

Profile

Name of the Faculty	Dr. M. Devaiah	
Designation	Professor	
Department	Mechanical Engineering	
Area of Interest	Manufacturing, Composite Materials, production, 3D Printing, Additive Manufacturing	
Subjects Taught	Engineering Graphics, Engineering Mechanics, FMHM, FMHM Lab, MOS, MOS Lab, MMS, MMS Lab. Operations Research, Optimization Techniques, Renewable Energy Sources (NCES), Environmental Studies	
JNTUH Registration Id	41150402- 133226	
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Educational Qualifications:

S. No.	Degree	Specialization	University/College	Year
1	BE	Mechanical Engineering	Osmania/CBIT	1997
2	M.Tech	Industrial Metallurgy	Kakatiya/NIT Warangal	2000
3	PhD	Mechanical Engineering	Osmania	2013

Paper Publications:

S. No.	Publication details
1	Malkapuram Devaiah, D., Pothula Chucharitha., and Jaweed Shaik, “Design, Aerodynamic Analysis, and Fabrication of Agricultural Drone”, SAE Technical Papers,

	WCX, E-ISSN: 0148–7191, 2021, SCOPUS Indexed, Web of Science (ESCI) Indexing, CiteScore: 0.47, SJR: 0.360, SNIP: 0.528, H-Index: 107, doi.org/10.4271/2021-01-0809.
2	Malkapuram Devaiah, "Development of Hybrid Natural Fiber Reinforced Epoxy Matrix Composites with SiC as Filler," SAE Technical Papers 2021-01-0357, E-ISSN: 0148–7191, 2021, SCOPUS Indexed, Web of Science (ESCI) Indexing, CiteScore: 0.47, SJR: 0.360, SNIP: 0.528, H-Index: 107, doi.org/10.4271/2021-01-0357.
3	Dr. M. Devaiah, Thermal Properties of Hybrid natural reinforced polymer matrix composites with SiC as filler, SAE Technical Papers, SAE International, 2018-28-0047, E-ISSN: 0148–7191, 2020, SCOPUS Indexed, Web of Science (ESCI) Indexing, CiteScore: 0.47, SJR: 0.360, SNIP: 0.528, H-Index: 107, DOI:10.4271/2020-28-0047
4	Dr. M. Devaiah*, Bhasker Bommara, P. Laxmi Reddy, M. Ravindra Gandhi, "Thermal Characterization of Fiber Reinforced Polymer Composites and Hybrid Composites" International Journal of Mechanical Engineering and Technology (IJMET), Volume 10, Issue 04, February 2019, pp. 153 - 165, SCOPUS Indexed, CiteScore: 2.13, SJR: 0.119, SNIP: 0.215, H-Index: 10,
