B. V. S. RAGHU VAMSI

Department : Mechanical Engineering

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ACADEMIC QUALIFICATIONS

❖ Ph.D - Heat Transfer (Pursuing from Annamalai University, Chidambaram) –

Thesis submitted

❖ M. Tech - Applied Mechanics (Stress and Vibration Analysis)

❖ B.Tech - Mechanical Engineering

CERTIFICATIONS:

❖ Completed AICTE QIP PG certification programme in "Machine Learning" from Indian Institute of Information Technology (IIIT), Raichur in December, 2024.

ACHIEVEMENTS / RECOGNITIONS:

- * Received grant of Rs. 4.50 lakhs under Minor Research Project scheme from UGC in 2015.
- ❖ Recognized as NPTEL Disciplined Star December 2020.
- ❖ Topper in M.Tech (Applied Mechanics Department) with 9.81 GGPA in Maulana Azad National Institute of Technology (MANIT) Bhopal.
- * Reviewer for the Journals:
 - o Journal of Thermal Engineering (Scopus and ESCI Journal)
 - o Journal of Engineering Science and Technology Reviews (Scopus Indexed Journal)

PROFESSIONAL EXPERIENCE

Designation	University/College	Period	
Senior Grade Assistant Professor	Seshadri Rao Gudlavalleru Engineering College	01.07.2015 to Till Date	
Assistant Professor	Gudlavalleru Engineering College	10.06.2008 to 31.06.2015	

PROJECTS GUIDED

PhD	Post Graduation	Under Graduation
Nil	03	26

SPECIALIZATION:

❖ Applied Mechanics (Stress and Vibration Analysis)

RESEARCH PAPERS / BOOKS

❖ BOOKS PUBLISHED IN PUBLICATIONS: 01

Venkata Sai Raghu Vamsi, B., Ch. Sastry, M.R., Siva Krishna, T. (2021). Simulation Studies of Heat Transfer by Natural Convection from an Isothermal Rectangular Cylinder Using ANSYS Fluent. In: Palanisamy, M., Ramalingam, V., Sivalingam, M. (eds) Theoretical, Computational, and Experimental Solutions to Thermo-Fluid Systems. Lecture Notes in Mechanical Engineering. Springer, Singapore. https://doi.org/10.1007/978-981-33-4165-4_9 (Indexed in Scopus)

PAPERS PUBLISHED IN JOURNALS:

Journals: National : Nil International : 17

Conferences: National : 02 International : 06

Patents Granted : 1

✓ Design Patent is granted with title "AIR COOLED MOBILE STAND" with design number 428201-001 dated: 26-08-2024 by The Patent Office, Government of India for 1. Seshadri Rao Gudlavalleru Engineering College 2. Dr. Gogineni Venkata Jagadeesh 3. Meda Hemalatha 4. Dr. G. Karuna Kumar 5. B.V.S. Raghu Vamsi 6.N. Premdasu.

Journals:

a) National - Nil

b) International:

- 1. B. Venkata Sai Raghu Vamsi, Experimental and numerical study of fluid flow and heat transfer in the impinging of inline round jets, Journal of Thermal Engineering, Vol. 11, Issue 1, January 2025, pg. 270-289, DOI: 10.14744/thermal.0000918 (Indexed in Scopus and ESCI), *Impact factor 1.1*
- 2. B Venkata Sai Raghu Vamsi, Estimation of temperature in a computer mother board with discrete heat sources by numerical analysis, Vol.6, Issue 2, 2024, pg.179-186, https://doi.org/10.33545/26633582.2024.v6.i2c.138
- 3. B. Venkata Sai Raghu Vamsi, Heat transfer prediction in impinging jets using artificial neural networks, JP Journal of Heat and Mass Transfer, Volume 36, 2023, Pages 103-142, http://dx.doi.org/10.17654/0973576323055 (Indexed in Scopus), *Impact factor* 0.42
- 4. B. Venkata Sai Raghu Vamsi, Numerical analysis of the fluid flow and heat transfer characteristics of impinging air jets, Journal of Engineering Science and Technology, Vol. 18, No. 4 (2023) 2091 2108 (Indexed in Scopus and ESCI), *Impact factor* 1.01
- 5. B.V.S. Raghu Vamsi, Studies on the Effect of CTOD (Crack Tip Opening Displacement) on Stress Triaxiality under Mixed Mode Fracture (I/II) in Plane Strain Condition, International Journal for Scientific Research & Development Vol. 6, Issue 05, 2018, pp. 351-360, ISSN: 2321-0613

