

Name: Dr. Ganesh Kumar Vadla

Designation: Assistant Professor

Department: Humanities & Science

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Experience (in years): 13 Teaching: 13 Research: 06 Others(if any, specify):

1. Educational / Technical qualifications:

S.No	Level (UG / PG / Ph.D)	Year of passing	Specialization
1	Ph. D	2023	Advanced Numerical Techniques
2	M. Tech.	2010	Industrial Mathematics and Scientific Computing
3	M.Sc.	2007	Applied Mathematics
4	B.Sc.	2005	MPC

2. Teaching and Learning:

2.1. Teaching Interests: Analytical and Applied mathematics, Computational Mathematics, Statistics

2.2. Novel Teaching & Learning Techniques adopted: Chalk & Talk, WIT & WIL, TPS, LBD

Successfully completed 8-week FDP on Foundation Program in ICT for Education conducted by IIT Bombay.

2.3. Involvement in curriculum updating / Design:

- i) Involved in designing R22 curriculum for B.Tech.
- ii) Involved in designing R29 curriculum for B.Tech.
- iii) Involved in designing R18 curriculum for B.Tech..

3. Co-curricular and Extra-Curricular Activities

3.1. Interests and Hobbies: Listening to music while reading a book, Playing Cricket, and Badminton.

3.2. CCA/ECA Organized:

Organized Academic Quiz Program

3.3. CCA/ECA participated: Participated in College level Cricket Tournament

3.4. Counseling and Mentoring Activity: Yes

3.5. Committees involved in:

Department level:

Worked as CET coordinator,

NAAC member,

Writing minutes of Mathematics faculty meeting

Institute Level: NAAC member

4. Conference / Workshop / Seminar / Guest Lectures:

4.1 Conducted:

- i) Organized **National Mathematics Day-2020** at VNRVJIET in December 2020.
- ii) Organized 1-week National Online FDP on Essential Mathematics for Machine Learning in July 2020.
- iii) Organized National Mathematics Day-2022 in December 2022 at VNRVJIET.

4.2 Attended: Actively participated in the following events

- i) One week FDP on “**Numerical methods and Optimization Techniques in Engineering Research**” at CMR Engineering College.
- ii) One week workshop on “**Advanced Numerical modeling Techniques For Mechanical Engineering**” at VNRVJIET.
- iii) One week refresher course on “**Engineering Mathematics**” at CMR Engineering College.
- iv) Webinar on Modelling and Simulation of Fluid Flows Using Partial Differential Equations.
- v) E-webinar on “**Single and Two Species Population Models**”.
- vi) National webinar on “**Research (Why? What?, How?)**”.
- vii) National Level Webinar on “Modelling and Simulation of Fluid Flows Using Partial Differential Equations”.
- viii) National webinar on Innovative approach to differential equations.
- ix) International Workshop-cum-Lecture Series on “**Computational Models and Methods Driven by Industrial Problems**” conducted at **IIT Madras**.
- x) International Workshop on “**PDE: Models and Numeric**” at **IIT Madras**.

5. Academic Contribution and Research & Consultancy:

5.1. Invited Lectures:

- i. Acted as a speaker in the 1-week FDP on Essential Mathematics for Machine Learning.
- ii. Acted as a resource person in the series of webinar on Mathematics for Machine Learning.
- iii. Acted as a Guest speaker during the webinar series on Machine Learning conducted by IEEE VNR CS Student Branch Chapter from June 21-July 3, 2020.

5.2. Articles/Chapters published in Books:

5.3. Books published as single author or as editor:

- i. **Engineering Mathematics** (Volume-1), ISBN: **978-613-9-85779-1**, Lambert Academic Publishing, Sept. 2018.