5	Dr. M Devaiah, Rajasekhar Vangala, N Rajendar and K Raju, "Comparison of mechanical properties For carbon, e-glass and hybrid (carbon & e-glass) composites" International Journal of Mechanical Engineering and Technology (IJMET), Volume 10, Issue 02, February 2019, pp. 407-417, SCOPUS Indexed, CiteScore: 2.13, SJR: 0.119, SNIP: 0.215, H-Index: 10,
6	Dr.M. Devaiah, Nithin Kumar, P Sandeep Kumar, P Sudheer Rao, "Experimental Investigation of Microstructure and Mechanical Properties of Brass - Iron Joined by TIG welding Process" Lecture Notes In Mechanical Engineering, Springer. Paper accepted to publish. SCOPUS Indexed, Web of Science (ESCI) Indexing, CiteScore: 0.16, SJR: 0.129, SNIP: 0.180, H-Index: 6,
7	Devaiah, Malkapuram, SEM and Fractography Analysis of SiCp/Al ₂ O ₃ Ceramic Matrix Composites Prepared Through Directed Metal Oxidation Process of Al Alloy (October 6, 2018). The IUP Journal of Mechanical Engineering, Vol. XI, No. 4, October 2018, pp. 27-39, Available at SSRN: https://ssrn.com/abstract=3383345 .
8	Devaiah Malkapuram and Prasad, T Siva, Manufacturing of Die Using Rapid Prototyping Technique (November 6, 2018). The IUP Journal of Mechanical Engineering, Vol. XI, No. 4, November 2018, pp. 69-79, Available at SSRN: https://ssrn.com/abstract=3383362 , UGC Approved Journal.
9	Dr. M. Devaiah* , T. Siva Prasad, "Experimental Study of Lost Foam Casting", Journal of Future Engineering and Technology, ISSN: 0974-6536, Vol. 13, Issue 4, Pp. 46 – 52, UGC Approved Journal, Indian Citation Indexed (ICI).
10	M. Devaiah, Coefficient Of Thermal Expansion And Elastic Modulus Of SiCp/Al ₂ O ₃ Ceramic Matrix Composites Prepared By Directed Metal Oxidation Process, SAE Technical Papers, SAE International, 2018-28-0047, E-ISSN: 0148–7191, 2018, SCOPUS Indexed, Web of Science (ESCI) Indexing, CiteScore: 0.47, SJR: 0.360, SNIP: 0.528, H-Index: 88, DOI:10.4271/2018-28-0047
11	M. Devaiah, Mathematical Model Validation of Experimental results of SiCpAl ₂ O ₃ Ceramic Matrix Composites Prepared by Directed Metal Oxidation of an Al Alloy, SAE Technical Papers, SAE International, 2018-28-0046, E-ISSN: 0148–7191, 2018, SCOPUS Indexed, Web of Science (ESCI) Indexing, CiteScore: 0.47, SJR: 0.360, SNIP: 0.528, H-Index: 88, DOI: 10.4271/2018 – 28 – 0046.
12	Dr.M. Devaiah* , A. Santhosh, Friction Stir Welding Of Aluminium 6082, SAE Technical Papers, SAE International, 2018-28-0051, E-ISSN: 0148–7191, 2018, SCOPUS

