

Dr. R. SWETHA

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RESIDENTIAL ADDRESS:

Dr. R.SWETHA,
W/o. V.Narendra Prasad, Penamakuru,
Thotlavalluru (MD).

ACADEMIC QUALIFICATIONS: M.Sc., M.Phil., Ph.D

ACADEMIC REWARDS / ACHIEVEMENTS:

- Top-2% in Numerical Methods conducted by IIT Madras(NPTEL).
- Top-1% in Mathematical Methods and its Applications conducted by IIT Roorkee (NPTEL).
- Top-1% in Transform Calculus and its Applications in Differential Equations conducted by IIT Kharagpur (NPTEL).
- Secured S+ Grade in One Week National level Short term Training Program on “MATLAB for All” organized by Sir M Visvesvaraya Institute of Technology, Bangalore, from 4th -8th June 2020

PROFESSIONAL EXPERIENCE:

| Designation | Institution | Period |
|-----------------|--|-------------------|
| Asst. Professor | Gudlavalleru Engineering College, Gudlavalleru | 2009 to Till date |
| Asst. Professor | Sunflower College of Engg& Technology | 2008-2009 |
| Asst. Professor | Aditya Engg. College | 2006 - 2008 |

PROJECTS GUIDED:

| PhD | Post Graduation | Under Graduation |
|-----|-----------------|------------------|
| NIL | NIL | NIL |

SPECIALIZATION:Fluid Mechanics

RESEARCH PAPERS / BOOKS:08

BOOKS PUBLISHED IN PUBLICATIONS: NIL

PATENTS: 01

Title of invention “Laplace transform in solving partial differential Equation in the presence of the second derivative and its applications”, published on 02.12.2022.

RECENT PUBLICATIONS/CONFERENCES:

| International/ National Journals | International / National Conferences |
|----------------------------------|--------------------------------------|
| 08 | 03 |

1. “Chemical reaction and thermal radiation effects on MHD free convective flow past an accelerated inclined plate embedded in porous medium with variable temperature & mass diffusion”. International Journal of Scientific and Innovative Mathematical Research (IJSIMR) Volume 3, Special Issue 3, July 2015, PP 1111-1117, ISSN 2347-307X (Print)
2. “Effects of thermal diffusion on hydrodynamic free convective, radiative and chemically reactive dissipative fluid flow past a vertical porous surface with heat absorption and constant suction” Journal of Emerging Trends in Engineering and Applied Sciences (JETEAS) 6(5): 335- 345, 2015 (ISSN: 2141-7016)
3. “Diffusion-thermo and Radiation effects on MHD free convection flow of chemically reacting fluid past an oscillating plate embedded in porous medium” Procedia Engineering Journal, Vol. 127 (2015), PP-533-560.
4. “Effects of thermal radiation and radiation absorption on flow past an impulsively started infinite vertical plate with Newtonian heating and chemical reaction”. Open Journal of Fluid Dynamics, 2015, Volume- 5, PP- 364-379 (2015), <http://dx.doi.org/10.4236/ojfd.2015.54036>
5. “Soret and heat generation effect on an unsteady free convective flow past an exponentially accelerated plate with constant mass flux”, International Journal of Current Trends in Engineering & Research (IJCTER), e-ISSN 2455-1392 Volume 2 Issue 5, PP 665 -675, May 2016
6. “Radiation and chemical reaction effects on MHD flow past an accelerated isothermal inclined plate in a rotating fluid with variable mass diffusion”, International Journal of Chemical Separation Technology,(Page No:1 – 14), Volume 3: Issue 1, May 2017
7. “MHD free convection flow past an exponentially accelerated inclined plate embedded in porous medium”, Springer, Applications of Fluid dynamics, Lecture notes in mechanical engineering, (Page No: 17-30), <https://doi.org/10.1007/978-981-10-5329-0-2>.
8. “Entropy generation analysis in a vertical porous channel with navierslip and viscous dissipation”, Springer, Applications of Fluid dynamics, Lecture notes in mechanical engineering, (Page No: 177-190), https://doi.org/10.1007/978-981-10-5329-0_12.

- 1) R. Swetha, presented a paper on “Chemical Reaction and Thermal Radiation Effects on Mhd Free Convective Flow Past An Accelerated Inclined plate Embedded In porous Medium with variable Temperature & Mass Diffusion.” in International conference on “Mathematical Sciences (ICMS-2015)” held in the Dept. Of Mathematics, Sri Venkateswara University, Tirupati, from 13th to 15th July, 2015.
- 2) R. Swetha, presented a paper on “Diffusion – Thermo and radiating effects on MHD free convection flow o chemically reacting fluid past on Oscillating plate embedded in porous medium” in International conference on “Computational Heat and Mass Transfer (ICCHMT-2015)” held in the Dept. Of Mathematics, National Institute of Technology, Warangal, from 30th November to 2nd December, 2015.
- 3) R. Swetha, MHD Free Convection Flow past an Exponentially accelerated Inclined Plate Embedded in pouousMediumin International conference on “Applications in Fluid Dynamics (ICAFD 2016)”, organized by department of Applied Mathematics, Indian Institute of Technology (Indian School Mines) Dhanbad, Jharkhand, 19-21 December 2016.

