
Dr. BALAJI.V M-Tech, Ph.D, AMIE, MISTE

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Head – Department of Mechanical Engg.

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Educational Qualification:

1. Completed Ph. D from Visvesvaraya Technological University, Belagavi
2. Completed M-Tech in Manufacturing Science and Engineering from Ghousia College of Engineering in First Class with Distinction during 2012.
3. Completed B.E in Mechanical Engineering from East West Institute of Technology, Bengaluru in First Class during 2008.
4. Completed Diploma in Mechanical Engineering from Ananda Marga Polytechnic, Malur, Kolar District in First Class during 2005.

Experience:

1. Worked as Lecturer in Ananda Marga Polytechnic, Malur from 01.08.2008 to 31.07.2010.
2. Worked as Lecturer in Shirdi Sai Engineering College, Anekal, Bengaluru from 19.07.2012 to 31.07.2015.
3. Worked as Assistant Professor in Sri Sairam College of Engineering, Anekal, Bengaluru from 01.08.2015 to 06.10.2017.
4. Working as HOD – Department of Mechanical Engineering, Sri Sairam College of Engineering, Anekal, Bengaluru from 07.10.2017 to till date.

Publications:

1. A Paper titled **“Optimization of location and size of opening in a pressure vessel cylinder for spherical and elliptical head”** published by **Jagadish kumar, Srikumar Biradar, Balaji V** in **Volume: 03 Special Issue: 03 | May-2014 NCRIET-2014.**
2. A Paper titled **“Wear and Mechanical Behavior of Aluminum Reinforced with Kyanite and Graphite Particulates”** published in **Transactions on Engineering and Sciences ISSN: 2347-1964 (Online) 2347-1875 (Print) Vol.3, Issue 4, April-June 2015.**
3. A Paper titled **“Design and Development of Hand Lay Up Polymer Composites for an Aerospace Application”** published in **Transactions on Engineering and Sciences ISSN: 2347-1964 (Online) 2347-1875 (Print) Vol.3, Issue 4, April-June 2015.**
4. A Paper titled **“Effect Of Temperature On Peristaltic Transport Using erschel-Bulkley Fluid”** published in **Transactions on Engineering and Sciences ISSN: 2347-1964 (Online) 2347-1875 (Print) Vol.3, Issue 2, February 2015.**
5. A Paper titled **“Study on Mechanical Behaviour of Aluminum - Kyanite Composites”** published in **Transactions on Engineering and Sciences ISSN: 2347-1964 (Online) 2347-1875 (Print) Vol.2, Issue 12, December 2014.**
6. A Paper titled **“Design and Figment of brine fueled automobile”** published in **Journal of Emerging Technologies and Innovative Research (JETIR) (ISSN-2349-5162) May 2019, Volume 6, Issue 5.**
7. A Paper titled **“Effect Of Ceramic Fillers On Mechanical Behavior Of Royal Palm-Glass Hybrid Composites”** published in **Journal of Emerging Technologies and Innovative Research (JETIR) (ISSN-2349-5162) May 2019, Volume 6, Issue 5.**
8. A Paper titled **“Automatic Sewage Cleaning Machine”** published in **International Journal of Engineering Research in Mechanical and Civil Engineering (IJERMCE ISSN (Online) 2456-1290 May 2017, Volume 2, Issue 5.**
9. A Paper titled **“Design and Fabrication of Hybrid Bicycle”** published in **International Journal of Engineering Research in Mechanical and Civil Engineering (IJERMCE ISSN (Online) 2456-1290 May 2017, Volume 2, Issue 5.**
10. A Paper titled **“Nano composites and Their Applications”** published in **International Journal of Engineering Research in Mechanical and Civil Engineering (IJERMCE ISSN (Online) 2456-1290 Nov 2017, Volume 2, Issue 11.**

