

Profile Page

Research Interests :

Reliability and Maintenance management, Fuzzy Decision Making, Quality Management, Modeling & Simulation, Supply chain Management, Operation Management, Thermal Power Plant

Other Profile Links :

Google Scholar Link :

Dilbagh Panchal [Click Here](#)

Personal Web Link :

Research Gate [Click Here](#)

Vidwan [Click Here](#)

ORCID [Click Here](#)

Journal Publications :

Year	Journal	Publication
2022	International Journal of Industrial and Systems Engineering, Inderscience Publication, Accepted (Scopus Indexed)	Dinesh kumar kushwaha, Dilbagh Panchal, Anish Sachdeva (2022). An integrated framework based on Intuitionistic fuzzy FMEA, COPRAS and TOPSIS for risk assessment in process industry
2022	Journal of Quality in Maintenance Engineering, Emerald Publication, Accepted (ESCI)	Nand Gopal, Dilbagh Panchal (2022). A structured framework for performance optimization using JBLTO, FCOPRAS and FCODAS methodology
2022	International journal of Applied Soft Computing, Elsevier Publication, Volume 124, pp. 109056 (Impact factor 8.263) (SCI)	Dinesh Kumar Kushwaha, Dilbagh Panchal, Anish Sachdeva (2022). Intuitionistic fuzzy modelling-based integrated framework for performance analysis of juice clarification unit
2021	International Journal of Six Sigma and Competitive Advantage, DOI Number:10.1504/IJSSCA.2021.10 040116 (Scopus Index)	Janpriy Sharma, Mohit Tyagi, Dilbagh Panchal, Ravi Pratap Singh (2021). Contemplation of food industry attributes confronted in smooth adoption of Lean Six Sigma practices.
2021	International Journal of Facta Universitatis, Series: Mechanical Engineering of FACTA, Volume 19(2), pp. 307-333 (Impact factor 4.662) (SCI)	Nand Gopal, Dilbagh Panchal (2021). A structured framework for reliability and risk evaluation in the milk process industry under fuzzy environment.
2021	International Journal of Cleaner Production, Elsevier Publication, Volume 313, pp. 127827 (Impact factor 11.072) (SCI)	Dilbagh Panchal, Prasenjit Chatterjee, Rohit Sharma, Rajiv Kumar Garg (2021). Sustainable oil selection for cleaner production in Indian foundry industries: A three phase integrated decision-making framework.

