



Dr. MANOHAR PRASAD JAKHANWAL

Head of the Deptt. Of Civil Engineering at Bharat Institute of Technology, Meerut

Ex-Dean, Faculty of Engineering, BRA Bihar University, Muzaffarpur-842001.

Former : Principal, Muzaffarpur Institute of Technology, Muzaffarpur (Deptt. Of Science & Technology,) Govt. of Bihar. Coordinator, Pradhan Mantri Gram Sadak Yojna (PMGSY), STA, NRRDA, Govt. of India, New Delhi. Consulting Civil Engineer, Ministry of Energy, Govt. of Iran. Empanelled consultant to Asian Development Bank, & Shamvi Consultant

1. Details of Educational qualification :

Sl. No	School/ College/ Institute	Date of Entry	Date of leaving	Name of the Board/ University/ Institution	Examination/ Degree/ Diploma passed	Distinction / Class/ Division	Subjects (Please Mention Field of Specialization, honors etc. where applicable)	% of Marks	Date of Passing
1	I.T., BHU			BHU, Varanasi	Ph.D.	-----	Soil Mechanics & Foundation Engg	-----	1983
2	I.T., BHU	1966	1968	BHU, Varanasi	M.Sc.(Engg.) Civil	-----	---Do---	68%	1968
3	Bihar College of Engg. (Presently NIT) Patna	1961	1966	Patna University, Patna	B.Sc.(Engg.) Civil	-----	Civil Engineering	68% in Final Yr. 62% AV.	1966
4	Science College, Patna (Pre-University)	1960	1961	Patna University, Patna	Pre-University	Ist with Distinction	Phy, Chm, Math, Dist. In Math	62%	1961
5	M.A.A. High School	1956	1960	BSSEB Patna	Matriculation	Ist	Phy, Chm, Math, Eng., Hindi, Snk	77%	1960

2. PROFESSIONAL EXPERIENCE :

(A) Administrative

- Principal MIT, Muzaffarpur, Deptt. Of Science & Technology, Govt. of Bihar, Patna
- Director (Admin) of four technical Institutes in Raj Kumar Goel Group of Institutions

- Director(Admin), Noida Institute of Engg. & Technology, Gr. Noida
- Worked as Coordinator State Technical Agency, (PMGSY), Pradhan Mantri Gram Sadak Yojna NRRDA, Ministry of Rural Development, Govt. of India, New Delhi from the year 2002 – 2009. Which required Techno-Administrative skills
- Handled large number of consultancy projects related to CPWD, PWD, water resource department, ONGC, IOC, etc.
- Empanelled consultants to M/S Shamwvi Consultants
- Empanelled consultant to Asian Development Bank
- **In the financial year 2008-09 when I was Principal of MIT, Muzaffarpur the institute had a record consultancy of the order of more than Rs.1.00 crore from Civil Engg. Projects.**

(C) Academic

- Member Syllabus Committee, Mahamaya Technical University, Noida (UP)
- Convenor, Research Degree Committee(Civil Engg), Mahamaya Technical University, Noida (UP)
- Guided Five Ph. D. research successfully and 25 M. Tech. Thesis
- Currently after retirement from MIT, Muzaffarpur, in 2009 I have successfully guided three more M. Tech. Projects
- Currently guided one more Ph.D. research scholars on the topic “ GIS Application in Village Planning.....”

RESEARCH EXPERIENCE :

Details of research work conducted / supervised. (Total No. 14)

Self :

- (i) Variation in permeability of silt with overburden pressure – M.Tech. Research.
- (ii) Instrumentation & application of ultrasonic in geotechnical studies of soil.

During Ph.D Thesis he developed two ultrasonic apparatus for soil testing.

- a. Ultrasonic Monitoring Consolidometer for soil testing.
- b. Ultrasonic Monitoring Triaxial Apparatus for soil testing.

