# **CURRICULUM-VITAE**

NAME	: Dr.Rudraswamy N.G.
OBJECTIVE	: Teaching /Research
POSTAL ADDRESS	: Department of Mathematics,
	KLE Society's P.C.Jabin Science College (Autonomous),
	Hubballi-580035
	(Mobile) +91 8105004050
e-mail	: ngrudraswamy@gmail.com
NATIONALITY	: INDIAN
DATE OF BIRTH	: 18th May 1986
MARITAL STATUS	: Married
EDUCATIONAL	: Ph.D., (2015), M.Sc., (2010)
QUALIFICATION	B.Ed., (2007)
AREA OF THE RESEARCH	· Eluid Machanics
WORK	
TITLE OF THE Ph.D. WORK	: A Study on Flow and Heat Transfer of a Nanofluid
RESEARCH EXPERIENCE	: From January
	2012 to till date
TEACHING EXPERIENCE	: Aug 2010-Dec 2011 (Dept. of Mathematics, KU)
	Aug 2015 to May 2019 (Sahyadri Science college)
	Jun 2019 to Till date (P.C.Jabin Science College, Hubballi)
PROJECT WORKS UNDER	
TAKEN	: Geometry of Curvature (M.Sc. 2010)
RESEARCH PUBLICATIONS	: 33 (International Journals)
	01 (Book Chapters)
	04 (Conference Proceedings)
MEMBER FOR	: 05
PROFESSIONAL BODIES	(1) Member in International Association of Engineers (IAENG)
	(No : 106858).
	(2) BOE Member, LBS College (Autonomous), Sagara, Karnataka.
	(3) Academic Council Member: KLE Society's P.C.Jabin Science
	College, (Autonomous), Hubballi.
	(4) BOS Chairman: KLE Society's P.C.Jabin Science College
	(Autonomous). Hubballi.
	(5) BOE Chairman: KLE Society's P.C. Jabin Science College
	(Autonomous), Hubballi,
SUBJECTS TAUGHT	Differential Equations Numerical Analysis Fluid Mechanics

Parent a

		Complex Analysis, Computer oriented Probability & Statistical	
		Methods	
COMPUTER LITERACY	:	C-programming, Matlab, Maple, LaTex, Microsoft Origin,	
		CorelDraw, SCILab,MAXIMA,	
OTHER ACTIVITIES	:	Position: NCC Jnr. Under Officer 2005-06.	
		Exams: NCC 'C' and 'B' certificates with 'B' Grade.	
AWARDS and	_	Descende Superviser VIE Tech Juckhalli	
RECOGNITION:	•	Research Supervisor, KLE Tech., Hubballi.	

#### PROFESSIONAL REVIEWING SERVICES:

- 1. Reviewer for International Journal of Heat and Mass .
- 2. Reviewer for Case Studies in Thermal Engineering.
- 3. Reviewer for Waves in Random and Complex Media.
- 4. Reviewer for Alexandria Engineering Journal.
- 5. Reviewer for Heat Transfer(wiley).
- 6. Reviewer for Propulsion and Power Research.
- 7. Reviewer for International Journal of Modern Physics B.
- 8. Reviewer for BioNanoScience.

## **RESEARCH PUBLICATIONS IN JOURNALS:**

- B.J.Gireesha, B.Nagaraja, N.Srikantha, Rudraswamy N.G. & F.Almeida, "Magnetically propelled Carreau fluid flow over Penetrable Sensor Surface Influenced by Thermal Radiation, Joule Heating and Heat Generation", Communications in Theoretical Physics, Vol. 74(2) (2022) 025002.
- G.R.Machireddy, M.M.Praveena, N.G. Rudraswamy & G.K.Kumar, "Impact of Cattaneo– Christov heat flux on hydromagnetic flow of non-Newtonian fluids filled with Darcy– Forchheimer porous medium", Waves in Random and Complex Media, (2021) 1-18 <u>https://doi.org/10.1080/17455030.2021.1957178</u>
- M.G.Reddy, N.Kumar, B.C.Prasannakumara, N.G.Rudraswamy & K.G.Kumar, "Magnetohydrodynamic flow and heat transfer of a hybrid nanofluid over a rotating disk by considering Arrhenius energy", Communications in Theoretical Physics, Vol. 73(4) (2021) 045002.
- K.G. Kumar, MR Krishnamurthy & N.G.Rudraswamy, "Boundary layer flow and melting heat transfer of Prandtl fluid over a stretching surface by considering Joule heating effect", Multidiscipline Modeling in Materials and Structures, Vol. 15(2) (2019) pp. 337-352.

