

Dr. A. JAWAHAR BABU

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ACADEMIC QUALIFICATIONS

- ❖ Ph.D - Industrial Engineering
- ❖ M.Tech - Production engineering
- ❖ B. Tech - Mechanical Engineering

ACADEMIC REWARDS / ACHIEVEMENTS: Nil

PROFESSIONAL EXPERIENCE

Designation	University/College	Period
Professor	SR Gudlavalleru Engineering College	1.12.2023 to till date
Professor & Head	Gudlavalleru Engineering College, Gudlavalleru.	30.11.2020 to 30.11.2023
Professor & Mentor (AS & A)	Gudlavalleru Engineering College, Gudlavalleru.	01.07.2017 to 29.11.2020
Professor & Head	Gudlavalleru Engineering College, Gudlavalleru.	10.09.2008 to 31.07.2017.
Professor	Gudlavalleru Engineering College, Gudlavalleru	1.11.2006 to 09.09.2008
Associate Prof.	K.S.R.M.C.E. Kadapa	01.01.2004 to 31.10.2006
Sr. Lecturer	K.S.R.M.C.E. Kadapa	08.08.1999 to 31.12.2003
Lecturer	K.S.R.M.C.E. Kadapa	08.08.1997 to 07.08.1999
Lecturer	N.B.K.R.I.S.T. Vidya Nagar	01.07.1991 to 07.08.1997
Associate Lecturer	N.B.K.R.I.S.T. Vidya Nagar	20.07.1988 to 29.04.1989

PROJECTS GUIDED

PhD	Post Graduation	Under Graduation
01	03	37

SPECIALIZATION: Production Engineering

• **PAPERS PUBLISHED IN JOURNALS:**

Journals:	National	:	04
	International	:	13
Conferences:	National	:	11
	International	:	03

Journals:

a) National

1. Published a paper on, “Optimization of Helical Spring Weight using Meta-heuristic Algorithms”, Trends in Machine Design, 2018, Vol. 5, Issue 2.
2. Published a paper on, “Selection of Bio – Implant Materials using Entropy and Analytic Hierarchy Process”, Research & Reviews: A Journal of Bioinformatics, 2017, Vol. 4, Issue 3.
3. Published a paper on, “Analytical Hierarchy Process (AHP) as a Decision Making Tool for Spouse Selection”, Indian Journal, Volume 17, Issue 2, June 2017, pp: 107-113.
4. Published a paper on, “Effect of Internal Roller Burnishing on Surface Roughness and Surface Hardness of Mild Steel”, Journal of Scientific and Industrial Research, 2009, Vol. 68, pages 29-31.

b) International

1. Published a paper on “Optimizing Bio-Implant Materials for Femur Bone Replacement: A Multi-Criteria Analysis and Finite Element Study”, International Journal of Innovative Science and Research Technology, Volume 9, Issue 6, June 2024, pp 2627-2631.
2. Published a paper on “Comprehensive Design and Analysis of a Prosthetic Leg: Material Selection and Performance Evaluation”, International Journal Of Research In Aeronautical And Mechanical Engineering, Vol.12 Issue 6, June 2024, pp - 06 - 16
3. Published a paper on “Friction stir processing of ZE41 Mg alloy: Optimizing the process parameters”, IOP Conference Series: Materials Science and Engineering, Volume 1185, International Conference on Materials, Mechanical and Energy Engineering (ICMME 2021) 7th-8th May 2021, Bapatla Engineering College , Bapatla, Andhra Pradesh, India
4. Published a paper on, “Mechanical behavior and wear characteristics fine grained ZE41 magnesium alloy”, Material science and Engineering Technology, Vol. 52, Issue 4, April 2021, pp – 392-399
5. Published a paper on, “Tailoring ZE41 Mg Alloy by Friction Stir Processing for Biomedical Applications: Role of Microstructure on the Degradation and Mechanical Behavior in Simulated Body Fluids”, Transactions of Indian Institute of Metals, Vol. 73, Issue 11, September 2020, pp – 2889-2999

