

Sri. Punith Gowda R. J.

Assistant Professor

Department of Mathematics

Bapuji Institute of Engineering and Technology,

Davangere -577004

Mob: +918105443432

Email: rjpunithgowda@gmail.com

RESEARCH INTEREST :

Modelling and Computational Mathematics, Boundary layer theory, Numerical analysis, Newtonian/Non-Newtonian fluids, Two phase fluid flow, Nanofluid Mechanics.

TEACHING EXPERIENCE : Having 4 years of teaching experience

Worked as:

- Lecturer in Mathematics Department of Mathematics, Jain Group of Institution, Davangere from April,2017 to January,2020
- Lecturer in Department of Mathematics, Government Science College(Autonomous) Bangalore from August,2016 to April,2017.

EDUCATION

- M.Sc (Mathematics) from Kuvempu University, Shankaraghatta, Shimoga, Karnataka, in the year 2014 with first class.
- B.Ed (Physics and Mathematics) from Kuvempu University, D.K Shivakumar B.Ed College Bhadravathi, 2015 with Distinction.
- B.Sc (Physics, Mathematics and Computer science) from Kuvempu University, DVS Arts & Science College Shimoga, 2012 with First class.

PUBLICATIONS

- [1] M. Ganeswara Reddy, **R.J. Punith Gowda**, R. Naveen Kumar, B. Prasannakumara, and K. Ganesh Kumar, ‘Analysis of modified Fourier law and melting heat transfer in a flow involving

carbon nanotubes', Proc. Inst. Mech. Eng. Part E J. Process Mech. Eng., p. 09544089211001353, Mar. 2021, doi: 10.1177/09544089211001353.

[2] R. Naveen Kumar, H. B. Mallikarjuna, N. Tigalappa, **R. J. Punith Gowda**, and D. U. Sarwe, 'Carbon nanotubes suspended dusty nanofluid flow over stretching porous rotating disk with non-uniform heat source/sink', Int. J. Comput. Methods Eng. Sci. Mech., vol. 0, no. 0, pp. 1–10, May 2021, doi: 10.1080/15502287.2021.1920645.

[3] P.-Y. Xiong, M. I. Khan, **R. J. Punith Gowda**, R. Naveen Kumar, B. C. Prasannakumara, and Y.-M. Chu, 'Comparative analysis of (Zinc ferrite, Nickel Zinc ferrite) hybrid nanofluids slip flow with entropy generation', Mod. Phys. Lett. B, p. 2150342, May 2021, doi: 10.1142/S0217984921503425.

[4] H. B. Mallikarjuna, T. Nirmala, **R. J. Punith Gowda**, R. Manghat, and R. S. Varun Kumar, 'Two-dimensional Darcy–Forchheimer flow of a dusty hybrid nanofluid over a stretching sheet with viscous dissipation', *Heat Transf.*, vol. 50, no. 4, pp. 3934–3947, 2021, doi: <https://doi.org/10.1002/htj.22058>.

[5] R. Naveen Kumar, **R.J. Punith Gowda**, G. Prasanna, B. Prasannakumara, K. S. Nisar, and W. Jamshed, 'Comprehensive study of thermophoretic diffusion deposition velocity effect on heat and mass transfer of ferromagnetic fluid flow along a stretching cylinder', Proc. Inst. Mech. Eng. Part E J. Process Mech. Eng., p. 09544089211005291, Mar. 2021, doi: 10.1177/09544089211005291.

[6] **R. J. Punith Gowda**, H. M. Baskonus, R. Naveen Kumar, B. C. Prasannakumara, and D. G. Prakasha, 'Computational Investigation of Stefan Blowing Effect on Flow of Second-Grade Fluid Over a Curved Stretching Sheet', Int. J. Appl. Comput. Math., vol. 7, no. 3, p. 109, May 2021, doi: 10.1007/s40819-021-01041-2.

[7] **R. J. Punith Gowda**, Fahad S Al-Mubaddel, R. Naveen Kumar, B.C Prasannakumara, Alibek Issakhov, Mohammad Rahimi-Gorji, Yusuf A Al-Turki, 'Computational modelling of nanofluid flow over a curved stretching sheet using Koo–Kleinstreuer and Li (KKL) correlation and modified Fourier heat flux model', Chaos Solitons Fractals, vol. 145, p. 110774, Apr. 2021, doi: 10.1016/j.chaos.2021.110774.

