




P.E.S. College of Engineering, Mandya - 571401

(An Autonomous Institution, affiliated to VTU, Belagavi)

Faculty Profile

General

Name	<i>Dr. GURUPAVAN H R</i>	
Designation,	<i>Assistant Professor</i>	
Department & Affiliated Institution	<i>Department of Mechanical Engineering, P.E.S College of Engineering, Mandya – 571 401</i>	
Research Area	<i>Condition Monitoring, Vision System, Composite Material</i>	
Contact Number	<i>+91 9686632650</i>	
Email ID	<i>gpavan1989@gmail.com</i>	

Academic Profile

Educational Qualifications

Degree	College	University	Year of Passing	% ge	Class
<i>Ph. D</i>	<i>P.E.S. College of Engineering, Mandya.</i>	<i>VTU, Belagavi</i>	<i>2020</i>	<i>-</i>	<i>-</i>
<i>M.Tech</i>	<i>P.E.S. College of Engineering, Mandya</i>	<i>VTU, Belagavi</i>	<i>2013</i>	<i>9.26</i>	<i>FCD (2nd Rank)</i>
<i>B.E.</i>	<i>Ghousia College of Engineering, Ramanagara.</i>	<i>VTU, Belagavi</i>	<i>2011</i>	<i>66.17</i>	<i>First Class</i>

Professional Experience

Organization and Department	Designation	Period	Total Experience
<i>P.E.S. College of Engineering, Mandya, Dept. of Mechanical Engg.</i>	<i>Assistant Professor</i>	<i>06-08-2013 to Till date</i>	<i>07 years</i>

Reports on Academic and Research Activities

Academic Activities

Teaching Records (Details of courses taught)	<p><u>Undergraduate:</u> Mechanical Measurements and Metrology, Material Science and Metallurgy, Fluid Mechanics, Industrial Robotics, Elements of Mechanical Engineering, Computer Aided Engineering Drawing, CAD/CAM.</p> <p><u>Post Graduate (M. Tech):</u> Newer Machining Technique, Industrial Sensors and Analysis Technique, Computer Control of Manufacturing System, Condition Based Maintenance, Advanced Industrial Robotics, Metrology & Computer Aided Inspection.</p>
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Research Guidance (Candidates Awarded / Pursuing Ph.D / M.Sc., Engg./ M.Phil)

Degree	Ph. D.	M.Sc., Engg.
Awarded	<i>Nil</i>	<i>Nil</i>
Pursuing	<i>Nil</i>	<i>Nil</i>

Sponsored Research Projects (List of Projects taken up /completed and funds receiver & funding sources)

Project Title	Project Funded by	Grants Sanctioned	Grants Received
<i>Performance Monitoring</i>	<i>AICTE</i>	<i>15,96,078/-</i>	<i>15,96,078/-</i>

Research Publications in Refereed Journals and Conferences/Symposia

Number of Publications in	National	International
Journals	<i>Nil</i>	<i>11</i>
Conferences/Symposia	<i>Nil</i>	<i>13</i>

Other Important Responsibilities Held in the College

<i>1. Coordinator for Department time table</i>	<i>2. BoE member</i>
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LIST OF PUBLICATIONS

