



Dr. Manoj Kumar Trivedi

Ph.D. (IIT-Roorkee), M.Tech (IIT-Kharagpur)

EDUCATION

Indian Institute of Technology – Roorkee (Uttarakhand, India) PhD (Hydraulics) 2001 Under the Guidance of Dr. Deepak Kashyap

- Thesis Title: "Numerical Modeling of Unsaturated Flow towards plant root".

Indian Institute of Technology – Kharagpur (West Bengal, India) M.Tech (Water Resources Engineering) 1990

- Obtained 8.39 CGPA.
- Thesis Title: "Computerized generation of Hydrographs"

RIT, Jamshedpur, India

B.Sc (Civil Engineering) 1987

- Obtained 78% marks.
- Thesis Title: "Design of Water Supply of RIT, Jamshedpur Campus"

JLN College, Chakradharpur Jharkhand

- Passed Intermediate (PCM) in 1981 with 67% marks.

South Eastern Railway Mixed Higher Secondary School, Chakradharpur Jharkhand

- Passed Bihar Board Patna, 11th (Science & Math) 1979 with 76% marks.

WORK EXPERIENCE

Madhav Institute of Technology and Science, Gwalior (M.P.)

- Professor: July 2010 Onwards.

Madhav Institute of Technology and Science, Gwalior (M.P.)

- Reader: July 2002 to July 2010

Madhav Institute of Technology and Science, Gwalior (M.P.)

- Senior Lecturer: July 1997 to July 2002

Madhav Institute of Technology and Science, Gwalior (M.P.)

- Lecturer: July 1992 to July 1997

Indian Institute of Technology – Kharagpur (West Bengal, India)

- Project Officer: March 1991 to May 1992

PERSONAL DETAILS

Father's Name:- Late. Shri Premshankar Trivedi

Mother's Name:- Smt. Shakuntla Trivedi

Date of Birth:- 02 Sept. 1963

Gender:- Male

Marital Status:- Married

Birth Place:- Village Fatehganj Tehsil Purwa Distt.

Unnao, U.P. India

PROFESSIONAL DETAILS

Current Designation: Prof. & Head of Civil Engineering Department, MITS, Gwalior (M.P.)

Member of ISCMS, ISTE, ICI & IWWA

Specialization: Water Resource Engineering

Research Area:

1. Water Resource Engineering
2. Construction Project Management
3. Transportation Engineering

ADDRESS OF CORRESPONDENCE

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CONTACT

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Research Gate ID:
Manoj_Trivedi3

EXPERIENCE

Teaching experience: 30 years
Research experience: 32 years

THESIS SUPERVISED

Ph.D.(Completed)	02
Ph.D. (Ongoing)	06
M.Tech (Completed)	60+
M.Tech(Ongoing)	04

COURSES TAUGHT

UG Level

Water Resources Engineering
Transportation Engineering
Project Planning and Control
Urban Planning & Transportation System

PG Level

Construction Cost Management
Project Planning Scheduling & Controls
Quantitative Methods
Soft Computing Methods
Optimization Techniques

PUBLICATIONS

Total Publications	70+
International/National Journals	50+
Conference Papers	10+
Google Citations:	
h-Index:	65
Citations:	30

REVIEWER OF JOURNAL/ CONFERENCES

- International Journal of Construction Management (Taylor and Francis)
- International Conference on Sustainable and Innovative Solutions for Current Challenges in Engineering and Technology (ICSISCET 2019), MITS Gwalior 2019.