[8] A. Hamid, Y.-M. Chu, M. I. Khan, R. Naveen Kumar, **R. J. Punith Gowda**, and B. C. Prasannakumara, 'Critical values in axisymmetric flow of magneto-Cross nanomaterial towards a radially shrinking disk', Int. J. Mod. Phys. B, vol. 35, no. 07, p. 2150105, Mar. 2021, doi: 10.1142/S0217979221501058.

[9] P.-Y. Xiong, Aamir Hamid, Yu-Ming Chu, M Ijaz Khan, **R.J Punith Gowda**, R Naveen Kumar, BC Prasannakumara, Sumaira Qayyum, 'Dynamics of multiple solutions of Darcy–Forchheimer saturated flow of Cross nanofluid by a vertical thin needle point', Eur. Phys. J. Plus, vol. 136, no. 3, p. 315, Mar. 2021, doi: 10.1140/epjp/s13360-021-01294-2.

- [10] **Punith Gowda Ramanahalli Jayadevamurthy**, Naveen kumar Rangaswamy, B. C. Prasannakumara, and K. S. Nisar, ‘Emphasis on unsteady dynamics of bioconvective hybrid nanofluid flow over an upward–downward moving rotating disk’, *Numer. Methods Partial Differ. Equ.*, vol. n/a, no. n/a, doi: <https://doi.org/10.1002/num.22680>.
- [11] **R. J. Punith Gowda**, R. Naveen Kumar, B. C. Prasannakumara, B. Nagaraja, and B. J. Gireesha, ‘Exploring magnetic dipole contribution on ferromagnetic nanofluid flow over a stretching sheet: An application of Stefan blowing’, *J. Mol. Liq.*, vol. 335, p. 116215, Aug. 2021, doi: [10.1016/j.molliq.2021.116215](https://doi.org/10.1016/j.molliq.2021.116215).
- [12] M. Radhika, **R. J. Punith Gowda**, R. Naveenkumar, Siddabasappa, and B. C. Prasannakumara, ‘Heat transfer in dusty fluid with suspended hybrid nanoparticles over a melting surface’, *Heat Transf.*, vol. 50, no. 3, pp. 2150–2167, 2021, doi: <https://doi.org/10.1002/htj.21972>.
- [13] A. J. Christopher, N. Magesh, **R. J. Punith Gowda**, R. Naveen Kumar, and R. S. Varun Kumar, ‘Hybrid nanofluid flow over a stretched cylinder with the impact of homogeneous–heterogeneous reactions and Cattaneo–Christov heat flux: Series solution and numerical simulation’, *Heat Transf.*, vol. 50, no. 4, pp. 3800–3821, 2021, doi: <https://doi.org/10.1002/htj.22052>.
- [14] A. M. Jyothi, R. Naveen Kumar, **R. J. Punith Gowda**, Y. Veeranna, and B. C. Prasannakumara, ‘Impact of activation energy and gyrotactic microorganisms on flow of Casson hybrid nanofluid over a rotating moving disk’, *Heat Transf.*, vol. n/a, no. n/a, doi: <https://doi.org/10.1002/htj.22129>.
- [15] **R. J. Punith Gowda**, R. Naveen Kumar, A. M. Jyothi, B. C. Prasannakumara, and I. E. Sarris, ‘Impact of Binary Chemical Reaction and Activation Energy on Heat and Mass Transfer of Marangoni Driven Boundary Layer Flow of a Non-Newtonian Nanofluid’, *Processes*, vol. 9, no. 4, Art. no. 4, Apr. 2021, doi: [10.3390/pr9040702](https://doi.org/10.3390/pr9040702).
- [16] R. Naveen Kumar, **R.J Punith Gowda**, Abdullah M Abusorrah, Y.M Mahrous, Nidal H Abu-Hamdeh, Alibek Issakhov, Mohammad Rahimi-Gorji, B.C Prasannakumara ‘Impact of magnetic dipole on ferromagnetic hybrid nanofluid flow over a stretching cylinder’, *Phys. Scr.*, vol. 96, no. 4, p. 045215, Feb. 2021, doi: [10.1088/1402-4896/abe324](https://doi.org/10.1088/1402-4896/abe324).
- [17] R. Naveen Kumar, A.M Jyothi, Hesham Alhumade, **R.J Punith Gowda**, Mohammad Mahtab Alam, Irfan Ahmad, M.R Gorji, B.C Prasannakumara ‘Impact of magnetic dipole on thermophoretic particle deposition in the flow of Maxwell fluid over a stretching sheet’, *J. Mol. Liq.*, vol. 334, p. 116494, Jul. 2021, doi: [10.1016/j.molliq.2021.116494](https://doi.org/10.1016/j.molliq.2021.116494).
- [18] R. Naveen Kumar, **R. J. Punith Gowda**, J. K. Madhukesh, B. C. Prasannakumara, and G. K. Ramesh, ‘Impact of thermophoretic particle deposition on heat and mass transfer across the dynamics of Casson fluid flow over a moving thin needle’, *Phys. Scr.*, vol. 96, no. 7, p. 075210, Apr. 2021, doi: [10.1088/1402-4896/abf802](https://doi.org/10.1088/1402-4896/abf802).