11. A Paper titled **“Pedal Operated Water Pumping System”** published in **International Journal of Engineering Research in Mechanical and Civil Engineering (IJERMCE ISSN (Online) 2456-1290 June 2016, Volume 1, Issue 2.**
12. A Paper titled **“Mechanical properties of Roystonea regia – Glass/epoxy composites with SiC particles”** published in **“Materials Today: Proceedings”** on **30 December 2021.**
13. A Paper titled **“Computational flow dynamics analysis of carburetor for different throttle angle”** published in AIP Publishing on 19 May 2022.
14. A Paper titled **“Synthesis and Characterization of Epoxy based Hybrid Composite Reinforced with Glass fiber, Royal Palm fiber and Titania Fillers”** published in **“NeuroQuantology - Volume 20 Issue 16 PAGE 2038-2043 on Nov 2022.**
15. A Paper titled **“Effect of ceramic fillers on Mechanical and Wear Properties of Royal palm – Glass/Epoxy Composites: A Comparative Study”** published in **“NeuroQuantology - Volume 20 Issue 16 PAGE 5123-5130 on Dec 2022.**

a) **International Conference:**

1. Presented a Paper titled **“Pedal operated water Pumping system”** in the international conference organized by IFERP in association with Sri Sairam College of Engg, Bengaluru.
2. Presented a paper titled **“ Automatic Sewage Cleaning Machine”** in the international conference organized by IFERP in association with Sri Sairam College of Engg, Bengaluru.
3. Presented a paper titled **“ Fabrication of Pneumatic Operated Bullock Cart Trailer”** in the international conference organized by IFERP in association with Sri Sairam College of Engg, Bengaluru.
4. Presented a paper titled **“Nano Composites and their applications”** in the international conference organized by IFERP in association with Sri Sairam College of Engg, Bengaluru.
5. Presented a paper titled **“Fabrication of Staircase Climbing Vehicle”** in the 5th international conference organized by IFERP in association with Sri Sairam College of Engg, Bengaluru.
6. Presented a paper titled **“Automated Guided Vehicle ”** in the 5th international conference organized by IFERP in association with Sri Sairam College of Engg, Bengaluru.
7. Presented a paper titled **“Performance Characteristics of IC Engine fuelled with different blends of Bio-diesel obtained from mahua oil”** in the 6th international conference organized by IFERP in association with Sri Sairam College of Engg, Bengaluru.
8. Presented a paper titled **“Design and Figment of brine fueled automobile”** in the 7th international conference organized by IFERP in association with Sri Sairam College of Engg, Bengaluru.

9. Presented a paper titled **“Effect Of Ceramic Fillers On Mechanical Behavior Of Royal Palm-Glass Hybrid Composites”** in the 7th international conference organized by IFERP in association with Sri Sairam College of Engg, Bengaluru.
10. Presented a paper titled **“Mechanical Properties of Roystonea Regia – Glass/Epoxy composites filled with SiC Particles”** in the 5th ICAMMME – 2021 held on 9th and 10th of July 2021 organized by Reva University, Bengaluru.

b) National Conference:

1. Presented a Paper titled **“Wear and Mechanical Behavior of Aluminum Reinforced with Kyanite and Graphite Particulates”** held at East Point College of Engineering and Technology, Bengaluru.
2. Presented a Paper titled **“Design and Development of Hand Lay Up Polymer Composites for an Aerospace Application”** held at Don Bosco Institute of Technology, Bengaluru.
3. Presented a Paper titled **“Bladeless wind turbine using EWICON”** in 19th ISTE Karnataka State Faculty Convention held at Sri Sairam College of Engg, Bengaluru.

Patent Filed:

1. A Patent titled **“DOMESTIC BIRDS PROTECTIVE SYSTEM”** filed and published on 18.01.2019, Part 1 in Indian Patent Office Journal with application number **201941001507 A**.
2. A Patent titled **“QUANTUM COMPUTING BASED SYSTEM AND METHOD FOR GEOMETRY RECOGNITION OF AN OBJECT”** filed and published on 25.01.2019, Part 1 in Indian Patent Office Journal with application number **201941001501 A**
3. A Patent titled **“A SYSTEM AND METHOD FOR AIR PRESSURE STABILIZING AND PUMPING APPARATUS IN VEHICLETMS TIRES”** filed and published on 01.01.2021, Part 1 in Indian Patent Office Journal with application number **202041056406 A**
4. A Patent titled **“: SMART BEAMFORMING ON VISIBLE LIGHT COMMUNICATION TO SECURE THE NETWORK AGAINST EAVESDROPPING FROM ANONYMOUS LOCATION”** filed and published on 01.01.2021, Part 1 in Indian Patent Office Journal with application number **202041056173 A**
5. A Patent titled **“:INTERNET OF THINGS (IOT) BASED ROBOTIC ARM”** filed and published on 17.12.2021, in Indian Patent Office Journal with application number **202141058330 A**.