- B.J.Gireesha, K.G. Kumar, M.R.Krishnamurthy, S.Manjunatha & N.G.Rudraswamy, "Impact of ohmic heating on MHD mixed convection flow of Casson fluid by considering cross diffusion effect", Nonlinear Engineering, Vol 8 (1) (2019) pp.380-388.
- K.G.Kumar, B.J.Gireesha, N.G.Rudraswamy & M.R.Krishnamurthy, "An unsteady flow and melting heat transfer of a nanofluid over a stretching sheet embedded in a porous medium", International Journal of Applied Mechanics and Engineering, Vol. 24 (2) (2019)Pp.245—258.
- B.J.Gireesha, M.R.Krishnamurthy, K.G.Kumar & N.G.Rudraswamy, "Enhancement ofheat transfer in an unsteady rotating flow for the aqueous suspensions of single wall nanotubes under nonlinear thermal radiation: a numerical study", Colloid and Polymer Science, Vol. 296 (9) (2018) pp. 1501-1508. IF-1.967
- 8. M.R.Krishnamurthy, K.G.Kumar, B.J.Gireesha & N.G.Rudraswamy, "MHD flow and heat transfer of non-newtonian nanofluids over a nonlinear stretching sheet", J. Computational and Theoretical Nanoscience, Vol. 15 (5) (2018) pp. 1452-1460
- 9. B.J.Gireesha, K.G.Kumar, S.Manjunatha & N.G.Rudraswamy, "Effect of viscous dissipation on three dimensional flow of a nanofluid by considering a gyrotactic micro organism in the presence of convective condition", Defect and Diffusion Forum, Vol. 388 (2018) pp.114-123
- K.G.Kumar, M.Archana, B.J.Gireesha, M.R.Krishanamurthy & N.G.Rudraswamy, "Crossdiffusion effect on MHD mixed convection flow of nonlinear radiative heat and mass transfer of Casson fluid over a vertical plate", Results in Physics, Vol. 8 (2018) pp. 694-701.IF-0.946
- K.G.Kumar, B.J.Gireesha, G.K.Ramesh & N.G.Rudraswamy, "Double-Diffusive Free Convective Flow of Maxwell Nanofluid Past a Stretching Sheet with Nonlinear Thermal Radiation", J. Nanofluids, Vol. 7 (3) (2018) pp. 499-508. IF-0.90
- 12. M.R.Krishnamurthy, K.G.Kumar, B.J.Gireesha & N.G.Rudraswamy, "MHD Flow and Heat Transfer (PST and PHF) of Dusty Fluid Suspended with Alumina Nanoparticles Over a Stretching Sheet Embedded in a Porous Medium Under the Influence of Thermal Radiation", J. Nanofluids, Vol. 7 (3) (2018) pp. 527-535.
- N.G.Rudraswamy, S.A.Shehzad, K.G.Kumar & B.J. Gireesha, "Numerical elucidation of MHD three-dimensional Carreau nanoliquid flow with radiation effect", J. Brazilian Society Mech. Sci. Engi., Vol. 39 (12)(2017) pp. 5037-5047. IF-1.235
- 14. K.G.Kumar, B.J.Gireesha, M.R.Krishanamurthy & N.G.Rudraswamy, "An unsteady squeezed flow of a tangent hyperbolic fluid over a sensor surface in the presence of variable thermal conductivity", Results in Physics, Vol. 7 (2017) pp. 3031-3036. IF-0.946
- 15. K.G.Kumar, N.G.Rudraswamy, B.J.Gireesha & M.R.Krishnamurthy "Influence of nonlinear thermal radiation and viscous dissipation on three-dimensional flow of Jeffrey nanofluidover a stretching sheet in the presence of Joule heating", J. Nonlinear Engineering, Vol.6(3) (2017) pp.207-219.

