

Dilip A Patel

B.E., M. Tech., LL.B., Ph.D.

Lead Auditor(OHSMS)

Affiliation

Assistant Professor, Civil Engineering Department,

Associate Dean (Planning & Development), Estate Section,

Sardar Vallabh National Institute of Technology (SV-NIT) Surat (C/o. MHRD, Govt of India, New Delhi), Ichchhanath, Surat-395007, Gujarat, India

Email: dap@ced.svnit.ac.in (M):+91 99982-77731 (O): +91 261 2201823

Specialization

Construction Project Management

Research Interest

Construction Safety, Demolition, Underground Utilities, Valuation, Legal Affairs and Dispute Resolution.

Academic History

- Doctor of Philosophy, Department of Civil Engineering, Indian Institute of Technology Delhi (July 2012 – July 2015)
- Bachelor of Law (General), V.T. Choksi Sarvajanic Law College, Veer Narmad South Gujarat University Surat Gujarat (June 2010 - May 2012)
- Master of Technology in Construction Project Management, Centre for Environmental Planning & Technology (CEPT), Ahmedabad (June 2001 - June 2003)
- Bachelor of Civil Engineering, Government Engineering College (GEC) Modasa, Gujarat (July 1997 - June 2001)

Professional Course

- Lead Auditor OHSMS, Bureau of Indian Standards, Govt. of India, New Delhi (March 2014)

Career History

- Assistant Professor, Civil Engineering Department, S. V. National Institute of Technology Surat, Gujarat (Sep. 2007 - continue)
- Assistant Professor, Civil Engineering Department, Government Polytechnic Palanpur, Gujarat (March 2005 – Sep. 2007) (through Gujarat Public Service Commission(GPSC), Ahmedabad)

- Project Executive, Electro Steel Infrastructure Services (EIS), Electro Steel Casting Ltd (ECL). Kolkata (June 2003 - March 2005) (through campus placement)

Relevant Scholarship and Award

- A Research Scholarship awarded by Ministry of Urban Development(MoUD), New Delhi through Transportation Research and Injury Prevention Programme (TRIPP), IIT Delhi for year 2012-13, 2013-14 and 2014-15
- A Research Scholarship awarded through Quality Improvement Programme (QIP), AICTE, New Delhi for year 2012-13, 2013-14 and 2014-15
- A Fellowship awarded by DGUV Germany to participate XX World Congress on Safety and Health at Work Place at Frankfurt, Germany during 24-27 August, 2014
- Selected and posted as a Deputy Project Executive in Gujarat Water Supply and Sewerage Board (GWSSB), Bhuj, Undertaking by Govt. of Gujarat, Gandhinagar (2010)
- Selected and posted as a Field Executive in ONGC Mehsana (2009)

Publications in Referred Journals and Conferences

Accepted/Published

1. Patel, D. A., and Jha, K. N. (2016). "Evaluation of construction projects based on the safe work behavior of co-employees through a neural network model." *Safety Science*, 89, 240-248. Elsevier. 10.1016/j.ssci.2016.06.020 (Impact factor: 2.157)
2. Patel, D. A., and Jha, K. N. (2017). "Developing a Process to Evaluate Construction Project Safety Hazard Index Using the Possibility Approach in India." *Journal of Construction Engineering and Management*, ASCE, 143(1), 10.1061/ (ASCE) CO.1943-7862.0001205 , 04016081
3. Patel, D. A., Kikani, K. D., and Jha, K. N. (2016). "Hazard assessment using consistent fuzzy preference relations approach." *Journal of Construction Engineering and Management*, ASCE, 10.1061/(ASCE)CO. 1943-7862.0001192 , 04016067. (Impact factor: 1.152)
4. Patel, D. A., and Jha, K. N. (2016). "Structural equation modeling for relationship based determinants of safety performance in construction projects." *Journal of Management in Engineering ASCE*, 10.1061/ (ASCE) ME.1943-5479.0000457, 05016017. (Impact factor: 1.840)
5. Patel, D. A., and Jha, K. N. (2015). "A neural network approach for prediction of safety climate." *Journal of Management in Engineering ASCE*, 30(6), 05014027. (Impact factor: 1.840)

