Research Metrics

Sl. No.	Publication Type	Number of Publications
1	Q1 Journals	17
2	Q2 Journals	22
3	Q3 Journals	06
4	Q4 Journals	01
5	Book Chapters	03
6	Conference Proceedings	06
Total Publications		55

Citation Metrics

Citation indices since 2008	Google Scholar	Scopus
Citation	1822	1309
h-index	19	16
i10-index	23	–

https://scholar.google.co.za/citations?hl=en&user=MctJNfkAAAAJ&view_op=list_works

https://www.scopus.com/authid/detail.uri?authorId=53164440700

Research Publications

Q1 2026 R. Francis, **M. Narayana**, Effects of boundary-temperature modulation on Rayleigh–Bénard convection: dynamics across convective and post-convective regimes, *Thermal Science and Engineering Progress* 71, 104576. Impact Factor: 5.4
DOI: https://doi.org/10.1016/j.tsep.2026.104576

Q1 2026 S. De Souze, V. M. Job, **M. Narayana**, In-silico study of intratumoural magnetic hyperthermia in thermoporoelastic liver tissues using Fe_3O_4 nanoparticles, *International Journal of Heat and Fluid Flow* 119, 110264. Impact Factor: 3.1
DOI: https://doi.org/10.1016/j.ijheatfluidflow.2026.110264

Q2 2026 D. Behera, **M. Narayana**, Development of a ranking function for a generalized $L - R$ fuzzy number, *International Journal of System Assurance Engineering and Management*. Impact Factor: 1.4
DOI: https://doi.org/10.1007/s13198-025-02961-8

Q3 2025 M. Sajjad, R. Asghar, M. K. Abdalrahem, A. B. Rajab, **M. Narayana**, M. D. Junjua, S.A. AlQahtani, Design and Analysis of Shortened Bose-Chaudhuri-Hocquenghem Codes for Efficient Data Transmission over the Eisenstein Fields, *European Journal of Pure and Applied Mathematics* 18(3), 6275. Impact Factor: 1.03
DOI: https://doi.org/10.29020/nybg.ejpam.v18i3.6275

Q1 2025 R. Francis, **M. Narayana**, P.G. Siddheshwar, Influence of magnetic field modulation on thermomagnetic convection in a layer of ferrofluid bounded by rigid-free boundaries, *International Journal of Heat and Mass Transfer* 251, 127359. Impact Factor: 5.8
DOI: https://doi.org/10.1016/j.ijheatmasstransfer.2025.127359

Q1 2025 R. Francis, **M. Narayana**, P.G. Siddheshwar, Hyperchaos in a three-dimensional non-autonomous system, *Physics of Fluids* 37, 064116. Impact Factor: 4.3
DOI: https://doi.org/10.1063/5.0272799

Q2 2025 M. M. Channakote, O. Anwar Bég, **M. Narayana**, M. Shekar, N. Akbar, Electro-osmotic peristaltic streaming flow of a fractional second-grade viscoelastic fluid in a tube with permeable walls containing single and multi-wall carbon nanotubes, *Journal of Nanofluids* 14, 171-186. (ISSN: 2169-4338)
DOI: https://doi.org/10.1166/jon.2025.2230

Q1 2025 M. M. Channakote, S. Marudappa, O. Anwar Bég, **M. Narayana** and C. Siddabasappa, Electro-osmotic peristaltic streaming of a fractional second-grade viscoelastic nanofluid with single and multi-walled carbon nanotubes in a ciliated tube, *Results in Engineering* 27, 104739. Impact Factor: 7.9
DOI: https://doi.org/10.1016/j.rineng.2025.104739

Q2 2025 T. N. Sakshath, **M. Narayana**, P. G. Siddheshwar and M. Shekar, Effect of general boundary conditions on the Brinkman-Bénard Convection of a Newtonian nanoliquid using local thermal non-equilibrium model, *Journal of Nanofluids* 14, 59–68. (ISSN: 2169-4338)
DOI: https://doi.org/10.1166/jon.2025.2218

Q1 2025 S. De Souze, V. M. Job, **M. Narayana**, Numerical study of the porous medium effects on mixed convective Fe_3O_4 - water ferrofluid flow in an annular region between heated inner cylinder and outer melting ice wall, *International Journal of Thermofluids* 26, 101062.
DOI: https://doi.org/10.1016/j.ijft.2025.101062

