor- Disposal of Bio Medical Waste in Punjab Engg. College, Chandigarh