

PUBLICATIONS

INTERNATIONAL PUBLISHED

- (i) Sarkar, D. and Dutta, G. (2010) “Design and Application of Risk Adjusted Cumulative Sum for Strength Monitoring of Ready Mixed Concrete” *Journal of Construction Engineering and Management, ASCE*. Vol. 136 (6), pp 623 – 631
- (ii) Sarkar, D. (2011) “Formulation of Project Risk Management Model for Mass Rapid Transit System Project” *1st Annual International Conference on Construction*, Athens Institute of Education & Research (ATINER), Athens, Greece.
- (iii) Sarkar, D. (2011) “Simulation Application in Project Risk Management for Infrastructure Transportation Project” *International Journal of Project Organization and Management*, Inderscience Publications, UK. Vol. 3(3 /4), pp. 374 -392
- (iv) Sarkar, D. and Dutta, G. (2011) “A Framework for Project Risk Management for the Underground Corridor Construction of Metro Rail” *International Journal of Construction Project Management*, Vol. 4(1), pp. 21-38
- (v) Sarkar, D. (2011) “Decision Tree Analysis for Risk Mitigation Options for Underground Corridor Metro Rail Project” *International Journal for Decision Sciences and Risk Management*, Inderscience Publications, UK, Vol. 4, Nos. 1 /2, pp. 25 – 37
- (vi) Sarkar, D. (2013) “Proactive Statistical Process Control for Quality Monitoring of RMC” *Proceedings of 1st Annual Conference in Civil Engineering and Architecture*, Global Science And Technology Forum, Singapore.
- (vii) Sarkar, D. and Shah, D (2013) “A framework for Application of Genetic Algorithm in Productivity Optimization of Highway Equipments Using Evolver Software” *European Int. Journal of Science & Technology*, Vol. 2(5), pp. 151 – 163
- (viii) Sarkar, D and Yadav, S. (2013) “Combined interpretative structural modeling and expected value method approach for managing project risks in oil exploration projects” *International Journal for Decision Sciences and Risk Management*, Inderscience Publications, UK, Vol. 5(1), pp. 35 - 54

- (ix) Sarkar, D and Yadav, S. (2014) “A Framework for project risk and uncertainty management for oil exploration projects” *Proceedings of International Conference on Energy & Infrastructure 2014*, Pandit Deendayal Petroleum University, Gandhinagar.
- (x) Sarkar, D. and Bhattacharjee, B. (2014) “Application of Multivariate CUSUM for Quality Monitoring of Ready Mixed Concrete” *Int. Journal of Quality Engineering & Technology*, Vol. 4(2), pp. 161-179. Inderscience Publishers, UK.
- (xi) Sarkar, D and Bhusan, M (2014) “Application of Bootstrap Technique and Genetic Algorithm for Resource Optimization of Bridge Projects” *Int. J. of Latest Technology in Engineering Management* , Vol. (III) (III), pp. 109-118.
- (xii) Sarkar, D and Yadav, S. (2014) “A Framework of Project Risk and Uncertainty Management for Oil Exploration Projects” *Proceedings of Int. Conference on Energy & Infrastructure 2014*, School of Petroleum Management, PDPU.
- (xiii) Sarkar, D. (2014) “Development of Sustainable Green Project Risk Management Model For Infrastructure Transportation Project” *Proceedings of Int. Conf. on Sustainable Development*, July 5 -7th, Bangkok, Thailand.
- (xiv) Sarkar, D (2014) “Evaluating Crane Safety Factors for Construction of Underground Metro Rail Project” *Proceedings of International Conference on Safety (ICS 2014)*, 3-4th December, IIT Gandhinagar,

NATIONAL PUBLISHED

- (i) Sarkar, D. and Bhattacharjee, B. (2003) “Quality monitoring of ready mixed concrete using cusum system” *Indian Concrete Journal*, Vol 77 (2), pp 1060-1065
- (ii) Sarkar, D. (2004) “Temporary retaining and supporting structures for underground corridor construction” *Proceedings of Regional Seminar in Construction & Project Management*, CEPT University, Ahmedabad
- (iii) Sarkar, D. and Nagesh, M. (2006) “Enabling Structures for Ground Improvement for Construction of Underground Metro Rail Corridor” *Civil Engineering & Construction Review*, Vol. 19 (2), pp 41 - 46
- (iv) Sarkar, D. and Nagesh, M. (2006) “Enabling Structures for Construction of Underground Corridor with special Focus on Productivity” *NICMAR Journal of Construction Management*, Vol. XXI (I), pp 1 -7

