

Curriculum Vitae

Dr. Ashwinkumar

Assistant Professor,
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❖ Academic Credentials: (Qualification: M.Sc., Ph.D.)

Qualification	Institution	Board / University	Passing Year	Class Obtained
Ph.D. in Mathematics	Department of Mathematics, GUK	Gulbarga University, Kalaburagi	2018	--
M.Sc.in Mathematics	Department of Mathematics, CUK	Central University of Karnataka	2014	FCD
B.Sc. in Mathematics	S.S.K.B. College of Arts & Science, Basavakalyan.	Gulbarga University, Kalaburagi	2012	FCD

❖ Ph.D. Details:

- Thesis Title : “Heat transfer characteristics on the study of MHD nanofluids”
- Research Guide: **Prof. C. Sulochana, Dept. of Mathematics, Gulbarga University, Kalaburagi.**

❖ Special Achievements:

- Qualified **K-SET Examinations** in Mathematical Sciences for Assistant Professorship/Lectureship in 2016, Conducted by University of Mysore, Mysore, Karnataka.
- Awarded **UGC - Rajiv Gandhi National Fellowship** during Doctoral Research in 2017.
- Received **Best Paper award** for presentation in Two day’s Seminar conducted for Research Scholars of GUK, at Gulbarga University, Kalaburagi on 9th &10th February-2017.
- Received **Best Poster Presentation award** in National Conference on “Science and Technology for Inclusive Development” Jointly organized by KSTA and GUK at Gulbarga University, Kalaburagi on 6th and 7th March 2018.

❖ Teaching Experience:

Institution	Designation	Service	
		From	To
V.S.K. University, Ballary	Assistant Professor	Sep. 2018	Till Date
Don Bosco Institutions Yadgiri, Karnataka	Lecturer	June 2014	April 2015

❖ Research Interests:

- Convective Heat and Mass Transfer in MHD flows.
- Heat and Mass Transfer in Newtonian and non-Newtonian fluids.
- Heat and Mass Transfer in Nanofluids, Hybrid Nanofluids
- Flows over Stretching Sheet, Vertical cone, thin needle, thin film etc.
- Flows through porous media.

❖ Research Publications:

- [1] G.P. Ashwinkumar, Heat and mass transfer analysis in unsteady MHD flow of aluminum alloy/silver-water nanoliquid due to an elongated surface. *Heat Transfer*. 2020; 1–18. <https://doi.org/10.1002/htj.21947>
- [2] F. Mabood, G.P. Ashwinkumar, N. Sandeep, Simultaneous results for unsteady flow of MHD hybrid nanoliquid above a flat/slendering surface, *J. Therm. Anal. Calorim.* (2020). doi: 10.1007/s10973-020-09943-x. **Impact Factor: 2.731 (Scopus Journal)**
- [3] I. Tlili, H.A. Nabwey, G.P. Ashwinkumar, N. Sandeep, 3-D magnetohydrodynamic AA7072-AA7075/methanol hybrid nanofluid flow above an uneven thickness surface with slip effect, *Sci. Rep.* 10 (2020) 1–13. doi:10.1038/s41598-020-61215-8. **Impact Factor: 4.576 (Scopus Journal)**
- [4] S.P. Samrat, C. Sulochana, G.P. Ashwinkumar, Impact of thermal radiation on an unsteady Casson nanofluid flow over a stretching surface, *Int. J. Appl. Comput. Math.* 5 (2019) 1–20. doi:10.1007/s40819-019-0606-2. **(Scopus Journal)**
- [5] C. Sulochana, G.P. Ashwinkumar, N. Sandeep, Effect of frictional heating on mixed convection flow of chemically reacting radiative Casson nanofluid over an inclined porous plate, *Alexandria Eng. J.* 57 (2018) 2573–2584. doi:10.1016/j.aej.2017.08.006. **Impact Factor: 2.460 (Scopus Journal)**
- [6] C. Sulochana, G.P. Ashwinkumar, N. Sandeep, Boundary layer analysis of persistent moving horizontal needle in magnetohydrodynamic ferrofluid: A numerical study, *Alexandria Eng. J.* 57 (2018) 2559–2566. doi:10.1016/j.aej.2017.08.020. **Impact Factor: 2.460 (Scopus Journal)**
- [7] G.P. Ashwinkumar, C. Sulochana, Effect of radiation absorption and buoyancy force on the MHD mixed convection flow of Casson nanofluid embedded with Al₅₀Cu₅₀ alloy nanoparticles, *Multidiscip. Model. Mater. Struct.* 14 (2018) 1082–1100. doi:10.1108/MMMS-12-2017-0164. **Impact Factor: 0.70 (Scopus Journal)**

