Faculty Profile

Basic Information:

NAME	:	**Dr. P. CHANDRA REDDY**
DESIGNATION	:	**Assistant Professor**
DEPARTMENT	:	**MATHEMATICS**
DATE OF BIRTH	:	**02.05.1978**
DATE OF JOINING	:	**12.08.2013**
EMAIL ID	:	chandramsc01@gmail.com
EMPLOYEE ID:	:	**522**

Academic Profile:

Qualification	Name of the Board/University	YEAR
Ph.D	Jawaharlal Nehru Technological University, Anantapuramu, AP, India.	2017
M.Sc	Sri Venkateswara University, Tirupati.	2001
B.Sc	Sri Venkateswara University, Tirupati.	1998

Research Details:

1. Areas of Specialization	:	Fluid Dynamics, Heat and Mass transfer.
2. No. of Publications	:	57
3. Awards Received	:	-
4. Research Guidance		
	No. of PhD Guided:	02
	No. of MTech. Guided:	-
	No. of B.Tech. Guided:	-
5. Details of Professional Membership:		➢ Life member of Andhra Pradesh and Telangana Society of Mathematical Sciences (APTSMS) ➢ Member of National Advisory Editorial Board, BPAS Publications ➢ Editorial Board Member of i-manager's Journal on Mathematics (JMAT).

6. Subjects Taught	1. Algebra and Calculus (Matrices, Partial Differentiation, Multiple integrals, Special functions) 2. Differential Equations and Vector Calculus (Differential Equations, Applications of Integration, Vector Differentiation, Vector integration) 3. Transform Techniques, Numerical methods and Complex variables (Laplace Transforms, Fourier Series, Fourier Transforms, Numerical Methods and Complex Analysis) 4. Probability & Statistics: (Probability, Random Variables, Probability Distributions, Sampling Distributions, Testing of Hypothesis) 5. Computational Methods: (Numerical techniques for solving Ordinary and Partial differential equations, Basics of Matlab) 6. Business Statistics: (Scope and applications of Statistics, Mathematical statistics, Index numbers, Time series) 7. Operations research: (Scope and applications of Operations research, Optimization, Transportation problems, Assignment problems, PERT & CPM. 8. Methods of Applied Mathematics. 9. Mathematical Modelling. 10. Aptitude and Reasoning skills.

Publication Details:

S.No.	Title	Publisher Name	Year
1	Thermal and solutal buoyancy effect on MHD boundary layer flow of a visco-elastic fluid past a porous plate with varying suction and heat source in the presence of thermal diffusion	Journal of Applied & Computational Mathematics	2015
2	Magnetohydrodynamic convective double diffusive laminar boundary layer flow past an accelerated vertical plate	International Journal of Engineering Research in Africa	2016
3	Soret and Dufour effects on MHD free convection flow of Rivlin-Ericksen fluid past a semi infinite vertical plate	Advances and Applications in Fluid Mechanics	2016
4	Free convective magneto-nanofluid flow past a moving vertical plate in the presence of radiation and thermal diffusion	Frontiers in Heat and Mass Transfer	2016
5	Free convective heat and mass transfer flow of heat generating nano fluid past a vertical moving porous plate in conducting field	Special Topics and Reviews in Porous Media	2016
6	Diffusion thermo and thermal diffusion effects on MHD free convection flow of Rivlin-Ericksen fluid past a semi infinite vertical plate	Bulletin of Pure and Applied Sciences	2017
7	Radiation and Dufour effects on laminar flow of a rotating fluid past a porous plate in conducting field	Frontiers in Heat and Mass Transfer	2018
8	Thermal diffusion and Joule-heating effects on magnetohydrodynamic, free-convective, heat-absorbing/generating, viscous-dissipative Newtonian fluid	International Journal of Fluid Mechanics Research	2018
9	Joule Heating and Radiation Absorption Effects on MHD Convective and Chemically Reactive Flow past a Porous Plate	Bulletin of Pure and Applied Sciences	2018
10	Thermal diffusion and Joule heating effects on MHD radiating fluid embedded in porous medium	International Journal for Research in Engineering Application & Management (IJREAM)	2018
11	Magneto-convective and radiation absorption fluid flow with variable temperature and concentration in the presence of thermal diffusion	International Journal for Research in Engineering Application & Management (IJREAM)	2018
12	Casson fluid flow over a vertical porous plate under the existence of cross diffusion effects in conducting field	International Journal of Advanced Scientific Research and Management	2018
13	Joule heating influence on MHD Casson fluid over a vertical porous plate in the presence of thermal diffusion and chemical reaction	International Journal of Research in Advent Technology	2018
14	MHD heat generating/absorbing and radiating fluid past a porous plate	Journal of Applied Physical Science International	2018
15	MHD natural convective heat generating/absorbing and radiating fluid past a vertical plate embedded in porous medium–an exact solution	Journal of the Serbian Society for Computational Mechanics	2018

