



K. S. SCHOOL OF ENGINEERING AND MANAGEMENT

#15/1, Mallasandra, Off. Kanakapura Road, Bangalore - 560109.

Faculty Name	Dr. P N Jyothi
Designation	Professor
Educational Qualification	PhD
Experience in Years	22 Years
Areas of Interest	Materials & Manufacturing
E-mail	jyothi.p.n@kssem.edu.in



Educational Details

Examination/ Degree	College / University	Year of Passing
UG	Vijayanagar Engineering College, Bellary	1999
PG	BVB, Hubli	2002
PhD	VTU, Belgaum	2016

Publications

Journal Publications:

- Jyothi P.N, et.al, "Understanding the Melt Flow Behaviour of ZA Alloys Processed through Centrifugal Casting", Issue 1, International Journal of Mechanical Engineering & Technology (IJMET), ISSN PRINT: 0976 – 6340, Volume 4, Jan-Feb (2013), PP 163-172
- Jyothi P.N, et.al, "Influence of Refiner in ZA-12 Alloys During Centrifugal Casting Process" JOM, Print ISSN, Vol. 66, No. 5, 2014, pp 720-725.
- Jyothi P. N, et.al, "The Effect of Increase in Aluminium Content on Fluidity of ZA Alloys Processed by Centrifugal Casting", World Academy of Science, Engineering and Technology, International Journal of Industrial and Manufacturing Engineering. Volume-1, Issue-4, 2014.
- Jyothi P.N, et.al, "Processing of ZA-27 Based MMC Reinforced with Al₂O₃ By Centrifugal Casting", International Journal of Advancements in Mechanical and Aeronautical Engineering–IJAMAE, Volume 2: Issue 1, ISSN: 2372-4153, 30 April, 2015
- Jyothi P N, et al, "Comparison of Mechanical Properties of Al-5%Si Alloy Reinforced with Cow dung ash and Rice husk ash", International Journal of Latest Research in Engineering and Technology, ISSN:2454-5031, Volume 1, Issue 4, September 2015, PP 55-58.
- Jyothi P.N, et.al, "Optimization and Prediction of Mechanical Properties of ZA-27/Al₂O₃ MMC Processed by Centrifugal Casting Using Multiple Regression Analysis", International Journal of Engineering Journal of Engineering Studies and Technical Approach, ISSN.2395-0900, Volume 01, No. 10, October 2015, PP 77-84
- Jyothi P.N, et.al, "Influence of Centrifugal Force on the Microstructure and Hardness of ZA-8 Alloys", SSRG International Journal of Material Science and Engineering (SSRG-IJMSE), ISSN:2394-8884, volume 1 Issue3 Nov to Dec 2015, PP 1-4
- Jyothi P.N, et.al, "Wear Characteristics of ZA-27/Al₂O₃ Composites Processed by Centrifugal Casting", International Journal of Materials Science and Engineering, ISSN: 2315-4527,

Volume 3, Number 4, December 2015, PP 310-318

9. Jyothi P.N, et.al, "Influence of Aluminium on melt flow behaviour of ZA alloys processed through Centrifugal Casting Process", Advanced Materials Manufacturing & Characterization Vol 6 Issue 2, ISSN 2347-1891, Sept 2016, PP.6-11
10. Jyothi P.N, et.al, "Physical Properties of Bio-oils used as cutting fluids during drilling operation of Mild steel", Adv. Res. Mech. Engi. Tech., ISSN: 2454-8650 2016
11. Jyothi P.N, et.al, "Influence of Bio-Oils as Cutting Fluids on Chip Formation and Tool Wear during Drilling Operation of Mild Steel"- International Journal of Recent Technology and Engineering (IJRTE)' at Volume-8 Issue-2, July 2019, pp 3328-30
12. Jyothi P.N, et.al., "Physical properties of Nano-based Bio-Oils as cutting fluids", Journal of Advanced Research In Manufacturing, Material Science & Metallurgical Engineering, VOL 5, NO 3 ,2018,pp 6-11
13. P N Jyothi, et al, Effect of Vegetable Based Cutting Fluids On Chip Formation And Surface Roughness During Turning Operation Of Mild Steel", IJPAM, Volume 119 No. 14 2018, pp 167-171; ISSN: 1314-3395
14. Jyothi P.N, et.al., "Improving Engineering Teaching Practices through Kaizen" International Journal of Research in Engineering, Science and Management, Volume-2, Issue-8, August-2019, ISSN (Online): 2581-5792
15. Experiment to determine the specific heat of oils, Journal of Mechanical and Engineering, Vol. 5(45), No1 2021,pp47-52
16. Influence of Nano graphite based Vegetable oils as Cutting Fluids for Mild Steel Drilling, International Journal of Scientific Research in Science, Engineering and Technology, Vol 9, issue 9, 2022, pp. no 251-264
17. A Review on Sustainable Eco-friendly Cutting Fluids ,Journal of Sustainability and Environmental Management (JOSEM), Vol.1, No. 2(2022), pp. 306–320
18. Design & Development of an Air Purifier-A Review, International Journal of Latest Engineering and Management Research (IJLEMR),Volume 07 - Issue 07 |,July 2022 , PP. 25-34
19. Physico-Chemical Properties of Bio-Oils as Cutting Fluids: A Comparative Investigation, Journal of Bio- and Tribo-Corrosion.(2025) 11:7