- [8] C. Sulochana, G.P. Ashwinkumar, Impact of Brownian moment and thermophoresis on magnetohydrodynamic flow of magnetic nanofluid past an elongated sheet in the presence of thermal diffusion, *Multidiscip. Model. Mater. Struct.* 14 (2018) 744–755. doi:10.1108/MMMS-12-2017-0168. **Impact Factor: 0.70 (Scopus Journal)**
- [9] S.P. Samrat, C. Sulochana, G.P. Ashwinkumar, Impact of thermal radiation and chemical reaction on unsteady 2D flow of magnetic-nanofluids over an elongated plate embedded with ferrous nanoparticles, *Front. Heat Mass Transf.* 10 (2018) 1–8. doi:10.5098/hmt.10.31. **Impact Factor: 1.36 (Scopus Journal)**
- [10] G.P. Ashwinkumar, C. Sulochana, S.P. Samrat, Effect of the aligned magnetic field on the boundary layer analysis of magnetic-nanofluid over a semi-infinite vertical plate with ferrous nanoparticles, *Multidiscip. Model. Mater. Struct.* 14 (2018) 497–515. doi:10.1108/MMMS-10-2017-0128. **Impact Factor: 0.70 (Scopus Journal)**
- [11] C. Sulochana, G.P. Ashwinkumar, N. Sandeep, Effect of thermophoresis and Brownian moment on 2D MHD nanofluid flow over an elongated sheet, *Defect Diffus. Forum.* 377 (2017) 111–126. doi:10.4028/www.scientific.net/DDF.377.111. **Impact Factor: 0.66 (Scopus Journal)**
- [12] C. Sulochana, G.P. Ashwinkumar, N. Sandeep, Joule heating effect on a continuously moving thin needle in MHD Sakiadis flow with thermophoresis and Brownian moment, *Eur. Phys. J. Plus.* 132 (2017). doi:10.1140/epjp/i2017-11633-3. **Impact Factor: 3.228 (Scopus Journal)**
- [13] C. Sulochana, G. P. Ashwinkumar, N. Sandeep, Numerical investigation of chemically reacting MHD flow due to a rotating cone with thermophoresis and Brownian motion, *Int. J. Adv. Sci. Technol.* 86 (2016) 61–74. doi:10.14257/ijast.2016.86.06. **Impact Factor: 0.44 (Scopus Journal)**
- [14] C. Sulochana, G.P. Ashwinkumar, N. Sandeep, Similarity solution of 3D Casson nanofluid flow over a stretching sheet with convective boundary conditions, *J. Niger. Math. Soc.* 35 (2016) 128–141. doi:10.1016/j.jnnms.2016.01.001. **(Elsevier)**
- [15] C. Sulochana, G.P. Ashwinkumar, N. Sandeep, Transpiration effect on stagnation-point flow of a Carreau nanofluid in the presence of thermophoresis and Brownian motion, *Alexandria Eng. J.* 55 (2016) 1151–1157. doi:10.1016/j.aej.2016.03.031. **Impact Factor: 2.460 (Scopus Journal)**
- [16] C. Sulochana, G.P. Ashwinkumar, Carreau model for liquid thin film flow of dissipative magnetic-nanofluids over a stretching sheet, *Int. J. Hybrid Inf. Technol.* 10 (2017) 239–254. doi:10.14257/ijhit.2017.10.1.21.
- [17] G. P. Ashwinkumar, Impact of thermal radiation on the 2-D magnetohydrodynamic flow of nanofluid past a vertically elongated sheet in the presence of alloy nanoparticles, *Int. J. Adv. Innov. Res.* 6 (2019) 26–33.
- [18] G.P. Ashwinkumar, C. Sulochana, Numerical simulation of heat transfer characteristics in thin film flow of MHD dissipative Carreau nanofluid past a stretching sheet with CoFe_2O_4 Nanoparticles, *Int. J. Res. Eng. Technol.* 5 (2016) 18–25.
- [19] C. Sulochana, G.P. Ashwinkumar, Three-dimensional MHD flow over a stretching surface with thermophoresis and Brownian motion effects, *Spec. Issue Comput. Sci. Math. Biol.* 01 (2016) 73–77. doi:10.1016/j.apr.2016.07.013.

