

JSS MAHAVIDYAPEETHA
JSS ACADEMY OF TECHNICAL EDUCATION
JSSATE Campus, Uttarahalli – Kengeri Main Road, Bengaluru 560060
Department of Mathematics

Publication Details

Journal publications: 2025

1. Shivakumar, V., Vinay, C. V., Sankar, M., Altmeyer, S. A., & Al Maqbali, A (2025). Buoyant Convective Thermal Transport in a Discretely Heated–Cooled Porous Parallelogrammic Configuration Saturated with Nanofluids: A Tiwari and Das Approach. *Journal of Mathematics*,13(21), 3516
2. Nandini, P., & Latha, S. (2025). Applications of Chebyshev Polynomials to a new subclass of Bi-Univalent functions connected to the Pascal distribution. *Palestine Journal of Mathematics*, 14(1), 725- 731.
3. Nandini, P., Dileep, L., & Latha, S. (2025). Bounds for a new subclass of Bi-univalent functions related to shell-like curves associated with the (p,q) -Salagean derivative. *South East Asian Journal of Mathematics & Mathematical Sciences*, 21(1), 113-126.
4. Shekar, C. S., B.Umadevi & Kumar, S. Mathematical Modeling of Epidemics: A Study on the Spread of Infectious Diseases. *Panamerican Mathematical Journal*, 35(1), 2025.
5. Umadevi, B., Mytra, G. S., & Rupashree, M. P. (2025). Mathematical modelling of poroviscoelastic biofluid material for convection drift-diffusion dynamics within Caputo and Atangana–Baleanu operator. *ZAMM- Journal of Applied Mathematics and Mechanics/Zeitschrift für Angewandte Mathematik und Mechanik*, 105(6), e70116.
6. Manoharkumar K.N, Shalini M. Patil, Dinesh P. A, Three-Dimensional Fluid Flow Over an Elastic Sheet Stretched Nonlinearly in Two Lateral Directions.*Chemical engineering and Technology*. volume 48, issue 2, pg:e202400326
7. Manoharkumar K.N, Shalini M. Patil, Dinesh P.A, Optimizing and controlling of fluid flow, heat and mass transfer for 3D D–F nanofluid induced by bidirectional power-law nonlinear stretching sheet under various external constraints. *Journal of Thermal analysis and Calorimetry*. Volume 150, pg 22473-22486,2025
8. B. J. Nandini, R. Sampathkumar, K. M. Nagaraja and V. Lokesh,(2025): Muirhead mean and its properties, *Montes Taurus J. Pure Appl. Math.* 6 (3), 589-604
9. BS Venkataramana, KM Nagaraja, R Sampathkumar, A Harish, (2025): The properties of complementary centroidal mean, *Engineering Science and Technology: Innovations for the Future*, 390-394
10. MC Ramanna, UKK Nanjappa, SR Perla, KM Nagaraja, ,(2025): The Efficacy of the Mean Filter on the Noise Reduction of Digitalized Images, *Engineering, Technology & Applied Science Research* 15 (4), 24291-24297

11. Dhanalakshmi, E., Narasimhan, G., Nagaraja, K. M., & Sampath Kumar,(2025): The double sequences and applications to convergences of compound mean, ZHUZAO/FOUNDRY JOURNAL 28 (7), 126-137
12. NG Brinda S,Sampath Kumar R, K M Nagaraja, Nandhini B J,(2025): Gesture Identification Using Murihead Mean Filtering, ZHUZAO/FOUNDRY JOURNAL 28 (7), 100-112
13. RSK, E. Dhanalakshmi, G. Narasimhan, K. M. Nagaraja, (2025): On convexity of Invariant Square mean root with respect to classical means, GIS SCIENCE JOURNAL 12 (5), 664-674
14. SKRNKM Swathi M, Smitha M G , (2025): Topology, Connectivity, and Charge Transport in Gallium Nitride: A Graph Theory Framework, Periodico di Mineralogia 94 (4), 164-174