Number of Events / Programmes Conducted (FDP / STTP / Workshop / Training / Conference etc.): 30+

Number of Events / Programmes Attended (FDP / STTP / Workshop / Training / Conference etc.): 30+

Administrative Responsibility & Position Held at Departmental Level

- Currently, preparing the departmental report for NAAC accreditation.
- Coordinated the department for NBA accreditation twice (2013 & 2021), and successfully achieved the NBA accreditation for 3 years (2021-24).
- Flexible scheme for B.Tech Civil is prepared and implemented in 2019-20 session and introduced NEP-2020.
- Head of Civil Engineering Department from January 2019 onwards.
- Head of Civil Engineering Department from October 2011 to November 2013. During this period NBA of B.E Civil programme was received for two years.
- Member of Departmental Purchase Committee.
- Procured and installed various lab equipment from TEQIP II and TEQIP III grant.
- Course In-Charge of ME (CTM) in 2004.
- Participated in preparation of NBA of B.E Civil and M.E CTM programme in 2003.
- Received MODROB grant of 5 Lakh for survey lab in 1997 and procured total station in 2003.
- Involved in the procurement of computers for the department in 1993 from MODROB grant.

Administrative Responsibility & Position Held at Institutional Level

- Involved in construction of boy's hostel and academic block in 2018-21.
- Construction & Maintenance In-charge from April 2018 Onwards.
- Implementation team member of OBE system in flexible scheme of both UG & PG.
- Dean of Training & Placement from June 2011 to November 2013.
- RAC member as external expert of many Research Scholars other than Civil Department.
- Organized two winter course in 2004 and 2005 sponsored by ISTE.
- PET Counselling: worked as officer from 2004 to 2009.
- Autonomy Cell: worked as Examination Controller from Oct. 2002 to Oct. 2003.
- VYAPAM Examination: worked as Assistant Superintendent and Deputy Coordinator from 2001 onwards.
- Assistance to construction activities to the Institute Engineer from 1996 to 1997.
- Organized National conference in 1996 worked as joint secretary.
- Organized summer course as Deputy Coordinator in 1996.
- Hostel Warden from 1995 to 1997.

Administrative Responsibility & Position Held at University/AICTE/ MHRD Level

- Co-coordinator of RGPV MITS nodal centre, Bhopal from March 17, 2016 to December 31, 2018.
- Institutional AICTE Affiliation of Programmes and sanction of new programmes from 2004 to 2007.
- Deputy and Co-coordinator of RGPV MITS nodal centre, Bhopal from January 2003 to October, 2003.

Administrative Responsibility & Position Held at National Level

- State Technical Agency (STA) coordinator from NRRDA/NRIDA, New Delhi

Other Responsibility & Position Held

- Member of Board of Studies (BOS) of AMITY University, Gwalior and ITM, Gwalior.

RESEARCH PROJECT

Completed	:	05
Ongoing	:	01

CONSULTANCY PROJECT

Completed	:	50+
Ongoing	:	02

EXPERT LECTURE

No. of Invitation	:	10
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RESEARCH EXPERIENCE

- Real Time Forecasting on River

Damodar under CBIP project at IIT, Kharagpur: worked as Project Officer for one and half year.

- Two candidates have completed their Ph.D. and six candidates are undergoing Ph.D.
- Nearly 70 students have completed their ME dissertation work in last twenty-five years.
- Published nearly 70 papers either in journals or in conferences.
- Submitted several R & D proposals to AICTE, TEQIP III and MODRB.
- Completed two MODROB projects in 1995 & 2003.
- Completed one FIST project from DST for the Department on 2004 on Water and waste lab costing 30 Lakhs.

RESEARCH PROJECTS

Year	Funding Agency	Title of Project	Status (Completed/Submitted/Amount Received)
2021	IRS	Source apportionment of the fine particulate matter in ambient air.	Ongoing
2020	IRS	Multi-Objective Optimization in Construction Projects using NSGAIII	Completed
2018	AICTE	Development of Optimal Front for Time-Cost Trade-off in Construction Projects	Completed
2004	DST	Water/ Waste Water Lab Development	Completed
2003	MODRB	Survey Lab Development	Completed
1995	MODROB	Computational Lab Development	Completed