❖ **Paper Presentation in National/International Conferences /Seminars/ Workshops /Lecture Series:**

1. Attended **National Conference** on Pure and Applied Mathematics held at VIT University, Vellore. Tamil Nadu On March 12th 2016 and presented paper titled “*Heat and mass transfer in MHD dissipative flow in the presence of cross diffusion*”.
2. Attended **National Conference** on Analysis and its applications held at Karnatak University, Dharwad, Karnataka, India. During March 15th-16th 2017 and presented paper titled “*Thermophoresis and Brownian motion effects on MHD flow of Maxwell fluid over a stretching sheet in the presence of Cu nanoparticles.*”
3. Attended **National Conference** on Emerging Trends In Engineering Sciences and Management held at Shridevi Institute of Engineering and Technology, Tumkuru – 572 106, Karnataka from 23rd-24th March, 2016 and presented paper titled “*Similarity solution of MHD flow through a vertical rotating cone in porous medium with Brownian motion and thermophoresis effects*”
4. Attended **International Conference** on Computational, Mathematical and Biological modeling, held at Sri Padmavathi Mahila Vishwa Vidyalayam, Tirupati, Andhra Pradesh from March 25-26, 2016 and presented paper titled “*Three-dimensional MHD flow over a stretching surface with thermophoresis and Brownian motion effects.*”
5. Attended **International Conference** on Fluid Dynamics and its applications, held at BNMIT, Bangalore, from July 12-14, 2017 and presented paper titled “*Thermophoresis and Brownian motion effects on chemically reacting MHD flow over a rotating cone in porous medium*”.
6. Attended **National Conference** on Science and Technology for Inclusive Development, held at Gulbarga University Kalaburagi, from March 6-7, 2018 and presented poster presentation titled “*Joule heating and viscous dissipation effects on a continuously moving horizontal thin needle in MHD Sakiadis flow of ferrofluid*”.
7. Attended **National Workshop** on Advanced Analysis and Differential Equations held at Periyar University Salem, Tamil Nadu. During June 9-17, 2016.
8. Attended the Author **Workshop** Conducted by Elsevier in association with Gulbarga University, Gulbarga on 21st September 2016.
9. Attended First **International Conference** on Recent Innovations in Engineering and Technology-2016 held at Bheemanna Khandre Institute of Technology, Bhalki India from November 11-13, 2016 and presented paper titled “*Numerical Simulation Of Heat Transfer Characteristics In Thin Film Flow Of MHD Dissipative Carreau Nanofluid Past A Stretching Sheet With CoFe₂O₄ Nanoparticles*”.
10. Attended One day **National Seminar** on Recent Trends in Information and Communications Technology RTICT on 6th January 2017 at department of Computer Science, Gulbarga University, Kalaburagi Karnataka, India.

11. Attended **Two day's Seminar** conducted for Research Scholars of Gulabrga University, Kalaburagi, at Gulbarga University, Kalaburagi on 9th & 10th February-2017 and presented paper titled "*Heat and mass transfer in MHD flow of Maxwell nanofluid past a stretching sheet in the presence of thermophoresis and Brownian motion: a numerical study.*"
12. Attended **62nd ISTAM Congress-2017** held at Osmania University, Hyderabad, India from December 15-18, 2017 and presented paper titled "Joule heating effect on continuously moving thin needle in MHD Sakiadis flow with thermophoresis and Brownian moment".
13. Attended and **Received best poster presentation award in** National conference on Science and Technology for Inclusive Development jointly organized by KSTA and Gulbarga University, Kalaburagi on 6th-7th March 2018.
14. Attended three day's **Special Lecture Series on Mathematical Science** sponsored by Karnataka Science and Technology Academy, Bangalore organised by the Department of Mathenatics, Gulbarga University, Kalaburagi on 29-31, December-2015.
15. Attended Two days **KSTA Regional Conference on Science and Technology for Development** organised by Central University of Karnataka, Gulbarga on 30th and 31st January, 2014.
16. Attended the "**National Workshop on Current Research in Mathematical Sciences**" Organised by Dept. of Mathematics, Central University of Karnataka at Dept. of Mathematics, Central University of Karnataka. Kalaburagi on 28th-30th March-2019
17. Participated and Presented research paper titled "Joule heating effect on continuously moving thin needle in MHD Sakiadis flow with thermophoresis and Brownian moment" in **International Conference on Emerging Trends in Engineering**, science and Management at RYMEC Engineering College, Ballari on 4th -5th April 2019.
18. Participated and presented research paper titled "**Joule heating effect on continuously moving thin needle in MHD Sakiadis flow with thermophoresis and Brownian moment**" in national Conference on Recent Developments of Mathematics In Industrial Applications held at Department of Mathematics, Kuvempu university, Shivamogga on 11th -12th April 2019.

❖ **Technical Proficiency:**

- Mathematica, MatLab, C-Programming.
- Basics of Computers
- Text formatting : MS-Word, Power point, LaTeX

❖ **Languages Known:**

- English, Hindi, Kannada, Marathi.