

10. Agarwal, S., Lenka, U., & Agrawal, V. (2016). An empirical investigation of self-confidence of Indian women entrepreneurs published in Emerging themes in strategy, pp.104-115, ISBN 978-93-85965-80-7
11. Tiwari, B., and Lenka, U. Intrapreneurship: a key to employee engagement in post-recession. Published in conference proceedings of International Conference on 'Research and Business Sustainability' ICRBS 2015 held on December 4-6, 2015 organized by IIT Roorkee- Greater NOIDA Campus, ISBN: 978-93-84935-59-7
12. Malik, P., and Lenka, U. Impact of HR practices on workplace deviance through perceived organizational support. Published in conference proceedings of International Conference on 'Research and Business Sustainability' ICRBS 2015 held on December 4-6, 2015 organized by IIT Roorkee- Greater NOIDA Campus, ISBN: 978-93-84935-59-7
13. Sahoo, D. K., & Lenka, U (2015). Human resource management intervention a precursor to female employee engagement published as e-proceedings of the International conference on Research and Business Sustainability organized by IIT Roorkee and Sheffield Business School, pp. 638-641, ISBN-978-93-84935-59-7
14. Agarwal, S., & Lenka, U. (2015). An Analysis on Leadership Role: Case of Indian Women Entrepreneur published in Eleventh Biennial Conference on Entrepreneurship, pp. 983-991, ISBN 978-93-80574-77-6.
15. Agarwal, S., & Lenka, U. (2015). Review on Motivational Factors of Women Entrepreneurship published as e-proceedings in Creating Opportunities in Emerging Markets- A Global Approach, pp. 86-96, ISBN 978-81-928678-1-6.
16. Agarwal, S., & Lenka, U. (2015). Factors affecting the involvement of women entrepreneurs to develop self enterprises: An empirical investigation published as e-proceedings in International Conference on Research and Business Sustainability, pp. 602-606, ISBN 978-93-84935-59-7.
17. Himanshu Agrawal, Gaurav Dixit, "Mobile Commerce Research for Individual, Business and Society: Review, Extension & Suggestions for Future Research", International Conference on Smart Cities, IIT Delhi 22-23 Jan 2016
18. Himanshu Agrawal, Gaurav Dixit, "Mobile Commerce Research for Individual, Society and Business", International Conference on Research and Business Sustainability 4-6 Dec 2015, IIT Roorkee

4.14 MATHEMATICS DEPARTMENT

Books/Monographs/Books Chapters

1. M. Jain, Maintainability of machining system with spare provisioning: Markov queueing models, Mathematical Modeling, Optimization and Information, Omprakash (Ed), Lambert Academy Publishers, ISBN: 978-659-71422-1, DOI: 10.13140/RG.2.1.4895.4728 (2015) 349-364
2. M. Jain and G.C. Sharma (2015): Performance modeling of flexible manufacturing systems: An overview, Mathematical Modeling, Optimization and Information, Omprakash (Ed), ISBN: 978-659-71422-1, DOI: 10.13140 /RG. 2.1.4895.4728 (2015) 283-315.
3. M. Jain, Ram Singh and Shoket Ali, Transmission dynamics of HIV/AIDS among female prostitutes: A mathematical modeling approach, Mathematical Modeling, Optimization and Information, Omprakash (Ed), Lambert Academy Publishers, ISBN: 978-659-71422-1, ISBN: 978-659-71422-1, DOI: 10. 13140 / RG.2.1.4895.4728 (2015) 534-546.