LIST OF WORKSHOPS ORGANIZED:

- ❖ APPLICATIONS OF MATHEMATICS IN ENGINEERING at Gudlavalleru Engineering College, Gudlavalleru from 09-11-2013 to 10-11-2013

LIST OF WORKSHOPS /SEMINARS ATTENDED:

1. Attended State Level Two Day Workshop on “Applications of Mathematics in Engineering” (As per JNTUK R13 - Syllabi) from 09th& 10th November 2013 Organized by Gudlavalleru Engineering College, Gudlavalleru.
2. Participated in the UGC – SAP – DRS – I National Seminar on “ Advances in Fluid Dynamics” Conducted by dept. of Mathematics, Sri Venkateswara University, Tirupathi on 30-5-13.
3. Attended complimentary training / orientation, “MATLAB, Simulink & Related tool boxes for Engineering Education” organized by Academy of Design and Architecture at Gudlavalleru Engineering College on 3rd& 4th April 2013.
4. Attended Two – Week ISTE workshop on “Signals & Systems” from 2nd to 12th January 2014 organized by IIT, Kharagpur at Gudlavalleru Engineering College, Gudlavalleru as Remote centre. This workshop was held under the National Mission on Education through ICT (MHRD).
5. Attended one week Faculty Development Program on “MATLAB Applications in Mechanical Engineering” organized by department of Mechanical Engineering, Gudlavalleru Engineering College, Seshadri Rao Knowledge Village, Gudlavalleru – 521356, during 07th – 11th September 2015.
6. One Day Workshop on “Fuzzy Mathematics in Engineering Control : An Example Oriented Treatise” Conducted by Gudlavalleru Engineering College, Gudlavalleru on 21st February, 2016
7. Two day workshop on “Multivariate Analysis using R-Software” Conducted by Gudlavalleru Engineering College, Gudlavalleru on 12th& 13th November, 2016.
8. Two day national workshop on “Advanced Optimization Techniques through MATLAB” conducted by VR Siddhartha Engineering College, Vijayawada on 10 - 11 March 2017.
9. Two day workshop on “Recent Trends in Mathematics and its Applications” conducted by PVP Siddhartha Institute of Technology, Vijayawada on 17- 18 March 2017.
10. “A Five - Day workshop on R-Programming for Statistical Computations”, Part-I, organized by dept. of BS&H, Gudlavalleru Engineering College, Gudlavalleru, 24 – 25 June 2017.
11. Four day workshop on “Numerical Methods with Matlab” (Theory & Hands on Experience) organized by BS&H dept., Gudlavalleru Engineering College, Gudlavalleru, from 25–28 June 2018.
12. One and half week AICTE approved faculty development program on “Mathematical methods and its applications” organized by IIT Roorkee.
13. One and half week AICTE approved faculty development program on “Transform Calculus and its applications in Differential Equations” organized by IIT Kharagpur.
14. One day Faculty development Programme on “ DESIGN AND ANALYSIS OF EXPERIMENTS” held on 30th August, 2019, organized by Mechanical Engineering, Gudlavalleru Engineering College, Gudlavalleru.
15. One day international webinar on “Mathematics: Tracing of Curve” held on 9th May 2020, organized by Bharati Vidyapeeth’s College of Engineering, Lavale, Pune.
16. Three days National level Workshop on “Research Methodology, Statistical Techniques and Data Analysis using MS Excel” Organized by Tilak College of Science and Commerce, Mumbai, from 18-20 May 2020.
17. One week online FDP on “Mathematical and Statistical Modelling” organized by Godavari Institute of Engineering and Technology, Rajahmundry, from 26-30 May 2020.

18. Seven day International FDP on “Mathematical Modeling in Multidisciplinary Domain” organized by BannariAman Institute of Technology, Tamilnadu, from 1-7 June 2020.
19. One Week National level Online Short term Training Program on “MATLAB for All” organized by Sir M Visvesvaraya Institute of Technology, Bangalore, from 4th -8th June 2020.
20. One day webinar on “Impact of COVID in Engineering Education and Way forward” organized by Indian Society for Technical Education (ISTE) chapter, Gudlavalleru Engineering College, Gudlavalleru, on 9th June 2020.
21. Two days National level FDP on “Techniques and Applications in Teaching Engineering Mathematics” organized by K.Ramakrishnan College of Engineering, Trichy, on 10th and 11th June 2020.
22. One day National Level Webinar on “Application of SciLab and R-Programming” organized by R. L. Science Institute, Belgavi, on 23rd June 2020.
23. One day National Webinar on “Fluid Dynamics” organized by School of Basic Sciences,Manipal University, on 23rd June 2020.
24. Three days Online FDP on “R Programming Language” organized by Smt. Kamala and Sri Venkappa M. Agadi College of Engineering and Technology in association with spoken tutorial, IIT Bombay, from 28th – 30th May 2020.
25. One week online certification course on “Digital Teaching Techniques” Organized by ICT Academy from 29th June to 4th July 2020.

CERTIFICATIONS: NIL

INDUSTRIAL TRAINING: NIL

GUEST LECTURES DELIVERED: NIL

MEMBERSHIP IN PROFESSIONAL BODIES: APSMS

CONSULTANCY ACTIVITIES: NIL

GRANTS FETCHED: NIL