DETAILS OF Ph.D. GUIDANCE

S. No.	Name of Student	Title/ Area	Current Status (Awarded with date / Submitted / Ongoing)	University	Number of Paper Published in Ph.D.
1.	Mukesh Pandey	Application of Fuzzy in Construction Projects	Awarded	RGPV, Bhopal	03
2.	Mohan Kantharia	Investigation of Strength of Mortar using Polymer and Nano Materials	Awarded	Amity University	03
3.	Shyamveer Singh Chauhan	Fuzzy-Neural Network (AFNN) Approach for Determination of Surface Water Quality Index in Gwalior Chambal Region	Ongoing	RGPV, Bhopal	02
4.	Aditi Tiwari	Critical Sequence Scheduling for Linear and Discrete Time-Cost trade-Off Problem	Ongoing	RGPV, Bhopal	03
5.	Kamal Sharma	Development of Robust Scheduling Model For Civil Construction Projects Using Metaheuristic Approaches	Ongoing	RGPV, Bhopal	09
6.	Jay Singh Rajput	Application of Machine Learning Algorithms in Source Apportionment of Particulate Matter in Ambient Air	Ongoing	RGPV, Bhopal	03
7.	Rakesh Gupta	Development of Time-Cost Model Using EHO for Civil Construction Projects	Ongoing	RGPV, Bhopal	-
8.	Wajid Hussain	Resource Constrained Project Scheduling: A Tripolar Trade-Off	Ongoing	RGPV, Bhopal	01

DETAILS OF M.E./M.Tech GUIDANCE

Sr. No.	Name of Student	Title/ Area	Current Status	University	No. of Paper Published
1	Himanshu Sharma	Time-Cost-Safety Trade-Off For Construction Projects	Awarded-2021	RGPV	01
2	Nitin Singh	Time-Cost-Quality Trade-Off For Construction Projects	Awarded- 2021	RGPV	01
3	Adhish Singh Bhadoria	Optimization of risk and disputes in PPP in Construction Industries	Awarded- 2021	RGPV	01
4	Anurag Soni	A Particle Swarm Optimization based model for quality-safety trade-off optimization under constraint duration & cost of construction project	Awarded- 2020	RGPV	01
5	Puneet Gupta	Improvement in the engineering properties of soil using plastic waste	Awarded- 2020	RGPV	01
6	Amit Dhawan	Simulated Annealing Algorithm for Optimization of time-cost trade-off for Construction Projects	Awarded- 2020	RGPV	01
7	Ramakant Sharma	Improvement in the engineering properties of locally available soil using silica fume	Awarded- 2020	RGPV	01
8	Narayan Singh Kasana	Managing the risks faced by Indian Road Construction Projects using Fuzzy Logic	Awarded- 2020	RGPV	01
9	Nitin Singh	Optimizing the time, cost and quality of project using Non-dominated sorting genetic algorithm II	Awarded- 2020	RGPV	01
10	Himanshu Sharma	Integrating the safety risk of project in time- cost analysis of construction projects	Awarded- 2020	RGPV	01
11	Ankit Gupta	Rainfall Modelling using Artificial Neural Network for Gwalior (M.P.)	Awarded- 2020	RGPV	01
12	Jainendra Singh Yadav	Study of combined effect of dismantled class III brick, lime & iron dust on expensive soil	Awarded- 2019	RGPV	01
13	Kamal Sharma	Risk Analysis in Highway Construction Projects using Fuzzy-Risk Failure Mode & Effect Analysis	Awarded- 2019	RGPV	01
14	Shivam Upadhyay	Study of geogrid reinforced pavement layer with FEA	Awarded- 2019	RGPV	01
15	Lalit Jain	Development of an approach for the selection of a wall construction material using AHP	Awarded- 2019	RGPV	01
16	Suryansh Sharma	Effect of nano iron oxide & nano titanium di- oxide on strength of concrete	Awarded- 2019	RGPV	01
17	Rahul Vyan	Truss bridge structure analysis by using element method	Awarded- 2019	RGPV	01
18	Neeraj Verma	Study of green retrofitting of existing building	Awarded- 2018	RGPV	01
19	Sandhya Parihar	Determination of optimum traffic timing at the intersection	Awarded- 2018	RGPV	01
20	Rahul Singh Dhakar	Study of enhancement of strength of clayey soils stabilized with Acrylic Polymer	Awarded- 2018	RGPV	01
21	Gyaneshwar Singh Uchariya	A study of wood ash, alternative material for stabilizing clay soil	Awarded- 2018	RGPV	01
22	Manish Bhardwaj	Activity Overlapping in Construction Projects	Awarded- 2018	RGPV	01
23	Aman Sen	Evaluation of factors causing rework in construction	Awarded- 2018	RGPV	01
24	Shivmangal Mishra	Utilization of PCB & Cost reduction in concrete	Awarded- 2018	RGPV	01
25	Umesh Pratap Singh Bagri	Evaluation of risk factors causing cost overrun in cost industry using IMPI & AHP technique	Awarded- 2018	RGPV	01
26	Deeksha Yadav	Effect of zirconium oxide as nano particle on compressive strength and durability of cement mortar	Awarded- 2018	RGPV	01