Conference publications: 2025

1. SP, K. M. Nagaraja, Chowdappa M R, Udaya Kumara K N, Sreenivasa Reddy Perla, (2025): Schur Harmonic Convexity of the Mean of Convex Functions for Two Variables, 2025

Journal publications: 2024

1. Roopa, K. R., Dinesh, P. A., Yadav, S., Vinay, C. V., & Subrahmanyam, C. (2024). Comparative heat transfer analysis of Fe₃O₄/Graphene-water hybrid nanofluid in unsteady hydrodynamic Lapwood-Brinkmann Forchheimer medium over a curved elongating region. *International Journal of Ambient Energy*, 45(1), 2304714.
2. Dinesh, P. A., Sumithra, R., Vinay, C. V., Ramesh, N. L., Kalavathi, G. K., Sahana, N. J., ... & Vandana, H. V. (2023). An Exploratory Analysis of MHD Non-Newtonian Nanomaterial Fluids Flow Across an Exponential Elongated Sheet. *Journal of Mines, Metals and Fuels*, 225-233. (Scopus)
3. Nandini, P and Latha, S, (2024), A Certain Subclass of Bi-Univalent functions Associated with Chebyshev Polynomials”, *South East Asian Journal of Mathematics and Mathematical Sciences*, 20(1), 71-80.
4. Nandini P, Latha S and Murugusundaramoorthy G, (2024), “Chebyshev Polynomials and Bi-univalent Functions Associationg with q-derivative operator”, *South East Asian Journal of Mathematics and Mathematical Sciences*, 20(2), 143-154.
5. Lakshmi Janardhan, R. C., Nagaraja, K. M., Harish, A., & Sampathkumar, R. (2024). Generalization of contra harmonic mean and their properties. *Foundry Journal*, 27(12), 124–132.
6. Patil, S. M., Radhakrishnan, A., Pawar, S. R., Railis, D. J., & Barmavatu, P. (2024). Prediction of heat exchanger efficiency using laminar heat transfer in swirling flow of radiated graphene oxide with nano fluid additives using machine learning technique. *Numerical Heat Transfer, Part B: Fundamentals*, 1-19.
7. Manoharkumar, K. N., Patil, S. M., Dinesh, P. A., & Suma, K. V. (2023). Combined Effect of Viscous Dissipation and Forchheimer Drag on 3D Nanofluid Flow over Nonlinear Stretching Sheet. *Journal of Mines, Metals and Fuels*, 453-461.

8. Makarand Mohan Jadhav, Pankaj Agarwal, B.Umadevi, Ali Khatibi, N.Akhila, Kasturi Sai Sandeep and Sudipta Banerjee (2024). Climate Change Prediction in Sustainable Healthcare Systems for Biodiverse Ecosystem Based on Satellite Data Modelling, Remote Sensing in Earth Systems and Sciences

Conference publications: 2024

1. Vishwanatha, S., Vinay, C. V., Sankar, M., & Reddy, N. K. (2024). Influence of Non-similar Heating on Nanofluid Buoyant Convection in a Tilted Porous Parallelogrammic Geometry. In *International Conference on Recent Developments in Mathematics* (pp. 325-333). Cham: Springer International Publishing.
2. S. Kiran, M. Sankar, N. Girish, and H. A. Kumara Swamy(2024) Buoyant Convection of Nanofluid in an Annular Domain with Linear Heating. *Advances in Mathematical Modeling and Scientific Computing, Trends in Mathematics*. Springer Nature Switzerland AG 2024, pp 335-343.

