

Name: Dr. G. JITHENDER REDDY
Designation: Assistant Professor/Mathematics
Department: Humanities & Sciences
Mail.I.D: jithenderreddy_g@vnrvjiet.in
Experience (13): Teaching: 15, Research: 7, Others (If any, Specify): Nil



1. Educational / Technical qualifications:

| S.No | Level (UG / PG / Ph.D) | Year of Passing | Specialization |
|------|------------------------|-----------------|-----------------------------------|
| 1 | Ph.D | 2018 | Fluid Dynamics |
| 2 | M.Sc | 2007 | Mathematic with Computers Science |
| 3 | B. Sc | 2005 | M.St.CS |

2. Teaching and Learning:

- 2.1. Teaching Interests: Linear Algebra, Numerical Analysis, Integral Transform, Diff. Equations, Complex Analysis, Operations Research, Graph theory etc...
- 2.2. Novel Teaching & Learning Techniques adopted: Learning by Doing ,WIT-WIL and POGIL.
- 2.3. Involvement in curriculum updating / Design: Nil

3. Co-curricular and Extra-Curricular Activities

- 3.1. Interests and Hobbies: Playing Cricket, Chess and Caroms
- 3.2. CCA/ECA Organized: Nil
- 3.3. CCA/ECA participated: Nil
- 3.4. Counseling and Mentoring Activity: Nil
- 3.5. Committees involved in:
 - Department level: In charge for departmental library from 2011-2012, NAAC committee member in departmental level for publications and workshops from 2017 to 2018, Coordinator for collecting the details of workshops and seminars etc conducted by H&S.
 - Institute Level: Coordinator for examinations from 2012-2014, Anti ragging Committee member from 2010-2012, Co-coordinator for Induction Program 2019-20.

4. Conference / Workshop / Seminar / Guest Lectures:

- 4.1. Conducted:
 - Conducted a guest lecture on “*Approximation and Uncertainty Modelling for Engineers*” at VNRVJIET on 23rd December 2013 by Prof. C.Raghavendra Rao, Professor in the School of Computer and Information Sciences, University of Hyderabad.

- Conducted a workshop on **“Human values and Professional Ethics”** at VNRVJIET, by Prof. Pradeep Kumar Ramancharla, Department of Civil Engineering, IIT Hyderabad on 13th July 2017.
- Conducted one day event on **“National Mathematics Day-commemorating Birth day anniversary of Sri Srinivasa Ramanujan”** on 22nd December 2017 at VNRVJIET.
- Conducted a guest lecture on **“Data Science Trends-Applications and How to prepare a career for it ”** on the occasion of National Statistics Day-2021, July 29, VNRVJIET by Dr. Venugopala Rao Manneni, Learner, Practitioner & Teacher, General Manager at Juxt Smartmandate, Analytical Solutions PVT LTD, Hyderabad.
- Conducted a workshop on **Cyber Security Awareness** on 28th November 2022, in collaboration with Cyberabad Security Council, Cyberabad Police and DiLSeY (Digital Literacy to Secure Youth).
- Worked as Proctor Coordinator in the two week online faculty development programme on “Numerical & engineering computation, optimization for Physicists, Scientists & Engineers using open-source- SCILAB” jointly organized by Electronics and ICT Academies, IIT Roorkee, MNIT Jaipur, NIT Patna, PDPM IITDM Jabalpur held from 21st February, 2022 to 04th March, 2022 under the “Scheme of financial assistance for setting up of Electronics and ICT Academies” by the “Ministry of Electronics and Information Technology (MeitY), Government of India”. This programme is endorsed by AICTE / UGC / NBA

4.2.Attended:

- Attended a Workshop on **“Engineering Mathematics-I”** at VITS in 2009.
- Attended national conference on **RAAME-2012** at VNRVJIET from 20th to 22th December 2012.
- Attended a **“3-Day Workshop Program Design with Map Code”** at VNRVJIET from 27th to 29th May 2013.
- Attended a **“3-Day Workshop on Art of Teaching”** at VNRVJIET, May 2013.
- Attended a **“3-Day Workshop on Engineering the Education Scenario towards Learner Centric Environment”** at VNRVJIET, from 4th to 6th Aug 2014.
- Attended a seminar on **“Over View of Mathematica”** at VNRVJIET, 23rd Jan 2015.
- Attended a lecture on **“Curriculum Design and Development”** at VNRVJIET, 2nd April 2015.
- Attended a 3 day workshop on **“Application of Finite Element Method to Mechanical Engineering”** at VNRVJIET from 25th to 27th February 2016.
- Attended a 2 day workshop on **“MATLAB and R- language”** at VNRVJIET from 17th to 18th March 2016.
- Attended a one day workshop on **“Matrix Analysis Through Octave”** Organized by IIT, Hyderabad at VNRVJIET on 12th May 2016.