Sponsored Research :

- (a) Model studies on instrumented soil pile-system under marine environment – sponsored by MHRD, Govt of India (1989-1992).
 - a. Model studies on effect of sub – drainage on pavement performance of roads – sponsored by AICTE. MHRD, Govt of India.

List of Ph.D Thesis Guided :

- (i) Consolidation & shear strength properties of flyash-soil matrices of MTPS (Muzaffarpur Thermal Power Station) kanti, Muzaffarpur – Ph.D. Thesis by Praveen Kumar Sinha (Ph.D. Degree awarded by BRA, Bihar University, Muzaffarpur (2014)
- (ii) Rainfall- Runoff Modeling of Punpun Basin using ANN (Artificial Neural Network), by Subha Sinha (Ph.D. degree awarded in 2014 by BRA Bihar University, Muzaffarpur)
- (iii) Effect of ground water improvement in bearing capacity of shallow foundations supported on desiccated kaolinite soils – Ph.D degree awarded to Dr. K.N Prasad (2004) by BRA Bihar University, Muzaffarpur

(iv) Study of acoustical and geotechnical properties of soils under marine condition – Ph.D degree awarded to Dr. U.P Singh (1989) by BRA Bihar University, Muzffarpur

(V) “GIS application in village Planning, a case study of select village in the state of Bihar” Ph.D. degree awarded to Dr. Amod Thakur (2014) by Bra Bihar University, Muzffarpur

List of M.Tech. Thesis Guided (Recently):

(i) Stability of slopes of newly constructed railway embankment for railway line between Muzaffarpur & Sitamarhi. – Degree awarded to Mr. Arun Kumar for the award of degree. (2010)

(ii) Performance study of polymerized bitumen pavement. Degree awarded to Mr. Abhishek Kumar. (2010)

(iii) Stresses around piles in elastic half space. – Degree awarded to Mr. Rakesh kumar for the award of degree. (2010)

(iv) Influence of fly ash on stabilization of slopes and sub-grades. Degree awarded to Miss Seema Kumari. (2005)

(v) Stability of soil-cement stabilized embankments. Degree awarded to Mr. Prashant Kumar.(2003)

(vi) Variation in permeability of silt-clay matrices with depth. Degree awarded to Mr. Amod Thakur. (1999)

(vii) A study of shear strength properties of dynamically compacted local soil-cement matrices Degree awarded to Mr. N.K Singh. (1993)

+ Two M.Tech Thesis have also been submitted for award of the degree

LIST OF SOME IMPORTANT FIELD INVESTIGATION WORKS CONDUCTED FOR DESIGN OF FOUNDATION :

- Drilling Rig foundation of O.N.G.C. Platform at Ganauli-I , Bagaha, Bettia and Dullipatti, Jainagar.
- Foundation Design for Turbine House, Boiler House, F.D. Fans, Chimney etc. of Shahid Rajai Thermal Power Station, Ministry of energy, Govt. of Iran.
- 132 KV Transmission line tower foundations near Kursaila bridge on NH-31 and at Koliwar, Ara.
- 400 KV Transmission line tower foundation on both sides of Rajendra bridge, Mokameh.
- Multi-storied building foundation at Godowlia Chowk, Varanasi.
- Pavement design for Runway extension work at babatpur Acrodrome, Varanasi.
- Boiler foundation of Motipur Sugar Factory, Motipur, Muzaffarpur.
- Quality control of Earthen Embankments of roads, canals, and permanent ways of railway.
- Ground improvement for the proposed construction of Subhash Park at Begusarai.
- Tank Pad foundation of the Barauni oil Refinery Indian Oil Company (IOC)
- Stability of Slopes of railway embankments.
- Investigation of Seepage, Breaches and Piping problems in Jaitpur Branch Canal.
- Soil Investigation & design of Well foundation for C.D. structures and bridges Tirhut Main Canal.
- Technical scrutiny of road projects And Bridge Projects under PMGSY (Pradhan Mantri Gram sadak Yojna) as coordinator of State Technical Agency constituted by Department of Rural development, Govt. of India, New Delhi.