- N.G.Rudraswamy, K.G.Kumar, B.J.Gireesha & R.S.R.Gorla, "Combined effect of Joule heating and viscous dissipation on MHD three dimensional flow of a Jeffrey nanofluid", J.Nanofluids, Vol. 6 No. 2 (2017) pp. 1-11. IF-0.90
- 17. K.G.Kumar, N.G.Rudraswamy, B.J.Gireesha & S.Manjunatha, "Non linear thermal radiation effect on Williamson fluid with particle-liquid suspension past a stretching surface", Results in Physics, Vol. 7 (2017) pp. 3196-3202. IF-0.946
- K.G.Kumar, B.J.Gireesha, S.Manjunatha & N.G.Rudraswamy, "Effect of nonlinear thermal radiation on double-diffusive mixed convection boundary layer flow of visco-elastic nanofluid over a stretching sheet", Int. J. Mech. and Mat. Engi., Vol. 12 (1) (2017)pp. 18. IF-0.235
- 19. K.G.Kumar, N.G.Rudraswamy & B.J.Gireesha, "Effects of mass transfer on MHD threedimensional flow of a Prandtl liquid over a flat plate in the presence of chemical reaction", Results in Physics, Vol.7 (2017) pp. 3465-3471. IF-0.946
- 20. M.Umeshaiah, M.R.Krishnamurthy, N.G.Rudraswamy, B.J.Gireesha & B.C.Prasannakumara, "Nonlinear radiative heat transfer to Carreau fluid over a nonlinear stretching sheet in a porous medium in the presence of non-uniform heat source/sink and viscous dissipation", Frontiers in Heat and Mass Transfer (FHMT), Vol. 9(4) (2017).
- 21. K.G.Kumar, B.J.Gireesha, N.G.Rudraswamy & S.Manjunatha, "Radiative heat transfer of Carreau fluid flow over a stretching sheet with fluid particle suspension and temperaturejump", Results in Physics, Vol.7 (2017) pp. 3976-3983. IF-0.946
- N.G.Rudraswamy, K.G.Kumar, B.J.Gireesha & R.S.R.Gorla, "Soret and Dufour effects in three-dimensional flow of Jeffery nanofluid in the presence of nonlinear thermal radiation", J. Nanoeng. Nanomanuf., Vol. 6 (2016) pp. 1-10.
- 23. N.G.Rudraswamy, B.J.Gireesha & M.R.Krishnamurthy, "Effect of Internal Heat Generation/Absorption and Viscous Dissipation on MHD Flow and Heat Transfer of Nanofluidwith Particle Suspension Over a Stretching Surface", J. Nanofluids, Vol. 5 No. 6 (2016)pp.1-11. IF-0.90
- 24. N.G.Rudraswamy & B.J.Gireesha and Ali J.Chamkha, "Effects of magnetic field and chemical reaction on stagnation-point flow and heat transfer of a nanofluid over an inclinedstretching sheet", J. Nanofluids, Vol. 4 (2015) pp. 1-8. IF-0.90
- 25. B.J.Gireesha, Ali J.Chamkha, N.G.Rudraswamy & M.R.Krishnamurthy, "MHD Flow and Heat Transfer of a Nanofluid Embedded with Dust Particles Over a Stretching Sheet", J. Nanofluids, Vol. 4, No. 1 (2015) pp. 66-72. IF-0.90
- 26. N.G.Rudraswamy & B.J.Gireesha, "Radiation flow near stagnation point with heat and mass transfer of nanofluid over a permeable stretching sheet in the presence of uniform magnetic field and non-uniform source/sink", TEPE, Vol. 3, No. 4 (2014) pp. 273-283.
- 27. N.G.Rudraswamy & B.J.Gireesha, "Effect of inclination angle and magnetic field on flowand heat transfer of a nanofluid over an impermiable stretching sheet", J. Nanofluids, Vol.3,No. 2 (2014) pp.181-187. IF-0.90

