



Noteworthy Publications by Faculty Members

Sr. No.	Year	Publisher	Name of Staff	Publication Details
1	2023	Elsevier	Prof. P. R. Mehta	Chaotic marine predators algorithm for global optimization of real-world engineering problems
2	2023	Springer	Prof. P. R. Mehta	Performance investigation of a modified single-basin solar distiller by augmenting thermoelectric cooler as an external condenser
3	2023	Elsevier	Prof. P. R. Mehta	A novel hybrid arithmetic optimization algorithm for solving constrained optimization problems
4	2023	De Gruyter-Materials Testing	Prof. P. R. Mehta	Cheetah optimization algorithm for optimum design of heat exchangers
5	2023	De Gruyter-Materials Testing	Prof. P. R. Mehta	A multi-strategy boosted prairie dog optimization algorithm for global optimization of heat exchangers
6	2023	De Gruyter-Materials Testing	Prof. P. R. Mehta	A novel generalized normal distribution optimizer with elite oppositional based learning for optimization of mechanical engineering problems
7	2023	De Gruyter-Materials Testing	Prof. P. R. Mehta	A novel hybrid flow direction optimizer-dynamic oppositional based learning algorithm for solving complex constrained mechanical design problems
8	2022	Elsevier	Dr. G. D. Bassan	Quantitative Analysis and Validation using Computational Approach for Hollow Spherical Roller Bearing 22212E
9	2022	Springer	Dr. G. D. Bassan	Performance improvement and advancement studies of mixed-mode solar thermal dryers: a review
10	2022	Proceeding of ISME Conference	Dr. G. D. Bassan	Feasibility study of foil journal bearing for LH2 turbopumps used in Cryogenic Engine.
11	2022	Emerald	Prof. J. M. Ravalji	Review of Quality Issues and Mitigation Strategies for Metal Powder Bed Fusion
12	2022	De Gruyter-Materials Testing	Prof. P. R. Mehta	A new hybrid artificial hummingbird-simulated annealing algorithm to solve constrained mechanical engineering problems

Sr. No.	Year	Publisher	Name of Staff	Publication Details
13	2022	Springer	Prof. Amit S. Patel	Local neighbor spider monkey optimization algorithm for data clustering.
14	2022	Inderscience	Prof. J. M. Ravalji	Insightful Implementation of Lean Tools to Cultivate Lean Culture in Small Scale Manufacturing Organization a case study
15	2022	De Gruyter-Materials Testing	Prof. P. R. Mehta	Artificial gorilla troops algorithm for plate fin heat exchanger optimization
16	2022	Elsevier	Prof. N. M. Bhavsar	Quantitative Analysis and Validation using Computational Approach for Hollow Spherical Roller Bearing 22212E
17	2022	Taylor and Francis	Prof. P. N. Tank	Experimental investigation of critical heat flux, pressure drop and heat transfer coefficient for the flow boiling in a horizontal lobed channel with R-123
18	2022	Inderscience	Dr. S. J. Raval	Insightful Implementation of Lean Tools to Cultivate Lean Culture in Small Scale Manufacturing Organization a case study
19	2022	De Gruyter-Materials Testing	Prof. P. R. Mehta	African vultures optimization algorithm for optimization of shell and tube heat exchangers
20	2022	Proceeding of ISME Conference	Prof. D. G. Bohra	Feasibility study of foil journal bearing for LH2 turbopumps used in Cryogenic Engine.
21	2022	Springer	Prof. P. R. Mehta	Performance assessment of conventional solar desalination system in Northern part of Gujarat
22	2022	Springer	Prof. P. R. Mehta	Performance improvement and advancement studies of mixed-mode solar thermal dryers: a review
23	2022	De Gruyter-Materials Testing	Prof. P. R. Mehta	Hunger games search algorithm for global optimization of engineering design problems
24	2022	De Gruyter-Materials Testing	Prof. P. R. Mehta	Manta ray for aging optimization algorithm and hybrid Taguchi salp swarm-Nelder-Mead algorithm for the structural design of engineering components
25	2022	De Gruyter-Materials Testing	Prof. P. R. Mehta	Gradient-based optimizer for economic optimization of the fin and tube heat exchanger
26	2022	De Gruyter-Materials Testing	Prof. P. R. Mehta	A Nelder Mead-infused INFO algorithm for optimization of mechanical design problems

Sr. No.	Year	Publisher	Name of Staff	Publication Details
27	2021	Emerald	Dr. S. J. Raval	Analyzing the critical success factors influencing Lean Six Sigma implementation: fuzzy DEMATEL approach
28	2021	Elsevier	Prof. P. R. Mehta	Hybrid Heat Transfer Search and Passing Vehicle Search optimizer for multi-objective structural optimization
29	2021	Springer	Prof. P. R. Mehta	Numerical analysis of multiphase flow in chemical looping reforming process for hydrogen production and CO2 capture
30	2021	Masinski Fakultet Kragujevac	Prof. K. R. Shah	Analysis of Friction and Wear as system response using Indigenously fabricated Tribometer
31	2020	Springer	Prof. P. N. Tank	Pressure drop, local heat transfer coefficient, and critical heat flux of DNB type for flow boiling in a horizontal straight tube with R-123
32	2020	Elsevier	Dr. N. S. Patel	Colloidal PTFE dispersion in commercial engine oil: Lubrication by Pluronic adsorption at the interface
33	2020	Japanese Society of Tribologist	Dr. N. S. Patel	Experimental tribometric characteristics analysis of a ferrofluid based journal bearing system
34	2020	Emerald	Dr. S. J. Raval	Analyzing the Lean Six Sigma enabled organizational performance to enhance operational efficiency
35	2020	Inderscience	Dr. S. J. Raval	On achieving the objectives of Lean Six Sigma by ranking the solutions using hybrid AHP TOPSIS approach under fuzzy environment
36	2020	ISEE	Prof. P. R. Mehta	Mathematical modeling and performance assessment of solar air collector
37	2019	Elsevier	Prof. D. N. Patel	Application of 3D view factor method for heat fluxes deposition on ITER cryostat Thermal Shield
38	2019	Emerald	Dr. S. J. Raval	Benchmarking the Lean Six Sigma performance measures: a balanced score card approach
39	2018	Taylor & Francis	Dr. S. J. Raval	Lean Six Sigma implementation: modelling the interaction among the enablers

Sr. No.	Year	Publisher	Name of Staff	Publication Details
40	2018	Emerald	Dr. S. J. Raval	Revealing research trends and themes in Lean Six Sigma: from 2000 to 2016
41	2017	Elsevier	Dr. N. S. Patel	Experimental performance analysis of ferrofluid based hydrodynamic journal bearing with different combination of materials
42	2017	Emerald	Dr. N. S. Patel	Hydrodynamic journal bearing lubricated with a ferrofluid
43	2017	Emerald	Dr. S. J. Raval	Study on Lean Six Sigma frameworks: a critical literature review

For more details on faculty publications please click the following link

<https://scholar.google.com/citations?user=zbuxepoAAAAJ&hl=en&authuser=3>