Membership of the Professional bodies held :

- (i) Fellow Institution of Engineers (India)---FIE
- (ii) Life Member Indian Geotechnical Society (India)---LMIGS
- (iii) Life Member Indian Society for Technical Education---LMISTE
- (iv) Life Member Ultrasonic Society of India---LMUSI
- (v) Life Member Indian Road Congress- IRC

LIST OF PUBLICATIONS OF DR. M.P.JAKHANWAL

- 1 "Shear Strength Behavior of Silt-clay Matrices" Proc. National Seminar on Trends in Geotechnical Engg. Held at Bhatinda in April' 2005.
- 2 "Evaluation of Compression Index of Silt-clay Matrices from their Index Properties" held at Bhatinda in April' 2005.
- 3 "Inter-Relationship between Shear Strength and Acoustical Properties of Silt-clay Matrices" Indian Geotechnical Journal, Vol.25, No-4, 1995, pp. 444-452.
- 4 Effect of CaCo₂ on Acoustico – geotechnical properties of Marine simulated soils" Indian Geotechnical Journal, Vol.21, No.-3, 1991, pp. 256-270.
- 5 "Subterranean Considerations in the Foundation Design of a Drilling Rig for On-shore Oil Exploration" Proc. Of India Geotechnical Conference held in December' 1998, at M.N.R. Engineering College, Allahabad-211004 (India)
- 6 "Acoustical Properties of a Kaolinite Related to it's Engineering Properties" Proc. Int. Conf. On Construction in Glacial Clays (Glacial Till-85) held at Glasgow (UK), in March' 85, pp. 103-112.
- 7 "Ultrasonic Testing of Silt Clay Matrices" Jr. of Pure and Applied Ultrasonics, Vol. 6, 1984, pp. 83-84.
- 8 "Non-destructive Testing of Soil-Clay Matrices" Paper presented at the Seminar on Ultrasonic Non-Destructive Testing (SUT-83), at National Physical Laboratory, New Delhi-1983.
- 9 "UMTA and SEM Studies of Some Off-Shore soils from Bombay High" Proc. Second Indian Conf. on Ocean Engineering (INCOE-83), Central Water Power research Station, Pune, December (1983), pp. 1359-63.
- 10 "Ultrasonic Instrumentation for Geotechnical Apparatuses" Proc. National Symposium on Instrumentation, Chandigarh, Feb.'1983, pp. 171-174.
- 11 "Acoustical and Engineering Properties of Tri-axially Loaded off-shore soil from Bombay High" Proc. IVth International Congress (Int. of Eng. Geology), Dec.'1982, Vol.-VII, pp. 275-283.
- 12 "Scanning Electron Microscopic Studies on Consolidated Kaolinite and Silt Clay Matrices" Paper presented at XV National Conf. on SEM Studies held at Banaras Hindu University, Varanasi, December' 1982.
- 13 "Remedial Measures for Improvement of Pavement Performance" Paper presented at National Conf. and Exhibition on Infrastructure Development in Core Sectors (NCEI-2K), held at M.I.T., Muzaffarpur on 29-30th May' 2000.
- 14 "Investigation of Deformation Parameters of Bombay High off-shore Soils with Ultrasonic Monitoring Tri-axial Appratus (UMTA)" Proc. Conf. on Construction Practices and International in geotechnical Engineering, held at Surat, Dec.'1982. pp.227-231.
- 15 "Acoustic Emission and Velocity characteristics of tri-axially loaded Soils" Proc. Seventh Symposium on Earthquake, Vol.-1, Held at Roorkee, Nov.'1982, Vol.-1, pp.361-363.
- 16 "Non-destructive Testing of Unconfined Kaolinite Subjected to Large Scal Vibration Paper presented at Second National Symposium on Ultrasonics (NSU-82), National Physical Laboratory, New Delhi, Feb'1982.
- 17 "Monitoring of Geotechnical Properties of Mining Ground by Ultrasonic Technique" Paper Presented at National Symposium on Mechanics of Mining Ground, Banaras Hindu University, Feb' 1982.
- 18 "UMTA Tests for Acoustical and Engineering Behaviour of Marine Soils" Proc. Workshop on Structures on Marine Soil, held at Waltair, Jan' 1982, pp. 09-012.
- 19 "Acoustical and Engineering Behaviours of Uni-axially Loaded Coarse and Fine Grained Soils" Proc. Symposium on Engineering Behaviour of Course Grained Soils Boulders and Rocks (GEOMECH-81), Vol.I, Held at Hyderabad, Dec'1981 pp 401-406.
- 20 "Acoustical Properties of Kaolinite Related to it's Engineering Properties" Paper accepted for presentation in the 7thInternational Conference, at Bologna, Pavia Italy September, 1981 (However the Paper could not be presented due to non-availability of Funds for going to Italy).
- 21 "Ultrasonic Monitoring Consolidometer (Electronics) and Instrumentation Details", CSIO Communications, Vol.8, No.2, (1981) pp 64-71.