Journal publications: 2023

1. R. Sampath Kumar, K. M. Nagaraja, G. D. Chethankumar, B. J. Nandini and Chinni Krishna R,(2023) *Properties of oscillatory mean involving power exponential mean and power mean*, *Advances and Applications in Mathematical Sciences*, 22(6), pp. 1117-1124.
2. M. J. Sridevi, Ambika M. Hejib, R. C. Lakshi Janardhana, R. D. Jagadeesha and K. M. Nagaraja, (2023) *Ky Fan type inequalities*, *Advances and Applications in Mathematical Sciences*, 22(6), pp. 1177-1185.
3. M. J. Sridevi, R. Sampath Kumar, K. M. Nagaraja, A. Harish and Chinni Krishna R, (2023) *Invariant centroidal mean graph labeling*, *Advances and Applications in Mathematical Sciences*, 22(6), pp. 1187-1197.
4. Nagesh Shyanubhag, K. M. Nagaraja, Sampath Kumar R and Sudheer Pai K, (2023) *Narayana prime cordial graph labeling*, *Advances and Applications in Mathematical Sciences*, 22(6), pp.1353-1360.
5. E. Dhanalakshmi, G. Narasimhan, K. M. Nagaraja, R. Sampath Kumar,(2023) Schur convexity of complementary geometric mean, *Journal of Propulsion Technology*, 44(2), pp.1327-1338.
6. Chinni Krishna. R, K.M. Nagaraja, Sampathkumar. R. And P. Siva Kota Reddy, (2023). The Ky Fan type inequalities for the means whose arguments lying on linear and curved path, *Eur. Chem. Bull.* 12(10), pp. 2338-2347
7. Reddy, P. Siva Kota; Nagaraja, KM, Sridevi, K; (2023). Inequalities among means of two positive arguments in index (conjugate index) sets, *Proceedings of the Jangjeon Mathematical Society*, 26(2), pp. 169–174.
8. Nagaraja, K.M, Sampathkumar, R., Chethankumar, G.D., Dhanya, P. (2023). Schur convexities of ratio of one parameter power exponential mean and its invariant, *Proceedings of the Jangjeon Mathematical Society*, 26(2), pp. 161–168.
9. P. Nandini and S. Latha, “ A subclass of bi-univalent functions related to shell-like curves connected with Fibonacci numbers associated with (p, q) -derivative”, *TWMS Journal of Applied and Engineering Mathematics*. 13(4), pp. 1503-1511 , 2023.

Journal publications: 2022

1. B. V. Shilpa, D V Chandrashekhar, P A Dinesh, C V Vinay, C G Raghavendra, B J Gireesha, "Soret and Dufour effect on convection flow of Casson fluid in a channel", *Journal of Thermal Analysis and Calorimetry* 147, 14939-14951, 2022.
2. P. Nandini, M. Ruby Salestina and S. Latha, "Faber Polynomial Coefficient Estimates for certain Subclass of Bi-Univalent functions Associated with (p,q) -Ruscheweyh derivative", *Palestine Journal of Mathematics*, 11(3), 133-146, 2022.
3. P. Nandini and S.Latha, "Certain Subclass of Bi-Univalent Functions related to Horadam Polynomials Associated with q -derivative", *South East Asian Journal of Mathematics and Mathematical Sciences*, 18(3), 153-160, 2022.

Journal publications: 2021

1. Dhanya P.;Nagaraja K.M.;Siva Kota Reddy P., "A note on d'ocagne's identity on generalized fibonacci and lucas numbers", *Palestine Journal of Mathematics*, Volume 10, Year 2021, Pages 751-755
2. Umadevi B, Vinay C V, Dinesh P A, "The Influence of Drag on Nonlinear Oscillatory Flow through Concentric Annulus", *Molecular & Cellular Biomechanics*, 18(4), 157-172, 2021.
3. Nagaraja, K M, Sampathkumar R, Venkataramana B, "Properties of Power Exponential Mean and Its Invariant Mean", *International Journal of Science, Technology, Engineering and Management*, 3(2), 19-24, 2021.
4. Girish N, M Sankar, Keerthi Reddy, "Analysis of Fully Developed Mixed Convection in Open-Ended Annuli with Viscous Dissipation", *Journal of Thermal Analysis and Calorimetry*, 143, 503-521, 2021.
5. Sridevi, K, Nagaraja, K M, P Siva Kota Reddy, "Relative Study on Means in Linear Path and Two Positive Arguments in a Curved Path", *Italian Journal of Pure and Applied Mathematics*, 46(2), 696-705, 2021.
6. Reddy P S K, Nagaraja K M, Kumar R S, " α -Centroidal Means and its Applications to Graph Labeling", *Palestine Journal of Mathematics*, 10(2), 704–709, 2021.
7. Nagaraja K M, Reddy P, "A Note on D'Ocagne's Identity on Generalized Fibonacci and Lucas numbers", *Palestine Journal of Mathematics*, 10(2), 751-755, 2021.
8. Nagaraja K M, Hejib A M, Venkataramana B S, "Complementary of Classical Means with Respect to Heron Mean and Their Schur Convexities", *Proceedings on Engineering*, 3(2), 231-238, 2021.
9. Nagaraja, K M, Ramachandraiah S, Siddappa V B, "Power Exponential Mean Labeling of Graphs", *Montes Taurus Journal of Pure and Applied Mathematics*, 3(2), 70-79, 2021.
10. Venkataramana B S, K M Nagaraja, R Sampath Kumar, Ambika M Hejib, "The Properties of One Parameter Power Exponential Mean and its Invariants", *Advances and Applications in Mathematical Sciences*, 20(7), 1197-1208, 2021.
11. R Sampath Kumar, K M Nagaraja, Ambika M Hejib, Venkataramana B S, "Schur Convexity of Complimentary Means with Respect to Centroidal Mean", *Advances and Applications in Mathematical Sciences*, 20(7), 1209-1224, 2021.