2021	International Journal of Intelligent Systems, Wiley Publication, DOI Number:10.1002/int.22507 (Impact factor 8.993)(SCI)	Dilbagh Panchal, Prasenjit Chatterjee, Dragan Pamucar, Morteza Yazdani (2021).A novel fuzzy-based structured framework for sustainable operation and environmental friendly production in coal-fired power industry.
2021	International Journal of Quality & Reliability Management, Emerald Publication, DOI Number: 10.1108/IJQRM-10-2019-0320 (ESCI)	Indraneel Das, Dilbagh Panchal, Mohit Tyagi (2021). A novel PFMEA-Doubly TOPSIS approach-based decision support system for risk analysis in milk process industry.
2021	International Journal of Operational Research in Engineering Sciences: Theory and Applications , PKP Publication, Volume 4(1),pp. 38-66 (Scopus Index)	Mohit Tyagi, Dilbagh Panchal, Deepak Kumar, RS Walia (2021). Modeling and Analysis of Lean Manufacturing Strategies Using ISM-Fuzzy MICMAC Approach.
2021	International journal of mathematics in operational research, Inderscience Publication, DOI Number:10.1504/IJOR.2021.1003 9386 (Scopus Index)	Dilbagh Panchal (2021). Improving healthcare services in Trauma Emergency Centre for patient safety under COVID-19 pandemic crises.
2020	International Journal on Trends in Biomaterials & Artificial Organs, Volume 34(1),pp. 20-32 (Scopus Index)	Prasenjit Chatterjee, Dilbagh Panchal, Shankar Chakraborty (2020). A Developed Meta-model for Biomaterials Selection
2019	International journal of system assurance engineering and Management, Springer Publication, Volume 10(1), pp.44-56 (ESCI)	Dilbagh Panchal, Priyank Srivastava (2019).Qualitative analysis of CNG dispensing system using fuzzy FMEA–GRA integrated approach
2019	International journal of Applied Soft Computing, Elsevier Publication, Volume 74, pp.242-254 (Impact factor 8.263) (SCI)	Dilbagh Panchal, Anupam K Singh, Prasenjit Chatterjee, Edmundas Kazimieras Zavadskas, Mehdi Keshavarz- Ghorabae (2019). A new fuzzy methodology-based structured framework for RAM and risk analysis
2018	International journal of quality and reliability management, Emerald Publication, Volume 35(7),pp. 1459-1476 (ESCI)	Dilbagh Panchal, Sachin Mangala, Mohit Tyagi, Mange Ram (2018). Risk analysis for clean and sustainable production in a urea fertilizer industry
2018	International journal of mathematics in operational research, Inderscience Publication, Volume 12(2), pp. 220-237. (Scopus Index)	Dilbagh Panchal, Umesh Kumar, Priyank Srivastava, Kushal Kamboj, Rohit Sharma (2018). Integrated framework for failure analysis in Automobile industry: a case study from India
2017	International Journal of heat and mass transfer, Volume 53(2),pp.553-567. (Impact factor 2.464) (SCI)	Kushal Kamboj, Gurpreet Singh, Rohit Sharma, Dilbagh Panchal, Jaspreet Hira (2017).Heat Transfer Augmentation In Double Pipe Heat Exchanger by Using Mechanical Turbulators
2017	International journal for Economic computation and economic cybernetics studies and research, Volume 51(3),pp.179-196 (Impact factor 0.973) (SCI)	Dilbagh Panchal, Prasanjeet Chattergi, Rajinder Kumar Shukla, Tanupriya Choudhury, Jolnata Temostallin (2017). Integrated fuzzy AHP-CODAS framework for maintenance decision in urea fertilizer industry

2017	International journal of industrial and system engineering, Inderscience publication, Volume 25(2), pp. 228-250. (Scopus Index)	Dilbagh Panchal, Dinesh Kumar (2017).Risk analysis of compressor house unit in thermal power plant using integrated fuzzy FMEA-GRA approach
2017	International journal of operational research, Inderscience publication, Inderscience Publication, Volume 29(2), pp. 248-272. (Scopus Index)	Dilbagh Panchal, Dinesh Kumar (2017).Maintenance decision making of power generating unit in thermal power plant using combined fuzzy AHP-TOPSIS approach
2017	International journal of system assurance engineering and management, Springer Publication, Volume 8(2), pp.1126-1146. (ESCI)	Dilbagh Panchal, Dinesh Kumar (2017). Stochastic behaviour analysis of real industrial system
2017	International journal logistic systems and management, Inderscience Publication, Vol. 27(3), pp.380-394. (Scopus Index)	Umesh Kumar, Dilbagh Panchal, Anish Dhayia (2017).Change management in Indian pharmaceutical industry: a case study
2016	OPSEARCH, Springer publication, Volume 53(1), pp.16-40. (Scopus Index)	Dilbagh Panchal, Dinesh Kumar (2016).Stochastic behaviour analysis of power generating unit in thermal power plant using fuzzy methodology
2016	International journal of loss prevention in the process industries, Elsevier publication, Volume 40, pp.147-161. (Impact factor 3.916) (SCI)	Dilbagh Panchal, Dinesh Kumar (2017). Integrated framework for behavior analysis in a process plant
2014	12th global congress on manufacturing and management, GCM 2014, Procedia engineering, Elsevier publication, Volume 97, pp.2323-2332, 2014 (Scopus Index)	Dilbagh Panchal, Dinesh Kumar (2014).Reliability analysis of CHU of coal fired thermal power plant using fuzzy λ - τ approach

