Dr. N.Kishan, M.Sc.Ph.D. Senior Professor of Mathematics

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Employment History



Awards and Achievements

2020 Merit Award: Best Teacher Award for the year 2020 awarded by Govt. of Telangana, T.S, India

Education

1991 – 1996	Ph.D., Osmania University , Applied Mathematics. Thesis title: COMPUTATIONAL TECHNIQUES IN MHD HEAT TRANSFER & TURBU- LENT FLOWS
1988 – 1990	M.Sc. Applied Mathematics, Osmania University : University College of Science, Osmania University, Hyderabad-7, A.P
1984 – 1987	B.Sc. (Maths, Physics, Chemistry), Osmania University P.G. College of Science,Safabad, OU, Hyderabad-4, A.P
1981 – 1983	Intermediate (Maths, Physics, Chemistry), Govt. Junior College, Medak (Town & Dist.), A.P
1977 – 1981	VII – X Class, Govt. Junior College, Medak (Town & Dist.), A.P
1975 - 1977	VI – VII Class, Govt. New High School, Medak (Town & Dist.), A.P
1971 – 1975	I – V Class, Upper Primary School, Kodpak (Vill.), Papannapet (Mandal); Medak (Dist.), A.P



Details of Institutional Services

2021 - 2023	Head, Department of Mathematics, Osmania University from 1st July, 2021 to July, 2023.
2020 – till date	Dean, Faculty of Science, Mahathma Gandhi University, Nalgonda, Telangana State.
2019 - 2022	I/c Member Secretary for TSSET, Osmania University, Telangana State from 31st December,2019 to March, 2022.
2017 - 2021	Director, Directorate of Admissions, Osmania University, from 21st September, 2017 to 5th July, 2021.
2016 – 2019	Co-Ordinator, UGC-DSA Phase-I, Department of Mathematics, Osmania Uniersity, Hyderabad.
2020 – 2021	Convenor, CPGET-2020 (Common Post Graduate Entrance Tests) for Telan- gana State.
2019 - 2020	Convenor, CPGET-2019 (Common Post Graduate Entrance Tests) for Telan- gana State.
2009 – 2017	Joint Director, Directorate of Admissions, Osmania University, from 31st Oc- tober, 2009 to September, 2017(8 years)
2005 - 2007	Served as Warden, Hostel, at P.G. College of Science, Osmania University, Saifabad, Hyderabad.
2007 – 2009	Student Advisor, Department of Mathematics, University College of Science, Osmania University.
2017 - 2019	Chairperson, Board of Studies in Mathematics, Osmania University from August, 2017 to September, 2019.
2017 – 2021	Chairperson, Board of Studies in Mathematics, Mahathma Gandhi University.
2019 – 2021	Chairperson, Board of Studies in Mathematics, Palamuru University from August, 2019.
2001 - 2003	Member Board of Studies for P.G., Autonomous Course at P.G. College of Science, Osmania University, Saifabad, Hyderabad-4, A.P, India.
2009 – 2012	Member, Departmental Committee, Mathematics, July, 2009 to Jan-2012.
2008 – 2010	Member, Board of Studies in Mathematics for UG courses, Osmania Univer- sity, from 19th Aug, 2021 to till the date.
2021 - 2022	Chairperson, Board of Studies in Mathematics for UG courses, Satyavana University, Karimnagar, TS, from Aug, 2021 to till the date.

MEMBER IN THE COMMITTES:

- Member, Committee to conduct enquiry in maintaining the Roster Points (Rule of Reservation) meant for SC/ST categories and to prepare new Roster Register (Master Copy) Osmania University, during 2020-2022.
- Member, Committee to identify the irregularities and to look over the grievances, in Ph.D admissions as per AP High Court directions, during 2013-14.
- Member, Project Implementation Group (PIG) under DST-PURSE-I Programme, Osmania University, during 2018-2022.
- Member, Project Implementation Group (PIG) under RUSA-2.0, Osmania University, during 2019-2022.
- Co-ordinator, Research sub Centre under RUSA-2.0, Osmania University, during 2019-2022.