Conference Papers:

International Conference

1. P.N. Jyothi, et al, "Influence of Refiner Aluminum Titanium Boride on the ZA alloys Processed through Centrifugal Casting" ASME 2013 International Mechanical Engineering Congress and Exposition, IMECE2013, November 15-21, 2013, San Diego, California, USA.
2. P.N. Jyothi, et al. "Processing of ZA-27 Based MMC Reinforced with Al₂O₃ by Centrifugal

Casting”, October 25-26, 2014, Int. Conf on AMRE 2014, Zurich, Switzerland.

3. P.N. Jyothi, et al, “Influence of non-edible vegetable-based oil as cutting fluid on chip, surface roughness and cutting force during drilling operation of Mild Steel”, Advances in Materials and Manufacturing Applications (IConAMMA 2016)" 14th - 16th July, 2016, Amrita Vishwa Vidyapeetham University, Bangalore.
4. P N Jyothi, et al, “Effect of Vegetable Based Cutting Fluids on Chip Formation and Surface Roughness During Turning Operation of Mild Steel”, International Conference on Applied Engineering Sciences and Management, K S School of Engineering and Management, Bangalore,12th Oct 2018
5. P.N. Jyothi et al, “ Influence of Nano graphite based Vegetable oils as Cutting Fluids for Mild Steel Drilling”, International Conference on Recent Trends in Mechanical Engineering (ICRTIME2022), Government Engineering College,14th and 15th of March, 2022
6. P N Jyothi et al, “A Comprehensive Review on Renewable Materials Used in Textile Industry Effluent Treatment” 5th International Conference on Recent Advances in Engineering Sciences (ICFRAES-2024) on 14th -15th Nov 2024 at MSRIT, Bangalore

National Conference

1. Jyothi.P. N "Manufacturing of Zinc based MMC reinforced with Ceramic particles" National Conference on Resent Trends in Mechanical Engineering, V IT, Bangalore, India, 23 & 24th Nov 2009.
2. Jyothi.P.N “Development of Kyanite Reinforced Zinc based Metal Matrix Composite" National Conference on Mechanical Engineering Trends COMET-2010,BITM,Bellary,Karnataka , India, 19-20 Feb , 19 & 20th Feb 2010.
3. Jyothi.P.N, et al, “Effect of centrifugal force on the Microstructure of ZA 8 alloy” presented paper at National Conference “Advances in Mechanical Engineering AME-2013, KSSEM, Bangalore, Nov 11th and 12th, 2013
4. Jyothi.P.N. N, et al, “Development of Aluminium -5% Silicon Alloy Reinforced with Rice Husk and Cow Dung Ash for Engine Application”, NCAME 2015, KSSEM, Bangalore, 28th April 2015
5. Jyothi.P. N al “Recent Advances in 3D Printing Technology”, NCAME 2015, KSSEM, Bangalore, 28th April 2015
6. Jyothi.P.N, et al, “Research Avenues in Metal Foaming Process”, NCAME 2015, KSSEM, Bangalore, 28th April 2015.
7. Jyothi.P.N, et al, “Application of Vegetable based oils as cutting fluids for various machining operations -A review”, NCAME 2016, KSSEM, Bangalore, 29th April 2016
8. Jyothi.P.N, et al “Research work on Fiber Reinforced Hybrid Composite- A review”, NCAME 2016, KSSEM, Bangalore, 29th April 2016

Book Chapters

1. Wear Characteristics of ZA-27/Al₂O₃ Composites Processed by Centrifugal Casting: Experimental Investigation, Techniques and Innovation in Engineering Research Vol. 5
2. Solar powered water purification using Natural Coagulant, Advances in Environmental Sustainability, Energy and Earth Science: Proceedings of the 1st International Conference Aesee-2024. (2024). United States: Springer Nature Switzerland.