- 6. B. V. S. Raghu Vamsi, "Experimental Investigation on the Performance of Vortex tube", Advanced Materials Research, June, 2018, ISSN: 1662-8985, Vol. 1148, pp 128-135, doi.10.4028
- 7. B. V. S. Raghu Vamsi, "Evaluation of Coefficient of Thermal Expansion of Zirconium by Using Dilatometer & ANSYS", at Advanced Materials Research, June, 2018, ISSN: 1662-8985, Vol. 1148, pp 115-121, doi.10.4028
- 8. B.V.S. Raghu Vamsi (April, 2018) "Studies on the Critical Size of the Plastic Zone in Pure Mode-I and Mixed Mode (I/II) Fracture", Materials today Proceedings 5 (2018), PP-7765-7774, *Elsevier*.
- 9. B.V.S. Raghu Vamsi, "Structural Analysis of thin isotropic and orthotropic plates using finite element analysis" (June, 2017) SSRG International Journal of Mechanical Engineering (SSRG-IJME) volume 4 Issue 6, ISSN: 2348 8360, Pp. 17-27.
- 10. B. V. S. Raghu Vamsi, "Experimental Investigation on the Effect of Post Weld Heat Treatment on the Mechanical Properties of SS304 Weldment Fabricated by Vibratory Welding Process", SSRG International Journal of Mechanical Engineering (SSRG-IJME) – Special Issue May - 2017, ISSN: 2348 – 8360, pg. no. 300 - 303
- 11. B. V. S. Raghu Vamsi, "Design and Optimization of Internal Combustion Engine Based Co-Generation System Using Integrated Thermal Management Controller", SSRG International Journal of Mechanical Engineering (SSRG-IJME) Special Issue May 2017, ISSN: 2348 8360, pg. no. 175-179
- 12. B. V. S. Raghu Vamsi, "Experimental investigation of heat transfer in plain and tapered cylindrical fins", SSRG International Journal of Mechanical Engineering (SSRG-IJME) Special Issue May 2017, ISSN: 2348 8360, pg. no. 169-174
- 13. B. V. S. Raghu Vamsi, "Studies on the affect of stress triaxiality on strain energy density, and CTOD under plane stress condition subjected to mixed mode (I/II) fracture", International Journal of Control Theory and Applications, International Science Press, ISSN: 0974-5572, Vol. 10, No. 6, 2017, pg. no. 17-32
- 14. B.V.S. Raghu Vamsi, "Finite Element Analysis of An Edge Cracked Plate Subjected to Mixed Mode Loading (I/II) and Combined Tension-Bending A Comparative Study", International Journal of Control Theory and Applications, International Science Press, ISSN: 0974-5572, Vol. 9, No. 42, 2017, pg. no. 15-30
- 15. B. V. S. Raghuvamsi, (2016) "Mathematical Modeling for CTOD Based M-Criterion for the Determination of Triaxiality Under Mixed Mode (I/II) Fracture", Academic Journal of Science, ISSN: 2165-6282: 04(02):17–32 (2015)
- 16. B.V.S. Raghu Vamsi, Frequency response analysis of a Clamped Composite Plate with a Central Circular Cutout using ANSYS, International Journal of Scientific and Engineering Research (ISSN 2229-5518), Volume 6, Issue 3, March-2015
- 17. B V S Raghu Vamsi, Frequency response analysis of the gear box in a lathe machine using transfer functions, International Journal of Scientific and Research Publications (ISSN 2250-3153), Volume 4, Issue 11, November 2014