(continued)

- Member, in framing and designing B.Sc, Data Science Course, Telangana State Council of Higher Education (TSCHE), Telangana, 2018-19.
- Member, TS-SET (State Eligibility Test, Telangana State) implementation committee, TS, 2018-19.
- Member, Advisory committee for CPGET-2021 (Common Post Graduate Entrance Test), Telangana State.
- Member, Advisory committee for CPGET-2022 (Common Post Graduate Entrance Test), Telangana State.

Academic & Research

Research Area:

Boundary Layer Theory; CFD; MHD; Non-Newtonian Fluids; Heat and Mass Transfer; Nanofluids

Projects:

- Co-Ordinator: Co-Ordinator UGC-DSA Phase-I, Department of Mathematics, Osmania University, Hyderabad, 2016-2019.
- Major Research Project: DST-PURSE-Programme, 2016-18 Research Project on Steady flow of Incompressible non-Newtonian power-law fluids: A Numerical study
- Major Research Project: DST-PURSE-II Programme, 2019-2021 Research Project on Boundary Layer flow of incompressible Non-newtonian power-law fluids: A Numerical study

$\mathbf{Ph.D}\ \&\ \mathbf{M.Phil}$

- Number of Ph.D Degrees Awarded: 22
- M.Phil Degrees Awarded: 6
- Presently Supervising: 8

Research Publications

- Total No. of Papers Published: 181
- International Journals(Scoupus, Sci, E.Sci): 140
- National/International (UGC Listed Journal): 41
- Google Scholar citation: 2400 , h-index-24 , i10-index- 69

MEMBERSHIP IN TO PROFESSIONAL BODIES/ORGANIZATIONS:

2022	President, APTSMS (Andhra Pradesh and Telangana Society for Mathematical Sciences):
	2021-2023
1998	Life Member, Indian Science Congress.
2016	Life Member, ISTAM.
2005	Member, Indian Academy of Mathematics.
2006	Life Member, ALUMNI, Association Osmania University.

RESOURCE PERSON / ACADEMIC ACTIVITIES:

2023	Invited talk on Computational Methods With Applications to Fluid Dynamics , at International Conference on Computational Modeling in Science and Engineering (ICCMSE - 2023) from 28-30 October, 2023, held at NIT, Warangal, TS.
	Invited talk on "Finite Element Analysis of MHD Bioconvection in a Porous Square Cavity" in International Conference on Recent Advances in Sciences and Engineering (ICRASE-2023) held from 22-24th June, 2023, at WOXSEN University, Sangareddy, Telangana.
2022	Presidential talk on Boundary Layer Theory and Its Applications at XXXI ANNUAL CONGRESS OF APTSMS Int. Conference on Relevancy of Ancient Mathematics to the cur- rent Digital Trends(ICRAMCDT-2022), NATIONAL SANSKRIT UNIVERSITY::TIRUPATI, 9 - 11 December , 2022, Tirupathi, A.P
	Invited talk on " Computational Methods for fluid flow and heat transfer problems " in International Conference on Mathematical Sciences and Emerging Applications in Technology (ICMSEAT-2022) held from 9-11th September, 2022, at GITAM University, Rudraram, Hyderabad, T.S
	Invited talk on LATEX at Faculty Development Programme for Polytechnic Lecturers held at UGC-HRDC- Osmania University, T.S during 2-21 July, 2022.
	Invited talk on Finite Element Analysis of Flow and Heat Transfer Problems , from 28-29 January, 2022, held at Yogi Vemana University, Kadapa, A.P
2020	Invited talk at Andhra Pradesh and Telangana States Mathematical Society (APTSMS) conference held at Mahathma Gandhi University, Nalgonda, December, 2020.
	Invited talk at National Conference on Recent Advances in Mathematics and its In- dustrial Applications, 6-7 February, 2020, ANU, Ongole, A.P
	Invited talk at National Conference on "Industrial Applications of Mathematics and its developments" during 13-14 March 2020, Kuvempu University, Shnakraghatta, Shiva-mogga, Karnataka.
2019	Invited Talk at NATIONAL CONFERENCE ON ADVANCES IN COMPUTATIONAL FLUID DYNAMICS (NACFD – 2019) Sponsored by DST-SERB during 12-13, April 2019. Andhra Kesari Tanguturi Prakasam University (Acharya Nagarjuna University Ongole Campus), Ongole, A.P
2009	Invited talk on Radiation Effect on MHD Steady free Convection flow of a gas at a streaching surface with a uniform free steam with viscous dissipation at International conference on Frontiers in Fluid Mechanics (ICFFM-09) during 31st Aug to 2nd Sept-2009 held at UGC-CAS in Fluid Mechanics Bangalore University, Bangalore.
2011-2019	Resource person for the BARC training school (during 2011-2019) , for junior scientists at AMD (Atomic Mineral Directorate), Begumpet, Hyderabad.
2011	Invited talk on Computational Fluid Dynamics for Training programme for M.Phil & Ph.d students at Dr.Br.Ambedkar Open University, during 12-18th Feb-2011, Hyderabad.
2010	Resource person for 2nd Refresher Course in mathematics & Statistics on 27th Dec-2010, at UGC-Academic Staff College, Osmania University, Hyderabad.
	Resource person for Training programme for M.Phil & Ph.d students at Dr.Br.Ambedkar Open University, during 11-17th Dec-2010, Hyderabad.
2008	Resource person for Short Course "Fourier Series & Laplace Transforms" for Polytechnic Teachers, at National Institute of Technical Teacher, s Training and Research, SanketikaVidya Bhavan, Hyderabad, A.P, India.
	Invited talk on Finite Difference and Finite Element for Training programme for M.Phil and Ph.d students at Dr.Br.Ambedkar Open University, during 19-25th Nov-2008, Hyderabad.

RESOURCE PERSON / ACADEMIC ACTIVITIES: (continued)

2005

Act as a Judge for Selection of 1st Prize Winners in the theme Mathematical Modelling in ANDHRA PRADESH STATE LEVEL SCIENCE EXHIBITION 2004-05, At Delhi Public School Vanasthalipuram, Hyderabad.

List of Ph.D Awardees:

Oct, 2009	K. Govardhan , Study of Heat Mass Transfer with Viscous Dissipation and Micropolar Fluids (Oct, 2009).
Dec, 2010	P.Amrutha , Numerical Study of MHD Heat Transfer over Wedge with Viscous Dissipation and Variable Viscosity (Dec, 2010).
Jan, 2011	B.Sashidar Reddy Reddy , Study of Non-Newtonian Power-law Fluid flows with MHD and Viscous Dissipation (Jan, 2011).
Mar, 2012	Bala Siddulu Malga , Finite Element Analysis of unsteady MHD Convective Heat and Mass Transfer of Micropolar Fluid past a plate (Mar, 2012).
May, 2013	G. Deepa , Numerical Study of MHD Effects on Convective Heat and Mass Transfer with Viscous Dissipation (May, 2013).
May, 2015	Hunengnaw Dessie, Numerical Study of MHD Boundary Layer Flow and Heat Transfer over A Stretching Sheet (May, 2015).
Sept, 2015	P.Kavitha , Numerical Study of Magneto hydrodynamic flow heat transfer of a Non-Newtonian power law fluid with thermal radiation and viscous dissipation (Sept, 2015).
Dec, 2015	S. Jagadha , Numerical Study of MHD Heat and Mass Transfer In Darcy-Forchheimer mixed convection from a vertical flat plate in a porous medium under the effects of radiation, thermophoretic and chemical reaction (Dec, 2015).
Feb, 2016	B. Balaswamy, Numerical Study Of MHD Boundary Layer Flow In A Porous Medium (Jan, 2016).
Feb, 2017	Balla Chandra Shekar, Finite Element Analysis of MHD Boundary Layer Flow and Heat Transfer Characteristics of Nanofluids (Feb, 2017).
	Macha Madhu, Finite Element Analysis of MHD Boundary Layer Flow of a Non-Newtonian Nanofluid (Feb, 2017).
Jan, 2017	Srinivas Maripala , Numerical study of MHD Boundary layer flow and heat transfer of a Nanofluid over a stretching/shrinking sheet (Jan, 2017).
Dec, 2017	D. Hyma, MHD Boundary layer flow, Heat and Mass transfer Analysis of Nanofluids (Dec, 2017).
July, 2018	C. Srinivas Reddy , Numerical Study of Heat and Mass Transfer characteristics of Non-Newtonian Nanofluids (July, 2018).
Nov, 2018	Vijaya Basker Reddy, Numerical Study of Melting Heat Transfer on MHD Flow of a Non Newtonian Nanofluid past a Stretching sheet (Nov, 2018).
June, 2019	C. Haritha , Convective Heat Transfer Analysis in a Porous Square Cavity filled with Nanofluids (June, 2019).
Nov, 2019	Gossaye Aliy Adem, Optimal Homotopy Asymptotic Method for Electrical MHD non-Newtonian Fluid Flow over a Stretching Sheet (Oct, 2019).
Oct, 2020	Degavath Gopal , Flow and Heat Transfer Analysis of MHD non-Newtonian nonfluids over a stretching surface: A Numerical Study (Mar, 2020).
Apr, 2021	V. Meenakshi , Dufour and soret effect On unsteady MHD free Convection and mass Transfer flow past an Impulsively started Vertical porous plate Considering with heat Generation (Apr, 2021).

List of Ph.D Awardees: (continued)

Sept, 2022	Alluguvelli Ramesh , Finite Element Analysis of Bioconvection in a Porous Cavity filled by Oxytactic Microorganisms (2022).
Dec, 2022	Neella Amar, Heat Transfer Analysis on MHD Boundary Layer over a static/moving Wedge (Dec, 2022).
Dec, 2023	Nagaraju L, Heat Transfer Analysis of unsteady MHD convective flows through porous medium (Jan, 2024).

List of M.Phil Degree Awarded Candidates:

- 2010 **V. Meenakshi**, MHD Heat and Mass Transfer through porous medium (2010).
- 2011 Maripala Srinivas, Heat Transfer analysis : A Numerical Study (2011).
 - **D. Latha Madhuri**, Numerical solutions of Heat Transfer Problems (2011).
- 2015 **L. Nagaraju**, MHD Effects on Convective Heat Transfer: A Finite Element Analysis Dec, (2015).

ATTENDED TRAINING PROGRAMMES/COURSES:

- SERC-School on Mathematical Modelling of Atmospheric Pollution, held at Bangalore University, from 15th May to 16th June, 2001.
- Workshop on Hydrodynamics, held at Indian Institute of Science (IISc), Bangalore, from 6th -9th, Dec, 2004.
- Course on Programming and Mathematical Packages, held at University Computer Center, Osmania University, Hyderabad, from 28th April to 15th June, 1999.
- National Level Workshop on Object Oriented Computing in Applicable Mathematics, held at Department of Mathematics, Osmania University, Hyderabad, from 22nd to 29th, Mar, 1997.
- Orientation Course, at Academic Staff College, Osmania University, from 8-06-1998 to 4-07-1998.
- Refresher course, at Academic Staff College, Osmania University, from 20-07-2006 to 10-08-2006.
- International Conference for Mathematicians (ICM) from 19th to 27th Aug-2010, held at Hyderabad, AP, India.
- Professional Development Programme(PDP) for senior teachers, from 15-11-2010 to 20-11-2010, at Academic Staff College, University of Hyderabad, Hyderabad.