27	Neha Pundir	Improvement of pavement soil subgrade by using burnt brick dust & scrap tyre rubber	Awarded- 2017	RGPV	01
28	Bhanu Pratap Singh	Stabilization of clayey soil by using gypsum and calcium chloride	Awarded- 2017	RGPV	01
29	Vivek Singh Bhadoria	Weight reduction & strengthening of RC Beam using CFRP & GFRP layers by ANSYS 15.0	Awarded- 2017	RGPV	01
30	Lalit Singh	Appropriate contractor evaluation techniques in construction industry based on multi-criteria decision	Awarded- 2017	RGPV	01
31	Kehkasha Khan	Genetic Algorithm for optimization of time-cost trade-off for construction projects	Awarded- 2017	RGPV	01
32	Murari Laal Sharma	Study of RSPM, SPM, NO _x , SO _x , particle of air pollution of two location in Gwalior city	Awarded- 2017	RGPV	01
33	Anjali Dubgaiya	Performance evaluation of effluent treatment plant & soap industry Malanpur, Bhind	Awarded- 2017	RGPV	01
34	Pradeep Sahu	Economics of canal lining	Awarded- 2016	RGPV	01
35	Rasna Sharma	Experimental Determination of variability in permeability & sandy silt soil mixed with fly ash in proportionate	Awarded- 2016	RGPV	01
36	NitankRastogi	Risk Management in Construction Projects	Awarded- 2016	RGPV	01
37	Vishali Yadav	Study of stabilized sand bricks & its compressive strength	Awarded- 2016	RGPV	01
38	Pankaj Paipuria	Stabilization of black cotton soil blended with sand and cement	Awarded- 2016	RGPV	01
39	Shivangi Bhardwaj	Impact of silica fume on engineering properties of expensive soil & its use in subgrade	Awarded- 2016	RGPV	01
40	Wajid Hussain	Application of Genetic Algorithm in Resources	Awarded-	RGPV	01
41	Sapna Namdev	Application of genetic algorithm in optimization of time-cost of civil construction projects	Awarded- 2015	RGPV	01
42	AvdeshGurjar	Quality function deployment technique applied on plumbing services in multi-storey building	Awarded- 2014	RGPV	01
43	Ravindra Singh Yadav	Rural Development through Integrated waste management	Awarded- 2014	RGPV	01
44	Neoni Chandra Jain	Water management & its development in Kalisindh sub-basin uptokundaliya dam site in Chambal basin	Awarded- 2014	RGPV	01
45	Anil Kumar Gupta	Assessing risk inherent in Indian Highways PPP projects using AHP	Awarded- 2013	RGPV	01
46	Manish Kumar Mandre	Risk Assessment in construction industry for joint venture	Awarded- 2012	RGPV	01
47	Alok Dandotiya	Construction project delay analysis using fuzzy logic method	Awarded- 2012	RGPV	01
48	Shruti Singh	Analysis of delay in construction projects using fuzzy logic tool box of MATLAB software program	Awarded- 2012	RGPV	01
49	Surendra Singh Kushwah	Cold mix design for flexible pavement	Awarded- 2012	RGPV	01
50	Mathura Prasad Gupta	Optimization of time-cost trade-off in construction projects	Awarded- 2011	RGPV	01
51	Rajesh Kumar Tripathi	Feasibility of new alternative material (R.B.I Grade - 81) for road construction	Awarded- 2010	RGPV	01
52	Vinod Sharma	Site layout planning using nonstructural fuzzy decision support system model in civil construction projects	Awarded- 2010	RGPV	01
53	Dinesh Kumar	Application of pre-allocation of total float in CPM based construction contracts	Awarded- 2010	RGPV	01
54	Mohan Katthria	Grading of delays in construction projects	Awarded- 2010	RGPV	01