- [19] **R. J. Punith Gowda**, R. Naveen Kumar, and B. C. Prasannakumara, ‘Two-Phase Darcy-Forchheimer Flow of Dusty Hybrid Nanofluid with Viscous Dissipation Over a Cylinder’, *Int. J. Appl. Comput. Math.*, vol. 7, no. 3, p. 95, May 2021, doi: 10.1007/s40819-021-01033-2.
- [20] **R. J. Punith Gowda**, R. Naveen Kumar, A. Rauf, B. C. Prasannakumara, and S. A. Shehzad, ‘Magnetized flow of sutterby nanofluid through cattaneo-christov theory of heat diffusion and stefan blowing condition’, *Appl. Nanosci.*, May 2021, doi: 10.1007/s13204-021-01863-y.
- [31] R. S. Varun Kumar, **R. J. Punith Gowda**, R. Naveen Kumar, M. Radhika, and B. C. Prasannakumara, ‘Two-phase flow of dusty fluid with suspended hybrid nanoparticles over a stretching cylinder with modified Fourier heat flux’, *SN Appl. Sci.*, vol. 3, no. 3, p. 384, Feb. 2021, doi: 10.1007/s42452-021-04364-3.
- [22] M. Ijaz Khan, Sumaira Qayyum, Faisal Shah, R Naveen Kumar, **R. J Punith Gowda**, B.C Prasannakumara, Yu-Ming Chu, S Kadry, ‘Marangoni convective flow of hybrid nanofluid (MnZnFe₂O₄-NiZnFe₂O₄-H₂O) with Darcy Forchheimer medium’, *Ain Shams Eng. J.*, Mar. 2021, doi: 10.1016/j.asej.2021.01.028.
- [23] R. S. Varun Kumar, P. G. Dhananjaya, R. Naveen Kumar, **R. J. Punith Gowda**, and B. C. Prasannakumara, ‘Modeling and theoretical investigation on Casson nanofluid flow over a curved stretching surface with the influence of magnetic field and chemical reaction’, *Int. J. Comput. Methods Eng. Sci. Mech.*, vol. 0, no. 0, pp. 1–8, Mar. 2021, doi: 10.1080/15502287.2021.1900451.
- [24] R. Naveen Kumar, **R. J. Punith Gowda**, B. J. Gireesha, and B. C. Prasannakumara, ‘Non-Newtonian hybrid nanofluid flow over vertically upward/downward moving rotating disk in a Darcy–Forchheimer porous medium’, *Eur. Phys. J. Spec. Top.*, Apr. 2021, doi: 10.1140/epjs/s11734-021-00054-8.
- [25] J. K. Madhukesh, R Naveen Kumar, **R.J Punith Gowda**, B.C Prasannakumara, G.K Ramesh, M Ijaz Khan, Sami Ullah Khan, Yu-Ming Chu, ‘Numerical simulation of AA7072-AA7075/water-based hybrid nanofluid flow over a curved stretching sheet with Newtonian heating: A non-Fourier heat flux model approach’, *J. Mol. Liq.*, vol. 335, p. 116103, Aug. 2021, doi: 10.1016/j.molliq.2021.116103.
- [26] A. Hamid, M. I. Khan, R. Naveen Kumar, **R. J. Punith Gowda**, and B. C. Prasannakumara, ‘Numerical study of bio-convection flow of magneto-Cross nanofluid containing gyrotactic microorganisms with effective Prandtl number approach’, p. 24.
- [27] W. Jamshed, K. S. Nisar, **R. J. Punith Gowda**, R. Naveen Kumar, and B. C. Prasannakumara, ‘Radiative heat transfer of second grade nanofluid flow past a porous flat surface: a single-phase mathematical model’, *Phys. Scr.*, vol. 96, no. 6, p. 064006, Apr. 2021, doi: 10.1088/1402-4896/abf57d.