- Attended a one day workshop on **“Arduino For Everyone”** Organized by IIT, Hyderabad at VNRVJIET on 1st July 2016.
- Participated and successfully completed an online NPTEL eight weeks course on **MATLAB Programming for Numerical Computations**, organized by IIT Madras from 20th January to 26th March 2017.
- Attended a one week workshop on **“Advanced Numerical Modeling Techniques for Mechanical Engineering”** at VNRVJIET from 27th to 31st March 2016.
- Attended a one week refresher course on **“Engineering Mathematics”** from 12th to 17th June 2017 at CMR Engineering College.
- Attended **“5-Day faculty orientation workshop for enabling student induction in Technical Institutions”**, organized by AICTE at JNTU Hyderabad from 27th June to 1st July 2017.
- Successfully completed an AICTE approved faculty development programme on **Foundation Program in ICT for Education** conducted by IIT Bombay from August 3, 2017 to September 7, 2017.
- Successfully completed an AICTE approved faculty development programme on **Pedagogy for online and Blended Teaching-Learning Process** conducted by IIT Bombay from August 3, 2017 to September 7, 2017.
- Successfully completed an NPTEL-AICTE approved Faculty Development Program **“Basics of Finite Element Analysis-I”** conducted by IIT Kanpur, from Feb-Apr 2019
- Attended a national level webinar on **“Innovative Approaches in differential Equations ”** organized by Department of Mathematics, Vignana Barathi Institute of Technology VBIT, Hyderabad on 5th June 2020.
- Participated a one day national level webinar on **“Modeling and Simulation Fluid Flows Using PDE”** Organized by Department of Humanities and sciences, CMR Engineering College, Hyderabad on 25th June 2020.
- Attended a national webinar on **“Research (Why, What & How)”** organized by Department of Mathematics, Vignana Barathi Institute of Technology VBIT, Hyderabad on 14th June 2020.
- Participated a two day national webinar on **“MATLAB Programming on Differential Equations”** organized by Division of Mathematics, Department of Science & Humanities, VFSTR, Guntur Andhra Pradesh from 20-21st June, 2020.
- Participated a two day national webinar on **“ICT in Teaching -Learning Mathematics”** organized by Aurora's Degree and PG College, Hyderabad from on 7-8th June, 2020.
- Attended a 7-day International national faculty development program on **“Mathematical Modeling in Multidisciplinary Domain”** Organized by Department of Mathematics, Bannari Amman Institute of Technology, Tamil Nadu, India, from 1st -7th June, 2020.
- Attended one week online faculty development program on **“Taxonomy of Software's related to Mathematical Sciences ”** Organized by Gokaraju and Ranga Raju Institute of Engineering and Technology, Hyderabad, Telangana from 9th -14th June, 2020.
- Attended and successfully completed one week national level online faculty development program and online training on **“SCILAB-An open Source Substitute for MATLAB”** jointly organized by JNTUH College of Engineering, Sulthanpur, Sangareddy, Telangana and Spoken Tutorial Project, IIT Bombay from 25-30th May, 2020.
- Participated a one week online faculty development program on **“Design Thinking In Engineering Education”** conducted by VNRVJIET, Hyderabad from 15th -20th July 2020.

- Participated and successfully fully completed national level online Quiz on "**Mathematics**" organized by Department of Mathematics, Government City College, Hyderabad, Telangana on 7th July, 2020 with score of 96%.
- Participated and Successfully fully completed National Level Quiz on "**Mathematics and Aptitude**" conducted by Department of Mathematics, Andhra Loyola Institute of Engineering and Technology, Vijayawada, Andhra Pradesh from 19th -22nd June, 2020 with score of 85%
- Successfully fully completed National Level Quiz on "**Covid-19**" conducted by Department of Humanities and Sciences, Malla Reddy Institute of Engineering and Technology, Hyderabad on 26th June, 2020 with score of 90%
- Participated in the Quiz on "**Finite Element Analysis**" organized by Department of Mechanical & Civil Engineering, AISSMS College of Engineering, Pune, India on 25th June, 2020.
- Attended a one week faculty development programme on "**R Programming: A Practical Approach**" from 9th -14th may 2022, Organized by department of CSE (CyS,DS, AIDS) at VNRVJIET, Hyderabad, 500090.
- Attended a 5-Day Workshop on "Statistical Analysis using Python" from 6th to 11th, March-2023 Organized by Department of Humanities & Sciences and CSE (CYS, DS) and AI&DS, VNRVJIET, Hyderabad, 500090.