	Indexed, Web of Science (ESCI) Indexing, CiteScore: 0.47, SJR: 0.360, SNIP: 0.528, H-Index: 88, DOI: 10.4271/2018 – 28 – 0051.
13	Dr.M. Devaiah , K. Shiva Prasad Reddy and Karna Koti Reddy, “Designing and Simulation of Baler Included with Combine Harvester”, <i>Journal of Advanced Research in Dynamical and Control Systems</i> , Volume 10, 8 - Special Issue, 2018, ISSN: 1943-023X, pp.97 - 102, SCOPUS Indexed Journal. H index: 6, Impact Factor: 0.22. CiteScore: 0.19, SNIP: 0.135, SJR: 0.114, UGC Approved Indexing.
14	Dr.M. Devaiah , “Comparison of Thermal Conductivity Experimental Results of SiC _p /Al ₂ O ₃ Ceramic Matrix Composites with Mathematical Modelling”, <i>International Journal of Applied Engineering Research</i> , ISSN 0973 - 4562 Volume 13, Number 6 pp. 3784 - 3788 (2018), SCOPUS Indexed Journal. H index: 13, SJR: 0.199 SNIP: 0484, Impact Factor: 0.14. UGC Approved Indexing.
15	M. Devaiah, R. Sudarshan” Optimization of Process Parameters in Arc Welding On Material Mild Steel”. <i>International Journal of Advanced Research Trends in Engineering and Technology (IJARTET)</i> Vol. 4, Issue 11, ISSN 2394-3777 (Print) ISSN 2394-3785 (Online), pp. 13 – 20, November 2017, UGC Approved Indexing.
16	M. Devaiah, S. Santhosh Kumar, V. Seshu Bai, T. Rajasekharan.”Mechanical properties of SiC _p /Al ₂ O ₃ ceramic matrix composites prepared by directed metal oxidation of aluminium alloy”. <i>Ceramics International</i> , Volume 38, Issue 2, March (2012), pp 1139-1147. SCI Indexed Journal (Elsevier), Impact Factor: 3.057, H index:82, SNIP: 1.167, SJR:0.784, Citations: 19,
17	M. Devaiah , S. Santhosh Kumar, T. Srihari, and T. Rajasekharan. “SiC _p /Al ₂ O ₃ ceramic matrix composites prepared by directed oxidation of an aluminium alloy for wear resistance applications”. <i>Transactions of the Indian Ceramic Society. Volume 71, Number 3, September (2012), pp 151-158. Impact factor: 0.558. WOS Indexing, SCOPUS Indexing Journal and UGC Approved Indexing. H Index: 9, SNIP: 0.498, SJR:0.229, Citations: 01</i>
18	M. Devaiah , T. Srihari, and T. Rajasekharan. “Identification of Growth Promoter to Fabrication SiC _p /Al ₂ O ₃ Ceramic Matrix Composites Prepared by Directed Metal Oxidation of an Al Alloy”. <i>Journal of Minerals and Materials Characterization and Engineering</i> , Volume 11, Number 11, November (2012), PP. 1063-1068. Impact factor: 1.29. UGC Approved Indexing, h5 index: 18, DOI: 10.4236/jmmce.2012.1111111
19	M. Devaiah , T. Srihari, and T. Rajasekharan. “Fabrication of SiC _p /Al ₂ O ₃ ceramic matrix composites prepared by directed metal oxidation of aluminium alloy”. <i>International Journal of Advanced Material Science</i> , ISSN 2231-1211 Volume 2, Number 3 (2011), pp. 341-350. UGC Approved Indexing.
20	M. Devaiah , T. Srihari, and T. Rajasekharan. “Sliding wear resistance of SiC _p /Al ₂ O ₃ ceramic matrix composites prepared by directed metal oxidation of aluminium alloy”. <i>International Journal of Mechanics Structural</i> , ISSN 0974-312X Volume 3, Number 1 (2012), pp. 19-34. UGC Approved Indexing
21	M. Devaiah , T. Srihari, and T. Rajasekharan. “Phase, microstructure and physical properties of SiC _p /Al ₂ O ₃ ceramic matrix composites prepared by directed metal oxidation process”. <i>International Journal of Material Science</i> , ISSN 0973-4589 Volume 6, Number 4 (2011), pp. 473-484. UGC Approved Indexing
22	M. Devaiah , T. Srihari, and T. Rajasekharan. “Properties of SiC _p /Al ₂ O ₃ ceramic matrix composites prepared by directed metal oxidation of aluminium alloy”. <i>International Journal of Mechanical and Material Sciences research</i> , Volume 1, Number 1(2011), pp. 11-28. UGC Approved Indexing