- [28] **R. J. Punith Gowda**, R Naveen Kumar, Ali Aldalbahi, Alibek Issakhov, B. C Prasannakumara, Mohammad Rahimi-Gorji, Mostafizur Rahaman, ‘Thermophoretic particle deposition in time-dependent flow of hybrid nanofluid over rotating and vertically upward/downward moving disk’, *Surf. Interfaces*, vol. 22, p. 100864, Feb. 2021, doi: 10.1016/j.surfin.2020.100864.
- [29] A. M. Jyothi, Naveen Kumar R, **Punith Gowda R. J.**, and B. C. Prasannakumara, ‘Significance of Stefan blowing effect on flow and heat transfer of Casson nanofluid over a moving thin needle.’, *Commun. Theor. Phys.*, 2021, doi: 10.1088/1572-9494/ac0a65.
- [30] **R. J. Punith Gowda**, A. Rauf, R. Naveen Kumar, B. C. Prasannakumara, and S. A. Shehzad, ‘Slip flow of Casson–Maxwell nanofluid confined through stretchable disks’, *Indian J. Phys.*, Jun. 2021, doi: 10.1007/s12648-021-02153-7.
- [31] Y.-X. Li, M Ijaz Khan, **RJ Punith Gowda**, Arfan Ali, Shahid Farooq, Yu-Ming Chu, Sami Ullah Khan, ‘Dynamics of aluminum oxide and copper hybrid nanofluid in nonlinear mixed Marangoni convective flow with Entropy Generation: Applications to Renewable Energy’, *Chin. J. Phys.*, Jun. 2021, doi: 10.1016/j.cjph.2021.06.004.
- [32] S.-S. Zhou, M Ijaz Khan, Sumaira Qayyum, B. C Prasannakumara, R Naveen Kumar, Sami Ullah Khan, **R. J Punith Gowda**, Yu-Ming Chu ‘Nonlinear mixed convective Williamson nanofluid flow with the suspension of gyrotactic microorganisms’, *Int. J. Mod. Phys. B*, p. 2150145, Jun. 2021, doi: 10.1142/S0217979221501459.
- [33] J. Madhukesh, A. Alhadhrami, R. Naveen Kumar, **R.J. Punith Gowda**, B. Prasannakumara, and R. Varun Kumar, “Physical insights into the heat and mass transfer in Casson hybrid nanofluid flow induced by a Riga plate with thermophoretic particle deposition,” *Proc. Inst. Mech. Eng. Part E J. Process Mech. Eng.*, p. 09544089211039305, Aug. 2021, doi: 10.1177/09544089211039305.
- [34] P. T. Manjunatha, A. J. Chamkha, **R. J. Punith Gowda**, R. Naveen Kumar, B. C. Prasannakumara, and S. M. Naik, “Significance of Stefan Blowing and Convective Heat Transfer in Nanofluid Flow Over a Curved Stretching Sheet with Chemical Reaction,” *J. Nanofluids*, vol. 10, no. 2, pp. 285–291, Jun. 2021, doi: 10.1166/jon.2021.1786.
- [35] **R. J. Punith Gowda**, H. M. Baskonus, R. Naveen Kumar, D. G. Prakasha, and B. C. Prasannakumara, “Evaluation of heat and mass transfer in ferromagnetic fluid flow over a stretching sheet with combined effects of thermophoretic particle deposition and magnetic dipole,” *Waves Random Complex Media*, vol. 0, no. 0, pp. 1–19, Sep. 2021, doi: 10.1080/17455030.2021.1969063.
- [36] **R. J. Punith Gowda**, H. B. Mallikarjuna, B. C. Prasannakumara, R. N. Kumar, and P. T. Manjunatha, “Dynamics of thermal Marangoni stagnation point flow in dusty Casson nanofluid,” *Int. J. Model. Simul.*, vol. 0, no. 0, pp. 1–9, Sep. 2021, doi: 10.1080/02286203.2021.1957330.