22 “Ultrasonic Monitoring Tri-axial Apparatus for Soil Testing” Paper presented at Second World Instrumentation Symposium and international Trade Exposition (WISITEX-81), held at Bombay, April’1981 and also published in the Journal of Pure and Applied Ultrasonics, Vol.4. No.1, 1982, pp. 8-11.

23 “Contribution on Ultrasonic Monitoring of Geotechnical Properties of Soil” Proc. Indian Conf. in Ocean Engineering (INCOE-81), Vol. II, held at Indian Institute of Technology, Madras, 1981, pp. 72-74

24 “Ultrasonic of Soil Engineering” Journal of Institution of Engineers, March’ 1981.

25 “Ultrasonic Monitoring Consolidometer for Soil Testing” Proc. International Conf. & Exhibition on Ultrasonic (ICEU-80) held at National Physical Laboratory, New Delhi, July’1980, pp. 82-87.

THESIS & REPORTS :

- “Instrumentation and Application of Ultrasonic in Geotechnical Studies of Soils” PH.D. Thesis of self, degree awarded by Banaras Hindu University, Varanasi-221005.
- “Variation in permeability of Soils with Over burden Pressure” M.Tech. Thesis of Self, degree awarded by Banaras Hindu University, Varanasi-221005.
- “Investigation of Seepage Breaches and Piping Problems in Jaitpur Branch Canal” TR-1, of M.I.T., Muzaffarpur.

GUEST LECTURES DELIVERED :

- “Acoustic Emissions in Geotechnical Studies” International Workshop on Critical State Models and Behavior of Soils held in I.I.T., Kanpur in Feb.’1985.
- Short Term Training Programme on “Health Hazards and Medical Electronics” Sponsored by ISTE (Indian Society for Technical Education) and AICTE (All India Council of Technical Education) held at M.I.T., Muzaffarpur from 19-06-2000 to 30.06.2000.
- One day Workshop on “Biomass Gasifiers”, sponsored by Ministry of Non-Conventional Energy, held at M.I.T., Muzaffarpur on 21.01.1998.
- Short Term training Programmed on “Under-ground Mining & Ground Movement” sponsored by ISTE (Indian Society for Technical Education) and AICTE (All India Council of Technical Education) held at B.I.T., Sindri in Oct.’ 2001.
- Short Term training Programmed on “IT-Applications in the Management of Technical Institutions” sponsored by ISTE (Indian Society for Technical Education) and AICTE (All India Council of Technical Education) held at M.I.T., Muzaffarpur from 16th Nov.’02 to 29th Nov.’02.
- Apart from the above a large number of guest lecture have been delivered in various capacities held under the auspicious of Local Chapter of Institution of Engineer’s M.I.T., Muzaffarpur.