Q1 2024 S. De Souze, V. M. Job, **M. Narayana**, Mixed convective flow of water-based nanofluid and melting heat transfer in a partially porous annulus, *Thermal Science and Engineering Progress* 54, 102881. Impact Factor: 5.4
DOI: https://doi.org/10.1016/j.tsep.2024.102881

Q2 2024 S. De Souze, V. M. Job, **M. Narayana**, Ferrohydrodynamic mixed convection in Fe_3O_4-water/EG or Ni_3Fe-water/EG ferrofluid in a porous square vented enclosure, *European Physical Journal Plus* 139(2), 136. Impact Factor: 2.9
DOI: https://doi.org/10.1140/epjp/s13360-024-04933-6

Q2 2023 **M. Narayana**, P.G. Siddheshwar, D. Laroze, C. Kanchana, Brinkman-Bénard convection with rough boundaries and third-type thermal boundary conditions, *Symmetry* 15, Art. ID. 1506. Impact Factor: 2.2 DOI: https://doi.org/10.3390/sym15081506

Q2 2023 **M. Narayana**, P.G. Siddheshwar, Solution of boundary eigenvalue problems and IBVP involving a system of PDEs using the successive linearization method, *ZAMM*, e202200472. Impact Factor: 3.2 DOI: https://doi.org/10.1002/zamm.202200472

Q2 2023 R. Francis, **M. Narayana**, P.G. Siddheshwar, Gravity-modulated Rayleigh-Benard convection in a Newtonian liquid bounded by rigid-free boundaries: A comparative study with other boundary conditions, *Journal of Engineering Mathematics* 139(1), 5.
Impact Factor: 1.4 DOI: https://doi.org/10.1007/s10665-023-10260-z

Q2 2023 **M. Narayana**, R. Saha, P.G. Siddheshwar, S.S. Nagouda, Individual effect of spatially periodic vertical surface temperatures and nanoparticles on natural convection in water, *ASME Journal of Heat and Mass Transfer* 145(7), Art. ID. 072601.
Impact Factor: 1.8 DOI: https://doi.org/10.1115/1.4056922

Q2 2023 R. Saha, **M. Narayana**, P.G. Siddheshwar, S.S. Nagouda, Thermo-convective flows of mono- and hybridnanofluids over horizontal undulated surfaces in a porous medium, *Journal of Nanofluids* 12, 514-534. (ISSN: 2169-4338)
DOI: https://doi.org/10.1166/jon.2023.1920

Q3 2023 B.A. Pasha, **M. Narayana**, G. Sowmya, V. Ramachandramurthy, Flow and heat transfer analysis of a thin film ferromagnetic liquid over an unsteady stretching sheet, *Biointerface Research in Applied Chemistry* 13(3), 284. (ISSN: 2069-5837)
DOI: https://doi.org/10.33263/BRIAC133.284

Q2 2022 P.G. Siddheshwar, **M. Narayana**, R. Saha, S.S. Nagouda, A comparative study of thermo-convective flows of a Newtonian fluid over three horizontal undulated surfaces in a porous medium, *ASME Journal of Heat Transfer* 144(9), Art. ID. 092701.
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Q2 2022 B.A. Pasha, **M. Narayana**, G. Sowmya, V. Ramachandramurthy, Numerical investigation of ferromagnetic liquid film flow over an unsteady stretching surface in the presence of radiation and aligned magnetic field, *Heat Transfer* 51(5), 4268-4285.
Impact Factor: 2.6 DOI: https://doi.org/10.1002/htj.22499