International Journals

- 1. Gurupavan H R, H.V. Ravindra, T.M. Devegowda, “Effect of Wire Electrode Materials on Performance Characteristics for Wire Electrical Discharge Machining of Metal Matrix Composite Material” ASME International Mechanical Engineering Congress and exposition, PP. 1-5, ISBN: 978-0-7918-8448-5, 2021**
- 2. Gurupavan H R, T.M. Devegowda, H.V. Ravindra, “Monitoring the Performance of Electrode Status and Surface Roughness in WEDM of Al-8% Si₃N₄ using Vision System” Journal of Critical Reviews, Vol. 7, PP. 2590-2599, ISSN: 2394-5125, 2020.**
- 3. Gurupavan H R, Anil Kumar M N, “Effect of Various Wire Electrode Materials on the Performance of Wire Electrical Discharge Machining of Al/SiC Composite Material” International Research Journal of Engineering and Technology, Vol. 7, PP. 1484-1488, ISSN: 2395-0056, 2020.**
- 4. Gurupavan H R, Amruth Babu D S “Experimental Investigation of Machining Performances of Al6061-SiC Metal Matrix Composite through Wire EDM” International Research Journal of Engineering and Technology, Vol. 7, PP. 1335-1340, ISSN: 2395-0072, 2020.**
- 5. Gurupavan H R, H.V. Ravindra, Devegowda T. M, “Prediction and Comparison of Vision Parameter of Surface Roughness in WEDM of Al-6%Si₃N₄ and Al-10%Si₃N₄ Using ANN” Lecture Notes on Multidisciplinary Industrial Engineering, PP. 361-371, ISSN 2522-5022, 2019.**
- 6. Gurupavan H R, H.V. Ravindra, Devegowda T. M, “Surface Roughness Measurement of WEDM Components Using Machine Vision System” Lecture Notes in Electrical Engineering, Vol.545, PP. 539-547, ISSN 1876-1100, 2019.**
- 7. Gurupavan H R, H.V. Ravindra, Devegowda T. M, Rudreshi Addamani, “Machine Vision System for Correlating Wire Electrode Status and Machined Surface in WEDM of AlSi₃N₄ MMC’S” IOP Publishing: Materials Science and Engineering Vol. 376, PP. 012120, 2018.**
- 8. Rudreshi Addamani, Gurupavan H R, H V Ravindra, Ugrasen G, “Estimation and Comparison of Welding Performances in P- GMAW using MRA and ANN for SS 304L Material” IOP Publishing: Materials Science and Engineering Vol. 376, PP. 012119, 2018.**
- 9. Gurupavan H R, T.M. Devegowda, H.V. Ravindra, G. Ugrasen, “Estimation of Machining Performances in WEDM of Aluminium based Metal Matrix Composite Material Using ANN” Materials Today: Proceedings, Vol. 4, PP. 10035–10038, 2017.**
- 10. Gurupavan H R, T.M. Devegowda, H.V. Ravindra, “Optimization of WEDM Parameters using Taguchi Technique in Machining of Metal Matrix Composite Material”, International Journal of Engineering Research in Mechanical and Civil Engineering (IJERMCE), Vol 2, PP. 714-719, 2017.**
- 11. B.M. Umeshgowda, H.V. Ravindra, H.R. Gurupavan, G. Ugrasen, G.V. Naveen Prakash, “Optimization of process parameters in drilling Al-Si₃N₄ metal matrix composites material using Taguchi technique” Procedia Materials Science, Vol. 5, PP. 2207-2214, 2014.**