Publications In Conferences:

a) National

❖ A paper entitled "Experimental Investigation of flow over different geometrical objects in an open channel", at National Conference on Emerging Trends in Mechanical Engineering

- (ETME 2019) organized by National Institute of Technology, Warangal during $09^{th} 10^{th}$ January, 2019.
- ❖ A paper on "Strength analysis of Banana and Americana Hybrid Composites", presented in One Day National Conference on "Recent Advances in Mechanical Engineering (NCRAME-17)", PVP Siddhartha Institute of Technology, Vijayawada on 02.12.2017.

b) International:

- B. V. S. Raghu Vamsi has presented a paper on "Fluid flow and heat transfer analysis of laminar multiple elliptical Jets impinging on a flat plate", at International Conference on Innovations in Thermo-fluid Engineering and Sciences (ICITFES-2020) National Institute of Technology, Rourkela during 10th – 12th February 2020
- 2. B. V. S. Raghu Vamsi has presented a paper on "Simulation studies of heat transfer by natural convection from an Isothermal rectangular cylinder using ANSYS Fluent", at International Conference on Innovations in Thermo-fluid Engineering and Sciences (ICITFES-2020) National Institute of Technology, Rourkela during 10th 12th February, 2020
- 3. B. V. S. Raghu Vamsi, "Experimental Investigation on the Performance of Vortex tube", at International Conference on Advanced Materials and Manufacturing Processes (ICAMMP-2018), organized by University College of Engineering, Vizianagaram (JNTUK, Kakinada), 30th 31st March, 2018.
- 4. B. V. S. Raghu Vamsi, Studies on the critical size of the plastic zone in pure mode-I and mixed mode (I/II) fracture, IMME'17, International Conference at NIT Tiruchirapalli, 10-12 March, 2017
- 5. B. V. S. Raghu Vamsi, "Finite element analysis of an edge cracked plate subjected to mixed mode loading (I/II) and combined tension-bending A comparative study", at 5th International Conference on Advanced Computing, Engineering and Technology, Organized by The World Academy of Research in Science and Engineering, Bangalore on 17thFebruary, 2017.
- 6. B. V. S. Raghu Vamsi, "Studies on the affect of stress triaxiality on strain energy density, and CTOD under plane stress condition subjected to mixed mode (I/II) fracture", at 2nd International Conference on Sustainable Computing Techniques in Engineering, Science and Technology, Organized by Jain College of Engineering, Belagavi during 27th 28th January, 2017.

LIST OF WORKSHOPS ORGANIZED:

- ❖ Coordinator for the One-Week Online Faculty Development Programme on "Applications of Artificial Intelligence & Machine Learning in Mechanical Engineering", organized by the Department of Mechanical Engineering, Seshadri Rao Gudlavalleru Engineering College, Gudlavalleru during 06th − 10th March 2023.
- ❖ Co-Coordinator for One-Week Virtual Faculty Development Program on "Emerging Trends in Mechanical Engineering", organized by the Departments of Mechanical Engineering, Seshadri Rao Gudlavalleru Engineering College, Gudlavalleru during 20th − 25th June 2022.
- ❖ Co-Coordinator for AICTE-ISTE sponsored One week short term course on "Computational Fluid Dynamics" organized by the Department of Mechanical Engineering, Gudlavalleru Engineering College, Seshadri Rao Knowledge Village, Gudlavalleru on during 18th − 23rd June, 2018

- ❖ Two Day Workshop on "MATLAB and its Applications" organized by the Department of Mechanical Engineering, Gudlavalleru Engineering College, Seshadri Rao Knowledge Village, Gudlavalleru on 8th & 9th Feb., 2018.
- ❖ One week faculty training program on "**Training Program on ANSYS**", organized by the Departments of Mechanical and Civil Engineering, Gudlavalleru Engineering College, Gudlavalleru during 22nd to 27th June, 2015

LIST OF WORKSHOPS / SEMINARS ATTENDED:

- ❖ Attended AICTE Training and Learning (ATAL) Academy Faculty Development Program on "Emerging Green hydrogen energy technologies for societal sustainability and climate change mitigation" at Lakireddy Balireddy College of Engineering from 16/12/2024 to 21/12/2024.
- ❖ Attended One Week Online Short-Term Course on "Computational Fluid Dynamics: Introduction and Applications" held on July 04-08, 2023, organized by Department of Mechanical Engineering, Dr B R Ambedkar National Institute of Technology Jalandhar, Punjab
- ❖ Completed NPTEL-AICTE FDP course on "**Problem solving through programming in** C" during July-October 2022 organized by NPTEL Swayam.
- ❖ Attended a One Week Online Faculty Development Programme on "Modelling and Problem Solving using CFD", organized by Department of Mechanical Engineering, GITAM Institute of Engineering and Technology, Visakhapatnam during 26th − 30th July 2021.
- ❖ Attended a One Week Online Faculty Development Programme on "Recent Trends in Mechanical Engineering", during 15.06.2020 to 20.06.2020
- ❖ Attended 06 days online Proficiency Improvement Programme (oPIP) on "Design & Analysis of ATV using ANSYS Software", organized by The Automotive Research Association of India (ARAI), Pune & ANSYS Software Pvt. Ltd, Pune during 30-05-2020 to 20-06-2020
- ❖ Attended a programme on "Fuel Cell Technology and it's Applications", organized by SVR Engineering College, Nandyal on 05.06.2020
- ❖ Attended 5 days Faculty Development Program on "Materials for Thermal and Renewable Energy Research", organized by Sri Sai Ram Institute of Technology, Chennai, Tamilnadu during 20-05-2020 to 24-05-2020
- ❖ Attended Three-day Online Faculty Development Programme on "Improving Your Research Visibility Research Impact and Metrics", organized by Velalar College of Engineering and Technology, Thindal, Erode during 11-05-2020 to 13-05-2020
- ❖ Attended a One Week Online Faculty Development Program on "Research Challenges and Opportunities Post COVID-19 (RECOP 2020)" , organized by Sri Vasavi Engineering College (Autonomous), Tadepalligudem during 04-05-2020 to 09-05-2020
- ❖ Attended a faculty development programme on "**Digital image processing using MATLAB**", organized by SYNXA IT Pvt., Ltd., during 24-04-2020 to 27-04-2020
- ❖ Attended Short Term course on "Experimental flow visualization and measurement techniques for both incompressible and compressible flow regimes", organized by

- Department of Aero space Engineering, Indian Institute of Technology Kharagpur 1 15th March 2019
- ❖ Attended Two Day faculty development programme on "Advances in Manufacturing" organized by the Department of Mechanical Engineering, Gudlavalleru Engineering College, Seshadri Rao Knowledge Village, Gudlavalleru during 16th 17th November, 2018
- ❖ Attended One Day Workshop on "Characterization of Metal matrix Composites" organized by the Department of Mechanical Engineering, Gudlavalleru Engineering College, Seshadri Rao Knowledge Village, Gudlavalleru on 11th August, 2018 in association with IE(I),APSC, Vijayawada
- ❖ AICTE-ISTE sponsored One week short term course on "Computational Fluid Dynamics" organized by the Department of Mechanical Engineering, Gudlavalleru Engineering College, Seshadri Rao Knowledge Village, Gudlavalleru on during 18th − 23rd June, 2018
- ❖ Attended One day Workshop on "Brainstorming on Innovation in Incubation Centers" (Igniting the Young Minds), Organized by Jawahar Lal Nehru Technological University, Kakinada on 01st September, 2016
- ❖ Attended One Week Faculty Development Programme on "Outcome Based Education and Accreditation" organized by the Electronic and ICT, NIT Warangal in association with Dhanekula Institute of Engineering and Technology, Vijayawada during 13th − 18th June, 2016
- ❖ Attended one week faculty training program on "MATLAB Applications in Mechanical Engineering", organized by the Department of Mechanical Engineering, Gudlavalleru Engineering College, Gudlavalleru during 7th to 11th September, 2015
- ❖ Attended One week faculty training program on "**Training Program on ANSYS**", organized by the Departments of Mechanical and Civil Engineering, Gudlavalleru Engineering College, Gudlavalleru during 22nd to 27th June, 2015
- ❖ Attended short term course on "Computational Techniques for Scientific and Engineering Problems", Organized by Maulana Azad National Institute of Technology, Bhopal during 18th − 22nd May, 2015
- ❖ Attended Two week National workshop on "Fluid Mechanics" organized by Gudlavalleru Engineering College, Gudlavalleru in association with ISTE & IIT Bombay during 22nd 30th May, 2014
- ❖ Attended Two-day National workshop on "Vibrations and Monitoring of Engineering Infrastructures", held on 3rd − 4th January, 2014, organized by Andhra University College of Engineering, Andhra University, Visakhapatnam
- ❖ Attended Two week National workshop on "**Engineering Mechanics**" organized by Gudlavalleru Engineering College, Gudlavalleru in association with ISTE & IIT Bombay during 26th November 07th December, 2013
- ❖ Attended One week workshop on "Training Teachers for Excellence" organized by Gudlavalleru Engineering College, Gudlavalleru in association with NITTTR during 17th -21st June, 2013
- Attended AICTE sponsored Two Day Seminar on "Applications of FInite Element Methods in Engineering" organized by Gudlavalleru Engineering College, Gudlavalleru during 08th 09th July, 2011