23	M. Devaiah, T.Srihari, and T. Rajasekharan. “Phase and Microstructure and Physical properties of SiC_p/Al₂O₃ ceramic matrix composites prepared by directed metal oxidation of aluminium alloy ”. <i>Journal of Materials Science and Engineering (A & B, USA)</i> , ISSN 2161-6213), <i>Accepted, 2011</i> .
24	S. Santhosh Kumar, M. Devaiah and T. Rajasekharan. “Fabrication of SiC/Al ₂ O ₃ CMCs & their physical properties”. AIP Conference Proceedings, ISSN: 0094-243X, Web of Science (ESCI) Indexing, Scopus Indexing, UGC Approved, H Index: 54, SNIP: 0.300, SJR: 0.165, 1447, 1295 (2012); DOI: 10.1063/1.4710487 .
25	M. Devaiah , S. Santhosh Kumar, T. Srihari, and T. Rajasekharan. “Properties of SiC_p/Al₂O₃ ceramic matrix composites as a function of Reinforcement Content ”. Oral Presentation at the 5th International Conference Proceedings on Theoretical, Applied, Computational and Experimental Mechanics–ICTACEM, 27-29, 2010, IIT Kharagpur-721302, INDIA, ISBN: 9789380813035
26	M. Devaiah , S. Santhosh Kumar, T. Srihari, and T. Rajasekharan. “Coefficient of thermal expansion and ultrasonic properties of SiC_p/Al₂O₃ ceramic matrix composites prepared by directed metal oxidation of aluminium alloy ”. Oral Presentation at the 5th International Conference Proceedings on Theoretical, Applied, Computational and Experimental Mechanics ICTACEM, 27-29, 2010, IIT Kharagpur-721302, INDIA, ISBN: 9789380813035
27	Dr.M. Devaiah , K. Shiva Prasad Reddy, “ Designing and Simulation of Baler Included with Combine Harvester ”, Paper presented at International Conference on Trends in Engineering, Management, Pharmacy & Sciences (ICTEMPS-2018), 21 st April 2018, Geethanjali College of Engineering and Technology, Hyderabad, Telangana, INDIA, , pp 76 -79, ISBN 978-93-85100-86-4.
28	M. Devaiah, Shiva Prasad Reddy. K, N. Satya Guha,”Report on better performance on Engines”. Oral Presentation at 1 st International Conference on “Innovations in Mechanical Engineering (ICIME -18) 5 th – 6 th January 2018, Gurunanak Institute of Engineering and Technology, Hyderabad-501203, Telangana, INIDIA, pp 76 -79, ISBN 978-93-85100-86-4.
29	Shiva Prasad Reddy. K, M. Devaiah, N. Satya Guha,”Report on modification of I.C.Engines”. Oral Presentation at International Conference on “Applied Sciences, Engineering, Technology and Management (ICASETM -17)”, 02 nd –03 rd November 2017, DRK Institute of Science and Technology, Hyderabad-501203, Telangana, INIDIA. Pp 23 - , ISBN: 978-81-932966-8-4.
30	Dr. M. Devaiah , Dr. D. Samuel John, R. Sudharshan and Dr. T. Siva Prasad, “Optimization of process parameters in Arc welding on material mild steel”. Oral Presentation at International Conference on “Research Contribution in the New Era of Arts, Science, Engineering, management and Pharmacy”, 6 th - 7 th August 2017, Hyderabad-501203, Telangana, INIDIA, pp 94 -102, ISBN: 13:978-1973775645.
31	Dr. D. Samuel John, Dr. M. Devaiah and Dr. T. Siva Prasad, “Spur Gear Drive Analysis of Static and Dynamics of High Contact Ratio”. Oral Presentation at International Conference on “Research Contribution in the New Era of Arts, Science, Engineering, management and Pharmacy”, 6 th - 7 th August 2017, Hyderabad-501203, Telangana, INIDIA, pp 116 -124, ISBN: 13:978-1973775645.
32	D. Samuel john, Dr. M. Devaiah and B. Subba Rao. “Analysis on the Impact of Bullwhip Effect (BWE) in Supply Chain Management”. Oral Presentation at Proceedings of International Conference on Emerging Trends in Mechanical Engineering (ICETiME-