- [37] Y.-J. Xu et al., “New modeling and analytical solution of fourth grade (non-Newtonian) fluid by a stretchable magnetized Riga device,” *Int. J. Mod. Phys. C*, p. 2250013, Oct. 2021, doi: 10.1142/S0129183122500139.
- [38] Aamir Hamid, R Naveen Kumar, **R. J. Punith Gowda**, RS Varun Kumar, Sami Ullah Khan, M Ijaz Khan, BC Prasannakumara, Taseer Muhammad, “Impact of Hall current and homogenous–heterogenous reactions on MHD flow of GO-MoS₂/water (H₂O)-ethylene glycol (C₂H₆O₂) hybrid nanofluid past a vertical stretching surface,” *Waves Random Complex Media*, vol. 0, no. 0, pp. 1–18, Oct. 2021, doi: 10.1080/17455030.2021.1985746.
- [39] M Asif Zahoor Raja, M Shoaib, Rafia Tabassum, M Ijaz Khan, **R. J. Punith Gowda**, BC Prasannakumara, MY Malik, Wei-Feng Xia, “Intelligent computing for the dynamics of entropy optimized nanofluidic system under impacts of MHD along thick surface,” *Int. J. Mod. Phys. B*, vol. 35, no. 26, p. 2150269, Oct. 2021, doi: 10.1142/S0217979221502696.
- [40] R. s Varun Kumar, A. Alhadhrami, **R. J. Punith Gowda**, R. Naveen Kumar, and B. c. Prasannakumara, “Exploration of Arrhenius activation energy on hybrid nanofluid flow over a curved stretchable surface,” *ZAMM - J. Appl. Math. Mech. Z. Für Angew. Math. Mech.*, vol. 101, no. 12, p. e202100035, 2021, doi: 10.1002/zamm.202100035.
- [41] R. Naveen Kumar, S. Suresha, **R. J. Punith Gowda**, S. B. Megalamani, and B. C. Prasannakumara, “Exploring the impact of magnetic dipole on the radiative nanofluid flow over a stretching sheet by means of KKL model,” *Pramana*, vol. 95, no. 4, p. 180, Oct. 2021, doi: 10.1007/s12043-021-02212-y.
- [42] **R. J. Punith Gowda**, A. M. Jyothi, R. Naveen Kumar, B. C. Prasannakumara, and I. E. Sarris, “Convective Flow of Second Grade Fluid Over a Curved Stretching Sheet with Dufour and Soret Effects,” *Int. J. Appl. Comput. Math.*, vol. 7, no. 6, p. 226, Nov. 2021, doi: 10.1007/s40819-021-01164-6.
- [43] Muhammad Shoaib, Ghania Zubair, Kottakkaran Sooppy Nisar, Muhammad Asif Zahoor Raja, Muhammad Ijaz Khan, **R. J. Punith Gowda**, BC Prasannakumara, “Ohmic heating effects and entropy generation for nanofluidic system of Ree-Eyring fluid: Intelligent computing paradigm,” *Int. Commun. Heat Mass Transf.*, vol. 129, p. 105683, Dec. 2021, doi: 10.1016/j.icheatmasstransfer.2021.105683.
- [44] Muhammad Shoaib, Mamoona Kausar, M Ijaz Khan, Muhammad Zeb, **R. J. Punith Gowda**, BC Prasannakumara, Faris Alzahrani, Muhammad Asif Zahoor Raja, “Intelligent backpropagated neural networks application on Darcy-Forchheimer ferrofluid slip flow system,” *Int. Commun. Heat Mass Transf.*, vol. 129, p. 105730, Dec. 2021, doi: 10.1016/j.icheatmasstransfer.2021.105730.
- [45] J. K. Madhukesh, R. S. Varun Kumar, **R. J. Punith Gowda**, B. C. Prasannakumara, and S. A. Shehzad, “Thermophoretic particle deposition and heat generation analysis of Newtonian

nanofluid flow through magnetized Riga plate,” *Heat Transf.*, vol. n/a, no. n/a, doi: 10.1002/htj.22438.