- ❖ Attended One day Workshop on "Current Trends in Biofuels" at Gudlavalleru Engineering College, Gudlavalleru on 23rd October, 2010
- ❖ Attended One Week short term course on "Computational Mechanics", held at P V P Siddhartha Institute of Technology, during 18th 22nd May, 2009

CERTIFICATIONS:

S.No	Name of the Course	Duration	Score (%)	Remarks
1	Problem solving through programming in C	July - October, 2022	75	Elite + Silver
2	Conduction and Convection Heat transfer	January–April, 2021	92	Elite + Gold
3	Engineering Drawing and Computer Graphics	September– December, 2020	98	Elite + Gold (Top 1% Topper)
4	Fluid Machines	August–October, 2019	90	Elite + Gold (Top 5% Topper)
5	Refrigeration and Air- Conditioning	July–September, 2019	85	Elite + Silver (Top 5% Topper)
6	Introduction to Fluid Mechanics	January–April, 2019	67	Elite
7	Steam and gas power systems	February–March, 2018	72	Elite
8	Advanced Fluid Mechanics	January–April, 2018	75	Elite
9	Laws of Thermodynamics	July–August, 2017	80	Elite (Top 5% topper)

GUEST LECTURES DELIVERED: Nil

MEMBERSHIP IN PROFESSIONAL BODIES:

- Indian Society for Heat and Mass Transfer Life Membership No. 1318
- Institution of Engineers IE(I) M-163708-2

CONSULTANCY ACTIVITIES: Nil

GRANTS FETCHED/FUNDED R&D PROJECTS:

1. Title of the project : Near Wall Measurements in Turbulent Circular Jet

Impingement on Flat Surface

Funding Agency : Gudlavalleru Engineering College

Sanctioned Amount : Rs.2.4 Lakhs

Project Duration : 01 Year (March, 2019 - April, 2019)

Status : In Progress

2. Title of the project : Experimental and Finite Element Analysis of a

. plate with an edge Crack subjected to combined

tension and bending in plane stress and plane strain

condition

Funding Agency : University Grants Commission (UGC)

Sanctioned Amount : Rs.4.5 Lakhs

Project Duration : 02 Years (28.01.2015 - 07.01.2017)

Status : Completed

3. Title of the project : Bend & Rebend Tests on Fractured Components

Funding Agency : GEC, Gudlavalleru

Sanctioned Amount : Rs.1.9 Lakhs

Date of Funds released : 01 Year (01.10.2015 – 30.09.2016)

Status : Completed