Awards

- Got **B- Certificate as an NCC Cadet** under 34 KARNATAKA BN NCC, BALLARI
- Participated in District level Sports & Games.
- In Scouting and **Guiding**, participated in many camps also attended National Jambori held at Surathkal.
- Secured **First Rank in M. Tech (Production Management)** in 2002 under Visveswaraya Technological University, Belgaum.
- Rs. 25,000 Sanctioned by VTU, towards **travel grant** to present a paper in Sandiego, USA
- Awarded as “**Teacher of Excellence**” in 2010, 2011,2013,2014,2016,2018
- Received “**Certificate of Appreciation**” for all the papers published
- **Chaired the session** at International Conference on Advances in Materials and Manufacturing Applications-IconAMMA 2016 and 2017, held at Amrita School of Engineering, Amrita Vishwa Vidyapeetham University, Bengaluru Campus
- Successfully completed KSCST Sponsored project work entitled **Solar Powered Water Purification using a Natural Coagulant**”, under UG student project proposal for the year 2018-2019.
“**Performance Evaluation of nano based bio oil are current fluids for drilling of Mild steel**”, under UG student project proposal for the year 2016-2017.
“**Experimental Studies on Cutting Parameters During Drilling Operation of Mild Steel Using Eco Friendly Vegetable Oil as Cutting Fluid**” under UG student project proposal for the year 2015-2016.
- Received **Best Project Award** for the Project Titled “**Experimental Studies on Cutting Parameters during Drilling Operation of Mild Steel Using Eco Friendly Vegetable Oil as Cutting Fluid**”, from KSCST under UG student project proposal for the year 2016-2017
- Project work entitled “**Solar Powered Water Purification using a Natural Coagulant**”, got **3rd Place at South India Project Exhibition (SIPE-2k19)**, and held at Kalpataru

Institute of Technology, Tiptur.

- UG project titled “**Multi Source Modular Decorticator for Multiple Crops**” under my guidance got selected for sponsorship by Karnataka State Council for Science and Technology, SPP- 44th series for Academic Year 2020-21 and also got selected for VTU Financial funding for innovative projects. This project also received an award as Best **Innovative project** at Project Exhibition held at BIT
- Guided Project with title “**Design & Fabrication of Solar Powered Indoor Air Purifier**”, which Won 2nd Place in College level Project Exhibition.
- Guided Project with title “**Development of Sustainable Model for Textile Wastewater Treatment**” winning the 1st prize at the KSSEM Project Exhibition.
- **Completed the following NPTEL Course**
 - ✓ Operations Management, 12 Weeks, NPTEL Course, 2022, **Course Topper**
 - ✓ Fundamentals of manufacturing processes, 12 Weeks, NPTEL Course, 2022
 - ✓ Advanced Machining Processes, 8 Weeks, NPTEL Course, 2022
 - ✓ Introduction to Operations Research, 8 Weeks, NPTEL Course, 2023
 - ✓ Introduction to Machining and Machining Fluids, 8 Weeks, NPTEL Course, 2024
 - ✓ Computer Integrated Manufacturing, 12 Weeks, NPTEL Course, 2024
 - ✓ Product Design & Development, 4 Weeks, NPTEL Course, 2024
 - ✓ Advances in Welding & Joining Technologies, 8 Weeks, NPTEL Course, 2024
 - ✓ Automation in Manufacturing, 12 Weeks, NPTEL Course, 2024
- **Awarded NPTEL Star for Mechanical Discipline**

Guiding Ph.D. Students:01

1. Mrs. Viraja Deshpande, title of the work is “Experimental investigation on Machining Parameters Using Nano Based Bio-Oils as Cutting Fluid for Drilling Operation of Mild Steel”, registered in 2017 under VTU

Professional Membership

- **Life member of Indian Society for Technical Education (ISTE) LM38609**
- **Institution of Engineers (INDIA)-M-1511852**

Contact Details

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