6. Design patent certificate received for the patent titled “ELECTRIC VEHICLE TROLLEY” dated 17.06.2023 with design No. 388521-001. The certificate issued by The Patent Office, Government of India on 14.09.2023.

Book/Chapter/Articles authored:

1. An article titled “**Programs for improvement of tribal education and tribal development**” authored for the book on “**Trends and issues in Indian Education**” with ISBN 9789389484526 edited by Dr. Ismail Thamarassen, Dr. Mumthas B M. **KANISHKA PUBLISHERS, 1 January 2020.**

Workshops / Seminars / FDP attended:

1. Participated in **Technocamp-2011**, a national level event on paper presentation held at Ghousia College of Engineering, Ramanagaram in 2011.
2. Participated in ISTE-SRM University sponsored short term training program on “**NUMERICAL METHODS FOR FLUID DYNAMICS**” held at Adhiyamaan College of Engineering, Hosur from 4th – 9th Feb 2013
3. Participated in Faculty Development Program on “**Industrial Hydraulics and Pneumatics**” conducted by VTU-VGST in Mysore from 9th – 12th July 2013.
4. Participated in “**FIVE DAYS FACULTY SKILL ENRICHED PROGRAMME**” held at Shirdi Sai Engineering College, Bengaluru from 20th – 24th Jan 2014.
5. Participated in four days FDP on “**IPR, STRESS MANAGEMENT & EFFECTIVE COUNSELLING TECHNIQUES**” held at Sri Sairam College of Engg, Bengaluru from 1st – 5th Jan 2015.
6. Participated in FDP on “**Future Challenges for the Techno Professional Faculty**” held at Sri Sairam College of Engg, Bengaluru from 18th – 19th Jan 2016.
7. Participated in 3 days FDP on “**Innovative Teaching Pedagogy and student Management**” held at Sri Sairam College of Engg, Bengaluru from 14th July 2016.
8. Participated in seminar on “**Skilling Tomorrow’s Engineers with advanced Product Development Capabilities**” organized by Siemens PLM Software and designtech solutions ltd held at Hotel Shangri-la, Bengaluru held on 27-08-2016.

9. Participated in 4 days FDP on “Outcome Based Education and Road Map for Accreditation” held at Sri Sairam College of Engg, Bengaluru from 18th – 21st Jan 2017.
10. Participated in 3 days FDP titled “FACTO2K17 (Funding, Authoring, Counselling, TQM & Oppurtunities in Entrepreneurship) Organized by Sri Sairam College of Engg, Bengaluru from 2nd – 4th Aug 2017.
11. Participated in BRIDGE 2018- BENGALURU (The largest Industry-Institute Interaction Event of Asia) , organized by ICT Academy held on 26th Sep 2018 at Hotel Le Meridien, Bengaluru
12. Participated 2 Days FDP titled “Empower Yourself” organized by Sri Sairam College of Engg on 19th – 20th Jan 2018.
13. Attended 2 days Guest Lecture & Hands-on “Emerging Trends in ICT for Education and Teaching” under AICTE Share & Mentor (Margadarshan) scheme on 10th & 11th Oct 2018 organized by Sri Sairam College of Engg, Bengaluru.
14. Participated in VTU TEQIP 1.3 sponsored Five day Workshop on Outcome based Education and NBA Accreditation organized by IQAC, CMR Institute of Technology, Bengaluru from 5th January 2020 to 10th January 2020.
15. Participated in workshop on Research Methodology during 13th and 14th March 2020 organized by Cambridge Institute of Technology, North Campus, Bengaluru.
16. Participated in 7 days Faculty Development Program titled on “A New Paradigm towards Accreditation Process organized by Sri Sairam College of Engineering, Bengaluru from 25th – 31st Jan 2020
17. Attended workshop on “New Model Curriculum of First year BE/B.Tech CBCS Detailed Syllabus (2018-19) as per outcome based education format including course outcomes (CO) and Blooms Taxonomy” held on 9th may 2018 at BNMIT Bengaluru.
18. Participated in One week Online Certificate course on Digital Teaching Techniques organized by ICT Academy from 5th Jan 2021 to 9th Jan 2021.
19. Participated in Five days National Level webinar organized by the post graduate department, Jain college, vasavi campus, on the topic “enhancing research & teaching capabilities – new education policy” from 25th to 30th march 2021.
20. Participated in the International Level workshop on “Research Ethics – software tools for doing research, publications in peer reviewed journals” organized by Department of Computer Science , Agurchandmanmull Jain College, Meenambakkam, Chennai on 19th March 2021.