55	Aman Ahlawat	Framework for construction to reach BID/No. BID & optimum make-up size decision	Awarded- 2010	RGPV	01
56	Pravir Kumar Joshi	An experimental apparatus for pavement evolution at existing road	Awarded- 2010	RGPV	01
57	Shirish More	Rain Water Harvesting Methods And Practices For Water Management	Awarded- 2006	RGPV	01
58	Neeraj Dwivedi	A Brief Study On Construction Contract Pricing And Bidding Strategy	Awarded- 2006	RGPV	01
59	Prabhat Kumar Saxena	Total Cost Reduction By Project Management In Earthen Dam	Awarded- 2006	RGPV	01
60	Anil Sharma	Significance Of Quality Control In The Construction Of Embankments/ Sub-Grades	Awarded- 2006	RGPV	01
61	S.S. Chauhan	Study And Analysis Of Contract Documents In Various Govt. Organisation In Construction Management.	Awarded- 2006	RGPV	01
62	Praveen Kumar Choudhry	The Role Of Passive Design, Thermal Insulation And Embodied Energy Of Building Material In Residential Building	Awarded- 2006	RGPV	01
63	Ashok Kumar	Experimental Study On The Effects Of Chemicals On Setting Time Of Cement	Awarded- 2006	RGPV	01
64	Rajesh Kumar Shrivastava	Planning And Evaluation Of Artificial Recharge Projects For GroundWater Management	Awarded- 2006	RGPV	01
65	U.S. Mishra	Evaluation Of Price Escalation Clause In Construction Contracts	Awarded- 2004	RGPV	01
66	Sarvesh Pratap Singh Rajput	Present Scenario Of Formwork And Scaffolding Systems In The Indian Construction Industry	Awarded- 2004	RGPV	01
67	Somitra Kumar Singh Chauhan	Energy Saving By Adopting – Solar Passive Architecture In Buildings	Awarded- 2004	RGPV	01
68	Ashutosh Shanker Trivedi	Environmental Impact On Handling Of Dangerous Materials	Awarded- 2001	RGPV	01
69	Pawan Kumar	Linear Programming: A Technique For Solving Time-Cost Problems In Construction.	Awarded- 1996	RGPV	01

NOTABLE JOURNAL PUBLICATIONS

1. Kamal Sharma, Manoj Kumar Trivedi (2021), “Statistical Analysis of Delay Causing Factors in Indian Highway Construction Projects under Hybrid Annuity Model”. Transportation Research Record (Under Review).
2. Chauhan, S.S., Trivedi, M.K. (2022) Assessment of Fuzzy-Based Water quality index (WQI) of surface water in Gwalior-Chambal region. J. Inst. Eng. India Ser. A (Accepted).
3. Chauhan, S.S., Trivedi, M.K. (2022) Artificial neural network-based assessment of water quality index (WQI) of surface water in Gwalior-Chambal region. Int J Energy Environ Eng. <https://doi.org/10.1007/s40095-022-00521-5>.
4. Rajput, J.S., Trivedi, M.K. Determination and assessment of elemental concentration in the atmospheric particulate matter: a comprehensive review. Environ Monit Assess 194, 243 (2022). <https://doi.org/10.1007/s10661-022-09833-9>
5. Tiwari, A., Trivedi, M.K. Practical Tool for Development of Non-Dominated Optimum Front in Time–Cost Trade-off analysis. J. Inst. Eng. India Ser. A 102, 1073–1088 (2021). <https://doi.org/10.1007/s40030-021-00554-9>
6. Kamal Sharma, Manoj Kumar Trivedi (2021), “Development of Multi-Objective Scheduling Model for Construction Projects Using Opposition-Based NSGA III”. Journal of The Institution of Engineers (India): Series A volume 102, pages435–449 (2021), Springer. <https://doi.org/10.1007/s40030-021-00529-w>