Conference Publications :

Year	Conference	Publication
2020	International Conference of Industrial and Manufacturing Systems, NIT Jalandhar, Punjab	Nand Gopal, Dilbagh Panchal, 2020. RAM analysis of industrial system of a chemical industry
2020	International Conference of Industrial and Manufacturing Systems, NIT Jalandhar, Punjab	Norma Ranga, Dinesh Khanduja, Dilbagh Panchal, 2020. RAM analysis for improving productivity in process industries: A Review
2020	International Conference of Industrial and Manufacturing Systems, NIT Jalandhar, Punjab	Dinesh Kumar Kushwaha, Dilbagh Panchal, Anish Sachdeva, 2020. Risk analysis of cutting system of a sugar industry under fuzzy environment
2020	International Conference of Industrial and Manufacturing Systems, NIT Jalandhar, Punjab	Prateek Saxena, Dilbagh Panchal and R.K Garg, 2020. An application of fuzzy FMEA for improving service quality in Trauma Emergency Centre
2020	International Conference of Industrial and Manufacturing Systems, NIT Jalandhar, Punjab	Ashish Shukla, Dilbagh Panchal, Anish Sachdeva, 2020. Reliability analysis of hydraulic brake press using fuzzy Lambda-Tau approach
2019	6th International conference on production & industrial Engineering, NIT Jalandhar, Punjab	Indraneel Das, Dilbagh Panchal, 2019. An Application of integrated fuzzy FMEA-TOPSIS approach for risk analysis in process industry

2019	6th International conference on production & industrial Engineering, NIT Jaladhar, Punjab	Mohammad Imran Mansoori, Mohit Tyagi, Dilbagh Panchal and Anish Sachdeva, 2019. Model Development and Assessment for E-Waste Management system in Indian Scenario
2016	4th International conference on production and industrial engineering, CPIE-2016,19-21 December-2016, Dr. B.R Ambedkar NIT-Jalandhar-144011,Punjab India.	Dilbagh Panchal, Salman Khan(2016). Risk analysis of centrifugal pump manufacturing plant
2015	International conference of ICIMPACT, ISBN 274-10-55225-32-2, Nov. 27-29, MANIT, Bhopal, India	Dilbagh Panchal, Dinesh Kumar(2015). Risk analysis of CHU system using FMEA approach
2013	National conference on recent trends in materials engineering, BRCM, Bahal, Haryana India, 4-5, October 2013	Dilbagh Panchal, Dinesh Kumar (2013).Stochastic behaviour analysis of boiler unit of thermal power plant
2013	International conference of ICIE, ISBN 978-93-83083-37-4, Nov.20-22, 2013, NIT Surat, India, pp. 575-583	Dilbagh Panchal, Dinesh Kumar (2013). Maintenance strategy selection for the steam generating unit of the coal fired thermal power plant using fuzzy AHP

Book/Chapter Publications :

Type	Title	Publisher	Authors	ISBN/ISS N No.	Year
Book	Optimization Methods for Engineering Problems	Apple Academic Press- Taylor and Frances Group[Dilbagh Panchal, Prasenjit Chatterjee, Mohit Tyagi, Ravi Pratap Singh	9781774911303	2022
Book Chapter	Operations Management and Data Analytics Modelling	CRC Press-Taylor and Frances Group	Lalit Kumar Awasthi, S. K. Mishra, Dilbagh Panchal, Mohit Tyagi	0-367-75451-7	2022
Book Chapter	Fuzzy FMEA Application in the Healthcare Industry	CRC Press-Taylor and Frances Group	Prateek Saxena, Dilbagh Panchal, Mohit Tyagi	9781003181644	2022
Book	Optimization of Industrial Systems	Wiley-Scrivener	Dilbagh Panchal, Mohit Tyagi, Anish Sachdeva, Dragan Pamucar	? 978-1119750314	2022
Book	Reliability and Risk Modeling of Engineering Systems	EAI/Springer Innovations in Communication and Computing (Scopus Indexed)	Dilbagh Panchal, Prasenjeet Chatterjee, Dragan Pamucar, Mohit Tyagi	10.1007/978-3-030-70151-2	2021
Book Chapter	Reliability analysis of cutting system of sugar industry using intuitionistic fuzzy LambdaTau approach	Elsevier	Dinesh Kumar Kushwaha, Dilbagh, Panchal and Anish Sachdeva	https://doi.org/10.1016/C2019-0-00129-X	2021