Q2 2021 **M. Narayana**, M. Shekar, P.G. Siddheshwar, N.V. Anuraj, On the differential transform method of solving boundary eigenvalue problems: An illustration, *ZAMM* 101, e202000114. Impact Factor: 3.2
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Q3 2020 P.G. Siddheshwar, **M. Narayana**, B. Bhatt, A new series solution applicable to a class of boundary layer equations with exponential decay in solution, *International Journal of Applied and Computational Mathematics* 6(4), 118. (ISSN 2199-5796)
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Q2 2018 R. Nandkeolyar, **M. Narayana**, S.S. Motsa, P. Sibanda, Magnetohydrodynamic mixed convective flow due to a vertical plate with induced magnetic field, *ASME Journal of Thermal Science and Engineering Applications* 10(6), Art. ID. 061005. Impact Factor: 1.4
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Q2 2016 C.T. Duba, M. Shekar, **M. Narayana**, P. Sibanda, Soret and Dufour effects on the thermohaline convection in rotating fluids, *Geophysical & Astrophysical Fluid Dynamics* 110, 317-347. Impact Factor: 1.1
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Q3 2015 A.A. Khidir, **M. Narayana**, P. Sibanda, P.V.S.N. Murthy, Natural convection from a vertical plate immersed in a power-law fluid saturated non-Darcy porous medium with viscous dissipation and Soret effects, *Afrika Mathematika* 26, 1495-1518. Impact Factor: 0.7
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Q2 2014 P.K. Kameswaran, **M. Narayana**, S. Shaw, P. Sibanda, Heat and mass transfer from an isothermal wedge in nanofluids with Soret effect, *The European Physical Journal Plus* 129, 154. Impact Factor: 2.9
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Q3 2014 **M. Narayana**, L.S. Rani Titus, A. Abraham, P. Sibanda, Modelling micropolar ferromagnetic liquid flow due to stretching of an elastic sheet, *Afrika Mathematika* 25, 667-679. Impact Factor: 0.7
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Q1 2013 **M. Narayana**, S.N. Gaikwad, P. Sibanda, R.B. Malge, Double diffusive magnetoconvection in viscoelastic fluids, *International Journal of Heat and Mass Transfer* 67, 194-201. Impact Factor: 5.8
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Q1 2013 **M. Narayana**, P. Sibanda, P.G. Siddheshwar, G. Jayalatha, Linear and nonlinear stability analysis of binary viscoelastic fluid convection, *Applied Mathematical Modelling* 37, 8162-8178. Impact Factor: 5.1
DOI: https://doi.org/10.1007/s00231-011-0939-9

Q2 2013 **M. Narayana**, A.A. Khidir, P. Sibanda, P.V.S.N. Murthy, Soret effect on the natural convection from a vertical plate in a thermally stratified porous medium saturated with non-Newtonian liquid, *ASME Journal of Heat Transfer* 135, Art. ID. 032501.
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Q2 2013 **M. Narayana**, A.A. Khidir, P. Sibanda, P.V.S.N. Murthy, Viscous dissipation and thermal radiation effects on mixed convection from a vertical plate in a non-Darcy porous medium, *Transport in Porous Media* 96, 419-428. Impact Factor: 2.6
DOI: https://doi.org/10.1007/s11242-012-0096-8

Q1 2013 **M. Narayana**, F.G. Awad, P. Sibanda, Free magnetohydrodynamic flow and convection from a vertical spinning cone with cross-diffusion effects, *Applied Mathematical Modelling* 37, 2662-2678. Impact Factor: 5.1
DOI: https://doi.org/10.1016/j.apm.2012.04.059

Q2 2012 P.K. Kameswaran, **M. Narayana**, G. Makanda, P. Sibanda, On radiation effects on hydromagnetic Newtonian liquid flow due to an exponential stretching sheet, *Boundary Value Problems* 105. Impact Factor: 1.7
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Q2 2012 **M. Narayana** P. Sibanda, S.S. Motsa, P.G. Siddheshwar, On double-diffusive convection and cross diffusion effects on a horizontal wavy surface in a porous medium, *Boundary Value Problems*, 88. Impact Factor: 1.7
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Q1 2012 **M. Narayana**, P. Sibanda, Laminar flow of a nanoliquid film over an unsteady stretching sheet, *International Journal of Heat and Mass Transfer* 55, 7552-7560.
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Q3 2012 **M. Narayana**, P. Sibanda, On the solution of the double-diffusive convective flow due to a cone by a linearization method, *Journal of Applied Mathematics* Art. ID. 587357.
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Q2 2012 **M. Narayana**, P. Sibanda, S.S. Motsa, P.A.L. Narayana, Linear and nonlinear stability analysis of binary Maxwell fluid convection in a porous medium, *Heat and Mass Transfer* 48, 863-874. Impact Factor: 2.0
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Q4 2011 F.G. Awad, P. Sibanda, **M. Narayana**, S.S. Motsa, Convection from a semi-finite plate in a fluid saturated porous medium with cross-diffusion and radiative heat transfer, *International Journal of Physical Sciences* 6(21), 4910-4923. (ISSN: 1992-1950)