5. Academic Contribution and Research & Consultancy:

5.1. Invited Lectures: Nil

5.2. Articles / Chapters published in Books: Nil

5.3. Books published as single author or as editor: Nil

5.4. Projects Guided:

a) UG:Nil

b) PG:Nil

5.5. Research Interests: Fluid Dynamics

5.6. Ph.D students:

a) Enrolled: Nil

b) Submitted: Nil

c) Awarded: Nil

5.7. Papers published in peer reviewed Journals:

| S.No | Title of the Paper | Journal Name, Vol.No. PP | ISBN/ISSN No. | Impact Factor/ Citation Index | National/ International |
|------|--|--|---------------|-------------------------------|-------------------------|
| 1 | Finite Analysis of Soret and Radiation Effects on Transient MHD Free Convection From an Impulsively Started Infinite Vertical Plate with Heat Absorption | International Journal of Mathematical Archive-5(4), 2014, 211-220. | 2229-5046 | Google Scholar | International |
| 2 | Chemical Reaction and Radiation Effects on MHD Free Convection From an Impulsively Started Infinite Vertical Plate with Viscous Dissipation | International Journal of Advances in Applied. | 2347-2529 | 1.3 Google Scholar | International |

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| | | Mathematics and Mechanics (2015) 1- 19. | | | |
| 3 | Application of FEM to free convective flow of water near 4°C past a vertical moving plate embedded in porous medium in presence of magnetic field | Global Journal of Pure and Applied Mathematics(2015) 11(2) 130-134 | 0973-1768 | Google Scholar | International |
| 4 | Finite element study of an unsteady MHD free convection Couette flow with viscous dissipation | Global Journal of Pure and Applied Mathematics (2015), Vol. 11, No. 2, pp. 65 – 69 | 0973-1768 | Google Scholar | International |
| 5 | Analytical and numerical study of unsteady MHD free convection flow over an exponentially moving vertical plate with heat absorption | International Journal of Thermal Sciences(2016) Vol. 107, pp. 303 – 315 | 1290-0729 | 3.615 (Elsevier) WOS Scopus | International |
| 6 | Thermal diffusion and diffusion thermo effects on an unsteady heat and mass transfer magnetohydrodynamic natural convection Couette flow using FEM, | International Journal of Computational Design and Engineering, (2016), Vol. 3, No. 4, pp. 349 – 362 | 2288 – 4300 | 1.35 (Elsevier) Scopus WOS | International |
| 7 | Thermal diffusion and diffusion thermo effects on unsteady MHD fluid flow past a moving vertical plate embedded in porous medium in the presence of Hall current and rotating system | Transactions of A Razmadze mathematical Institute Journal, (2016). Vol. 170, No. 2, pp. 243-265. | 2346-8092 | (Elsevier) Scopus WOS | International |
| 8 | Unsteady MHD Couette Flow of Water at 4°C in a Rotating System in Presence of Heat Transfer with Ramped Temperature via Finite Element Method | International Journal of Applied Mechanics and Engineering, (2017) Vol.22, No.1, pp. 145-161. 2353-9003 | 2353-9003 | Scopus WOS | International |
| 9 | Influence Of Viscous Dissipation On Unsteady MHD Natural Convective Flow Of Casson Fluid Over An Oscillating Vertical Plate Via FEM | Ain Shams Engineering Journal, Vol. 9, No.4, pp. 1907-1915 | 2090-4479 | (Elsevier) Scopus WOS | International |
| 10 | Influence of Angle of Inclination on Unsteady MHD Casson Fluid Flow Past a Vertical Surface Filled by Porous Medium in Presence of Constant Heat Flux, Chemical | Journal of Nanofluids, (2017), Vol. 6, pp. 1-12. | 2169-432X | Scopus WOS | International |