6. Patel, D. A., and Jha, K. N. (2015). "Neural network model for the prediction of safe work behavior in construction projects." *Journal of Construction Engineering and Management ASCE*, 141(1), 04014066 (Impact factor: 1.152)
7. Patel, D. A., and Joshi, G. J. (2013). "Selection of a water pipe through MADM approach." *Journal of Construction Management*, 28(2), 33-42.
8. Dhamaniya, A., and Patel, D. A. (2011). "Road traffic air pollution level in Surat city: A GIS approach." *International Journal of Information Technology and Network Application*, 1(2), 59-65.
9. Patel, D. A., and Modhera, C. D. (2010). "Evaluation of construction projects by earned value analysis." *Journal of Construction Management*, 24(1), 78-88.
10. Reddy, S., Patel, D. A., and Jha, K. N. (2010). "Safety management systems and Indian construction industry." *Journal of Construction Management*, 25(5), 18-34.
Under Review
11. Patel, D. A., and Jha, K. N. (2015). "An estimate of fatal accidents in Indian construction." *International Journal of Injury Control and Safety Promotion*, Taylor and Francis. (Impact factor: 1.047)
12. Vyas, G. S., Patel, D. A., and Jha, K. N. (2015). "Fuzzy approach for developing green building rating system – A case of India." *Journal of Construction Engineering and Management*, ASCE. (Impact factor: 0.842)

Book Review or Article

1. Jha, K. N., and Patel, D. A. (2015). "Cost of accident: What and why?" *Industrial Safety Chronicle, National Safety Council of India*, 46, 30-33.
2. Patel, D. A. (2011). "Construction of Project Management: Theory and Practice by Dr. Kumar Neeraj Jha published by Pearson Education Pvt. Ltd., New Delhi, India" *Journal of Construction Management*, 26(2), 79-80.

Referred Conference Proceedings

1. Shantwna, D., and Patel, D.A. (2017). " A framework to evaluate urban underground utility complexity index using the Delphi method and analytic hierarchy process." Proceedings, Annual Conference of Canadian Society for Civil Engineering (CSCE), Vancouver, Canada (31st May- 3rd June, 2017).
2. Patel, D. A., and Jha, K. N. (2016). "An estimation of fatal accidents." Proceedings, 32nd Annual Conference of Association of Researchers in Construction Management (ARCOM), Manchester, UK.
3. Vyas, G. S., Patel, D. A., and Jha, K. N. (2016). "Enhancement of greenness of new construction using through DEA." Proceedings, 32nd Annual Conference of Association of Researchers in Construction Management (ARCOM), Manchester, UK.

4. Tripathy, P., Gupta, G., Chauhan, K.A., Patel, D. A. (2016). "E Governance: A critical factor for Indian smart cities- status, challenges, and issues." International Conference on Smart Sustainable Cities, Velagapudi R.S. Engineering College, Vijayawada, *Asian Pacific Journals*, ISBN: 978-81-930411-7-8.
5. Patel, D. A., and Jha, K. N. (2014). "Prediction of safety climate through neural network." *Proceedings, International Conference on Construction Research Congress (CRC)*, Georgia Institute of Technology, Atlanta, USA.
6. Patel, D. A., Vyas, G. S., and Jha, K. N. (2012). "The role of employer in construction safety in context to Indian legislation." *Proceedings, the 3rd International Conference on Construction in Developing Countries (ICCDC III)*, Bangkok, Thailand.
7. Vyas, G. S., Patel, D. A., and Jha, K. N. (2012). "Comparative study of rating systems for green building in developing and developed countries." *Proceedings, the 3rd International Conference on Construction in Developing Countries (ICCDC III)*, Bangkok, Thailand.
8. Patel, D. A., and Jha, K. N. (2012). "Evaluation of construction projects in terms of cost, schedule and safety performance." *Proceedings, International Conference on Modeling and Building Health and Safety*, National University of Singapore, Singapore.
9. Patel, D. A., and Jha, K. N. (2012). "A comparative study of OSHA 1970 and BOCW 1996." *Proceedings, International Conference on Modeling and Building Health and Safety*, National University of Singapore, Singapore.
10. Patel, J., and Patel, D. A. (2012). "Assessment of fire safety management in urban area." *Proceedings, the National Conference on Technology and Management (NCTM)*, Sankalchand Patel College of Engineering, Visnagar.
11. Patel, D. A., and Katti, B. K. (2010). "Evaluation of BRTS project by earned value analysis approach." *Proceedings, the International Conference on Infrastructure Finance (ICIF)*, Indian Institute of Technology, Kharagpur.
12. Patel, D. A., and Shah, N. C. (2010). "Laws and infrastructure development." *Proceedings, the National Conference on Sustainable Urban Infrastructure Development (SUID)*, Visvesvaraya National Institute of Technology, Nagpur.
13. Patel, D. A., and Mandwara, J. P. (2010). "Trench lying by HDD: A trenchless method." *Proceedings, the National Conference on Emerging Technologies and Applications*, Baldev Ram Mirdha Institute of Technology, Jaipur.
14. Mandwara, J. P., and Patel, D. A. (2010). "Intelligent transport system for improving urban public transport: A case study of Mysore city." *Proceedings, the National*

Conference on Emerging Technologies and Applications, Baldev Ram Mirdha Institute of Technology, Jaipur.