Journals

1. Kumar, P. and Kumar, S., A modified variational functional for estimating dense and discontinuity preserving optical flow in various spectrum, International Journal of Electronics and Communications, 70 (3) (2016), 289-300
2. Saini, D. and Kumar, S., Stereo Vision based Conic Reconstruction using a Ray-Quadric Intersection, Journal of Image and Graphics, 15(4) (2015), 1550019 [22 pages]
3. Saini, D. and Kumar, S., A Skeleton-Based 3D Shape Reconstruction of Free-Form Objects with Stereo Vision, 3D Research, 6 (2015) 37[17 pages]
4. Mekonnen, G., Kumar, S. and Pathak, P. M., Wireless Hybrid Visual Servoing of Omnidirection Wheeled Mobile Robots, Robots and Autonomous Systems, 75(B) (2015), 450-462
5. Bala, A., Kumar, S., and Bhargava, R., 2D-3D Non-rigid Registration Using Depth from Gradient Information, 3D Research (Springer), 6 (2015), 34[11 pages]
6. Bala, A., Kumar, S., and Bhargava, R., Recovering Depth Map from Enhanced Image Gradients, Procedia Computer Science, 70 (2015), 572-578
7. Rani, A., Bhullar, A. K., Kumar, S., Dangwal, D., A Zero-Watermarking Scheme using Discrete Wavelet Transform, Procedia Computer Science, 70 (2015), 603-609
8. Gochchayat, P., Jordaan, K., Raghavendar, K. and Swaminathan, A. Interlacing properties and bounds for zeros of $2\phi_1$ hypergeometric

- and little q -Jacobi polynomials, Ramanujan Journal, 40(1) (2016), 45-62
9. Chung, Y. L., Mohammed, M. H., Swaminathan, A. and Lee, S. K., Starlikeness of triple integral operators, Far East Journal of Mathematical Sciences, 99(6) (2016), 793-801.
 10. Verma, A., Jiwari, R., Cosine expansion based differential quadrature algorithm for numerical simulation of two dimensional hyperbolic equations with variable coefficients, International Journal of Numerical Methods for Heat & Fluid Flow, 25(7) (2015) 1574-1589.
 11. Jiwari, R., Lagrange interpolation and modified cubic B-spline differential quadrature methods for solving hyperbolic partial differential equations with Dirichlet and Neumann boundary conditions, Computer Physics Communications, 193 (2015), 55-65.
 12. Pandey R. K., Tripathi A. A note on the density of M-sets in geometric sequence. Ars Combinatoria, 119 (2015), 221-224.
 13. Pandey R. K. Maximal upper asymptotic density of sets of integers with missing differences from a given set. Mathematica Bohemica, 140 (2015), 53-69.
 14. Banerjee, S., Keval, R., and Gakkhar, S., Global dynamics of Hepatitis C viral infection with logistic proliferation, International Journal of Biomathematics, 9(4) (2016) 1 25.
 15. Banerjee, S., Khajanchi, S., and Chowdhuri, S., Mathematical model to elucidate brain tumor abrogation by immunotherapy with T11 target structure, PLoS ONE 10 (5) (2015) 1-21.
 16. Banerjee, S. and Tsygvintsev, A., Stability and bifurcations of equilibria in a delayed Kirschner–Panetta model, Applied Mathematics Letters 40 (2015), 65 71.
 17. Singh, U., and Singh, B., Con vergence of Matrix Means of Mellin – Fourier Series, Palestine Journal of Mathematics, 5 (2016) , 269–274