6. Published a paper on, “Metallurgical and Tribological Behaviour of Al6061 with Reinforcement of E-Glass Fiber, SiC and Fly Ash by using Stir Casting”, International Journal for Research in Applied Science & Engineering Technology (IJRASET),, Vol. 7, Issue 7, Dec 2019, pp – 68-78.
7. Published a paper on, “Analysis of dry sliding wear behaviour of al 6061-coconut shell ash metal matrix composites using stir casting”, International Journal of Latest Engineering Science (IJLES),, Vol. 2, Issue 3, June 2019, pp – 41-45.
8. Published a paper on, “A Gravitational Search Based Optimization of Job Shop Scheduling Problem”, International Journal of Mechanical and Production Engineering Research and Development,, Vol. 8, Issue 6, Dec 2018, pp – 465-478.
9. Published a paper on, "Implementation of Analytical Hierarchy Process (AHP) as decision support tool for selection of Robot for spot welding operation", International Journal of Research in Engineering & technology, Vol. 5, Special Issue 16, eISSN : 2319-1163
10. Published a paper on, “Qualification of Subjectivity for better Decision making-Role of Mathematics" published in GEC's International Journal of Innovation Technology and Management - ISSN No.2394-594 X - Vol No.2 P.No.66 to 69.
11. Published a paper on, “Decision Support System (DSS) for Capacity Planning" published in GEC's International Journal of Innovation Technology and Management - ISSN No.2394- 594 X - Vol No.1 P.No.38 to 46.
12. Published a paper on, “Decision support system for capacity planning-A case study” International Journal of Advance Research in Computer Science and Management Studies Volume 1, Issue 4, pg. 24-30.
13. Published a paper on “A Decision Making Tools for Dynamic Scheduling of Jobshop Problem”, International Journal of Advanced Computing, Vol.2, Issue 1, January 2010, pp.45 to 49.

PUBLICATIONS IN CONFERENCES:

National

1. Presented a paper on “Experimental Study and Prediction of Surface Finish and Cutting Forces over Machined Surfaces by End Milling Process Using Factorial Technique” in the National Conference on Innovations in Engineering & Technology (NCIET 2013) at Gudlavalleru Engineering College, Seshadri Rao Knowledge Village, Gudlavalleru on 27th–28th December, 2013.
2. Presented a paper on “Capacity Planning In a Manufacturing System - Case Study” in the National Conference on Innovations in Engineering & Technology (NCIET 2013) at Gudlavalleru Engineering College, Seshadri Rao Knowledge Village, Gudlavalleru on 27th–28th December, 2013.

3. Presented a paper on “Analysis of Cracked Cantilever Beam Using ANSYS” in Innovations and Emerging Trends in Mechanical Engineering at the Department of Mechanical Engineering & Technology, Bangalore on 11th May, 2012.
4. Presented a paper on “Pre-requisites for a Competent Teacher in Engineering Education Role of University” in ISTE AP-Section Fourth Annual Convention & Awards Function at Gudlavalleru Engineering College, Seshadri Rao Knowledge Village, Gudlavalleru during 21st–22nd November, 2009.
5. Presented a paper on "Optimization of Lot Size in MRP Environment Using Genetic Algorithm" in the AICTE-sponsored 3-Day National Seminar on ‘Applications of Optimization Techniques in Mechanical Engineering’ during 18th–20th January, 2008.
6. Presented a paper on "A Study of Mechanical Behavior in Selection and Manufacturing of Titanium as Implant Material" at the National Conference on Recent Trends in Manufacturing and Thermal Engineering on 3rd May, 2007.
7. Presented a paper on "Modeling and Analysis of FMS Using Petri Nets" in MINAC–2002 held at JNTU College of Engineering, Anantapur on 21st December, 2002.
8. Presented a paper on “Decision Support System for Aggregate Production Planning – A Case Study” in MINAC–2001 held at JNTU College of Engineering, Anantapur on 18th October, 2001.
9. Presented a paper on “Process Selection Through Expert System” in MINAC–2001 held at JNTU College of Engineering, Anantapur on 18th October, 2001.
10. Presented a paper on “Evaluation of Performance Measures of AGV System in an Automated Manufacturing Systems” in the National Conference on Computer Applications in Engineering organized by the Institution of Engineers, Kadapa Local Centre on 15th March, 2000.
11. Presented a paper on “Computerized Structural Formula for the Speed Box in a Machine Tool” in the National Conference on Computer Applications in Engineering organized by the Institution of Engineers, Kadapa Local Centre on 15th March, 2000