7. Kamal Sharma, Manoj Kumar Trivedi (2020), "Latin Hypercube Sampling based NSGA-III optimization model for multi-mode resource constrained time-cost-quality-safety trade-off in construction projects". International Journal of Construction Management, Taylor & Francis. <https://doi.org/10.1080/15623599.2020.1843769>.
8. Shyamveer Singh Chauhan, Dr. M.K Trivedi (2020), "Water Quality Index Assessment Tool of Surface & Sub-surface Water Quality: An Overview". International Journal of Innovative Science and Research Technology Volume 05 Issue01.
9. Manish Bharadwaj, M.K. Trivedi, Vikas Shinde (2020), "Activity overlapping Mechanism for Construction Management using Game Theory" i-manager's Journal on Management Volume 14 Issue03
10. Rajput, J.S., Trivedi, M.K. Determination and assessment of elemental concentration in the atmospheric particulate matter: a comprehensive review. Environ Monit Assess 194, 243 (2022). <https://doi.org/10.1007/s10661-022-09833-9>
11. Tiwari, A., Trivedi, M.K. Practical Tool for Development of Non-Dominated Optimum Front in Time-Cost Trade-off analysis. J. Inst. Eng. India Ser. A 102, 1073-1088 (2021). <https://doi.org/10.1007/s40030-021-00554-9>
12. Kamal Sharma, Manoj Kumar Trivedi (2021), "Development of Multi-Objective Scheduling Model for Construction Projects Using Opposition-Based NSGA III". Journal of The Institution of Engineers (India): Series A volume 102, pages435-449 (2021), Springer. <https://doi.org/10.1007/s40030-021-00529-w>
13. Kamal Sharma, Manoj Kumar Trivedi (2020), "Latin Hypercube Sampling based NSGA-III optimization model for multi-mode resource constrained time-cost-quality-safety trade-off in construction projects". International Journal of Construction Management, Taylor & Francis. <https://doi.org/10.1080/15623599.2020.1843769>.
14. Shyamveer Singh Chauhan, Dr. M.K Trivedi (2020), "Water Quality Index Assessment Tool of Surface & Sub-surface Water Quality: An Overview". International Journal of Innovative Science and Research Technology Volume 05 Issue01.
15. Manish Bharadwaj, M.K. Trivedi, Vikas Shinde (2020), "Activity overlapping Mechanism for Construction Management using Game Theory" i-manager's Journal on Management Volume 14 Issue03.
16. K.S Hari Prasad, M.K. Trivedi, K.K Agarwal (2012). "Estimation of unsaturated soil parameters: Effect of data errors and choice of objective function", ISH JournalofHydraulic Engineering Volume 9 Issue 1 pp46-60.
17. Shobha Ram, K.S Hari Prasad, M.K. Trivedi (2012). "Estimation of Border-Strip Soil Hydraulic Parameters", Journal of Irrigation and Drainage Engineering 138(6).
18. Amit Dhawan, Dr. M.K. Trivedi (2020), "Development of Time-Cost Trade-off Model using Simulated Annealing", International Journal for Research in Applied Science & Engineering Technology (IJRASET) ISSN: 2321-9653; IC Value 45.98; SJ Impact Factor: 7.429 Volume 8 Issue VII, July 2020 Page187-193.
19. Jainendra Singh Yadav, M.K Trivedi, Shivam Gupta (2019), "Stabilization of expansive soil using dismantled class III bricks, Lime and Iron Dust", International Journal for Research in Applied Science & Engineering Technology (IJRASET) Volume 07 IssueVII.
20. KamalSharma,Dr.M.K.Trivedi(2019),"RiskAnalysisinHighwayConstructionProjects Using Failure Mode & Effect Analysis", International Journal for Research in Applied Science & Engineering Technology (IJRASET) ISSN: 2321-9653; IC Value 45.98; SJ Impact Factor: 7.177 Volume 7 Issue VI, June 2019 Page 187-193.
21. Mohan Kantharia, Pankaj Kumar Mishra, Dr. M. K Trivedi, Ripunjoy Gogoi (2019), "Effect of Chemical Exposure on Mechanical Strength of Polymer Mortar". International Journal of Recent Technology and Engineering (IJRTE) Volume 07 Issue06.
22. Mohan Kantharia, Pankaj Kumar Mishra, Dr. M.K Trivedi (2019), "Problems in using Carbon Nano Tubes (CNT) in Cement Concrete Industry". International Journal of Recent