Q1 2011 M. Subhas Abel, P.G. Siddheshwar, **N. Mahesha**, Numerical solution of the momentum and heat transfer equations for a hydromagnetic flow due to a stretching sheet of a non-uniform property micropolar liquid, *Applied Mathematics and Computation* 217, 5895-5909. Impact Factor: 3.4
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Q2 2011 M. Subhas Abel, **N. Mahesha**, S.B. Malipatil, Heat transfer due to MHD slip flow of a second grade liquid over a stretching sheet through the porous medium with non-uniform heat source/sink, *Chemical Engineering Communications* 198, 191-213. Impact Factor: 2.0
DOI: https://doi.org/10.1080/00986445.2010.499848

Q1 2009 M. Subhas Abel, **N. Mahesha**, Jagadish Tawade, Heat transfer in a liquid film overcan unsteady stretching surface with viscous dissipation in presence of external magnetic field, *Applied Mathematical Modelling* 33, 3430-3441. Impact Factor: 5.1
DOI: https://doi.org/10.1016/j.apm.2008.11.021

Q1 2009 M. Subhas Abel, P.S. Datti, **N. Mahesha**, Flow and heat transfer in a power law fluid over a stretching sheet with variable thermal conductivity and non-uniform heat source, *International Journal of Heat and Mass Transfer* 52, 2902-2913. Impact Factor: 5.8
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Q1 2009 M. Subhas Abel, P.G. Siddheshwar, **N. Mahesha**, Effects of thermal buoyancy and variable thermal conductivity on the MHD flow and heat transfer in a powerlaw fluid past a vertical stretching sheet in the presence of a non-uniform heat source, *International Journal of Non-Linear Mechanics* 44, 1-12. Impact Factor: 3.2
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Q1 2008 M. Subhas Abel, **N. Mahesha**, Heat transfer in MHD viscoelastic fluid flow over a stretching sheet with variable thermal conductivity, non-uniform heat source and radiation, *Applied Mathematical Modelling* 32(10), 1965-1983. Impact Factor: 5.1
DOI: https://doi.org/10.1016/j.apm.2007.06.038

Book Chapters

2021 **M. Narayana**, R.R. Jackson, Heat transfer in a nanoliquid flow due to a permeable quadratically stretching sheet, in "Energy Systems and Nanotechnology" (Editors D. Tripathi, R. K. Sharma, ISBN: 978-981-16-1256-5), Springer, 307-328.
DOI: https://doi.org/10.1007/978-981-16-1256-5_16

2021 **M. Narayana**, P.G. Siddheshwar, S.B. Ashoka, Computer assisted successive linearization solution of the Darcy-Forchheimer-Brinkman flow through rectangular channel, in "Mathematical Fluid Mechanics" (Editor B. Mahanthesh), De Gruyter Series on the Applications of Mathematics in Engineering and Information Sciences. ISBN: 9783110696127
DOI: https://doi.org/10.1515/9783110696080-006

2011 F.G. Awad, P. Sibanda, **M. Narayana**, Heat and mass transfer from an inverted cone in a porous medium with cross-diffusion effects, in "Mass Transfer – Advanced aspects", InTech Publisher, 81-106. ISBN 978-953-307-977-6
DOI: 10.5772/21056

Conference Proceedings

2024 De Souze, S., Job, V.M., Narayana, M. Numerical Study of the Effects of geometric parameters on ferrofluid mixed convection in a porous rectangular vented enclosure. In: Saha, A., Banerjee, S. (eds) Proceedings of the 2nd International Conference on Nonlinear Dynamics and Applications (ICNDA 2024), Volume 2. ICNDA 2024. Springer Proceedings in Physics, 315. Springer, Cham.
DOI: https://doi.org/10.1007/978-3-031-69134-8_43

2017 Metri, P.G., Narayana, M., Silvestrov, S. Hypergeometric steady solution of hydromagnetic nanoliquid film flow over an unsteady stretching sheet. In: Proceedings of the 11th International Conference on Nonlinear Problems in Aviation and Aerospace (ICNPAA 2016) held at University of La Rochelle, La Rochelle, France during 05 - 08, July 2016. AIP Conference Proceedings 1798, 020097 (2017).
DOI: http://doi.org/10.1063/1.4972689

2017 Narayana, M., Metri, P.G., Silvestrov, S. Thermocapillary flow of a non-Newtonian nanoliquid film over an unsteady stretching sheet. In: Proceedings of the 11th International Conference on Nonlinear Problems in Aviation and Aerospace (ICNPAA 2016) held at University of La Rochelle, La Rochelle, France during 05 - 08, July 2016. AIP Conference Proceedings 1798, 020109 (2017);
DOI: http://doi.org/10.1063/1.4972701

2014 Narayana, M., Siddheshwar, P.G., On a Successive Linearization Solution of an Eigen BVP due to Magnetoconvection in a 2-Dimensional Rectangular Box. In: Proceedings of the International Conference held at ITM University, Gurgoan, India during 2 - 4, June 2014.