15. Patel, D. A., and Kale, G. D. (2008). "Public private partnership in sanitation." *Proceedings, the National Conference on Sustainable Urban Environment: Issues and Management Strategies*, Sardar Vallabhbhai National Institute of Technology, Surat.
16. Patel, D. A. (2007). "Public private partnership in road safety management. Paper presented at the National Conference on Sustainable Urban Transportation: Issues and Management Strategies, Sardar Vallabhbhai National Institute of Technology, Surat.
17. Vyas, G. S., Patel, D. A., and Jha, K. N. (2016). "Development of a ranking algorithm for the green building attributes: A case of Indian cities." *Proceedings, 5th International Symposium on Life-cycle Civil Engineering*, Delft University of Technology, Delft, Netherlands [Life –Cycle of Engineering Systems: Emphasis on Sustainable Civil Infrastructure- Bakker, Frangopol & Van Breugel (Eds) Taylor & Francis Group, London, ISBN 978-1-138-02847-0, Pp:896-900].
18. Navandar, Y.V., Dhamaniya, A., and Patel, D. A.(2016). "An Approach of Estimating Vehicle Equivalency Factors at Toll Booth in India." *Proceeding of 12th Transportation Planning and Implementation Methodologies for Developing Countries (TPMDC 2016)*, Transportation Systems Engineering group, IIT Bombay, during 19-21 December 2016.

Presented in Conference but not published in Proceedings

1. Dongre,P., Jha, K.N., and Patel, D. A.(2017) "Structural Equation Modelling of work injuries in the construction sector." *International Conference on Safety(Jan.3-4,2017)*, Safety Centre, Indian Institute of Technology, Gandhinagar.
2. Patel, D. A., and Katti, B. K. (2012). "Prediction of the remaining duration of the project during execution of the project." *The International Conference and Workshop on Sustainable Architecture and Urban Design (ICWSAUD)*, University Sains Malaysia, Penang, Malaysia
3. Patel, D. A., Mistry, N. J., and Dhamaniya, A. (2010). "Flood management in Surat city - Gujarat." *The International Congress on Environmental Research (ICER)*, University of Mauritius, Reduit, Mauritius.
4. Dhamaniya, A., and Patel, D. A. (2010). "Road traffic air pollution level in Surat city." *The International Congress on Environmental Research (ICER)*, University of Mauritius, Reduit, Mauritius.

5. Kale, G. D., and Patel, D. A. (2009). "Impact assessment of soil erosion using geo-spatial techniques and RUSLE in a watershed." *The Association of Hydrologists of India, Gujarat Chapter*, Maharaja Sayajirao University, Vadodara.

Dissertation Guided

1. "Analysis of Bus Rapid Transit Project under Execution & Modeling of Project Completion Time: A Case Study" by Mrunal D. Vithalpura, TEP (2008-09)
2. "Fuzzy Delay Risk Modeling of Public Private Partnership in Indian Context" by Rinkesh M Rathi, TEP (2010-11)
3. "Planning Proposal for Vadodara City based on Quality of Life Index" by Jignesh N Patel, Urban Planning (2011-12)
4. "Highway Construction Project Risk Modeling with Reference to Overburden Cost" by Darshan M Patel, TEP (2011-12)
5. "Planning Proposal for Fire Safety Infrastructure Facilities – Special Reference to Surat City" by Jigar Patel, Urban Planning (2011-12)
6. "Development of Parking Demand Forecasting Model at Railway Terminal – A Case Study of Surat" by Radhika Marvaniya, TEP (2011-12)
7. "Formulation of Urban Underground Utility Complexity Index (UUUCI) using Delphi method and Analytic Hierarchy Process (AHP)" by Shantwna Dixit, UP(2015-16)
8. "E Governance Performance Assessment for Urban Local Body of Surat City: Qualitative Comparative Analysis" by Gunjan Gupta, UP (2015-16)
9. "Fire Safety Facilities in High Rise Residential Buildings A Case Study of Surat City" by Amit J Nayak, UP (2015-16).