SEMINARS/CONFERENCES ATTENDED AND CONDUCTED:

- Convener, National Seminar on Synergizing Higher Education in the Context of NEP-2020 on 22-23, December, 2021, held at Osmania University, HYDERABAD, T.S, India.
- Convener, XXX-APTSMS (Andhra Pradesh & Telangana Society for Mathematical Sciences) and Internatinal Conference on Mathematics and its relevance to science and engineering, 12-14, 2022, held at Osmania University, HYDERABAD, T.S, India.
- Convener, National Mathematics Day, on 19-20, December, 2021, held at Osmania University, HY-DERABAD, T.S, India.
- Attended a two-day seminar on the "National Educational Policy 2020– A road map to revamp the Indian higher education system" from 22-23 March 2022, held at Sri Venkateswara University, TIRU-PATHI, A.P.
- Convener, International conference on Computational Fluid Flow and Heat Transfer, from 28-29, March, 2018, held at Osmania University, HYDERABAD, T.S, India.

SEMINARS/CONFERENCES ATTENDED AND CONDUCTED: (continued)

- Convener, National conference on MATHEMATICAL SCIENCES AND APPLICATIONS(NCMSA); 30-31 July, 2018, held at Osmania University, HYDERABAD, T.S, India.
- **O**rganizing Secretary for National workshop on "Advanced Techniques in Computational Fluid Dymnamics" from $24-25^{th}Feb 2012$, HYDERABAD, T.S, India.
- Organizing Secretary for one day Seminar on "Mathematics Modelling in Fluid Mechanics" 30 Nov-2011, HYDERABAD, T.S, India.
- International Conference on "Recent Advances in Fluid Mechanics" from 23-24 Dec-2010 (Organizing Committee), Osmania University, HYDERABAD, T.S, India.
- National conference on "Recent treands in Mathematical Science" Dept. of Mathematics, from 30-31 Mar-2010,Osmania University, HYDERABAD, T.S, India.
- National work shop on "Advanced Techniques in Computational Fluid Dynamics" from 24-25 Feb-2012, Osmania University, HYDERABAD, T.S, India.
- International conferences on "Recent Advance in Fluid Mechanics" from 23-24 Dec-2010, Dept. of Mathematics (Organising Committe), Osmania University, HYDERABAD, T.S, India.
- Workshop attended on "Hydrodynamics" held at Indian Institute of Science (IISc), Banglore, from 6-9 December, 2004.
- National Seminar on "Fluid Mechanics Its Applications to science & Technology", February 9-10,2005, held at Osmania University, HYDERABAD, T.S, India.
- National Seminar on "New Trends in Functional Analysis & Operator Theory", March 11-12, 2005 held at Osmania University, HYDERABAD, T.S, India.
- National Conference on "New Trends in Number Theory", held from March 18-19, 2006 held at Osmania University, HYDERABAD, T.S, India.
- National Seminar on "Recent Advances in Continnum Mechanics" from March 11-12, 2004, held at Osmania University, HYDERABAD, T.S, India.
- National Seminar on "Recent Advance in Heat & Mass Transfer" February 28,2004 held at Osmania University, HYDERABAD, T.S, India..
- Presented Paper at XII-Congress Andhra Pradesh Society for Mathematical Science, from December 12-14, 2003 held at Osmania University, HYDERABAD, T.S, India.
- National Seminar on "Recent Advance in Fluid Mechanics" March 26, 2003 held at Osmania University, HYDERABAD, T.S, India.
- National Seminar on "Algebra Its Applications" March 29-30, 2003 held at Osmania University, HYDERABAD, T.S., India.
- Presented Paper at X-Congress Andhra Pradesh Society for Mathematical Science, from 18-20 January, 2002, held at Osmania University, HYDERABAD, T.S, India.
- National Seminar on "Current Trends in Fluid Mechanics" March 30-31, 2001 held at Osmania University, HYDERABAD, T.S, India.
- National level Seminar cum Workshop on "Object Oriented Computing in Applicable Mathematics", during March 22-29, 1997 held at Osmania University, HYDERABAD, T.S, India.
- X-ISME Conference on Mechanical Engineering, held at Delhi, Dec 9-11, 1996.