2012 Narayana, M., Sibanda, P. Double diffusive convection due to a horizontal wavy surface in a porous medium. In: Proceedings of the Fourth International Conference on Porous Media and its Applications in Science, Engineering and Industry (ICPM 2012), held at Potsdam, Germany during 17 - 22, June 2012. AIP Conference Proceedings 1453, 185 - 190 (2012);
DOI: https://doi.org/10.1063/1.4711173

2011 Narayana, M., Sibanda, P. Successive linearization solution of the free convection problem due to a cone immersed in Maxwell liquid. In: Proceedings of the International Conference on Fluid Dynamics and its Applications held at B. N. M. Institute of Technology, Bangalore, India, 20 – 22, July 2011. BNMIT Conference Proceedings 1 (2011) 167-185.

Invited talks and Seminars

2026 Delivered an invited talk “The weakly nonlinear stability analysis of the gravity-modulated Rayleigh-Bénard convection” at an international conference Scientific Advances in Natural and Technological Sciences (SAINTS-2026) organized by CHRIST (Deemed to be University), Bengaluru, India, during January 7-9, 2026

2025 Delivered an invited talk “Is hyperchaos possible in 3-dimenional non-autonomous systems?” at 70th Congress of the Indian Society of Theoretical and Applied Mechanics (ISTAM-2025) organized by VIT Bhopal University, Bhopal, India during December 10-12, 2025

2025 Delivered a keynote address entitled “Control of thermal convection through modulations: Boundary effects” at the International Conference on Pure and Applied Sciences at Sharnbasva University, Kalaburagi, India during 04-05, January 2025.

2024 Delivered a seminar on “Real world applications of Differential Equations powered by Linear Algebra” during the National Mathematics Day celebration at Mangalore Institute of Technology and Engineering, Karnataka, India on December 30, 2024.

2024 Delivered an invited talk entitled “Construction of new series solution to a class of Falkner-Skan-type boundary layer equations” at the International Conference Advances in Applied Mathematics (ICAAM-2024) held via Hybrid Mode at Tumkur University, Tumakuru, India during 10-11 January, 2024.

2023 Delivered an invited talk entitled “A numerical exploration of Rayleigh-Bénard-Brinkman convection using the computer-assisted successive linearization method” at the International Conference on Advanced Materials and Fluid Mechanics (ICAMFM-2023) held at BNM Institute of Technology, Bengaluru, India during 23-24 November, 2023.

2023 Delivered a seminar entitled “Homotopy Concept to Solve Differential Equations” at the Department of Mathematics, University of West Indies, Mona Campus, Jamaica on 20 October 2023.

2023 Delivered an invited talk entitled "Boundary Effects on Gravity-Modulated Rayleigh-Benard Convection" at the Intentional Conference on Recent Advances in Fluid Mechanics and Nanoelectronics (ICRAFMN-2023) held at Manipal Institute of Technology, Bengaluru, India during 12-14, July 2023.

2022 Delivered an invited talk entitled “On the comparative study of gravity modulated Rayleigh-Bénard convection involving free-free, rigid-free, and rigid-rigid boundaries” at the 2nd International Conference (virtual) on Applied Mathematics and Computational Sciences (ICAMCS-2022) organized by DIT University, Dehradun, India during 12-14, October 2022.

2022 Delivered a seminar entitled “How to handle non-linear problems in a simple way?” at the Department of Mathematics, University of West Indies, Mona Campus, Jamaica on 18 November 2022.

2021 Delivered an invited talk entitled "Exact solution of the BVP arising from heat transfer in a nano-liquid flow due to a quadratically stretching sheet" at the International Conference on New Trends in Differential Equations And Applied Mathematics (ICNTDEAM – 2021) organised by Department Of Mathematics, Sri Vidya Mandir Arts & Science College, Uthangarai, Tamilnadu, India during 12-13, April 2021.