Research project

1. Preparation of State of the Art Report (SOAR) on Preparation of Construction Safety manual. Ministry of Road Transport and Highways, Government of India, New Delhi, Cost of Project:Rs.8.3690 Lakh

Membership

1. Life Time Membership in National Safety Council of India (NSCI), Navi Mumbai (LM-GJT-113)
2. Life Time Membership in The Indian Society For Technical Education (ISTE), New Delhi (LM 57568)
3. Life Time Membership in Operation Research Indian Society (ORIS), Kolkata (o818/P/09/ML)
4. Life Time Membership in Wind Engineering, IIT Roorkee (459/Life membership)

5. Life Time Membership in Indian Road Congress (IRS), New Delhi (LM-36815)
6. Life Time Membership in Associate Membership, Institute of Engineers, Kolkata, (AM099128-5)
7. Life Time Membership in Association of Civil Engineers, Surat (ICEA /ALM/608/11-12)

Selected Consultancy Work

1. Consultancy work of evaluation of partially constructed reactor clarifier at KGPP Plant, NTPC Ltd, Kawas Gas Power Project, Surat (Rs.40,000.00)
2. Consultancy work of health monitoring and retrofitting work of ESIC Hospital, Naroda, Ahmedabad (Rs.2,00,000.00)
3. Third party inspections of different buildings of SMC Surat (Rs.2,00,000.00 approximate)
4. Investigation of fall down compound of new guest house, Dadra Nagar Haveli, Selvasa (Rs. 50,000.00)
5. Safety audit of a bridge construction project across the Mahi river, Gammon India, Dedicated freight Corridor of India Ltd. New Delhi. (Rs.20,000)
6. Development of 'Truck Parking Mall' under PPP model for Kandla Port Trust(KPT), Kandla
7. Development of 'Public Bicycle Sharing' project under PPP model for Surat Municipal Corporation, Surat
8. Investigation of Collapse of Compound Wall of the Government Guest House, Selvass (UT) (Rs. 50,000.00) for the Police Department.

Editorial Review Work

1. Reviewer, Journal of Construction Engineering and Management in Engineering, ASCE
2. Reviewer, Journal of Management in Engineering, ASCE
3. Reviewer, Journal of Sustainable Cities and Society, Elsevier
4. Reviewer, Journal of Construction Economics and Building
5. Reviewer, Alexandria Engineering Journal, Elsevier
6. Reviewer, National Conference on Recent Advance in Civil Engineering (RACE), SV-NIT Surat, March 5-6, 2016
7. Session Chair, National Conference on Recent Advance in Civil Engineering (RACE), SV-NIT Surat, March 5-6, 2016
8. Reviewer, Dissertations of M Tech Students, Gujarat Technical University (GTU), Ahmedabad

Additional Professional Training

1. Lead Auditor OHSMS, 24-28 March, 2014, Bureau of Indian Standards, Govt. of India, New Delhi
2. International Course on Transportation Planning and Safety, 3-10 December, 2013, Transport Research and Injury Prevention Programme (TRIPP), India Institute of Technology Delhi, New Delhi
3. International Workshop on Research of Safety, 11 December, 2013, Transport Research and Injury Prevention Programme (TRIPP), India Institute of Technology Delhi, New Delhi
4. Application of GIS, RS and Computer Models for Water Resources Management, 19-24 March, 2007, ISTE-AICTE-Nirma University Ahmedabad
5. Induction Training Programme, 15-17 January, 2008, EQUATE New Delhi and SVNIT, Surat
6. Computerized Project Management, 25-29 February, 2008, NICMAR Ponda, Goa
7. Modern Construction Project Management, 10-15 March, 2008, Indian Institute of Technology Delhi
8. Life Skills for Engineers, 16-21 June, 2008, Nirma University Ahmedabad
9. Advanced Engineering Optimization through Intelligent Techniques, 30 June to 4 July, 2008, AICTE
10. New Delhi and Mechanical Engg. Dept., SVNIT, Surat.
11. Software Application and Web Based Learning Tools in Structural Engineering, 7-11 July 2008, AICTE New Delhi and Applied Mechanic Dept., SVNIT, Surat.
12. Management and Mitigation of Natural Disasters, 14-26 July, 2008, MHRD and AICTE New Delhi, Structural Engineering Department, MNIT Jaipur
13. Solid and Hazardous Waste Management, 15-19 December, 2008, AICTE New Delhi and SVNIT Surat
14. Advance in Water Resources Engineering, 22-26 December, 2008, AICTE New Delhi and SVNIT Surat
15. Pavement and Road Design System, 29 December, 2008- 2 January, 2009, AICTE New Delhi and SVNIT Surat
16. Pedagogy & Research Methodology, 19-23 January, 2009, AICTE New Delhi and SVNIT Surat
17. Management Science and Practices, 14- 16, February, 2009, IIM Ahmedabad and ORSI Kolkata
18. Advanced Research Techniques in Urban Planning and Management, 13-17 July, 2009, AICTE New Delhi and SVNIT Surat