International

1. Presented a paper on "Implementation of Analytic Hierarchy Process (AHP) as a Decision Support Tool for Selection of Robot for Spot Welding Operation" at the Second International Conference on Recent Advances in Engineering Sciences organized under TEQIP-II at Ramaiah Institute of Technology, Bangalore held from 8th–9th September, 2016.
2. Presented a paper on "Role of Mathematics in Quantification of Subjectivity for Better Decision Making" at the 1st International Conference on Energy, Environment and Engineering (ICEEE-2016) organized by the Department of Chemistry and Department of Mechanical Engineering, Coimbatore Institute of Technology, Coimbatore, held during 29th

February–2nd March, 2016.

3. Presented a paper on “Decision Support System for Job Shop Scheduling” in ICAT-08 at Gokaraju Ranga Raju Institute of Engineering & Technology, Hyderabad on 26th–27th December, 2008.

Patents Published

1. A Handheld Device for Dispensing Customized Wipes and Method of Operating the Same, on 24th February, 2023. Application no: 202341006009
2. Lathe and Miller Structural Assembly, on 16th Sept., 2022. Application no: 202241051261

LIST OF WORKSHOPS ORGANIZED: 03

1. Workshop on Robotics and Automation at GEC, Gudlavalleru from 9-2-07 to 10.02.07.
2. Student training program on Pro-E from 26.03.07 to 31.03.07 at GEC, Gudlavalleru
3. One Week Technical Awareness Programme for rural youth from 08.10.2007 to 12.10.2007 on Automatic Drafting – CAD.

LIST OF WORKSHOPS / SEMINARS ATTENDED: 40

1. A Two Day Faculty Development Workshop on “A High Impact Design Thinking”, organized by Innovation and Incubation Cell of Seshadri Rao Gudlavalleru Engineering College from 12-12-2024 to 13-12-2024.
2. One Week National Level Online Faculty Development Program on Outcome Based Education and Application of Generative AI in Teaching and Research, organized by St. Mary’s College (Autonomous), Thrissur, Kerala in association with the Collegiate Education Department, Government of Kerala from 17 October 2024 to 24 October 2024.
3. One week Virtual Faculty Development Programme on “Current Trends in Mechanical Engineering-Case Studies from Industries & Academia to Promote Innovation, Design Thinking and Startups”, organized by Department of Mechanical Engineering, Sri Vishnu Engineering College for Women, Bhimavaram, from 20th May 2024-25th May 2024.
4. One day Training Program on “Assessment and Accreditation Process of NAAC in the Revised Accreditation Framework” organized by Quality Assurance Cell (QAC), Andhra Pradesh State Council of Higher Education in association with Internal Quality Assurance Cell (IQAC), Andhra Loyola College-Vijayawada on 5th May, 2022
5. A Five Day Faculty Development Program on “Recent Trends in Thermal Engineering from 6th September 2021 to 10th September 2021, by Department of Mechanical Engineering , Seshadri Rao Gudlavalleru Engineering College, Gudlavalleru.