Book Chapter	Reliability analysis of cutting system of sugar industry using intuitionistic fuzzy Lambda-Tau approach	Elsevier	Dinesh Kumar Kushwaha, Dilbagh, Panchal and Anish Sachdeva	https://doi.org/10.1016/C2019-0-00129-X	2021
Book Chapter	RAM Analysis of Industrial System of a Chemical Industry	EAI/Springer Innovations in Communication and Computing (Scopus Indexed)	Nand Gopal, Dilbagh Panchal, Mohit Tyagi	10.1007/978-3-030-70151-2_2	2021
Book Chapter	RAM Analysis for Improving Productivity in Process Industries: A Review	EAI/Springer Innovations in Communication and Computing (Scopus Indexed)	Norma, Dinesh Khanduja, Dilbagh Panchal	10.1007/978-3-030-70151-2_10	2021
Book Chapter	Dimensions Modelling for Reliable Indian Food Supply Chains	EAI/Springer Innovations in Communication and Computing (Scopus Indexed)	Janpriy Sharma, Mohit Tyagi, Dilbagh Panchal, Arvind Bhardwaj	10.1007/978-3-030-70151-2_9	2021
Book Chapter	Reliability analysis of cutting system of sugar industry using intuitionistic fuzzy Lambda-Tau approach	Elsevier	Dinesh Kumar Kushwaha, Dilbagh Panchal, Anish Sachdeva	10.1016/B978-0-12-819582-6.0004-6	2021
Book Chapter	A framework development and assessment for cold supply chain performance system: a case of vaccines	Springer, Singapore	Neeraj Kumar, Mohit Tyagi, RK Garg, Anish Sachdeva, Dilbagh Panchal	10.1007/978-981-15-6017-0_22	2021
Book Chapter	A Novel Framework for Evaluation of Failure Risk in Thermal Power Industry	Springer, Singapore	Dilbagh Panchal, Mohit Tyagi, Anish Sachdeva	https://doi.org/10.1007/978-981-13-6476-1_3	2019
Book Chapter	Modeling and Analysis of Critical Success Factors for Implementing the IT-Based Supply-Chain Performance System	Springer, Singapore	Mohit Tyagi, Dilbagh Panchal, Ravi Pratap Singh, Anish Sachdeva	https://doi.org/10.1007/978-981-13-6476-1_4	2019
Book Chapter	A Hybrid MCDM Approach-Based Framework for Operational Sustainability of Process Industry	IGI-Global	Dilbagh Panchal, Prasenjit Chatterjee, Morteza Yazdani, Shankar Chakraborty	10.4018/978-1-5225-8579-4.ch001	2019
Book Chapter	Performance Evaluation of Sustainable Smart Cities in India: An Adaptation of Cartography in PROMETHEE-GIS Approach	IGI-Global	Rajeev Ranjan, Prasenjit Chatterjee, Dilbagh Panchal, Dragan Pamucar	10.4018/978-1-5225-8579-4.ch002	2019

Book	Advanced Multi-Criteria Decision Making for Addressing Complex Sustainability Issues	IGI-Global	Prasenjit Chatterjee, Morteza Yazdani, Shankar Chakraborty, Dilbagh Panchal, Siddhartha Bhattacharyya	10.4018/978-1-5225-8579-4	2019
	Reliability Analysis of Complex Repairable System in Thermal Power Plant	Springer Nature	Dilbagh Panchal, Mohit Tyagi, Anish Sachdeva, R.K Garg	978-3-030-31375-3	2019