19. Sustainable Water and Waste Management Techniques, 27- 31 July, 2009, AICTE New Delhi and SVNIT Surat
20. Workshop on Research Proposal and Report Writing, 18 Sep., 2009, IIM Ahmedabad
21. Recent Trends in Urban Transportation Planning, 5-9 October, 2009, AICTE New Delhi and SVNIT Surat
22. Engineering Drawing using CAD, 23-27 November, 2009 AICTE New Delhi and SVNIT Surat
23. Sustainable Environmental Planning, 30 Nov. 4 Dec. 2009, AICTE New Delhi and SVNIT Surat
24. Discrete Choice Modeling, 21-25 Dec., 2009, AICTE New Delhi and SVNIT Surat
25. Recent Advance in Concrete Technology, 25- 29 Jan., 2010, AICTE New Delhi and SVNIT Surat
26. Sustainable Housing for All through Real Estate, CREDAI New Delhi
27. Theory and Practices in CPM, 5-9 July, 2010, IIT Delhi
28. Safety and Environmental Practice in Construction Projects, 11-15 July, 2011, IIT Delhi
29. Patent Awareness, 16 September, 2011, ED cell, SVNIT Surat
30. Symposium on OSH in Construction Industry-Problems to Solution, 23-24 Sep., 2014, DGUV Germany, Indian Habitat Centre New Delhi
31. Effective Teaching Learning, 8-10 Sep., 2015, NITTTR Bhopal and SVNIT Surat
32. Assessment Tools for NBA Accreditation, 2-3 Nov., 2015, NITTTR Bhopal and SVNIT Surat
33. Performance Evaluation of Housing Units, 21-22 July, 2017, IIT Kanpur Extension Centre, Noida.

Organized Short Term Training Programme

1. A Short Term Training Organized on “Basic of Computer and ROR Software” for Talatis and Mamlatdars at Collectorate office, Palanpur, Gujarat
2. A National Level Workshop on “Urban Land Management: Policies and Practices (ULMPP)” on 24-25 May, 2008 at SV-NIT Surat
3. A Workshop on Curriculum Development of Construction Technology and Management during 21-22 January, 2009 at SV-NIT Surat
4. A National Level Short Term Development Programme on “Urban Infrastructure and Services: Planning and Implementation” during 5-9 January, 2009 at SV-NIT Surat

5. A National Level Short Term Training Programme on “Urban Infrastructure Development and Finance Management” during 15-19 February, 2010 at SVNIT Surat
6. A National Level Conference on “Recent Advances in Traffic Engineering(RATE 12)” during 7-8 June, 2012 at SVNIT Surat in collaboration with DST , IRC New Delhi
7. One day Brain Storming Workshop Organized jointly with Construction Industry Development Council (CIDC), New Delhi “Estimation of Cost of Accident and Safety Budget” on 13 August, 2014 at CIDC, Vishwakarma Pratham, Faridabad, New Delhi
8. A STTP on “Construction and Road Safety management (TEQIP II)” during 26-30, October, 2015
9. Two weeks **Self-financed** STTPs on “Research Methodology for Civil Engineering and Management” during 16-27, May, 2016.
10. Two Day Workshop on Ethics in Technical Education: Challenges and Solutions 18-19, November, 2016.
11. *A GIAN course on “Resilient and Sustainable Infrastructure Systems” during 18-22 December, 2017. Expert: Prof Sunil Sinha, Virginia Tech, USA (Approved)*

Industrial Experience

Company: Electro Steel Infrastructure Services/Electro Steel Casting Ltd., Kolkata
 Position: Project Executive

1. Project: Water Distribution System, Sewerage Collecting System, and Water Pumping Station in Dhrangadhra, Dist: Surendranagar, Gujarat (Year 2003)
 Client: Gujarat Urban Development Company Ltd (GUDC), Gandhinagar
 Consultant: Gerzhi Eastern Ltd., Mumbai
 Cost of Project: Rs. Ten Crore approximately
2. Project: Clear Water Transmission & Distribution Mains for Mangalore City (Year 2004)
 Client: Karnataka Urban Infrastructure Development and Finance Corporation Ltd. (KUIDFC)/Mangalore City Corporation (MCC), Mangalore.
 Cost of project: Rs. Eighteen Crore approximately
 Consultant: Dalal Consultant & Engineers Ltd., Mangalore
3. Project: Sufalam-Sujalam Yojana (Year 2004-05)
 Client: GWSSB, Gandhinagar
 Cost of Project: Rs. Fourty Crore approximately
 Consultant: EIL, New Delhi
