

Research Publication during the year 2013-14

1. Harpreet Kaur, R C Mittal, Vinod Mishra, Haar wavelet approximate solutions for the generalized Lane–Emden equations arising in astrophysics, **Comp. Physics Comm.** 184 (2013), pp 2169-2177
2. R C Mittal and R K Jain, Numerical solutions of nonlinear Fisher's reaction–diffusion equation with modified cubic B-spline collocation method , **Mathematical Sciences**, 7 (2013), pp 1-10
3. R C Mittal and Rachna Bhatia, Numerical solution of second order one dimensional hyperbolic telegraph equation by cubic B-spline collocation method, **Appl Maths & Comp.** 220(2013), pp 496-506
4. Alemayehu Shiferaw, RC Mittal, Fast Finite Difference Solutions of the Three Dimensional Poisson's Equation in Cylindrical Coordinates, **American J Comp Maths** 3 (2013), pp 356-361.
5. A Shiferaw, RC Mittal, High Accurate Fourth-Order Finite Difference Solutions of the Three Dimensional Poisson's Equation in Cylindrical Coordinate, **American J Comp Maths** 4 (2014) pp 73-86.
6. D. K. Verma and **P. N. Agrawal** , Approximation by Baskakov-Durrmeyer-Stancu operators based on q-integers, Lobachevskii, **Journal of Mathematics (Springer)** 43 (2) (2013) 187-196.
7. P. N. Agrawal, V. Gupta and A. Sathish Kumar, On q-analogue of Bernstein-Schurer-Stancu operators, **Appl. Math. Comput.**, 219 (14) (2013) 7754-7764.
8. P. N. Agrawal, A. Sathish Kumar and T. A. K. Sinha, Stancu type generalization of modified Schurer operators based on q-integers. **Appl. Math. Comput.**, 226 (1) (2014) 765-776.
9. P. N. Agrawal and A. Sathish Kumar, Approximation by q-Baskakov Durrmeyer type operators, **Rendi. Circ. Mat. Palermo, Springer**, 63 (2013) 73-89.
10. P. N. Agrawal, Vijay Gupta, A. Sathish Kumar and Arun Kajla, Generalized Baskakov-Szasz operators, **Appl. Math. Comput, Elsevier**, 236 (2014) 311-324.
11. P. N. Agrawal, Vijay Gupta and A. Sathish Kumar, Generalized Baskakov-Durrmeyer operators, **Rendi. Circ. Mat. Palermo, Springer**, DOI 10.1007/s12215-014-0152-z, (2014).
12. Tanuja Srivastava and Shiv Kumar Verma: Uniqueness Algorithm with Diagonal and Anti-diagonal Projections, **International Journal of Tomography & Simulation**, 23(2). (2013) pp 22-31.
13. Tanuja Srivastava and Nirmal Yadav: On Image Reconstruction Algorithms with Discrete Radon Transform **International Journal of Applied Mathematics and Statistics** 47, (2013), pp 48-60.
14. Nirmal Yadav and Tanuja Srivastava : Local and Global Tomographic Image Reconstruction with Discrete Radon Transform, **IEEE Digital Library, ICSIPR'2013**, 978-1-4673-4862-1/13, (2013), pp 1-5.
15. Uday Singh, Shailesh Kumar Srivastava, Degree of Approximation of Functions in Lipschitz Class with Muckenhoupt Weights by Matrix Means, **IAENG Int. J. Appl. Maths.**, 43(4)(2013), 190-194.
16. Uday Singh, Shailesh Kumar Srivastava, Approximation of conjugate of functions belonging to weighted Lipschitz class $W(L^p, \xi(t))$ by Hausdorff means of conjugate Fourier series, **J. Computational and Applied Maths**, 259 (2014), 633-640.
17. R. Chandrasekhar, Rosihan M. Ali, K.G. Subramanian and A. Swaminathan, Starlikeness of functions defined by third order differential inequalities and integral operators, **Abstract and Applied Analysis, Hindawi Publishing Corporation**, (2014), Article ID 723097, 6 pages.