Research Publications

Journal Articles

Amar, N., Kishan, N., & Shankar Goud, B. (2023). Viscous dissipation and radiation effects on mhd heat transfer flow of casson fluid through a moving wedge with convective boundary condition in the existence of internal heat generation/absorption. *Journal of Nanofluids*, *12*(3), 643–651.

Dyapa, H., & Kishan, N. (2023). Numerical simulation of dufour and soret impacts on mhd williamson nanofluid flow through an inclined surface. *Heat Transfer*, *52*(1), 448–466.

³ Hymavathi, D., Ramachandru, M., Reddy, M., & Kishan, N. (2023). Heat generation and thermal radiation effects on magneto hydrodynamics non newtonian casson nanofluid with gyro tactic microorganisms over a plate, stagnation and wedge through porous media. *Journal of Nanofluids, 12*(6), 1463–1474.

Kune, R., Jagadha, S., Naik, S. H. S., Kishan, N., & Gopal, D. (2023). Parametric study of mhd, heat absorption/generation and diffusion of mass on one dimensional unsteady, chemically reacting flow employing finite element method. *Materials Today: Proceedings*, *80*, 1086–1095.

5 Nagaraju, L., & Naikoti, K. (2023a). Laminar unsteady magnetohydrodynamic flow of newtonian nongray optically thin fluid through porous medium between two concentric vertical cylinders. *Heat Transfer*, *52*(5), 3774–3798.

Nagaraju, L., & Naikoti, K. (2023b). The effects of thermal radiation on unsteady mhd free convective flow through the porous medium between two vertical plates with hall effects. *Heat Transfer*, *52*(4), 3074–3093.

7 Nagaraju, L., Naikoti, K., & Krishna, M. V. (2023). Chemical reaction and soret effects on mhd convective flow of second grade fluid through an absorbent medium with ramped wall temperature as well as ramped surface concentration. *Journal of the Indian Chemical Society, 100*(1), 100818.

8 Ramachandru, M., Hymavathi, D., Chenna Krishna Reddy, M., Fareeduddin, M., Kishan, N., Umeshaiah, M., & Gill, H. S. (2023). Role of bioconvection and activation energy on mhd flow of maxwell's nanofluid with gyrotactic microorganisms in porous media: The cattaneo–christov model. *International Journal of Modern Physics B*, *37*(25), 2350300.

Ramesh, A., Kishan, N., & Balla, C. S. (2023). Bioconvection in inclined square cavity comprising oxytactic microorganisms in the presence of soret and dufour. *International Journal of Modelling and Simulation*, 43(6), 967–979.

10 Alluguvelli, R., Balla, C. S., & Naikoti, K. (2022). Bioconvection in porous square cavity containing oxytactic microorganisms in the presence of viscous dissipation. *Discontinuity, Nonlinearity, and Complexity, 11*(02), 301–313.

Alluguvelli, R., Balla, C. S., Naikoti, K., Makinde, O. D. et al. (2022). Nanofluid bioconvection in porous enclosure with viscous dissipation. *Indian Journal of Pure & Applied Physics (IJPAP)*, 60(1), 78–89.

Amar, N., Kishan, N., & Shankar Goud, B. (2022). Mhd heat transfer flow over a moving wedge with convective boundary conditions with the influence of viscous dissipation and internal heat generation/absorption. *Heat Transfer*, (https://doi.org/10.1002/htj.22534).

- 13 Dyapa, H., Mattipelli, R., & Naikoti, K. (2022). Gyrotactic microorganisms bioconvection in combined convective magnetohydrodynamic casson nanofluid flow over a vertically surfaced saturated porous media with variable viscosity. *Heat Transfer*.
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