International Conferences

1. **Gurupavan H R**, H.V. Ravindra, T.M. Devegowda, “**Effect of Wire Electrode Materials on Performance Characteristics for Wire Electrical Discharge Machining of Metal Matrix Composite Material**” ASME International Mechanical Engineering Congress and exposition (IMECE-2020) Portland, OR, USA, November 16-19, 2020.
2. **Gurupavan H R**, H.V. Ravindra, T.M. Devegowda, “**Monitoring the Performance of Electrode Status and Surface Roughness in WEDM of Al-8% Si₃N₄ using Vision System**” International Conference on Advances in Mechanical Engineering Sciences (ICAMES-2K20), PESCE, Mandya, Feb. 28th-29th, 2020.
3. **Gurupavan H R**, H.V. Ravindra, T.M. Devegowda, “**Prediction of Vision Parameters of Surface roughness and Wire Wear in Wire-EDM of Al-10 wt.% Si₃N₄ MMC Material using ANN**” International Conference on Ultrasonics and Materials Science for Advanced Technology (ICUMSAT-2019), VBS Purvanchal University, Jaunpur, Uttar Pradesh, Nov. 16th-18th, 2019.
4. **Gurupavan H R** and H.V. Ravindra, “**Performance Monitoring of Electrode Wear and Surface Roughness in WEDM of Al-10%Si₃N₄ using Machine Vision System**” ASME International Mechanical Engineering Congress and exposition (IMECE-2019), Calvin L. Rampton Salt Palace Convention Center, Salt Lake City, Utah, USA, Nov. 11th-14th, 2019.
5. **Gurupavan H R**, H.V. Ravindra, T.M. Devegowda, “**Prediction and Comparison of Vision Parameter of Surface Roughness in WEDM of Al-6%Si₃N₄ and Al-10%Si₃N₄ using ANN**”, All India Manufacturing Technology, Design and Research (AIMTDR-2018), College of Engineering Guindy, Anna University, Chennai, Dec. 13th-15th, 2018.
6. **Gurupavan H R**, H.V. Ravindra, T.M. Devegowda, “**Estimation of Machine Vision parameters of Surface roughness and Wire wear in Wire EDM of Al-Si₃N₄ Metal Matrix Composite Material using Artificial Neural Network**” ASME International Mechanical Engineering Congress and exposition (IMECE-2018), David L. Lawrence Convention Center, Pittsburgh, PA, USA, Nov.09-15, 2018.
7. **Gurupavan H R**, T.M. Devegowda, H.V. Ravindra, “**Surface Roughness Measurement of WEDM Components using Machine Vision System**” International Conference on emerging research in electronics, computer science and technology (ICERECT-18), PESCE, Mandya, Aug. 23rd-24th, 2018.
8. **Gurupavan H R**, H.V. Ravindra, T.M. Devegowda, Rudreshi Addamani, “**Machine Vision System for Correlating Wire Electrode Status and Machined Surface in WEDM of AlSi₃N₄ MMC’S**” International Conference on Advances in Manufacturing, Materials & Energy Engineering, MITE, Mangalore, Mar. 02nd-03rd, 2018.
9. Rudreshi Addamani, **Gurupavan H R**, H V Ravindra, Ugrasen G, “**Estimation and Comparison of Welding Performances in P- GMAW using MRA and ANN for SS 304L Material**” International Conference on Advances in Manufacturing, Materials & Energy Engineering, MITE, Mangalore, Mar. 02nd-03rd, 2018.

10. **Gurupavan H R**, T.M. Devegowda, H.V. Ravindra, “**Optimization of WEDM Parameters using Taguchi Technique in Machining of Metal Matrix Composite Material**” International Conference on advances in mechanical engineering sciences (ICAMES-17), PESCE, Mandya, Apr. 21st-22nd, 2017.
11. **Gurupavan H R**, T.M. Devegowda, H.V. Ravindra, G. Ugrasen, “**Estimation of Machining Performances in WEDM of Aluminium based Metal Matrix Composite Material Using ANN**” International Conference on Recent Trends in Engineering and Materials Science (ICEMS-2016), Jaipur National University, Jaipur, Mar. 17th-19th, 2016.
12. **Gurupavan H R**, T.M. Devegowda, Monisha P, H.V. Ravindra, “**Optimization of machining parameters in WEDM of Al-Si₃N₄ metal matrix composite material using Taguchi Technique**”, International Conference on Precision, Meso, Micro and Nano Engineering, COPEN-9, IIT-Bombay, Dec. 10th-12th, 2015.
13. **Gurupavan H R**, H.V. Ravindra, B.M. Umeshgowda, G.V. Naveen Prakash, G. Ugrasen, “**Optimization of process parameters in drilling Al-Si₃N₄ metal matrix composites material using Taguchi technique**”. International conference on Advances in Manufacturing and Materials Engineering (ICAMME-2014), NITK, Surathkal, Mar. 27th-29th, 2014.