	2016), pp 233-239, 23 rd -24 th September 2016, Department of Mechanical Engineering, ICFAI Foundation of Higher Education Hyderabad-501203, Telangana, INDIA.
33	Samuel john, Dr. M. Devaiah and Dr. T. Siva Prasad. “Design and Fabrication of Solar Powered Lawn Mower with Linear Blades”. Oral Presentation at Proceedings of International Conference on Emerging Trends in Mechanical Engineering (ICETiME-2016), pp 240-244, 23 rd -24 th September 2016, Department of Mechanical Engineering, ICFAI Foundation of Higher Education Hyderabad-501203, Telangana, INDIA.
34	B. Subba Rao, Dr. M. Devaiah , D. Samuel john, and G. Jagan Naik. “Agriculture Pesticide Sprayer using Solar Energy”. Oral Presentation at Proceedings of International Conference on Emerging Trends in Mechanical Engineering (ICETiME-2016), pp 348-352, 23 rd -24 th September 2016, Department of Mechanical Engineering, ICFAI Foundation of Higher Education Hyderabad-501203, Telangana, INDIA.
35	Dr. T. Siva Prasad, Dr. M. Devaiah and D. Samuel john. “Effect of Burnishing on Surface Properties of Ferrous and Non-Ferrous Metals”. Oral Presentation at Proceedings of International Conference on Emerging Trends in Mechanical Engineering (ICETiME-2016), pp 520-525, 23 rd -24 th September 2016, Department of Mechanical Engineering, ICFAI Foundation of Higher Education Hyderabad-501203, Telangana, INDIA.
36	M. Devaiah , S. Santhosh Kumar, T. Srihari, and T. Rajasekharan. “Al ₂ O ₃ -SiC Ceramic Matrix Composite: Physical Properties & Microscopic Features”. <i>Accepted for Poster Presentation at the 3rd International Conference on Recent Advances in Composite Materials –ICRACM 2010, ENSIL - ENSCI in Limoges (France), December 13-15, 2010.</i>
37	M. Devaiah , S. Santhosh Kumar, T. Srihari, and T. Rajasekharan. “SiC _p - Al ₂ O ₃ Ceramic Matrix Composite for wear resistance applications”. <i>Accepted for Oral Presentation at the International Conference on Interfaces and Interphases in Multicomponent Materials-IIMM, Sheffield, UK, 1-3 September, 2010.</i>
38	M. Devaiah , S. Santhosh Kumar, T. Srihari, and T. Rajasekharan. “Mechanical properties of SiC_p/Al₂O₃ ceramic matrix composites prepared by directed metal oxidation of aluminium alloy ”. <i>Oral Presentation at the National Symposium for Materials Research Scholars, MR-10, IITM, December 13-15, 2010.</i>
39	M. Devaiah , S. Santhosh Kumar, T. Srihari, and T. Rajasekharan. “Physical properties of SiC_p/Al₂O₃ ceramic matrix composites prepared by directed metal oxidation of aluminium alloy ”. <i>Oral Presentation at the National Symposium for Materials Research Scholars, MR-10, IITM, December 13-15, 2010.</i>
40	M. Devaiah , A. Parusha Ram, T. Srihari, and T. Rajasekharan, “Elastic Properties of SiC _p /Al ₂ O ₃ Ceramic Matrix Composites Prepared by Directed Metal Oxidation of an Aluminium Alloy”, Oral Presentation at the National Conference on Recent Advances in Mechanical Engineering, 8-9, March 2012, Mechanical Engineering Department, UCE, OU Hyderabad, A.P.-500 007, India
41	M. Devaiah , T. Srihari, and T. Rajasekharan, “Identification of Growth Promoter to Fabrication of SiC _p /Al ₂ O ₃ Ceramic Matrix Composites Prepared by Directed Metal Oxidation of an Al Alloy”, Oral Presentation at the National Conference on Recent Advances in Mechanical Engineering, 8-9, March 2012, Mechanical Engineering Department, UCE, OU Hyderabad, A.P.-500 007, India.

Books/Book Chapters Published:

S. No.	Publication details
1	Dr. M. Devaiah, P, Chucharitha, Md. Jawed, “Design, Aerodynamic Analysis and Fabrication of Agricultural Drone”, LAP LAMBERT Academic Publishing, ISBN: 978-620-2-66888-0, May 2021.
2	Dr.M. Devaiah , a Textbook of “Additive Manufacturing for Medical Implants, SciMedTech Publishers, Delhi, ISBN: 9789387631076, 2 nd February, 2018.
3	Dr.M. Devaiah , a Textbook of “Additive Manufacturing for Automotive Components, Research India Publications, ISBN: 978-93-87388-02-4, December 2017.
4	Dr.M. Devaiah , a Textbook of “DIMOX Processed Al ₂ O ₃ /SiC CMCs through Al Alloy: Physical properties, LAP LAMBERT Academic Publishing, ISBN: 978-3-659-85800-0, November 2017.

Experience:

Teaching	20
Industry	01
Research	5
Total Experience	22