- 28. B.J.Gireesha, & N.G.Rudraswamy, "Chemical reaction on MHD flow and heat transfer of a nanofluid near the stagnation point over a permeable stretching surface with non-uniformheat source/sink", Int. J. Eng. Scie. Tech., Vol.6 No. 5 (2014) pp. 13-25.
- 29. N.G.Rudraswamy & B.J.Gireesha, "Influence of chemical reaction and thermal radiation on MHD boundary layer flow and heat transfer of a nano fluid over an exponentially stretching sheet", J. App. Math. & Phy., Vol. 2 (2014) pp. 24-32.
- 30. B.J.Gireesha, K.Ganeshkumar, N.G.Rudraswamy & M.R.Krishnamurthy, "Three dimensional flow and heat transfer of a Jeffrey nanofluid with uniform heat source/sink", proceedings Recent advances in Nanoscience and Nanotechnology, GFGC Hasana, Karnataka, INDIA, (2016).
- 31. N.G.Rudraswamy & B.J.Gireesha, "Numerical studies on heat and mass transfer of ananofluid over an exponentially stretching sheet with Brownian motion and thermophoresiseffects", proceedings NCGAF-2013, pp. 164-171.
- 32. N.G.Rudraswamy & B.J.Gireesha, "Effects of thermal radiation and stagnation pointflow of a nanofluid over a stretching sheet in the presence of non-uniform source sink", proceedings NCMSA-2013, pp. 74-84.
- 33. B.J.Gireesha, K. Ganesh Kumar, B.C.Prasannakumara, M.R. Krishnamurthy & N.G.Rudraswamy, "Effect of nonlinear thermal radiation on williamson dusty fluid over a stretching sheet in the presence of magnetic field", Accepted in Proceeding of the National workshop on Partial Dfferential Equations and Numerical methods in Fluid Dynamics, GFGC KOPPA,Karnataka, INDIA, (2016).

## **RESEARCH PUBLICATIONS AS BOOK CHAPTERS:**

 N.G.Rudraswamy, K.G.Kumar, M.R.Krishanamurthy, B.J.Gireesha & P.Venkatesh "Thermalconductivity in the boundary layer of non-Newtonian fluid with particle suspension(ThermalConductivity)", Publisher: InTech - open science — open minds, Chapter 3 (2018). DOI:10.5772/intechopen.76345.

## CONFERENCES/SEMINARS/SYMPOSIUM/WORKSHOPS ATTENDED/PRESENTED:

- Participated in 11<sup>th</sup> International Multidisciplinary conference held during 12<sup>th</sup>-14<sup>th</sup> August 2022 at Karnataka State open university, Mysore. Paper Presented: Unsteady flow and influence of absorption/generation and dissipation on non-Newtonion fluid.
- Participated in International conference on "Differential Geometry and its Applications" held during 4<sup>th</sup> and 5<sup>th</sup> March 2022 organized by Department of P.G. Studies and Research in Mathematics, Jnanasahyadri, Kuvempu University, SHIVAMOGGA. Paper Presented: Unsteady Casson fluid flow over a stretching sheet with Thermal radiation, convective and slip boundary conditions.

- 3. Participated in Webinar on "Innovations and Best practices in Higher Education Institutions" held on 3<sup>rd</sup> August 2021 organized by S.Nijalingappa College, Bengaluru.
- 4. Participated in FDP on "Information and communication technology usage in teaching" 11th to 22<sup>nd</sup> August 2021 Govt. first grade college, Siddakatte, Dakshina kannada.
- Participated in International workshop on "Geometry of continued fractions Ramanujan and his successors" held during September 14<sup>th</sup> and 15<sup>th</sup> 2020 organized by Central University of Himachal Pradesh, India.
- 6. Participated in National Webinar on "Implementation of NET-2020" held on 12<sup>th</sup> November 2020 organized by K.L.E Society's Jagadguru tontadarya college, Gadag.
- Participated in Seminar on "A conceptual analysis on fundamentals of intellectual property rights" held on 19<sup>th</sup> November 2020 organized by Mahantswamy arts, science and commerce college Haunsbhavi, Haveri.
- Participated in National E- conference on "Multidisciplinary science education and research using E-tool' held during July 29<sup>th</sup> and 30<sup>th</sup> 2020 organized by Ramaiah college of arts, science and commerce, Bengaluru.
- 9. Attended the CSIR sponsered Two day National workshop on 'Theoretical and Computational Fluid Dynamics' held during Dec 21-22, 2018, organized by Department of Mathematics, Erode Sengunthar Engineering College, Erode, TAMILNADU.
- 10. Participated in 'International conference on Computational Fluid Flow and Heat Transfer(CFFHT-2018)' held during March 28-29, 2018, organized by Department of Mathematics, Osmania University, Hyderabad. Paper Presented: "Three dimensional flow analysis of a carreau fluid with particle suspension under the influence of non-linear thermal radiation".
- 11. Participated as a speaker in a state level seminar on 'Advances in Mathematics and its applications' held on 24th March, 2017, organized by Department of Mathematics, Sahyadri Science College (Autonomous), SHIVAMOGGA.
- Participated in one day workshop on 'Academic and Administrative Training' held on 23<sup>rd</sup>March, 2017, organized by IQAC, Sahyadri Science College(Autonomous), SHIVAMOGGA.
- 13. Participated in 'Science Academies Lecture shop on Computational Fluid Dynamics' heldduring Oct 21-22, 2016, organized by Department of P.G.studies and Research in Mathematics, Jnanasahyadri, Kuvempu University, SHIVAMOGGA.
- Participated in 'One Day Workshop on Research Opportunities in Mathematics (ROM2016)' held on September 2, 2016, organized by Department of Mathematics, Alva's College, Moodbidri.
- 15. Participated in 'National Conference on An Insight into Analysis and Application of Mathematics' held on August 24, 2016, organized by Department of Mathematics, The NationalCollege, Jayanagar, Bangalore. Paper Presented : "Combined effect of Joule heating and viscous dissipation of MHD three dimensional flow of a Jeffrey nanofluid".