[46] Qiu-Hong Shi, Aamir Hamid, M Ijaz Khan, R Naveen Kumar, **R. J. Punith Gowda**, BC Prasannakumara, Nehad Ali Shah, Sami Ullah Khan, Jae Dong Chung, ‘Numerical study of bio-convection flow of magneto-cross nanofluid containing gyrotactic microorganisms with activation energy’, *Sci. Rep.*, vol. 11, no. 1, p. 16030, Aug. 2021, doi: 10.1038/s41598-021-95587-2.

[47] K. Sarada, **R. J. Punith Gowda**, I. E. Sarris, R. N. Kumar, and B. C. Prasannakumara, ‘Effect of Magnetohydrodynamics on Heat Transfer Behaviour of a Non-Newtonian Fluid Flow over a Stretching Sheet under Local Thermal Non-Equilibrium Condition’, *Fluids*, vol. 6, no. 8, Art. no. 8, Aug. 2021, doi: 10.3390/fluids6080264.

[48] Ying-Qing Song, Aamir Hamid, M Ijaz Khan, **RJ Punith Gowda**, R Naveen Kumar, BC Prasannakumara, Sami Ullah Khan, M Imran Khan, MY Malik ,‘Solar energy aspects of gyrotactic mixed bioconvection flow of nanofluid past a vertical thin moving needle influenced by variable Prandtl number’, *Chaos Solitons Fractals*, vol. 151, p. 111244, Oct. 2021, doi: 10.1016/j.chaos.2021.111244.

[49] T. A. Yusuf, R. Naveen Kumar, **R. J. Punith Gowda**, and U. D. Akpan, “Entropy generation on flow and heat transfer of a reactive MHD Sisko fluid through inclined walls with porous medium,” *Int. J. Ambient Energy*, vol. 0, no. 0, pp. 1–10, Dec. 2021, doi: 10.1080/01430750.2021.2013941.

[50] G. Sowmya, B. Saleh, **R. J. Punith Gowda**, R. Naveen Kumar, R. S. Varun Kumar, and M. Radhika, “Analysis of radiative nonlinear heat transfer in a convective flow of dusty fluid by capitalizing a non-Fourier heat flux model,” *Proc. Inst. Mech. Eng. Part E J. Process Mech. Eng.*, p. 09544089211041192, Sep. 2021, doi: 10.1177/09544089211041192.

[51] P. T. Manjunatha, **R. J. Punith Gowda**, R. Naveen Kumar, S. S., and D. U. Sarwe, “Numerical simulation of carbon nanotubes nanofluid flow over vertically moving disk with rotation,” *Partial Differ. Equ. Appl. Math.*, vol. 4, p. 100124, Dec. 2021, doi: 10.1016/j.padiff.2021.100124.

[52] A. Alhadhrami, CS Vishalakshi, BM Prasanna, BR Sreenivasa, Hassan AH Alzahrani, **RJ Punith Gowda**, R Naveen Kumar, “Numerical simulation of local thermal non-equilibrium effects on the flow and heat transfer of non-Newtonian Casson fluid in a porous media,” *Case Stud. Therm. Eng.*, vol. 28, p. 101483, Dec. 2021, doi: 10.1016/j.csite.2021.101483.

[53] A. Alhadhrami, Hassan AH Alzahrani, R Naveen Kumar, **R. J. Punith Gowda**, Konduru Sarada, BM Prasanna, JK Madhukesh, N Madhukeshwara, “Impact of thermophoretic particle deposition on Glauert wall jet slip flow of nanofluid,” *Case Stud. Therm. Eng.*, vol. 28, p. 101404, Dec. 2021, doi: 10.1016/j.csite.2021.101404.

[54] R Naveen Kumar, **RJ Punith Gowda**, Mohammad Mahtab Alam, Irfan Ahmad, YM

Mahrous, MR Gorji, BC Prasannakumara, “Inspection of convective heat transfer and KKL correlation for simulation of nanofluid flow over a curved stretching sheet,” *Int. Commun. Heat Mass Transf.*, vol. 126, p. 105445, Jul. 2021, doi: 10.1016/j.icheatmasstransfer.2021.105445.