Research Projects :

Role	Project Type	Title	Funding Agency	From	To	Amount	Status	Co-Investigator
Principal Investigator	Seed Grant	Performance Analysis of Milk Process Industry	TEQIP Sponsored	2018	2019	1.80	Completed	-

Events Organized :

Category	Type	Title	Venue	From	To	Designation
Faculty Development Program	National	Quality, Reliability and Maintainability Aspects in Industry	NKN Hall, NIT Jalandhar	2/7/2018	6/7/2018	Course Coordinator
Faculty Development Program	National	Contemporary Extent in Industrial Operation	NKN Hall, NIT Jalandhar	6/12/2019	10/12/2019	Course Coordinator
Faculty Development Program	National	Reliability Maintainability and Quality Issues in Process Industries	NIT Jalandhar	4/8/2020	8/8/2020	Coordinator
Faculty Development Program	National	Supply Chain Management: Challenges and Strategies	NIT Jalandhar	13/7/2020	17/7/2020	Convener
Faculty Development Program	National	Industry 4.0 and Smart Manufacturing: Opportunities and Challenges	NIT Jalandhar	20/7/2020	24/7/2020	Convener
Conference	International	International Conference on Industrial and Manufacturing Systems (CIMS-2020)	NIT Jalandhar	9/10/2020	11/10/2020	Organizing Secretary

Professional Affiliations :

Designation	Organization
Life Senior Member	Indian Institution of Industrial Engineering (IIIE), Navi Mumbai

Life Member	The Indian Society for Technical Education (ISTE)
Life Membership	Operational Research Society of India (ORSI) HQ Chapter

PhD Supervised :

Scholar Name	Research Topic	Status	Year	Co-Supervisor
Nand Gopal	Reliability and Maintenance Engineering	In progress	2019	-
Norma	Reliability and Maintenance Engineering	In progress	2019	Prof. Dinesh Khanduja
Dinesh Kumar Khuswaha	Reliability and Maintenance Engineering	In progress	2018	Prof. Anish Sachdeva

PG Dissertation Guided :

Student Name	Dissertation Title	Status	Year	Co-Supervisor
Ashish Shukla	Reliability analysis of Hydraulic Brake Press using fuzzy ?-? approach	Completed	2021	Prof. R.K Garg
Prateek Saxena	An application of fuzzy FMEA for improving healthcare service quality in Trauma Emergency Centre	Completed	2021	Prof. Anish Sachdeva
Indraneel Das	A novel FMEA-Doubly TOPSIS approach based framework for risk analysis in milk process industry	Completed	2019	Dr. Mohit Tyagi
Mohammad Imran Mansoori	Model development and assessment for E-waste management system in Indianscenario	Completed	2019	Dr. Dilbagh Panchal
Kishan Joshi	Uncertainty analysis of power generating unit in thermal power plant using intuitionistic fuzzy methodology	Completed	2019	Prof. Anish Sachdeva

Patents :

Name	Reg./Ref. No.	Date of Award/Filing	Organization	Status
A smart face shield with real time temperature and distance monitoring		20/03/2021		Filed
An impact energy absorption assembly for a four wheeler vehicle	202111028747	25/6/2021		Filed

Admin. Responsibilities :

Position Held	Organization	From	To
Warden (Hostel-6)	NIT Jalandhar	21/2/2018	21/2/2019
Warden (Hostel-3)	NIT Jalandhar	8/3/2021	Till Date
Coordinator- Social and Press Media	NIT-Jalandhar	23/4/2019	Till Date

Award and Honours :

Title	Activity	Given by	Year
The Award of Best Teacher	Teaching and Research	NIT Jalandhar	2020-2021
Gold Medal	For standing first position in M.Tech batch (2009-2011)	NIT-Jalandhar	2012