5.4. Projects Guided: Guided Course based projects.

a) UG: 4 Course based projects for II-CSE and II-IT students in the course SMDA

b) PG:

5.5. Research Interests: Advanced Numerical Techniques, computational Mathematics

5.6. Ph.D students : NA

a) Enrolled :

b) Submitted:

c) Awarded:

5.7. Papers published in reviewed journals : 5

S.No	Title of the Paper	Journal Name Vol.No. PP	ISBN/ISSN No.	Impact Factor/Citation Index	National/International
	An extended finite difference method for singular perturbation problems on a non-uniform mesh	<i>Int. J. of Applied Mechanics and Engineering</i>	2353-9003	0.18/Scopus	International
1	Computational technique for two parameter singularly perturbed parabolic convection diffusion problem	J. Math. Comput. Sci. 10 (2020), No. 4, 1251-1261	ISSN: 1927-5307	0.22/Scopus	International
2	A variable mesh Finite Difference Scheme for two-parameters singularly perturbed boundary value problems	Journal of Mathematical Control Science and Applications (JMCSA) Vol. 6 No. 1 (January-June, 2020)	0974-0570	0.13/Scopus	International
3	Optimization of Temperature of a 3D Duct with the Position of Heat Sources Under Mixed Convection	<i>Numerical Heat Transfer and Fluid Flow</i> , Lecture Notes in Mechanical Engineering Pages 275-284	978-981-13-1903-7	0.36/Scopus	International
4	Unsteady Heat and Mass Transfer Flow of Cu-Water Nano-Fluid over an Inclined Plate with Free Convection and Chemical Reactions	<i>International Journal of Pure and Applied Mathematics</i> , 118 No. 10, 33-46	1314-3395	7.59/Scopus	International

5.8. Papers presented at National / International Conferences:

S.No	Title of the Paper	Names of the Conference/ Seminars	National/ International	Period
1	Two parameter fitting method for singularly perturbed parabolic convection-diffusion problems	DST-SERB Sponsored International conference on Mathematical Modelling and Emerging Trends in computing	International	June 23-25, 2023
2	Multiple parameters fitting method for singularly perturbed convection-diffusion problems	Telangana State Science Congress-2018	International	22 nd -24 th Dec, 2018
3	Optimization of Temperature of a 3D Duct with the Position of Heat Sources Under Mixed Convection	International conference on numerical heat transfer and fluid flow (NHTFF) Organized by Department of Mathematics, NIT Warangal	International	January 19 - 21, 2018
4	An efficient hybrid Numerical Method for two parameter boundary layer problem	National Conference on Recent Advances of Mathematical techniques in science and Engineering, conducted by department of Mathematics, Osmania University,	National	30 th to 31 st July 2017
5	Optimal Arrangement of Heat Sources in a 3D Horizontal Duct Under the Mixed Convection	20th International Conference of International Academy of Physical Sciences on Recent advances in physical sciences and future challenges	International	July 14-16 2017

5.9. Sponsored research Projects: Nil

S.No	Title	Agency	Period	Grant amount	Ongoing / Completed

5.10 Consultancy Projects: Nil

S.No	Title	Agency	Period	Sanctioned Amount	Ongoing / Completed

6. Awards / Honors received:

6.1 Qualified ***CSIR-UGC NET-2017***

6.2 Qualified and Secured ***ALL INDIA 37th RANK IN GATE-2008***

6.3 Qualified ***APSET-2012*** conducted by Osmania University

6.4 Received Elite certificate for completion of 12 weeks certificate course “Essential Mathematics for Machine Learning” through NPTEL, Jul-Oct 2021.

6.5 Successfully completed 8-week online course “Mathematics for machine learning: Multivariate calculus” authorized by Imperial college London and offered through Coursera, Mar-2020

6.6 Successfully completed self-paced training course on MATLAB onramp.

6.7 Certificate received on completion of an 8-week online non-credit course “Linear regression in Business statistic” authorized by Rice University and offered through Coursera.

6.8 Received Elite certificate for completion of 8-week certificate course “MATLAB programming for Numerical computation” through NPTEL, Jan-Mar 2017.

Motto: “Happiness is the highest level of success”