- 16. Participated in 'UGC sponsored National workshop on Partial differential equations andnumerical methods in fluid mechanics' held during March 4-5, 2016, organized by Department of Mathematics, Govt. First Grade college, KOPPA. Paper Presented: "Doubly stratified flow of Maxwell nanofluid in the presence of viscous dissipation and thermal radiation".
- 17. Participated in 'National seminar on Recent Advances in Mathematics and its Applications(NSRAMA2016)' held during Feb 18-19, 2016, organized by Department of Mathematics, JSS College of Arts, Commerce and Science, MYSURU. Paper Presented : "MHD flow and heat transfer of dusty nanofluid past a stretching sheet with internal heat generation/absorption and viscous dissipation effects".
- 18. Participated in 'International conference on Differential Geometry, Analysis and Fluid Mechanics (ICDGAFM-2016)' held during Feb 4-5, 2016, organized by Department of P.G.studies and Research in Mathematics, Jnanasahyadri, Kuvempu University, SHIVAMOGGA. Paper Presented: "Nonlinear thermal radiation and chemical reaction effect onslip flow of nanofluid past stretching sheet".
- 19. Participated in 'one day state level Mathematics workshop on Algebra and Analysis' heldon Oct 7, 2015, organized by Science Forum, GFGC, Ranebennur, in association withKarnatak University Mathematics Teachers Association (KUMTA), DHARWAD.
- 20. Participated in 'UGC sponsored national conference on Pure and Applied Mathematics(NCPAM2014)' held on Sept 29, 2014, organized by Department of Mathematics, Sahyadri Science College (Autonomous), SHIVAMOGGA. Paper Presented : "Radiation effect on an unsteady flow and heat transfer of nanofluid over an inclined stretching sheet".
- 21. Participated in 'International conference on Emerging trends in mathematical sciences(ICETMS-2014)' held during July 25-26, 2014, organized by Department of studies inMathematics, Vijayanagara Sri Krishnadevaraya University, BELLARY.Paper Presented :"Unsteady flow and heat transfer of a nanofluid with viscous dissipation effect".
- 22. Participated in 'Faculty Enrichment Programme-2014' (Eight days instructional workshopon Differential Geometry) held during April 5-12, 2014, Jointly organized by Departmentof P.G.studies and Research in Mathematics, Jnanasahyadri, Kuvempu University, SHIVAMOGGA and Ramanujan Mathematical Society.
- 23. Participated in 'Recent Advances in Mathematics and their Implications' held on March 08,2014, organized by Department of Mathematics, DRM Science College, DAVANAGERE.Paper Presented : "Stagnation point flow and heat transfer of nanofluid over aporous exponential stretching sheet".
- 24. Participated in 'National seminar on Emerging Trends in Mathematics and its Application'held during March 6-7, 2014, organized by Department of Mathematics, Acharya NagarjunaUniversity, Ongole Campus, ONGOLE.Paper Presented :"MHD flow and heat transfer of a nanofluid over an inclined impermeable stretching sheet".