- (v) Sarkar, D. and Thaker, M (2007) “Operating Characteristic Curves : Design and Application for Online Quality Monitoring of Ready Mixed Concrete” *NICMAR Journal of Construction Management*, Vol. XXII (III), pp 46 - 56
- (vi) Sarkar, D. and Thaker, M. (2007) “An Application of OC Curves in Online Strength Monitoring of RMC” *New Building Materials & Construction World*, Vol 12 (12), pp. 130 -139
- (vii) Sarkar, D. (2007) “Formulation of Risk Adjusted Cusum for Online Quality Monitoring of Ready Mixed Concrete” *NICMAR Journal of Construction Management* , Vol. XXII (IV), pp 5 - 16.
- (viii) Sarkar, D. (2008) “A Framework for Development of Quality Control Model for Indian RMC Industry, *New Building Materials & Construction World*, Vol. 14 (6), pp 144 -161
- (viii) Sarkar, D. and Akalkotkar, P.V. (2008) “A Framework for Selection of Appropriate Housing Technology and Materials for EWS Housing” *New Building Materials & Construction World*, Vol. 14 (4), pp 64 -71
- (ix)
- (x) Sarkar, D. and Thaker, M.(2009) “Application of Structural Equation Modeling for Project Risk Time Cost Behaviour and Optimization for Underground Corridor Metro Rail” *Proceedings of National Seminar on Role of Management Science in Decision Making*, Institute of Management Technology, Nagpur, pp. 369 -379
- (xi) Sarkar, D. and Dutta , G. (2009) “Optimum Design of Control Charts for Indian RMC Industry” *New Building Materials & Construction World*, Vol. 14 (12), pp 122 - 130
- (xii) Sarkar, D. (2009) “EWMA and CUSUM Control Charts for Online Strength Monitoring of Ready Mixed Concrete” *The Journal of Institution of Engineers (India)*, Vol. 90, pp 19 - 23
- (xii) Sarkar, D. and Dutta, G. (2009) “Economic Design of CUSUM Control Charts for Indian Ready Mixed Concrete Industry” *NICMAR Journal of Construction Management*, Vol. XXIV (III) pp 22 – 27
- (xiv) Sarkar, D. (2009) “Project Risk Management Model for Metro Rail Inventory” *Proceedings of National Conference of Operations Management Society*, Dept. of Management Studies, IIT Madras.
- (xv) Sarkar, D. (2010) “Project Risk Assessor Model (PRAM) for Underground Corridor Construction of Metro Rail: A Case Study of Delhi Metro” *New*

Building Materials & Construction World, Vol. 15(11) pp. 190 – 204

- (xvi) Sarkar, D, (2010) “Effect of Local Environment Factors in Selection of Green Building Materials and Technology: A Case Study of a Commercial Complex in Ahmedabad” *New Building Materials & Construction World*, Vol. 16(2) pp. 132 – 140
- (xvii) Sarkar, D. and Shah, M. (2011) “Environmental Analysis of GWR Systems for Residential Projects” *New Building Materials & Construction World*, Vol. 17(4) pp. 170 – 175.
- (xviii) Sarkar, D. and Kamdar, P. (2011) “Application of Simulation in Evaluation of Travel Time Performance of Bus Rapid Transit System, Ahmedabad” *Journal of Institution of Engineers*, Vol. 92, pp 9-13
- (xix) Sarkar, D. and Shah, M. (2011) “Grey Water Recycling Systems: A Study of Economic Implications and Potential Applications in Residential and Commercial Projects” *NICMAR Journal of Construction Management*, Vol. XXVI, pp. 5 – 13.
- (xx) Sarkar, D. and Patel, K. (2012) “Project Risk Management Framework for PPP Models for Indian Highway Projects” *Civil Engineering & Construction Review*, Vol. 25 (3), pp 104 -114
- (xxi) Sarkar, D and Shah, S. (2012) “Evaluating Tower Crane Safety Factors for a Housing Project through AHP” *NICMAR Journal of Construction Management*, Vol. XXVII (II & III), pp. 61 -70.
- (xxii) Sarkar, D and Gunjan, B (2014) “Risk Analysis of Elevated Corridor Project Using Failure Mode and Effect Analysis (FMEA) and Combined Fuzzy FMEA” *NICMAR Journal of Construction Management*, Vol. XXIX (2), pp. 5-21

PAPERS ACCEPTED

- (i) Sarkar, D. (2010) “Exponentially Weighted Moving Average Control Charts for Online Quality Monitoring of Highway Projects” *Indian Highways, Indian Roads Congress*
- (ii) Sarkar, D. and Panchal, S. (2014) “Integrated ISM and Fuzzy Approach for Project Risk Management of Ports” *Int. Journal of Construction Project Management*, Nova Sc. Publishers, Canada.
- (iii) Sarkar, D. (2014) “A Framework for Development of Lean Integrated Project Delivery Model for Infrastructure Transportation Project” *Int. Journal of Civil & Structural Engineering*, Integrated Publishing Association.