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| | Reaction and Viscous Dissipation | | | | |
| 11 | Thermal Diffusion and Diffusion Thermo impact on Chemical reacted MHD Free Convection from an Impulsively Started Infinite Vertical Plate embedded in a Porous Medium using FEM | Journal of Porous Media, (2017), Vol. 20, No. 12, pp. 1097-1117 | 1091-028X | IF-1.03 Scopus WOS | International |
| 12 | Finite Element Solutions Of Free Convective Casson Fluid Flow Past An Vertically Inclined Plate Submitted In Magnetic Field In Presence Of Heat And Mass Transfer, Communicating | International Journal for Computational Methods in Engineering Science and Mechanics (2017), Vol. 18, pp. 255-265. | 1550-2287. | IF-0.38 Scopus WOS (Taylor & Francis) | International |
| 13 | MHD Casson viscous dissipative fluid flow past a vertically inclined plate in presence of heat and mass transfer: A finite element technique | Frontiers in Heat and Mass Transfer (FHMT) (2017), Vol. 8, No. 27, pp. 1-12. | 2151-8629 | IF-1.38 Scopus WOS | International |
| 14 | Heat And Mass Transfer Effects On MHD Natural Convective Flow Past A Vertical Porous Plate Through Analytical And Numerical Results | Journal of Heat and Mass Transfer Research, 4 (2017) 117-133, | 2383-3068 | Scopus WOS | International |
| 15 | EFGM Solutions of Natural Convective Viscous Jeffrey Fluid Flow Past A Vertically Inclined Plate In Presence of Transverse Magnetic Field, Porous Medium, Heat And Mass Transfer | International Journal of Fluid Mechanics Research, (2019), Vol. 46, No. 03, pp. 239-260. | 1064-2277 | IF-0.446 WOS Scopus | International |
| 16 | Unsteady Magnetohydrodynamic Chemically Reacting Fluid Flow Past An inclined Vertical Permeable Moving Plate | International Journal of Fluid Mechanics Research, (2020), Vol. 47, No. 03, pp. 191-215. 1064-2277 | 1064-2277 | IF-0.446 WOS Scopus | International |
| 17 | Influence of Thermal Radiation on MHD Fluid Flow over a Sphere. | Biointerface Research in Applied Chemistry. | 2069-5837 | IF-0.357 WOS Scopus | International |

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| | | (2021), 12(5), 6978 – 6990. | | | |
| 18 | MHD free convective non-Newtonian Casson fluid flow over an oscillating vertical plate | Partial Differential Equations in Applied Mathematics, (2022), 5, Article Id-100366 | 2666-8181 | Scopus | International |
| 19 | Finite element analysis of chemically reacted fluid flow over an exponentially accelerated vertical plate | Proceeding of International Conference on Computer Aided Engineering (CAE-2015) | | | International |
| 20 | Finite Element Analysis Of Hall Current And Rotation Effects On Free Convection Flow Past A Moving Vertical Porous Plate With Chemical Reaction And Heat Absorption | 59-istam-fm-fp-29, Proceedings of 59th Congress of ISTAM (http://istam.iitkgp.ac.in) (2014) | | | International |
| 21 | Unsteady MHD Free Convection Flow of Casson Fluid over an Inclined Vertical Plate Embedded in a Porous Media | 2nd International Conference on Condensed Matter and Applied Physics (ICC 2017), AIP Conf. Proc. 1953, 140038 (2018) | ISBN: 978-0-7354-1648-2 | Scopus WOS | International |
| 22 | Effect of Non-Linear Density Temperature Variation on Convective Heat and Mass Transfer Flow Through A Porous Medium In A Rectangular Duct With Radiation Chemical Reaction And Dissipation | 2nd International Conference on Condensed Matter and Applied Physics (ICC 2017), AIP Conf. Proc. 1953, 140048 (2018) | ISBN: 978-0-7354-1648-2 | Scopus WOS | International |
| 23 | Viscous Dissipation Impact on MHD Free Convection Radiating Fluid Flow past a Vertical Porous Plate | 2nd International Conference on Condensed Matter and Applied Physics (ICC 2017), Conf. Proc. 1953, 140074 (2018) | ISBN: 978-0-7354-1648-2 | Scopus WOS | International |
| 24 | MHD Free Convection Heat Transfer Couette Flow in Rotating System | 2nd International Conference on Condensed Matter and Applied Physics (ICC | ISBN: 978-0-7354-1648-2 | Scopus WOS | International |

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| | | 2017), AIP Conf. Proc. 1953, 140143 (2018) | | | |
| 25 | Finite element solutions of Jeffery fluid flow past a vertical inclined plate in presence of MHD | Advances in Basic Science (ICABS 2019) AIP Conf. Proc. 2142, 170007(2019) | ISBN:978-0-7354-1885-1 | Scopus WOS | International |
| 26 | MHD Free Convective Couette Flow Of Cu-Water Nanofluid | Proceeding of "International E-Conference on Material processing & Characterization-2020", | ISBN: 978-81-946476-9-0 | -- | International |