 18. Saini, S. and Singh, U., Degree of approximation of functions belonging to $Lip(\alpha, p)$ -class by linear operators based on Fourier, Boll Unione Mat Ital DOI 0.1007/s40574-016-0064-2.
 19. Dubey, R., Gupta, S. K. Khan, M. A., Optimality and duality results for a nondifferentiable multiobjective fractional programming problem, Journal of Inequalities and Applications, 354 (2015)
 20. Debnath, I. P., Gupta, S. K. and Ahmad, I., A note on strong duality theorem for a multiobjective higher order nondifferentiable symmetric dual programs, Opsearch, 53(1) (2016), 151–156
 21. Jain, M., Singh, C. J. and Kumar, B., MX /G/1 retrial queue with option of additional service and Bernoulli vacation, AIN Shams Engineering Journal 7(1) (2016) 415-429
 22. Jain, M., Shekhar, C. and Shukla, A time-shared machine repair problem with mixed spares under N-policy, Journal of Industrial Engineering International 12(2) (2016) 145-157
 23. Jain, M., Shekhar, C. and Shukla, Queueing analysis of machine repair problem with controlled rates and working vacation under F-policy, Proceedings of the National Academy of Sciences, Section A (2016) 86(3) 21-31
 24. Jain, M., Shekhar, C. and Shukla, S., N-policy for a repairable redundant machining system with controlled rates, On Line first, RAIRO-Operations Research, <http://dx.doi.org/10.1051/ro/2015032> (2016) 1-11
 25. Jain, M. and Mittal, R., Adaptive call admission control and resource allocation in multi server wireless/cellular network, Journal of Industrial Engineering International 12(7) (2016) 71-80
 26. Dhakad, M. R. and Jain, M., Finite controllable Markovian model with balking and reneging, International Journal of Science Technology and Engineering 2(8) (2016) 36-45.
 27. Jain, M., and Bhagat, A., Transient analysis of finite F-policy retrial queues with delayed repair and threshold recovery, National Academy Science Letters 38(3) (2015) 257–261
 28. Jain, M., and Bhagat, A., Embedded Markov chain approach to retrial queue with vacation, phase repair and multioptional services, Opsearch 52(4) (2015) 782-809
 29. Jain, M., and Bhagat, A., Double orbit finite retrial queues with priority customers and service interruptions, Applied Mathematics and Computation 253 (2015) 324-344
 30. Jain, M., and Bhagat, A., Analysis of bulk retrial queue using maximum entropy principle, International Journal of Operational Research 23(4) (2015) 477 - 496
 31. Jain, M. and Mittal, R., Maximum entropy analysis of MX/G/1 retrial queue with k-phase of heterogeneous service and impatient calls under different vacation, American Journal of Mathematical and Management 34(1) (2015) 117-146.
 32. Jain, M. and Mittal, R., Call admission control for soft handoff coverage in CDMA cellular system, International Journal of Wireless Information Networks 22(1) (2015) 53-66.
 33. Jain, M., Mittal, R. and Kumari, R., (m, M) Machining system with two unreliable servers,