6. Three day online Faculty Development Program on “Recent Trends in Electrical Vehicles-Phase-1, organized by Department of Mechanical Engineering, Gudlavalleru Engineering College, Gudlavalleru, from 17th March 2021 to 19th March 2021.
7. One week online Certificate Course on “Digital Teaching Techniques” from 29th June 2020 to 4th July 2020, organized by ICT Academy.
8. One week Faculty Development Program on “Advanced Manufacturing Enterprise in Digital Era”, from 1st June 2020 to 5th June 2020, organized by Department of Mechanical Engineering, Aditya Institute of Technology and Management, Tekkali-AP.
9. One week Faculty Development Program on “Development and Characterization of Composite Materials”, from 25th May 2020 to 29th May 2020, organized by Department of Mechanical Engineering, Lingayas Institute of Management and Technology, Nunna-AP.
10. One week Faculty Development Program on “Industrial Revolution Post COVID’19”, from 22nd May 2020 to 27th May 2020, organized by Department of Mechanical Engineering, Adhi College of Engineering, Kanchipuram-Tamilnadu.
11. Four Day online course on “Examination Reforms”, from 22nd April 2020 to 25th April 2020, organized by All India Council for Technical Education.
12. One day Orientation Program on “ CMM Operation and its Industrial Applications”, organized by Department of Mechanical Engineering of VR Siddhartha Engineering College on 27th February 2020.
13. Short Term Training Programme through ICT mode on “Evaluating Students’ Performance and Designing Question Papers”, organized by NITTTR, Kolkata from 25-02-2019 to 1-03-2019.
14. Two Day Faculty Development Program on "Advances in Manufacturing" conducted by Department of Mechanical Engineering, Gudlavalleru Engineering College, Gudlavalleru, during 16th - 17th November 2018.
15. IE (I) Sponsored One Day Workshop on "Characterization of Metal Matrix Composites" conducted by Department of Mechanical Engineering, Gudlavalleru Engineering College, Gudlavalleru, on 11th August 2018.
16. AICTE - ISTE Sponsored One Week Refresher Course on "Computational Fluid Dynamics" conducted by Department of Mechanical Engineering, Gudlavalleru Engineering College, Gudlavalleru, during 18th - 23rd June 2018.
17. Two day Training Program on "MATLAB, Simulink & Related Tool Boxes" conducted by Capricot Technologies Pvt. Ltd. and Department of Mechanical Engineering, Gudlavalleru Engineering College, Gudlavalleru, during 8th - 9th February 2018.

18. One week Faculty Development Program on "MATLAB Applications in Mechanical Engineering" conducted by Department of Mechanical Engineering, Gudlavalleru Engineering College, Gudlavalleru, during 7th - 11th September 2015.
19. DST Sponsored Two Day National Seminar on "Smart Materials and Structures" conducted by Department of Mechanical Engineering, V.R. Siddhartha Engineering College, Vijayawada, during 28th - 29th August 2015.
20. Workshop on "Control Systems" conducted by IIT Kharagpur through IIT Bombay remote Centre. This programme was organized by Department of Electrical and Electronics Engineering, Gudlavalleru Engineering College, Seshadri Rao Knowledge Village, Gudlavalleru from 2nd to 12th December, 2014.
21. Two week workshop on "Fluid Mechanics" organized by hosted Dept. of Mechanical Engineering in association with IIT Kharagpur at Gudlavalleru Engineering College, Seshadri Rao Knowledge Village, Gudlavalleru from May 20, 2014 to May 30, 2014.
22. Two week workshop on "Engineering Mechanics" organized by hosted Dept. of Mechanical Engineering in association with IIT Bombay at Gudlavalleru Engineering College, Seshadri Rao Knowledge Village, Gudlavalleru from 26th November to 7th December, 2013.
23. NBA workshop on "Training for Resource Persons and Evaluators on Outcome Based Accreditation" organized by V.R. Siddhartha Engineering College, Vijayawada from 26th – 28th September, 2013.
24. NBA workshop on "Training for Resource Persons and Evaluators on Outcome Based Accreditation" organized by V.R. Siddhartha Engineering College, Vijayawada on 13th September, 2013.
25. One day Workshop on "Thermodynamics Solution and Practice using MATLAB" organized by Dept. of Mechanical Engineering at Gudlavalleru Engineering College, Seshadri Rao Knowledge Village, Gudlavalleru on 18th February, 2013.
26. One day Workshop on " DFX - Product Design Excellence" organized by Dept. of Mechanical Engineering at Gudlavalleru Engineering College, Seshadri Rao Knowledge Village, Gudlavalleru on 17th September, 2012.
27. Two day Workshop on " Best Practices in Production" organized by Dept. of Mechanical Engineering at Gudlavalleru Engineering College, Seshadri Rao Knowledge Village, Gudlavalleru on 20th & 21st July, 2012.
28. Two day Workshop on " The Best International Practices in Production" organized by The Institution of Engineers (India) Vijayawada Local Center on 5th & 6th November, 2011.