Technology and Engineering (IJRTE) Volume 07 Issue06.

23. Trivedi M.K., S.S. Bhadoria, M.K. Pandey (2011), "A Fuzzy Decision Framework for Selection Of Suitable Alternative In Construction Industry", IUPJournal.
- ~~25. Trivedi M.K., M.K.Pandey, S.S Bhadoria (2011), "Prequalification of Construction Contractor Using a FAHP" International journal of computer application vol.28-No, 10thAugust 2011. Page39-45.~~
26. Trivedi M.K., Mukesh Pandey, Bhakti Singh Bhadoriya (2007), "Multi Criteria Decision Making for Contractor Selections under Fuzzy Environment in Civil Construction: An Overview". 28-29 Dec.2007 National seminar infra structure management for new world order.
27. Trivedi M.K., K.S. Hariprasad, A.Gairola, D. Kashyap (2000), "Numerical Modelling of soil water plant interaction", UK saturatsic soil for Asia, Rahard J.D. Toll & Leong, Singapore.
28. Gupta M.C., Trivedi M.K. (1995), "Economic Design of Rising Main in water supply system". Tenth Indian Congress, the Institution of Engineers (India). Jaipur page 13 to22.
29. Hari Prasad K.S., Trivedi M.K., Kapil Kumar Agarwal (2001), "Parameter Estimation for transient Unsaturated Flow" July 2001 International conference on Civil Engineering Bangalore.
30. Hari Prasad K.S., M. ISH, M.K.Trivedi, K.K.Agarwal "Estimation of Unsaturated Soil Parameters: Effect of Data Errors and Choice of Objective Function" The Indian society of hydraulics Journal of Hydraulicengineering.
31. Trivedi M.K., A.K.Saxena (2004), " Generation Of Flow Patterns Of One Of The Ungauged Tributary Of Damoda River Using Triangle-Based Terrain Models" proceedings of PUBSWRPM- 2004, OCT.30th2004, BITS Pilani.
32. Trivedi M.K., Pratesh Jayaswal, Arun Nagar (2011), "Fuzzy Approach Decision Making Framework For Selection Of Maintenance Alternative In Manufacturing Plants" 2011, Nov., Vol.3, Page204-599.
33. Trivedi M.K., Shruti Singh "Application of Fuzzy Logic in Delay Analysis in Construction" Civil Engineering Department MITS, Gwalior.
34. Pandey M.K Dandotiya A., Trivedi M.K., Bhadoriya S.S., Ramasesh G.R, " Delay Computation Using Fuzzy Logic Approach " I.J. Intelligent system and Application, 2012.11,84-89.
35. Shobah Ram , K.S. Hariprasad, AjaiGairoda, M.K. Trivedi., " Estimation of Border Strip soil hydraulic Parameters" J. Irrigation Drainage Engg.,2012,138,443-502.
36. Trivedi M.K., D. Kashyap, A.Gairoda " A Physically Based Microscopic model of root water uptake" journal of Agriculture Engineering and Biotechnology, Nov.2013,Vol.3 Page 158-170.
37. PariharJanak Singh, M.K. Trivedi, A.K.Diwedi "Behaviour of C & ϕ Of black Cotton Soil With Glass Fiber inclusion; An Experimental Study" 2013, IJAIR, Vol.3 Page158-170.
38. Sahu Pradeep, A.K. Saxena, M.K. Trivedi "The Use of Canal Lining Available Materials and its Comparative Study" 2014 IOSR-JMCE Vol.11, ISSUE 3 PP81-86.
39. Gurjar Singh Avadesh, M.K Trivedi "Quality Function Deployment Applied On Pre Plumbing and Cast Iron Plumbing" Mar-Apr 2014 IOSR Journal of Mechanical & Civil Engg. Vol.11 Issue2 PP52-60.
40. Jatav P.S, Deepak Rastogi, M.K. Trivedi "Energy Saving in Building by Using Energy Efficient Green Building Materials" 2014 IRJMST Vo. 5 issue PP53-70.
41. Trivedi M.K, Sapan Namdev (2015) "Use of Optimization Techniques in Time-Cost Trade Off (TCT) In Civil Construction: An Overview" 2015International journal of Civil Engg. & Mechanics Vo. 2 number 1 PP1-13.
42. Wajid Hussain, M.K. Trivedi, R. Kansal (2015) "Optimization Of Construction Resource