- mixed spares and common-cause failure, *Journal of Industrial Engineering International*, 11(2) (2015) 171-178
34. Jain, M., Sharma, G. C. and Mittal, R., ANN model for multi channel infinite buffer queue under N-policy, *International Journal of Operations Research*, 24(1) (2015) 59-81
 35. Jain, M., Sharma, G. C. and Rani, V., Performance prediction of machine repair problem with spares and two modes of failure, *International Journal of Operational Research* 22(2) (2015) 167-193
 36. Jain, M., Rani, V. and Kumari, R., Threshold switch over policy for multi-component machining system with controllable rate, *International Journal of Industrial and Systems Engineering* 20(4) 397-414
 37. Jain, M. and Jain, A., Batch arrival priority queueing model with second optional service and server breakdown, *International Journal of Operations Research* 11(4) (2015) 112-130.
 38. M. Jain, G.C. Sharma and P. Sharma, Performance prediction of an unreliable flexible manufacturing cell with double gripper robot, *International Journal of Logistics Systems and Management* 21(1) (2015) 46-69
 39. Singh, N., Jain, M. and Arora, N., Economic lot sizing for unreliable production system with shortages Economic lot sizing for unreliable production system with shortages, *International Journal of Mathematics in Operational Research* 7(4) (2015) 464-483
 40. Jain, M., Sharma, R. and Sharma, G. C., Maximum entropy analysis of bulk arrival retrial queue with second optional service and Bernoulli vacation, *International Journal of Industrial and Systems Engineering* 20(3) (2015) 369-396
 41. Jain, M. and Preeti (2015): Availability analysis of software rejuvenation in active/standby cluster system, *International Journal of Industrial and Systems Engineering* 19(1) (2015) 75-93
 42. Singh, A., and Jain, M., Analytic and numerical analysis of an epidemic model with vaccination, *Jnanabha* 45 (2015) 209-230
 43. Bandi, R. K. and Bhaintwal, M., Self-dual codes over $Z_4 + wZ_4$, *Discrete Math. Algorithm. Appl.* 07, 1550014 (2015) [10 pages].
 44. Bandi, R. K. and Bhaintwal, M., A note on cyclic codes over $Z_4 + uZ_4$, *Discrete Math. Algorithm. Appl.* 08, 1650017 (2016) [17 pages].
 45. Mittal, R. C., Tripathi Amit, Numerical solutions of generalized Burgers–Fisher and generalized Burgers–Huxley equations using collocation of cubic B-splines, *Int J Comp. Maths* 92(2015) 1053- 1077
 46. Mittal, R. C., Tripathi Amit, Numerical solutions of two-dimensional Burgers' equations using modified Bi-cubic B-spline finite elements, *Engineering Computations* 32(2015) 1275 – 1306
 47. Mittal, R C, Kaur Harpreet, Mishra Vinod, Haar wavelet-based numerical investigation of coupled viscous Burgers' equation, *Int. J Comp. Maths* 92(2015) 1643-1659
 48. Mittal R C, Dahiya Sumita, Numerical simulation on hyperbolic diffusion equations using modified cubic B-spline differential quadrature methods, *Computers & Mathematics with Applications* 70 (2015) 737 – 749
 49. Mittal R. C., Bhatia Rachna, Numerical solution of nonlinear system of Klein–Gordon equations by cubic B-spline collocation method, *Int J Comp. Maths* 92(2015) 2139 – 2159
 50. Bhowmik, M., Bera, P, Kumar, J., Non-isothermal Poiseuille flow and its stability in a vertical annulus filled with porous medium, 56 (2015) 272-283.
 51. Khandelwal, M. K., Bera, P., Weakly nonlinear stability analysis of non-isothermal Poiseuille flow in a vertical channel 27 (2015) 064103-1-24.
 52. Bera, P., Khandelwal, M.K., A thermal non-equilibrium perspective on instability mechanism of non-isothermal Poiseuille flow in a vertical porous-medium channel, 105 (2016) 159-173.
 53. Singh, S., and Bhargava, R., Numerical simulation of a phase transition problem with natural convection using hybrid FEM/EFM technique, *International Journal of Numerical Methods for Heat & Fluid Flow*, 25(3) (2015), 570–592
 54. Sharma, R. and Bhargava, R., Numerical Simulation of MHD Hiemenz Flow of a Micropolar Fluid towards a Nonlinear Stretching Surface through a Porous Medium, *International Journal for Computational Methods in Engineering Science and Mechanics*, 16(4) (2015), 234–245
 55. Poonia, M. and Bhargava, R., Heat and Mass Transfer in Unsteady Third-Grade Fluid with Variable Suction Using Finite Element Method, *International Journal of Computational Methods*, 12(6) (2015)
 56. Poonia, M. and Bhargava, R., Finite element