WORKING PAPERS

- (i) Sarkar, D. and Dutta, G. (2008) “Design and Application of Risk Adjusted Cumulative Sum (RACUSUM) for Online Strength Monitoring of Ready Mixed Concrete” Indian Institute of Management, Ahmedabad W.P. No. 2008-08-01
- (ii) Sarkar, D. and Dutta, G. (2011) “A Framework for Project Risk Management for the Underground Corridor Construction of Metro Rail” Indian Institute of Management, Ahmedabad W.P. No. 2011-02-05

PROFESSIONAL AFFILIATIONS

Member of Institute of Engineers (India)

Annual Member of Indian Roads Congress (IRC)

AWARDS

He has received Gold Medal from IMCC JV, Delhi Metro for “Outstanding Performance Year 2002”.

THESIS GUIDED

M.Tech (Construction & Project Management):

- (i) Quality Monitoring in Construction Industry (Using SQC as a tool), 2004
- (ii) Essentialities of Risk Management in BOT Highway Projects , 2008
- (iii) Risk Based Decision Support System for BRTS Ahmedabad , 2009 (Gold Medal)
- (iv) Development of a Regional Environment Based Green Building Model for a Commercial Complex in Ahmedabad, 2009
- (v) Financial Portfolio Management of Projects for a Real Estate Developer Firm ,2009
- (vi) Evaluation of Travel Time Performance for BRTS Project Ahmedabad, 2010 (Gold Medal)
- (vii) Risk Management of PPP Models in Indian Highway Projects, 2010
- (viii) Applications of Statistical Quality Control in Highway Projects, 2010
- (ix) Risk Management of Ports through Integrated ISM Fuzzy Technique, 2011
- (x) Green Material Selection through Neural Fuzzy Technique, 2011
- (xi) Dependency Structure Matrix for Metro Rail Project, 2011
- (xii) Development of Critical Chain Project Management Model for Metro Rail Project, 2011

- (xiii) Evaluation of Productivity, Safety & Type Selection of Tower Cranes, 2012
- (xiv) Application of Genetic Algorithm in Equipment Selection for Highway Projects, 2012 (Gold Medal)
- (xv) Resource Based Simulation Modeling (RBSM) for Elevated Segmental Construction Project, 2012
- (xvi) Statistical Quality Control and Development of Simulation Model for RMC Batching Plant Productivity, 2012
- (xvii) Evaluating the Usage of BIM as a tool for Facility Management and Virtual Reality, 2012

MBA (Technology Management) Thesis Guided:

- (i) Risk Management in Oil and Gas Sector, 2010 (Gold Medal)
- (ii) Uncertainties in Scope and Design for Construction Projects, 2010

PhD Thesis Under Progress:

- (i) Development and Management of Solar BRTS Model for Ahmedabad (2013).
- (ii) Framework for development of Project Risk Management Model for Elevated Corridor Metro Rail Projects (2014).
- (iii) Risk Allocation in Development of Public Private Partnership Models for Infrastructure Projects (2014).

Research / Consultancy Projects Completed:

Period	Sponsoring Organisation	Title of Project
2006 - 2007	Sintex Industries Ltd	Research Project on Appropriate Housing Technology Selection for Economically Weaker Section (EWS) Housing
2007 - 2008	Sintex Industries Ltd	Research Project on Openings and Fenestrations of LIG, MIG, MIG Housing
2007 - 2009	Sintex Industries Ltd	Research Project on Prefabricated buildings with Continuous Sandwich Panels

Consultancy Projects:

Period	Organisation	Nature of Work
2005 – 2013	Ahmedabad Municipal Corporation (AMC)	Project management consultancy of Sabarmati River Development Front
2006- 2013	Ahmedabad Janmarg Ltd / AMC	Project management consultancy of Bus Rapid Transit System