Allocation and Leveling Using Genetic Algorithm” International Journal of Innovative Research in Science , Engineering and Technology Vol.4, Issue 6, June2015.

43. Trivedi M.K, R. Kansal, SapanNamdev “Multi-Objective Time-Cost Optimization of Civil Construction Project by Genetic Algorithm (GA)” International Journal of Civil Engineering Research IISN 2278-3652 Vol.6 Number 1 PP45-51.
44. Trivedi M.K., M.K. Pandey, Ahlawat A. (2010), “Bid/No. & Mark-UP decision using Multi Criteria Decision Making Method” 2010 All India Seminar on Advances in Material and Techniques in Construction, Indian Institute of Technology, Kanpur.

NOTABLE CONFERENCE PUBLICATIONS

1. S. Kumar Vaishnav and Dr. M. K Trivedi (2022) “Performance evaluation of treated recycled fine aggregate on mortar properties,” Mater. Today Proc., vol. 62, pp. 6641–6647, 2022, doi: 10.1016/j.matpr.2022.04.645.
2. S. Kumar Vaishnav and Dr. M. K Trivedi (2022), “Performance enhancement of the recycled aggregate concrete properties using blended sand,” Mater. Today, Proc., vol. 62, pp. 6648–6653, 2022, doi: 10.1016/j.matpr.2022.04.651.
3. Amit, Dhawan, Kamal Sharma and Manoj Kumar Trivedi (2022), “Discrete Time-Cost-Resources Trade-Off Optimization Model for Construction Projects using Opposition-based NSGA-III”. 3 days (28-30 Jan, 2022) "International Conference on Advanced Engineering Optimization Through Intelligent Techniques", conducted by NIT Surat. (Accepted for Springer Book Chapter).
4. Kamal Sharma, Anurag Soni and Manoj Kumar Trivedi (2022), A Particle Swarm Optimization based model for Quality Safety trade-off optimization under constraint duration and cost of construction project. 3 days (28-30 Jan, 2022) "International Conference on Advanced Engineering Optimization Through Intelligent Techniques", conducted by NIT Surat. (Accepted for Springer Book Chapter).
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Expert Lectures

- Expert Lecture on "Water Saving", 2019 at BIET, Jhansi.
- Expert Lecture on "Use of Plastic Waste", 2019 at MITS, Gwalior.
- Expert Lecture on "Hydrology", 2019 at AMITY University, Gwalior.
- Expert Lecture on "Green Building", 2016 at MITS, Gwalior.
- Expert Lecture on "Application of GIS in Water resources", 2014 at MITS, Gwalior.
- Expert Lecture on "Utilization of Waste Material in Construction", 2013 at MITS Gwalior.
- Expert lecture on "STTP OF Waste Water Management about Numerical modelling", 2005 at MITS, Gwalior.
- Expert Lecture on "Use of Optimization Techniques in Construction Industry", 1995 at MITS, Gwalior.



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