SIDDHARTHA ACADEMY OF HIGHER EDUCATION
(Deemed to be University u/s 3 of UGC Act, 1956)

M.V.D.N.S.MADHAVI

Designation : Assistant Professor
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Velagapudi Ramakrishna Siddhartha school of
Engineering, Kanuru, Vijayawada, Andhra Pradesh
520007

Education

Ph. D (Fluid-Dynamics**)**
2020, Krishna University, Machilipatnam
M.Phil. (Mathematics)
2004, Madhurai Kamaraj University
M.Sc (Applicable Mathematics)
1993, Sri Padmavathi Mahila University, Tirupathi
B.Sc (M.P.C)
1991, *Nagarjuna University, Guntur*

Experience

Period	Designation	Institution / Organization	Key Responsibilities
2008- till date	Assistant Professor	Velagapudi Ramakrishna Siddhartha School of Engineering	syllabus framing, Ph.D. guidance, Research Publications, Academic Leadership, NBA/NAAC Coordination.
1996 - 2008	Lecturer	Sri Durga Malleswara Siddhartha Mahila Kalasala, Vijayawada	NSS Coordinator, Member – Timetable Committee, Member - NAAC Committee

Research Interests

Broad Area of Research:
Fluid Dynam*ics* (Convection in Porous Media)

Honors&Awards

Top 5% in Developing soft skills& Personality

Courses Taught

S.No	Course Name	Level (UG/PG)
1	Matrices and Differential Calculus	UG
2	Laplace Transforms and Integral Calculus	UG
3	Complex Analysis and Numerical Methods	UG
4	Operations Research	UG
5	Real analysis	UG
6	Modern Algebra	UG
7	Optimization Techniques	UG
8	Probability and Statistics	UG

Research Profile

Publications

The recent publications and research contributions can be viewed from the following URLs

Google Scholar	https://scholar.google.com/citations?user=Xde19c0AAAAJ&hl=en
Research Gate	https://www.researchgate.net/scientific-contributions/2080590375_MVDNS_Madhavi
Scopus	https://www.scopus.com/authid/detail.uri?authorId=59260245900
Sciencedirect	https://www.sciencedirect.com/journal/advanced-powder-technology/vol/27/issue/2
ISSUU	https://issuu.com/invention.journals/docs/d027019027_dfc3d84a701f1b
Springer	https://link.springer.com/chapter/10.1007/978-981-13-1903-7_29
Sciencedirect	https://www.sciencedirect.com/science/article/pii/S2214785319313185
Springer	https://link.springer.com/article/10.1007/s12046-015-0373-7
ORCID	https://orcid.org/0000-0003-2183-914X

Recognized Research Supervisor

S.No.	Department	University
01.	Mathematics	Siddhartha Academy of Higher Education Deemed to be University

Funded Research Projects

S.No.	Type	Title	Status	Funding Agency	Amount (INR)	Duration
01	Funded	A Study on Mixed Convective Heat Transfer from a Vertical Plate Embedded in a Saturated Porous Medium with Melting Effect	Completed	SERO, UGC	2,30,000	2 Years

Administrative Roles

S.No.	Role	Institution	Duration	Responsibilities
1	Assistant warden	SAHE	2025	Regular monitoring of hostel premises
2	Member	SAHE	2024-Present	Central Administrative Procedures for SAHE
3	Member	SAHE	2024-Present	Admission Procedure Manual for SAHE
4	Member Coordinator	VRSEC	2018 – 2021	NAAC Criterion II
5	Member Coordinator	VRSEC		NBA Criterion VIII
6	Convener	VRSEC	2020-2024	Women Welfare Committee
7	Chairperson	SAHE	2025 – Present	Women Welfare Committee
8	Coordinator	SAHE	2025 – Present	Women Empowerment Club
9	Member Coordinator	VRSEC	2022 – Present	NPTEL Courses (S & H)
9	Convener	SAHE	2025 – Present	Canteen Committee
10	Member	SAHE	2025 – Present	Library Committee

Certifications/MOOC Courses Completed

S.No.	Title	Platform	Duration	Year
1	Essential Mathematics for Machine Learning	NPTEL	12 Weeks	2024
2	Numerical Methods For Engineers	NPTEL	12 Weeks	2023
3	Multivariable calculus	NPTEL	12 Weeks	2023
4	Emotional Intelligence	NPTEL	12 Weeks	2021
5	Effective Engineering Teaching In Practice	NPTEL	8 Weeks	2020
6	Developing Soft Skills and Personality	NPTEL	12 Weeks	2018
7	Educational Leadership	NPTEL	12 Weeks	2018
8	Convective Heat Transfer	NPTEL	12 Weeks	2018
9	Outcome Based Pedagogic Principles for Effective Teaching	NPTEL	4 Weeks	2018
10	Vector Calculus for Engineers	Course Era	4 Weeks	2020
11	Mathematics for Machine Learning	Course Era	4 Weeks	2020
12	Operation Research1 models and applications	Course Era	1 Week (10 Hours)	2022

Patents

S.No	Title	Status	Application No.	Year
1	Advanced Numerical Methods for Solving Magneto hydrodynamic (MHD) Equations in Complex Geometries (2nd Claimant)	Published	202441069199	2024
2	System and Method for Numerical simulation of Magnetohydrodynamic (MHD) phenomena using analytical models(1st claimant)	Published	202441054735	2024
3	Magneto flow Shield: A System for Controlling Jeffrey Fluid Flow with Magneto Hydrodynamic and Porous Media Interactions (2nd claimant)	Published	202441021453	2024
4	System and Method for Optimal Control of Magneto Hydrodynamics Fluid Flows using Mathematical Modelling (1st claimant)	Published	202341053540	2023
5	An Analytical approach for solving	Published	202341022909	2023

	Fractional Differential Equations with Non-Homogeneous Boundary value issues (1st claimant)			
6	System and Method to Predict Product Freshness Status and Manage its Delivery (3rd claimant) ™	Published	202041026062	2020

Ph.D

Guiding	01

Professional Development Activities - Participations

Faculty Development and Training Programmes (at least 5 Days)	45
International / National Level Seminars	19
International / National Level Conferences	15
Workshops	16
Instructor Led / Self-Paced Courses	9/ 2
Webinars	8

Professional Bodies Membership Details

L/970	Indian society of Theoretical and Applied Mechanics

(M. V. D. N. S. Madhavi)

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