21. Participated in the International Webinar on “ Machine Learning for Predictive Maintenance” held on 22.05.2021 at Dr. Ambedkar Institute of Technology, Bengaluru
22. Participated in 3 day National Level Faculty Development Program on “Creative thinking and Quality Publications” organized by IQAC – SSCE from 29.09.2021 to 31.10.2021.
23. Participated in One Week Online Training Program for Teachers On “**An Overview of Teaching Techniques in Innovation & Design Thinking**” **6th – 10th December 2021** organized by **AICTE-VTU Joint training Program for teachers.**
24. Participated in **Innovation Ambassador training (Advanced Level)** conducted by **MoE's Innovation Cell & AICTE** during the period from **30th June - 30th July 2021** in online mode.
25. Participated in ICT academy Bridge 2023 Program held on 13.12.2023 in ITC Gardenia Hotel, Bengaluru.
26. Participated in 3 days Face to Face UHV – I Workshop conducted by SSCE in association with AICTE from 01.12.2023 to 03.12.2023.

Awards or Recognition:

1. Life Member of ISTE (Indian Society for Technical Education) # LM102229.
2. Associate Member Of IEI(Institution of Engineers, India) #AM1738510
3. 4 times awarded with the Academic Excellence award.
4. Certified as Qualified Internal Auditor for ISO 9001: 2000 & ISO 9001: 2008.
5. Organized 2 days International Conference on Applied Science Engineering and Technology held at Sri Sairam College of Engineering in association with IFERP.
6. Worked as co-opt BOE coordinator of VTU B.E Examination under the ME Board chairman Dr.Y.Vijaya Kumar during Dec/Jan 2016-17 and June/July 2017 Examinations.
7. Actively participated in various sports activities like volley ball, Kho-Kho for inter school and college.
8. Participated in NCC during High school and received NCC ‘A’ certificate under SGT Rank.
9. Event organizer in all school and college annual day functions and other technical events.
10. Mentoring several Students projects as well as events both Nationals as well as international level.
11. Coordinator for various events like Sports, ISO, Time table etc

12. Organized 3 days FDP titled “FACTO2K17 (Funding, Authoring, Counselling, TQM & Opportunities in Entrepreneurship) in Sri Sairam College of Engg, Bengaluru.
13. Faculty co-ordinator for Go-Kart Design and Development organized by Imperial Society of Innovative Engineers (ISIE) at Sri Sairam College of Engg, Bengaluru.
14. Organized 2 days 3rd International Conference on Applied Science Engineering and Technology held at Sri Sairam College of Engineering in association with IFERP.
15. Organized 2 days 4th International Conference “I7C” held at Sri Sairam College of Engineering in association with IFERP
16. Attended NPTEL Online Course exams conducting by IIT Madras with a consolidated score of 78% in Manufacturing of Composites Subject.
17. Received Best Academic Familiar Male Faculty Finalist-2018 award from ASDF held on 7th april 2018.
18. Organized 2 days 7th International Conference on Applied Science Engineering and Technology held at Sri Sairam College of Engineering in association with IFERP.
19. Guided a consultancy project on “Groundnut Thresher Machine” for Nandana Gardens, Chennai.
20. Organized AICTE Sponsored two weeks Faculty Development Program on “Recent Trends in Renewable Energy Resources” during 16.12.2019 to 30.12.2019.
21. Achieved one among the top-5 performers during VTU TEQIP 1.3 sponsored Five day Workshop on Outcome based Education and NBA Accreditation organized by IQAC, CMR Institute of Technology, Bengaluru from 5th January 2020 to 10th January 2020
22. Received letter of appreciation for being a session speaker to deliver about VLCI on 3rd Feb 2020 a part of 10 days Induction Program (Phase 2) for 2nd Semester students – academic year 2019-20 in Sri Sairam College of Engineering.
23. Received certificate of appreciation for being a resource person in the AICTE Sponsored Two Weeks Faculty Development Program on Opinion Mining – An insight into social media and customer service organized by Sri Sairam Institute of Management Studies Chennai on 07.12.2019.
24. Our Project Titled “Design and Fabrication of Groundnut Thresher” got selected for State convention of Chhatra Viswakarma Award 2019 held on 24th December 2019 at Cambridge Institute of Technology, Bengaluru.