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20. Rani, A., Balasubramanian, R., Kumar, S., A robust watermarking scheme exploiting balanced neural tree for rightful ownership protection, **Multimedia Tools and Applications**, DOI 10.1007/s11042-013-1528-3 (2013)
21. Kumar, S., Kumar, S., Sukavanam, N., Balasubramanian, R., Human Visual System and Segment-Based Disparity Estimation, **International Journal of Electronics and Communications (Elsevier)**, 67(5) (2011) 372-381
22. Kumar, S., Kumar, S., Sukavanam, N., Balasubramanian, R., Dual tree fractional quaternion wavelet transform for disparity estimation, **ISA Transactions (Elsevier)**, 53(2) (2014) 547-559
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24. Alka, Dwijendra N. Pandey, Approximation of a solution for a Sobolev type fractional order differential equation **Nonlinear Dynamics and Systems Theory**, 14 (1), (2014) 11-29.
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32. A. K. Nayak, 2014 Enhancement of flow mixing in micro and nano channels, **ANZIAM J.** 55, Pages: C47-C63.
33. Anju Saini, V. K. Katiyar and Pratibha, Effects of first-order chemical reactions on the dispersion coefficient associated with laminar flow through the lungs, **International Journal of Biomathematics**, 7, (2014), 12 pages.
34. S. K. Gupta, D. Dangar, Duality for a class of fuzzy nonlinear optimization problem under generalized convexity, **Fuzzy Optimization and Decision Making**, DOI 10.1007/s10700-013-9176-7, (2014).

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73. KUSUM DEEP and Kedar Nath Das: "A novel hybrid genetic algorithm for constrained optimization", **International Journal of System Assurance Engineering and Management, Springer**, 4, 2013, pp. 86-93.
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Book Chapter/Monograph:

1. Sanjeev Kumar, Christian Micheloni and Balasubramanian Raman, Multiresolution Depth Map Estimation in PTZ Camera Network, **Intelligent Multimedia Surveillance: Current Trends and Research (Springer)**, P. Atrey, M. Kankanhalli and A. Cavallaro (Editors), ISBN: 978-3-642-41511-1 (2013), 149-169
2. Banerjee, Sandip, Mathematical Modeling: Models, Analysis and Applications, **CRC Press, Taylor and Francis Group (2014)**.

Conference Papers

1. Tanuja Srivastava: Reconstruction Algorithm for Discrete Binary Functions from Two Orthogonal Projections, **IFP TC 7.2 Workshop "Electromagnetics - Modelling, Simulation, Control and Industrial Applications" held at WIAS, Berlin, Germany, 13-17 May 2013**.
2. Uday Singh, Shailesh Kumar Srivastava, Fourier Approximation of Functions Conjugate to the Functions Belonging to Weighted Lipschitz Class, **Lecture Notes in Engineering and Computer Science, (Proceedings of WCE-2013, July 3-4, 2013), 1(2013), 236-240**.
3. Kumar, S., Kumar, S., Balasubramanian, R., A variational approach for optical flow estimation in infra-red or thermal images, **IEEE Second International Conference on Image Information Processing (ICIIP), 56-61, 9-11 Dec. 2013 Shimla, India**
4. Kumar, S., A convex programming approach for establishing correspondence between stereo images, **International Conference on Operations Research for Data Analytics & Decision Analysis - 2013, October 21-23, 2013, Srinagar, India**
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14. S. K. Gupta, D. Dangar, I. Ahmad, On second-order duality for nondifferentiable minimax fractional programming problem involving type-I functions at Brisbane, Queensland, Australia, December 1-4, 2013 in the **11th Engineering Mathematics and Applications Conference (EMAC-2013)**
15. Jain, M. and Bhagat, A., Transient analysis of retrial queues with double orbits and priority customers, Proceedings of the 8th International Conference on Queueing Theory and Network Applications (QTNA 2013), Providence University, Taichung, Taiwan, 30 July -2 Aug. 2013, pp. 235-240.
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