29. One day Workshop on "Current Trends in Biofuels" organized by Dept. of Mechanical Engineering at Gudlavalleru Engineering College, Seshadri Rao Knowledge Village, Gudlavalleru on 23rd October, 2010
30. AICTE sponsored short term course on "Finite Element Application to Mechanical Engineering Problems" organized by PVP Siddhartha Institute of Technology, Vijayawada from 16th to 20th June, 2008.
31. AICTE Sponsored 3 Day National Seminar on Applications of Optimization Techniques in Mechanical Engineering during 18th - 20th January 2008 at Gudlavalleru Engineering College, Gudlavalleru
32. National conference on "Factory Automation, Robotics & Soft Computing" on 18th & 19th January, 2007.
33. National conference on Advanced Trends in Mechanical Engineering Research and development (MINAC-2002) on 21st December, 2002.
34. Course on product Life management using CAD 22nd – 26th June, 2009 conducted by ISTE and IUCEE
35. SERC School on Precision Engineering held at PSG College of Technology, Coimbatore during 14th to 23rd May, 2001.
36. Short term training programme on Senors in Condition Based Maintenance held at PES College of Engineering, Mandya during 3rd to 15th July, 2000.
37. National conference on Computer applications in Engineering conducted by Institution of Engineers, Kadapa local centre on 15.03.2000.
38. Winter School on systems approach to Computer integrated manufacturing held at REC Warangal, during 28th December, 1998 to 8th January, 1999.
39. SERC School on advanced Manufacturing Technology held at PSG College of Technology, Coimbatore during 18th to 30th May, 1998.
40. Winter School on recent trends in diagnostic maintenance held at Pondicherry Engineering College, Pondicherry during 15th to 27th December, 1997.

GUEST LECTURES DELIVERED: 06

1. Delivered a guest Lecture on "Lean Manufacturing" at Andhra Loyola Institute of Engineering and Technology, Vijayawada on 5th March, 2013.
2. Delivered a guest Lecture on "Lean Manufacturing" at QIS College of Engineering & Technology, Ongole on 15.12.2012.
3. Delivered a Guest Lecture on "Applications of Mathematics in Mechanical Engineering" in three day Staff development programme on "Scope of Mathematics & Science in Engineering" at Gudlavalleru Engineering College, Gudlavalleru during 11th – 13th August, 2011.

4. Delivered a key note address and acted as Judge for student Technical Paper Contest at Sri Vasavi Institute of Engineering & Technology Nandamuru, Pedana, on 16.12.2010.
5. Delivered a Guest Lecture, “Robot Applications” at QIS College of Engineering, Ongole, on 30th June, 2008.
6. Delivered a Guest Lecture, “Over view of Robotics” at Sri Saradhi Institute of Technology, Nuzivid, on 22nd April, 2008.

MEMBERSHIP IN PROFESSIONAL BODIES:

- Life Member of ISTE – LM 12227
- Life Member of IE – M128719-7

GRANTS FETCHED:

1. MODROBS Scheme on Modernization of Metallurgy Laboratory worth Rs. 5.00 lakh in 2017
2. MODROBS Scheme on Modernization of CAD/CAM Laboratory worth Rs. 15.00 lakh in 2015
3. MODROBS Scheme on Modernization of Thermal Engineering Laboratory worth Rs. 13.75 lakh in 2013