[55] **R. J. Punith Gowda**, R. Naveen Kumar, A. M. Jyothi, B. C. Prasannakumara, and K. S. Nisar, “KKL correlation for simulation of nanofluid flow over a stretching sheet considering magnetic dipole and chemical reaction,” *ZAMM - J. Appl. Math. Mech. Z. Für Angew. Math. Mech.*, vol. 101, no. 11, p. e202000372, 2021, doi: 10.1002/zamm.202000372.

[56] **R. J. Punith Gowda**, R. Naveenkumar, J. K. Madhukesh, B. C. Prasannakumara, and R. S. R. Gorla, “Theoretical analysis of SWCNT- MWCNT/H₂O/H₂O hybrid flow over an upward/downward moving rotating disk,” *Proc. Inst. Mech. Eng. Part N J. Nanomater. Nanoeng. Nanosyst.*, vol. 235, no. 3–4, pp. 97–106, Sep. 2021, doi: 10.1177/2397791420980282.

[57] Ying-Qing Song, M Ijaz Khan, Sumaira Qayyum, **RJ Punith Gowda**, R Naveen Kumar, BC Prasannakumara, Yasser Elmasry, Yu-Ming Chu, “Physical impact of thermo-diffusion and diffusion-thermo on Marangoni convective flow of hybrid nanofluid (MnZiFe₂O₄–NiZnFe₂O₄–H₂O) with nonlinear heat source/sink and radiative heat flux,” *Mod. Phys. Lett. B*, vol. 35, no. 22, p. 2141006, Aug. 2021, doi: 10.1142/S0217984921410062.

[58] Yinyin Wang, R Naveen Kumar, Soumaya Gouadria, Maha M Helmi, **RJ Punith Gowda**, Essam Roshdy El-Zahar, BC Prasannakumara, M Ijaz Khan, “A three-dimensional flow of an Oldroyd-B liquid with magnetic field and radiation effects: An application of thermophoretic particle deposition,” *International Communications in Heat and Mass Transfer*, vol. 134, p. 106007, May 2022, doi: 10.1016/j.icheatmasstransfer.2022.106007.

[59] M Sunitha, Fehmi Gamaoun, Amal Abdulrahman, Naveen Sanju Malagi, Sandeep Singh, Rekha Javare Gowda, **RJ Punith Gowda**, “An efficient analytical approach with novel integral transform to study the two-dimensional solute transport problem,” *Ain Shams Engineering Journal*, p. 101878, Jun. 2022, doi: 10.1016/j.asej.2022.101878.

[60] B. Saleh et al., “Aspects of magnetic dipole and heat source/sink on the Maxwell hybrid nanofluid flow over a stretching sheet,” *Proceedings of the Institution of Mechanical Engineers, Part E: Journal of Process Mechanical Engineering*, p. 09544089211056243, Jan. 2022, doi: 10.1177/09544089211056243.

[61] F. Alzahrani, **R. J. Punith Gowda**, R. N. Kumar, and M. I. Khan, “Dynamics of thermosolutal Marangoni convection and nanoparticle aggregation effects on Oldroyd-B nanofluid past a porous boundary with homogeneous-heterogeneous catalytic reactions,” *Journal of the Indian Chemical Society*, vol. 99, no. 6, p. 100458, Jun. 2022, doi: 10.1016/j.jics.2022.100458.

[62] R. S. Varun Kumar, B. Saleh, G. Sowmya, A. Afzal, B. C. Prasannakumara, and **R. J. Punith Gowda**, “Exploration of transient heat transfer through a moving plate with exponentially temperature-dependent thermal properties,” *Waves in Random and Complex Media*, vol. 0, no. 0,

pp. 1–19, Mar. 2022, doi: 10.1080/17455030.2022.2056256.

[63] M Asif Zahoor Raja, M Shoaib, Ghania Zubair, M Ijaz Khan, **RJ Punith Gowda**, BC Prasannakumara, Kamel Guedri, “Intelligent neuro-computing for entropy generated Darcy–Forchheimer mixed convective fluid flow,” *Mathematics and Computers in Simulation*, vol. 201, pp. 193–214, Nov. 2022, doi: 10.1016/j.matcom.2022.05.004.

[64] R. Naveen Kumar, B. Saleh, Y. Abdelrhman, A. Afzal, and **R. J. Punith Gowda**, “Soret and Dufour effects on Oldroyd-B fluid flow under the influences of convective boundary condition with Stefan blowing effect,” *Indian J Phys*, Mar. 2022, doi: 10.1007/s12648-022-02316-0.