5.8. Papers presented at National / International Conferences:

| S.No | Title of the Paper | Names of the Conference/ Seminars | National/ International | Period |
|------|---|--|-------------------------|--|
| 1 | Thermal Diffusion And Diffusion Thermo Effects On Radiative MHD Free Convection from an Impulsively Started Infinite Vertical Porous Plate with Chemical Reaction and Viscous Dissipation | II International Conference on Applications of Fluid Dynamics (ICAFD-2014) | International | 21 st to 23 rd July 2014 |
| 2 | Finite Element Analysis Of Hall Current And Rotation Effects On Free Convection Flow Past A Moving Vertical Porous Plate With Chemical Reaction And Heat Absorption | Indian Society of Theoretical and Applied Mechanics (ISTAM-2014) | International | 17 th -20 th December 2014 |
| 3 | Finite Element Study Of An Unsteady MHD Free Convection Couette Flow With Viscous Dissipation | International Conference on Computer Aided Engineering | International | 10 th -12 th Dec, 2015 |
| 4 | Application of FEM to free convective flow of water near 4°C past a vertical moving plate embedded in porous medium in presence of magnetic field | APSMS, VBIT, Ghatkesar, Hyderabad | National | 11 th – 13 th Dec, 2015 |
| 5 | Unsteady MHD Free Convection Couette flow in Rotating System: Finite Difference & Finite Element Method | National Conference on Recent Advances In Fluid Mechanics, Organized by Dept. of mathematics, Osmania University | National | 30 th – 31 st May, 2016 |
| 6 | Unsteady MHD Newtonian and non-Newtonian fluid flow over an Oscillating | APSMS, NBRKIST, Vidyannagar, Nellore, | National | 9 th – 12 th Dec, 2016 |

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| | Vertical Plate | AP, (2016) | | |
| 7 | Application of Spatial Discretization Method to Unsteady MHD Newtonian and non-Newtonian Fluid Flow over an Oscillating Inclined Vertical Plate | National Conference on Recent Advances Mathematical Techniques in Science & Engineering | National | 30-31 st July, 2017 |
| 8 | Unsteady MHD Free Convection Flow of Casson Fluid over an Inclined Vertical Plate Embedded in a Porous Media | 2 nd International Conference on condensed & Applied Physics, Organized by Govt Engineering College, Bikaner, Rajasthan, India | International | Nov 24-25, 2017 |
| 9 | MHD Free Convection Heat Transfer Couette Flow in Rotating System | 2 nd International Conference on condensed & Applied Physics, Organized by Govt Engineering College, Bikaner, Rajasthan, India | International | Nov 24-25, 2017 |
| 10 | Unsteady MHD Cu-water based nanofluid over an oscillating vertical plate embedded in porous media | International web conference on Mathematics for Materials Sciences, Signals, Images and structured Data (ICMMSIS'20) Organized by Bannri Ammans Institute of Technology, Satyamangalam, Tamilnadu | International | July 23-24, 2020 |
| 11 | MHD natural convective Casson fluid over an inclined and oscillating vertical plate | International conference on advances in science, Engineering & Mathematics (ICASEM2020), organized by Annamacharya Institute of Technology and Science, Rajampet, AP, India, in association | International | August, 7-9 2020. |

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| | | with APTSMS | | |
| 12 | MHD Free Convective Couette Flow Of Cu-Water Nanofluid | International E-Conference on Material processing & Characterization-2020 Organized by Department of Physics, CBIT, Hyderabad, India | International | September 18 th -20 th 2020 |

5.9. Sponsored research Projects: Nil

| S.No | Title | Agency | Period | Grant amount | Ongoing / Completed |
|------|-------|--------|--------|--------------|---------------------|
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5.10 Consultancy Projects: Nil

| S.No | Title | Agency | Period | Sanctioned Amount | Ongoing / Completed |
|------|-------|--------|--------|-------------------|---------------------|
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6. Awards / Honors received:

- Qualified Joint **CSIR-UGC NET (Mathematical Sciences)** for Lectureship in **Dec 2008**
- Awarded an **Elite certificate** for completing 8-week NPTEL online course “**MATLAB Programming for Numerical Computation**” from **IIT Madras**, Jan-Mar 2017.
- Awarded **I2OR-Bright Researcher Award 2018** for remarkable contribution in the field of **Applied Mathematics** from **International Institute of Organized Research**, Pune, India.
- Awarded an **Elite and Silver certificate** from **IIT Kanpur** for getting distinction in NPTEL online course “**Basics of Finite Element Analysis-I**”, Feb-Apr 2019.

7. **Motto:** Think Globally Act Locally