12. Ambika M Hejib, K M Nagaraja, R Sampath Kumar, Venkataramana B S, "Inequalities among Complimentary Means of Heron Mean and Classical Means", *Advances and Applications in Mathematical Sciences*, 20(7), 1249- 1258, 2021.
13. Venkataramana B S, K M Nagaraja, R Sampath Kumar, Harisha A, "The Ky Fan Type Inequalities for Power Exponential Mean and Its Invariant", *GIS Science Journal*, 8(1), 106-115, 2021.
14. P Nandini, S Latha, "A Note on Meromorphic Functions Associated with (p,q) -Ruscheweyh derivative", *Advances and Applications in Mathematical Sciences*, 20(11), 2947-2958, 2021.
15. P Nandini, M Ruby Salestina, S Latha, "Some Results on Certain Subclass of Meromorphic Functions Associated with (p,q) -derivative", *South East Asian Journal of Mathematics and Mathematical Sciences*, 17(2), 23-34, 2021.
16. P Nandini, M Ruby Salestina, S Latha, "Coefficient Estimates for Certain Subclasses of Analytic Functions using (p,q) -derivative", *Journal of Information and Computational Sciences*, 11(5), 529-545, 2021.
17. P Nandini, M Ruby Salestina, S Latha, "Fekete-Szego Inequality for Certain Classes of Analytic Functions using (p,q) -Ruscheweyh derivative ", *International Journal of Mathematics Trends and Technology*, 67(6), 81-89, 2021.
18. L Dileep, P Nandini, "On classes of q -al-obudi type Harmonic Functions", *Analele universitatii Oradea Fasc, Mathematica*, 28(2), 2021.

Journal publications: 2020

1. K Sridevi, K M Nagaraja, P. Siva Kota Reddy, "Note on Different Kinds of Schur Convexities of Heinz type Mean", *Proceedings of the Jangjeon Mathematical Society*, 23(4), 479-484, 2020.
2. R Sampath Kumar, K M Nagaraja, G Narasimhan, Ambika M Hejib, "Centroidal Mean Labeling of Graphs-II", *Proceedings of the Jangjeon Mathematical Society*, 23(2), 193-208, 2020.
3. Shalini M Patil, C V Vinay, Dinesh P A, "Numerical Approach to Interpret the Attributes of Porous Journal", *Industrial Lubrication and Tribology*, 73(2), 253- 259, 2020.
4. Umadevi B, C V Vinay, Dinesh P A, "The Analytical Study of Velocity Slip on Two Phase Flow in an Eccentric Annular Region", *Advances in Applied Mechanical Engineering*, Chapter 26, 223-231, 2020.
5. K M Nagaraja, P Dhanya, "Identities on Generalized Fibonacci and Lucas Numbers", *Notes on Number Theory and Discrete Mathematics*, 26(3), 189- 202, 2020.
6. K M Nagaraja, Serkan Araci, V Lokesha, R Sampathkumar, T Vimala, "Inequalities for the Arguments Lying on Linear and Curved Path", *Honam Mathematical Journal*, 42(4), 747-755, 2020.
7. Chethan Kumar G D, K M Nagaraja, "A Short note on Logarithmic Convexity of Stolarsky's Mean Type Function", *International Journal of Mathematical Archive-* 11(3), 17-19, 2020.
8. Girish N, M Sankar, O D Makinde, "Developing Buoyant Convection in Vertical Porous Annuli with Unheated Entry and Exit", *Heat Transfer - Asian Research*, 49(5), 2551-2576, 2020.