[65] Fuzhang Wang, S Prasanna Rani, Konduru Sarada, **RJ Punith Gowda**, Heba Y Zahran, Emad E Mahmoud, “The effects of nanoparticle aggregation and radiation on the flow of nanofluid between the gap of a disk and cone,” *Case Studies in Thermal Engineering*, vol. 33, p. 101930, May 2022, doi: 10.1016/j.csite.2022.101930.

Book Published / Book Chapters Published:

Title : **Micro and Nanofluid Convection with Magnetic Field Effects for Heat and Mass Transfer Applications Using MATLAB**

Chapter : **6 - Stefan blowing effect on nanofluid flow over a stretching sheet in the presence of a magnetic dipole**

Authors : R. Naveen Kumar, **R.J. Punith Gowda**, B.C. Prasannakumara, C.S.K. Raju

Publisher : **ISBN 978-0-12-823140-1, 2022 Imprint-Elsevier.**

DOI : <https://doi.org/10.1016/C2019-0-04634-1>

Conference/ Workshops/Trainings attended:

| Sl NO | Title of the paper | Title of Conference/ Symposia | Date of the event | Organized by | National/ International /State/College Level |
|-------|--|--|---------------------|---|--|
| 1. | Computational modeling of convective chemically reactive nanofluid flow over a curved stretching sheet: An application of Stefan blowing | National Seminar on “Modeling and Simulation (The world of Applied Mathematics)” (MS-2021) | July 3, 2021 | GOVT. PT. SHYAMACHARAN SHUKLA COLLEGE DHARSIWA RAIPUR, (C.G.) | National |

| | | | | | |
|----|---|---|-----------------------|--|---------------|
| 2. | Neuro-Computing Intelligent Networks for Entropy Optimized MHD Fully Developed Nanofluid Flow with Activation Energy and Slip effects | 27th International Conference of International Academy of Physical Sciences (CONIAPS XXVII) on Fluid Mechanics and its Industrial Applications) | October 26 - 28, 2021 | Department of Mathematics, Kuvempu University and International Academy of Physical Sciences, Allahabad (Prayagraj), India | International |
| 3. | Magneto-hydrodynamic nanofluid flow with activation energy: an application of neuro-computing intelligent networks | Two Days About the Conference International Conference on Differential geometry and its applications | March 4-5, 2022 | Department of Mathematics, Kuvempu University and The Tensor Society, Lucknow, India | International |
| 4. | Neuro-Computing Intelligent Networks for magnetohydrodynamic nanofluid flow with activation energy: A Buongiorno model analysis | International Conference on Mathematics and its Relevance to Science and Engineering | March 12-14, 2022 | Department of Mathematics, Osmania university, Hyderabad, India | International |

PAPERS PRESENTED

| Sl. No. | Conference | Title of the paper presented | Organized by | Date | National /International |
|---------|---|--|-------------------------------|---|-------------------------|
| 01 | Two days International Conference on Differential | Magneto-hydrodynamic nanofluid flow with activation energy: an | Kuvempu University, Karnataka | 4 th -5 th march 2022 | International |

| | | | | | |
|----|--|---|-------------------------------|--|----------------------|
| | Geometry and Its Applications | application of neuro-computing intelligent networks | | | |
| 02 | XXX Congress of APTSMS and International Conference on Mathematics and Its Relevance to Science and Engineering | Neuro-Computing Intelligent Networks for magnetohydrodynamic nanofluid flow with activation energy: A Buongiorno model analysis | Osmania University, Hyderabad | 12 th -14 th march 2022 | International |
| 03 | 27 th International Conference of International Academy of Physical Sciences (CONIAPS XXVII) On Fluid Mechanics and its Industrial Applications | Neuro-Computing Intelligent Networks for Entropy Optimized MHD Fully Developed Nanofluid Flow with Activation Energy and Slip Effects | October 26 - 28, 2021 | Department of Mathematics, Kuvempu University and International Academy of Physical Sciences, Allahabad (Prayagraj), India | International |

Residential Address

Punith Gowda R. J.
S/O Jayadevamurthy B,
Ramanahalli, Bisalehalli Post,
Kadur Tq,
Chickmagalur Dist.
Pin: 577548.