- 25. Participated in 'UGC sponsored National conference on Geometry, Analysis and Fluid mechanics (NCGAF-2013)' held during Sept 20-21, 2013, organized by Department of Mathematics, Govt. First Grade college, KOPPA.Paper Presented :"Numerical studies on boundary layer flow and heat transfer of a nanofluid over an exponential stretching sheet".
- 26. Participated in 'International conference on Mathematics-2013' held during August 9-10,2013, organized by International Multidisciplinary Research Foundation, KOCHIN.Paper Presented :"Chemical reaction on MHD flow and heat transfer of a nanofluidnear stagnation point".
- 27. Participated in 'National conference on Mathematical Sciences and Applications' held onMarch 09, 2013, organized by Department of Mathematics, Govt. First Grade college,KOPPA.Paper Presented :"Effects of thermal radiation and stagnation point flow of ananolfuid over a stretching sheet in the presence of non-uniform source/sink".
- 28. Participated in 'Maths Fest-2013' held during February 22-23, 2013, organized by Department of P.G.studies and Research in Mathematics, Jnanasahyadri, Kuvempu University,SHIVAMOGGA.
- 29. Participated in 'Special Lecture Series in Mathematics' held during October 4-6, 2012, sponsored by Karnataka Science and Technology Academy, Govt. of Karnataka, organizedby Department of P.G. studies and Research in Mathematics, Jnanasahyadri, KuvempuUniversity, SHIVAMOGGA.
- 30. Participated in 'National conference on Recent Developments in Mathematics' held duringMay 4-5, 2012, organized by Department of P.G.studies and Research in Mathematics, Jnanasahyadri, Kuvempu University, SHIVAMOGGAPaper Presented : "Heat transfer in MHD flow of a dusty fluid over a stretchingsheet with viscous dissipation".
- Prepared model in 'Kuvempu University Silver Jubilee Exhibition' held during February16-19, 2012, organized by Committee for Popularization of Science Education, KuvempuUniversity, SHIVAMOGGA.
- 32. Participated in '3rd Annual conference of The Tensor Scoiety on Differential Geometry andits applications' held during May 27-28, 2011, organized by Department of P.G.studies and Research in Mathematics, Jnanasahyadri, Kuvempu University, SHIVAMOGGA, Paper Presented: "Unsteady flow of a dusty fluid through a channel having triangular cross-section in Frenet frame field system".
- 33. Participated in National Workshop on 'Analytical and Numerical solutions of nonlinearDifferential equations', held during March 18-19, 2011, organized by Department Mathematics, Amrita School of Engineering, BANGALORE.
- 34. Attended the National conference on 'Works on Srinivasa Ramanujan', held on July 03,2010, organized by Department of studies in Mathematics, Manasagangothri, MYSORE.(28) Participated in Two Days Workshop on "The Vision Group of Mathematics and ComputerScience", held during March 19-20, 2010, organized by Department of P.G.studies andResearch in Mathematics, Jnanasahyadri, Kuvempu University, SHIVAMOGGA.

35. Participated in 'Special Lecture Series in Mathematics', held during March 30 to April 01,2009, sponsored by Karnataka Science and Technology Academy, Government of Karnataka,organized by Department of P.G.studies and Research in Mathematics, Jnanasahyadri,Kuvempu University, SHIVAMOGGA.

#### PARTICIPATION IN INDUCTION/ORIENTATION/REFRESHER COURSES/FDP:

- Participated in FDP on Information and communication technology usage in teaching held during 11<sup>th</sup> to 22<sup>nd</sup> August 2021 organized by Govt. first grade college, Siddakatte, Dakshina kannada, Karnataka.
- 2. Participated in "Two-Week Refresher Course in Mathematics" organized by the department of Mathematics, Ramanujan College from 16<sup>th</sup> -30<sup>th</sup> March 2021 and completed the course with Grade A+.
- 3. Participated in "Four-Week Induction/Orientation Course in Mathematics" organized by the department of Mathematics, Ramanujan College from 26<sup>th</sup> June-24<sup>th</sup> July 2020 and completed the course with Grade A+.

## **DECLARATION**

Above given information is correct and true to the best of my knowledge.

Si Sacatt

(Dr. Rudraswamy N.G.)