9. P Nandini, S Latha, "On a Class of Harmonic Univalent Functions Associated with (P, Q) -Salagean Derivative", GIS Science Journal, 7(9), 753 -769, 2020.
10. P Nandini, S Latha, "Coefficient Inequalities for Q -Star Like and Q -Convex Functions of Reciprocal Order", Palestine Journal of Mathematics, 9(1), 523- 526, 2020.
11. P Nandini, S Latha, "Coefficient Estimates of Certain Classes of Analytic Functions of Complex Order By Using Q -Ruscheweyh Derivative", Analele universitatii Oradea Fasc, Mathematica, 27(2), 131-135, 2020.

Conference publications: 2020

1. Girish N, M Sankar, "Fully Developed Mixed Convection in Vertical Double Passage Porous Annuli", Journal of Physics: Conference Series, Volume 1597, 012050, Aug 2020.

Journal publications: 2019

1. Vimala T, K M Nagaraja, Sampath Kumar R, "A Harmonic and Heron Mean Inequalities for Arguments in Different Intervals", International Journal of Mathematical Archive-10(7), 47-52, 2019.
2. Shalini M. Patil, C V Vinay, Dinesh P A, "Multigrid Solution to Analyze the Effect of Roughness for Modified Reynolds Equation", Advances and Applications in Mathematical Sciences, 18(10), 1039-1053, 2019.
3. R Sampath Kumar, K M Nagaraja, "Centroidal Mean Labeling of Graphs", International Journal of Research in Advent Technology, 7(1), 183-189, 2019.

Conference publications: 2019

1. Girish N, M Sankar, Do Y, "Numerical Investigation of Developing Laminar Convection in Vertical Double-Passage Annuli", in: Rushi Kumar B., Sivaraj R., Prasad B., Nalliah M., Reddy A. (eds) Applied Mathematics and Scientific Computing, Trends in Mathematics, Birkhäuser, Cham, 2019.

Journal publications: 2018

1. Manjunatha H, K M Nagaraja, "Short Note on Continuous Fourier series", International Journal of Engineering Research and Application, 8(2), (Part - 3), 19-23, 2018.
2. Lakshmi Janardhana R C, K M Nagaraja, Narasimhan G, "A note on G – Complementary to Heron Mean", International Journal of Research and Analytical Reviews, 5(3), 369-373, 2018.
3. Srinivasa G, Anand K, Shalini M Patil, "Relations on Tadpole of a graph", International Journal of Research in Engineering Application and Management, 4(3), 553-557, 2018.
4. R Sampath Kumar, K M Nagaraja, G Narasimhan, "New Family of Heinz Type Means", International Journal of Pure and Applied Mathematics, 118(18), 3427-3433, 2018.
5. Girish N, O D Makinde, M Sankar, "Numerical Investigation of Developing Natural Convection in Vertical Double-Passage Porous Annuli", Defect and Diffusion Forum, 387, 442-460, 2018.
6. P Nandini, S Latha, "Coefficient Inequalities for Certain Classes of Analytic Functions Using Generalized Q -Ruscheweyh Derivative", Asia Mathematica, 2(2), 67-72, 2018.

Conference publications: 2018

1. G Narasimhan, K M Nagaraja, R Sampath Kumar, K Murali, "Establishment of a New Inequality using Extended Heinz Type Mean", IOP Conf. Series: Journal of Physics: Conf. Series, 1139, 012034, 2018.