2020 Delivered an invited talk on the topic "Differential transform method for the boundary eigenvalue problem arising from Darcy-Brinkman convection" at the international conference on Mathematics and its Applications (ICMA-2020) held at Bangalore University, Jnana Bharathi Campus, Bengaluru, India on 29th February 2020.

2020 Delivered an invited talk on the topic "Application of pseudo-spectral method based linearization technique to free and forced convective flows through porous media" at the international conference on Emerging Trends in Fluid Mechanics and its Application held at Christ University Bengaluru, India on 28th February 2020.

2019 Delivered invited talk entitled "On the new series solution applicable to a class of boundary layer equations with exponential decay in solution" at the International Conference on Recent Advances in Algebra, Analysis and Applications (ICRAAAA-2019) organized by Department of Mathematics and Statistics, University College of Science, Mohanlal Sukhadia University, Udaipur, India during December 20-22, 2019.

2019 Delivered a seminar entitled "A new series solution applicable to a class of boundary layer equations with exponential decay in solution" at the Department of Mathematics, University of West Indies, Mona Campus, Jamaica on 25 October 2019.

2019 Delivered an invited talk on the topic "Homotopy methods for boundary layer problems" at the International Symposium on Recent Trends in Mathematical Sciences (ISRTMS-2019) organized by Department of Mathematics, School of Advanced Sciences, VIT, Vellore, India in association with Malaysia-Italy Centre of Excellence for Mathematical Science, Universiti Putra Malaysia, Serdang, Malaysia during July 15-16, 2019.

2016 Delivered an invited talk on "Successive Linearization Method", at the National Conference on Recent Advances in Fluid Mechanics held at Osmania University, Hyderabad, India during 30 – 31, May 2016.

2015 Delivered an invited talk on the topic "On the successive linearization technique applicable to nonlinear problems arising in fluid mechanics", at the National Conference on Recent Advances in Applied Mathematics held at St. Philomena's College (Autonomous), Mysore, India during 22 – 23, January 2015.

2014 Delivered an invited talk on the topic "On the Keller-Box solution of double diffusive convection due a non-uniform surface embedded in a porous medium", at the National Conference on Recent Advances in Applied Mathematics held at Gulbarga University, Gulbarga, India during 11 – 12, September 2014.

2012 Delivered an invited talk on "Utility of SLM to convective stability problems" at the International Conference on Emerging Trends in Fluid Mechanics and Graph Theory held at Christ University, Bangalore, India during 6 – 18, August 2012.

2011 Delivered an invited talk on "Successive linearization solution of the free convection problem due to a cone immersed in Maxwell liquid", at the International Conference on Fluid Dynamics and its Applications held at B. N. M. Institute of Technology, Bangalore, India, 20 – 22, July 2011, BNMIT Conference Proceedings 1 (2011) 167-185.

Workshops and Guest Lectures

2025 Delivered an expert lecture on “Applications of Artificial Neural Networks to Differential Equations“ and a hands-on session at a 5-day workshop on Numerical and Machine Learning Techniques in Applied Mathematics (NM-AM 2025) organised by the Department of Mathematics, National Institute of Technology, Jamshedpur, India, during July 10-14, 2025.

2025 Delivered expert lectures on “Complex Analysis“ in a Student Development Program (SDP organised by the Department of Mathematics, Reva University, Bengaluru, India, during June 23-26, 2025.

2024 Delivered series of lectures on the topic “Computer assisted SLM for mathematical models arising from fluiddynamics” in an international workshop on “Numerical and Machine Learning Techniques or Fluiddynamics” organized by NIT Jamshedpur, Jharkhand, India during 19-23, May 2024.

2024 Delivered a guest lecture on the topic of “Successive linearization methods for nonlinear differential equations” at the International Workshop (virtual) “Nonlinear Systems Including Differential and Difference equations with Mathematical Software” held at CVR College of Engineering, Hyderabad, India during 15-17, February 2024.

2023 Delivered series of lectures in an International Workshop on “Non-linear Stability of Thermoconvective Flows” held at Christ University, Bengaluru, India during 9 – 14, January 2023. Also, gave hands on experience on some of the numerical techniques using MATLAB in the laboratory sessions of the workshop.

2022 Delivered an expert lecture on "Use of spectral methods together with linearization technique for problems arising in fluid dynamics" at the workshop "Advanced Numerical Techniques for Differential Equations" (ANTDE) organized by MNIT, Jaipur, India, during 6-10 June 2022.