25. Our Project Titled “Design and Fabrication of Groundnut Thresher” got selected for National convention of Chhatra Viswakarma Award 2019 held on 24th February 2020 at AICTE head Quarters, New Delhi.
26. Received a badge as “Certified Digital Teacher” for successful completion of One week Online Certificate course on Digital Teaching Techniques organized by ICT Academy from 5th Jan 2021 to 9th Jan 2021.
27. Member of IEEE #98013130 for the academic year 2021-22
28. Received Best Faculty Advisor – 2021 award from IEI, Hosur Chapter held at Adhityamaan College of Engineering, Hosur on 3rd Sep 2021.
29. Our Project titled “**Design and fabrication of Sesame Peeling Machine**” received funds of Rs.10,000/- from KSCST for the academic year 2021-22.
30. Our Project titled “**Design and fabrication of Sesame Peeling Machine**” selected for State level exhibition organized by KSCST held at VTU University Campus, Belagavi.
31. Our Project titled “**Design and fabrication of Sesame Peeling Machine**” selected as “**Best Project for the Year**” under **Mechanical Engineering Category** with **cash award of Rs 7000/-**.
32. Successfully completed **NITTT Module-8 : Institutional Management and Administrative Procedures** with registration number: 20212117034 held on February 2022 by **AICTE New Delhi**.
33. Received **Primary Evaluator** certificate for contribution as **evaluator in Toyathon 2021** organized by **AICTE- MIC**.
34. Organized 2 days **National Level Seminar** on “**ALTERNATIVE ENERGY SYSTEM**” in association with **The Institute of engineers (India) – Karnataka State Centre, Bengaluru** on **16th and 17th Nov 2022**.
35. Delivered a invited talk on “**Design thinking, Critical Thinking and Innovation Design**” at “**Vivekananda Institute of Technology, Bengaluru**” on **17.02.2023** under IIC 5.0.
36. Successfully completed **NITTT Module-6 : Student Assessment and Evaluation** with registration number: 20212117034 held on February 2023 by **AICTE New Delhi**.
37. Delivered a invited talk on “**Design thinking, Critical Thinking and Innovation Design**” organized by Department of Computer Science and Engineering, “**SJB Institute of Technology, Bengaluru**” on **11.03.2023**.
38. Delivered a invited talk on “**Design thinking, Critical Thinking and Innovation Design**” organized by Department of ECE & EEE, “**SJB Institute of Technology, Bengaluru**” on **23.03.2023**.

39. Delivered a invited talk on **“Prototype/ Process Design & Development”** organized by Department of Mechanical Engg., **“Vivekananda Institute of Technology, Bengaluru”** on **07.06.2023**.
40. Successfully completed **NITTT Module-5 : Technology Enabled Learning and Life-Long Self Learning** with registration number: 20212117034 held on September 2023 by **AICTE New Delhi**.
41. Delivered as a speaker in the **One Week Faculty Development Program** organized by **Department of Mechanical Engineering, KNSIT, Bengaluru** on **"Role of IOT, AIML and Integrated Advanced Technologies In Mechanical Engineering"** from 9th to 13th October 2023.
42. Delivered a invited talk on **“Design thinking, Critical Thinking and Innovation Design”** organized by Department of Mechanical Engg., **“Vivekananda Institute of Technology, Bengaluru”** on **28.11.2023**