16	Numerical study of MHD boundary layer flow of a viscoelastic and dissipative fluid past a porous plate in the presence of thermal radiation	International Journal of Fluid Mechanics Research	2019
17	Buoyancy effects on unsteady MHD chemically reacting and rotating fluid flow past a plate in a porous medium	Defect and Diffusion Forum	2019
18	Buoyancy effects on chemically reactive magneto-nanofluid past a moving vertical plate	Bulletin of Pure and Applied Sciences	2019
19	Effects of Chemical Reaction and Radiation on MHD Convective Casson Fluid Flow	International Journal of Engineering Research	2019
20	Mathematical analysis of non-Newtonian fluid flow past an inclined plate	Special Topics & Reviews in Porous Media	2019
21	An Unsteady MHD Mixed Convection Flow Pattern of Casson Fluid through Past Vertical Porous Plate with Radiation and Chemical Reaction	International Journal of Scientific Research in Computer Science, Engineering and Information Technology	2019
22	Thermal Radiation and Thermophoresis Effects on Steady MHD Free Convection Flow of a Micropolar Fluid through a Porous Medium	International Journal of Engineering Research	2020
23	Three dimensional laminar flow of magnetite water based nanofluids under heat generation and couple stress effects	JP Journal of Heat and Mass Transfer	2020
24	Thermophoresis effect on MHD flow of a micropolar fluid under variable heat flux	Journal of Xidian University	2020
25	Thermal radiation and viscous dissipation effects on steady MHD heat and mass transfer flow of a micropolar fluid	Journal of Xidian University	2020
26	Uniform boundary layer flow of Casson fluid past a vertical plate through porous medium in conducting fluid	Journal of Xidian University	2020
27	Heat and Mass Characteristics of Magneto-Newtonian Fluid Through Upright Porous Plate	Lecture Notes in Electrical Engineering	2020
28	Flow characteristics of unsteady MHD Newtonian fluid past a rotating vertical porous plate	Bulletin of Pure and Applied Sciences	2020
29	Analytical study of buoyancy effects on MHD visco-elastic fluid past an inclined plate	AIP Conference Proceedings	2020
30	Convective heat transfer and mass transfer observations of MHD Cu-water nanofluid in a rotating system	AIP Conference Proceedings	2020
31	Analytical study on MHD convective non-Newtonian fluid flow under the influence of diffusion-thermo and heat source effects	AIP Conference Proceedings	2020
32	MHD double diffusive convective flow of heat generating fluid in the presence of Soret Effect	AIP Conference Proceedings	2020
33	Unsteady MHD free convective flow of a radiating fluid past an inclined permeable plate in the presence of heat source	AIP Conference Proceedings	2020
34	Marangoni convection impact on magnetonano fluid in porous medium	AIP Conference Proceedings	2020

35	Radiation absorption and Soret effects on MHD Conducting fluid flow past an exponentially Accelerated vertical plate	South East Asian Journal of Mathematics and Mathematical Sciences	2020
36	Heat generation and chemical reaction impact on MHD rotating flow past a vertical porous plate	Turkish Journal of Computer and Mathematics Education	2021
37	Analysis of MHD nanofluid in a rotating system under the existence of heat absorption	Annals of the Faculty of Engineering Hunedoara - International Journal of Engineering	2021
38	Numerical study on the parabolic flow of MHD fluid past a vertical plate in a porous medium	Heat Transfer	2022
39	Characteristics of MHD three dimensional flow of nanofluid over a permeable stretching porous sheet	Heat Transfer	2022
40	Aspects of parabolic motion of MHD fluid flow past a vertical porous plate with cross diffusion effects	Heat Transfer	2022
41	Thermal radiation impact on MHD Casson visco-elastic fluid under viscous dissipation	Neuro Quantology	2022
42	MHD flow pattern in a parabolic mode based on the angle of inclination under cross diffusion	Heat Transfer	2022
43	MHD Casson fluid flow past an upright plate under the impact of heat sink and chemical reaction	Advances and Applications in Mathematical Sciences	2022
44	Thermophoresis impact on a micropolar fluid under changeable heat flux in conducting field	Frontiers in Heat and Mass Transfer	2022
45	Study on MHD Free Convection flow of a Casson Fluid Flow Past a Vertical Porous Plate With Uniform Boundaries	GANITA	2022
46	Optimal scheduling methodology for machines, tool transporter and tools in a multi-machine flexible manufacturing system	Recent Advances in Material, Manufacturing, and Machine Learning (CRC Press)	2023
47	Parabolic form of Casson fluid flow based on angle of inclination in conducting field	i-manager's Journal on Mathematics	2023
48	Flow pattern of MHD Casson nanofluid past a porous stretching sheet – a numerical approach	European Chemical Bulletin	2023
49	Study on MHD flow of micropolar fluid over a stretching surface under the impacts of heat source and chemical reaction	European Chemical Bulletin	2023
50	Exact solution for an unsteady flow of radiative nanofluid under the existence of heat source in conducting field	BioGecko	2023
51	Numerical Based Study on the Flow Pattern of Casson Nano fluid under Thermo Diffusion in Conducting Field	BioGecko	2023
52	MHD Double Diffusive Radiative Jeffrey Fluid near Stagnation Point Flow towards a Stretching Sheet	BioGecko	2023
53	Thermophoresis and Soret-Dufour Impacts on MHD Viscous Dissipative Micropolar Fluid Past an Inclined Isothermal Surface	BioGecko	2023

54	Flow Characteristics of MHD Radiative Heat Absorbing/Generating Nanofluid with Variable Temperature	BioGecko	2023
55	MHD Convective Flow of Chemically Reacting Viscoelastic Fluid Through an Infinite Inclined Plate via Machine Learning	Modern Approaches in Machine Learning and Cognitive Science	2024
56	MHD Flow and Heat Transfer of Carreau Fluid With Radiation and Heat Source Effect	Journal of Advanced Research in Numerical Heat Transfer	2024
57	Neural network-driven analysis of MHD boundary layer flow and heat transfer in Sisko nanofluids.	Multiscale and Multidiscip. Model. Exp. and Des.	2025

Patent Details:

Title of Patent	Submitted/Published/Awarded
Symbolic-AI Hybrid System for Solving Complex Math Problems	Published