2022 Delivered an expert lecture on "Computer-assisted analytical methods of solving Non-linear Fluid Dynamical Problem" at an international webinar "Non-Linear Differential Equations & Fluiddyamics Applications in Engineering Sciences" organized by CVR College of Engineering, Telangana, India, during 12 - 14 May 2022.

2021 Delivered an invited lecture on "Differential Transforms" at the Faculty Development Programme organized by the Centre for Mathematical Needs, Department of Mathematics, Christ University, India during 25 - 29 October 2021.

2021 Delivered an online guest lecture entitled “Series solution of Falkner-Skan-type equations using functions that decay exponentially” at the Department of Math¬ematics (Math Club), Ramaiah Institute of Technology, Bengaluru, India on 14 July 2021.

2021 Delivered an expert lecture entitled "On the differential transform method of solving boundary eigenvalue problems arising from fluid mechanics - An illustration" at the international winter school (online mode) Fluid dynamics, “Heat Transfer and Applications” organized by NIT Uttarakhand, India during 18-29, January 2021.

2020 Delivered a special talk on “Taylor series solution of boundary eigenvalue problems arising from fluid flow instabilities” at the virtual faculty development program “Recent trends in Fluiddynamics organized” organized by Sapthagiri College of Engineering, India during November 17-21, 2020.

2020 Delivered a guest lecture for engineering students on the topic “Applications of Partial Differential Equations in Engineering” organized by Department of Mathematics, R V College of Engineering, Bengaluru, India on January 16, 2020.

2019 Delivered expert lectures in the workshop cum winter school on 'Methods for Nonlinear Dynamical Systems & Chaos' organized by Department of Mathematics, National Institute of Technology, Uttarakhand at Satellite Campus, Malaviya National Institute of Technology, Jaipur, India during December 23-27, 2019.

2017 Delivered expert lectures in the workshop on "FOSS tools for engineers and Scientists" organized by Department of Mathematics, Siddaganga Institute of Technology (SIT), Tumkur, India during 23 – 28, July 2017.

2017 Delivered special talk on "Homotopy Theory and its Applications" at a workshop on Integral Transforms and Differential Equations in Engineering Applications held at B. V. B. College of Engineering and Technology, Hubballi, India during 06 – 07, March 2017.

2017 Delivered guest lecture on "Mathematical Modeling through Differential Equations" at the Government First Grade College, K. R. Puram, Bangalore, India on 08 February 2017.

2017 Delivered guest lecture on "Latex and its Applications" at N. M. K. R. V. College for Women, Bangalore, India on 06 February 2017.

2017 Delivered guest lecture on "Finite Difference Methods and Shooting Technique", at faculty development program on Advanced Numerical Techniques for Engineers and Researchers held at B. M. S. College of Engineering, Bangalore, India during 23 – 28, January 2017.

2015 Delivered guest lecture on "Complex Analysis" at Government Degree College, Yadagiri, India on 23 May 2015.

2015 Delivered series of guest lectures on the topic of "Fluid Mechanics" at Osmania University, Hyderabad, India during 24 – 26, March 2015.

2014 Delivered guest lecture on "Mathematical Modeling" at Government First Grade College, H. S. R. Layout, Bangalore, India on 06 September 2014.

Research Supervision

Sl. No.	Name	Title	Degree/Course	Status
1	Roxanne Francis	Chemically driven convective instabilities in a binary viscoelastic fluid layer	MSc Research Project (MATH6800)	Completed
2	Ramone Jackson	An analysis of nanoliquid flow due to a quadratically stretching sheet with emphasis on heat transfer enhancement	MSc Research Project (MATH6800)	Completed
3	Shaun-Dale Williams	On the finite element solution of boundary eigenvalue problem: An illustration	MSc Research Project (MATH6800)	Completed
4	Roxanne Francis	Control of Rayleigh-Bénard convection using modulations of types: Body force and Boundary temperature	PhD	Thesis Submitted
5	Stephon De Souze	Mathematical modelling of ferrofluid flow in porous and poroelastic media	PhD (CoSupervisor)	Thesis Submitted

Current Students:

1. Jaheim Harris (MPhil)
2. Kurt McKenzie (PhD - CoSupervisor)
3. Tashina Williams (MSc Research Project)
4. Omar Butler (MSc Research Project)