Journal publications: 2017

1. Sampath Kumar R, Satish Kumar T, K M Nagaraja, G Geetha, "Application of Different Filters for Noise Removal in Digital Images", Journal of Advanced Research in Dynamical and Control Systems, 9(Sp-12), 2355-2366, 2017.
2. K M Nagaraja, Murali K, Lakshmi Janardhana R C, "Improvement of Harmonic and Contra Harmonic Mean Inequality Chain", International Journal of Pure and Applied Mathematics, 114(4), 771-776, 2017.
3. Manjunatha H, K M Nagaraja, "A study of Fourier transform Pair: Frequency and time Domain", International Journal of Advanced in Management, Technology and Engineering Sciences, 7(Special- 12), 167-179, 2017.
4. R C L Janardhana, K M Nagaraja, V Loksha, "Schur-Geometric Convexity of Stolarsky's Extended Mean Values", International Journal of Pure and Applied Mathematics, 114(1), 77-90, 2017.
5. Sampath Kumar R, K M Nagaraja, "The Convexities of Invariant Contra Harmonic Mean with Respect to Geometric Mean", International Journal of Pure and Applied Mathematics, 116(22), 407-412, 2017.
6. Lakshmi Janardhana R C, K M Nagaraja, Sampath Kumar R, Murali K, "Convexity of Power Type Heron Mean with Respect to Power Mean", International Journal of Pure and Applied Mathematics, 117(11), 155-163, 2017.
7. Sampath Kumar R, K M Nagaraja P, S K Reddy, "Convexity of Stolarsky's Mean with Respect to Well-Known Greek Means", International Journal of Pure and Applied Mathematics 117(12), 401-407, 2017.
8. R Sampath Kumar, K M Nagaraja, G Narasimhan, "Heron Mean Labeling of Graphs", International Journal of Recent Scientific Research Research, 8(9), 19808-19811, 2017.
9. Lakshmi Janardhana R C, K M Nagaraja, Sampath Kumar R, Murali K, "Schur Convexities and Concavities of Generalized Heron Means", International Journal of Pure and Applied Mathematics, 117(13), 69-79, 2017.
10. K M Nagaraja, Vimala T, "Convexity and Concavity of Means", International Journal of Research-granthaalayah, 5(4), 92-97, 2017.
11. Shalini M. Patil, Dinesh P A, C V Vinay, "Numerical Solution of Modified Reynolds Equation to Study the Roughness Effects Between Two Parallel Plates", World Applied Sciences Journal, 35(5), 729-734, 2017.
12. P Nandini, S Latha, "Coefficient Inequalities for Certain Classes of Analytic Functions using Q-Ruscheweyh Derivative", Annalele universitatii Oradea, Fasc, Mathematica, 24(2), 47-51, 2017.

Journal publications: 2016

1. Sreenivasa Reddy Perla, K M Nagaraja, Padmanabhan S, Padmanava Samanta, "Schur Convexity Condition for Novel Ratio of Difference of Means", International Journal of Scientific and Innovative Mathematical Research, 4(4), 13-18, 2016.
2. K M Nagaraja, K Sridevi, P Siva Kota Reddy, "Convexity of One Mean with Respect to another Mean", Bulletin of The International Mathematical Virtual Institute, 6, 241-249, 2016.
3. K Murali, K M Nagaraja, "Schur Convexity of Stolarsky's Extended Mean Values", Journal of Mathematical Inequalities, JMI-10-59,10(3), 725–735, 2016.
4. G S Mytra, P K Srimani, "Inertial Effects on Steady Hydromagnetic Mushy Layer Convection", Magnetohydrodynamic 52(3), 391-406, 2016.
5. P Nandini, S Latha, "Coefficient Inequalities for Classes of Q-Starlike and Q- Convex Functions using Q-Derivative", Journal of Rajasthan Academy of Physical Sciences ,15(4), 291-297, 2016.
6. P Nandini, S Latha, "A Note on Q-Ruscheweyh type Functions", International Journal of Mathematics Trends and Technology, 34(1), 1-4, 2016.