solution of oblique stagnation-point flow of viscoelastic fluid and heat transfer with variable thermal conductivity, *Int. J. of Computing Science and Mathematics*, 6(6) (2015), 519–537.

Conferences/Seminar/Symposia/Workshop

1. Gossaye, M., Kumar, S., Pathak, P. M., A New Dynamic Control Model with stability analysis for Omnidirectional Mobile Robot, ACM proceeding of Advanced in Robotics, BITS Pilani Goa July 02-04, 2015
2. Kumar, P., Kumar, S. and Balasubramanian, R., A Vision Based Motion Estimation in Underwater Images, IEEE International Conference on Advances in Computing, Communications and Informatics (ICACCI-2015), Aluva, Kerala, Aug. 10-13, 2015
3. Kumar, P., Kumar, S. and Balasubramanian, R., A Fractional Order Total Variation Model for the Estimation of Optical Flow, in proc. of fifth National Conference on Computer Vision, Pattern Recognition, Image Processing and Graphics (NCVPRIPG'15), Patna India, December 16-19, 2015
4. Debnath, I. P., Gupta, S. K., On duality with support functions for a multiobjective fractional programming problem, International Conference on Operations research and Enterprise Systems, Rome, Italy, 2016.
5. Dubey, R., Gupta, S. K., Duality for a nondifferentiable multiobjective fractional programming problem using Gf -invexity, International Conference on Industrial Engineering and Operations Management Kuala Lumpur, Malaysia, March 8-10, 2016
6. G. Kumar, M. Kaushik and M. Jain, Reliability Analysis for Embedded System with Two Types of Faults and Common Cause Failure Using Markov process, Proceedings of the Sixth International Conference on Computer and Communication Technology 2015 (ICCT-15), ACM Publisher, (2015) 271-275
7. Rama Krishna Bandi, Maheshanand Bhaintwal, Cyclic codes over $Z_4 + uZ_4$. In proc. 7-th International Workshop on Signal Design and Its Applications in Communications (IWSDA-15), Sept. 13-18, 2015, IISc Bangalore, pp. 47-51.
8. Amit Sharma, Maheshanand Bhaintwal, On skew-cyclic codes over $GR(4, 2) + uGR(4, 2)$. In proc. 7-th International Workshop on Signal Design and Its Applications in Communications (IWSDA-15), Sept. 13-18, 2015, IISc Bangalore, pp. 52-56.
9. Srinivasulu B, Maheshanand Bhaintwal, Reversible cyclic codes over $F_4 + uF_4$ and their applications to DNA codes. In proc. 7-th

International Conference on Information Technology and Electrical Engineering (ICITEE-2015), Oct. 29 - 30, 2015, Chiang Mai, Thailand, pp. 101 - 105.

4.15 MECHANICAL & IND. ENGG.

Books/Book Chapter/Proceeding/Monograph

1. Das P.K. and Das A.K. "Critical Heat Flux for Boiling in Microchannel" in Saha S., Eds. Microchannel Phase Change Transport Phenomena, Elsevier Inc., (2016).
2. Das P.K. and Das A.K. "Instabilities in Flow Boiling through Microchannels" in Saha S., Eds. Microchannel Phase Change Transport Phenomena, Elsevier Inc., (2016).
3. Sharma Naveen, Tariq Andallib and Mishra Manish. Detailed Heat Transfer Investigation inside a Rectangular Duct with an Array of Ventilated Rib Turbulators. Chapter 73 - Fluid Mechanics and Fluid Power – Contemporary Research, Lecture Notes in Mechanical Engineering (Proceedings of the 5th International and 41st National Conference on FMFP 2014), Springer India, (2016). (DOI: 10.1007/978-81-322-2743-4_73)
4. Vidyasagar R., Raghu Prasad B. K. and Singh R. K., Laboratory Investigation on Concrete Fracture using Acoustic Techniques, Chapter 7, Contribution in book OHTSU-9781782423270 Ed. Ohtsu, Elsevier (2015).

Journals

1. Ahmed S., Sreshth S., Ghosh S. and Das A.K. Study of the Dynamics of a Condensing Bubble Using Lattice Boltzmann Method, *Journal of Computational Multiphase Flow*, 7, (2015), 117-128.
2. Arora Punit, Gupta Suneel K., Bhasin V., Singh R.K., Sivaprasad S. and Tarafder S. Testing and assessment of fatigue life prediction models for Indian PHWRs piping material under multi-axial load cycling, *Int. J. of Fatigue*
3. Bansal Amit, Sharma Apurbba Kumar, Kumar Pradeep and Das Shantanu. Structure–Property Correlations in Microwave Joining of Inconel 718", *Journal of Metals*, June, 2015, (DOI: 10.1007/s11837-015-1523-4)
4. Bansal Amit, Sharma Apurbba Kumar, Kumar Pradeep and Das Shantanu. On Microstructure and Strength Properties of Microwave Welded Inconel 718/ Stainless Steel (SS – 316L), *Proceedings of the Institution of Mechanical Engineers, Part L: Journal of Materials: Design and Applications*, Jun. (2015). (DOI: 10.1177/1464420715589206).
5. Bansal Amit, Zafar Sunny and Sharma