# CURRICULUM VITAE

	Personal Information				
Name	Dr. Madhu P				
Designa	<i>ion</i> Associate Professor & Associate Dean (Research)				
Departm	ent Mechanical Engineering				
Email	madhu.p.gowda15@gmail.com±@mcehassan.ac.in	Concerning the second			
Contact	<b>Vo.</b> +91-9740627464				
Birthpla	e Hassan, Karnataka, India				
Address	No. 49, Sri Ranganatha Nilaya, Pragathi Nagar, Near Railway				
	Station, Rajaghatta Road, Hassan - 573201.				

#### **Publications (90)**

- International Journals = 76 (SCIE = 55, Scopus = 16 & Peer reviewed = 05)
- International Conference = 04 & National Conference = 01
- Book = 01, Book Chapter = 11 (Scopus = 03) & Editorial Corner = 02
- Patents: 12 [Granted 07; Published 04; Filed 01]
- Google Scholar Citations: 5505, h-index -30 & i10 index = 62 (till September 12<sup>th</sup>, 2024)
- Research Gate Stats: Citations = 4619, Research Interest Score = 2616, Recommendations = 1319 & Number of reads = 41774 (till May 2<sup>nd</sup>, 2024)
- Vidwan Score = 9.2

## 1. Research Area [Composite Materials]

• Composite Materials, Natural Fiber Composites, Natural Fibers, Bio-Composites, Polymer Matrix Composites, Mechanical testing of natural fiber composites

#### 2. Educational Qualifications

 Ph.D. (Composite Materials), 2020, Visvesvaraya Technological University, Belagavi - 590 018, Karnataka, India.

**Thesis Title:** Characterization and mechanical behaviour of natural/ synthetic hybrid composites for structural applications.

Thesis supervisor: Dr. S. Pradeep, Dept. of Mech. Engg., MCE, Hassan

 M.Tech. (Product Design and Manufacturing), 2013, The National Institute of Engineering, Mysuru, Karnataka, INDIA. [VTU, Belagavi] **Dissertation Title:** Stress Analysis and Life Estimation of Gas Turbine Blisk for Different Materials of a Jet Engine.

Dissertation supervisor: Dr. L. Krishnamurthy, MED, NIE, Mysuru

- **3. B.E.** in Mechanical Engineering, **2011**, Government Engineering College, K.R. Pet, Mandya, Karnataka, INDIA. [VTU, Belagavi]
- **4. Diploma** in Mechanical Engineering, **2008**, Smt. L.V. Government Polytechnic, Hassan, Karnataka, INDIA.
- 5. High School (Karnataka Board), 2005, Sri Aravinda High School, Hassan, Karnataka.

#### 3. Subjects Taught

Elements of Mechanical Engineering	<ul> <li>Engineering Drawing</li> </ul>
<ul> <li>Manufacturing Science – I, II &amp; III</li> </ul>	<ul> <li>Non-Conventional Energy Sources</li> </ul>
<ul> <li>Non-Traditional Machining</li> </ul>	<ul> <li>Project Management</li> </ul>
<ul> <li>Product Design and Manufacturing</li> </ul>	<ul> <li>Geometric Dimensioning and Tolerancing</li> </ul>
<ul> <li>Composite Materials</li> </ul>	<ul> <li>Introduction to Python programming</li> </ul>
<ul> <li>Human-Computer Interaction</li> </ul>	

## 4. Experiences

#### **4.1 Teaching Experience**

Designation	Department	Institute	Duration
Assistant	Mechanical	Malnad College of Engineering,	August 2013 to June
Professor	Engineering	Hassan	2024
Associate	ISE	Malnad College of Engineering,	June 2024 to
Professor	ISE	Hassan	September 2024
Associate	Mechanical	Malnad College of Engineering,	September 2024 to
Professor	Engineering	Hassan	date

## 4.2 Administrative Experience

Assigned Post	Period
Department Seminar Co-Ordinator	August 2016 – July 2017
Department Timetable Officer	August 2017 – July 2018/August 2019 – July 2020
Department CIE Co-Ordinator	August 2019 – July 2019
Department Contineo Co-Ordinator	August 2017 to July 2023
Department Project Co-Ordinator	June 2020 to July 2023
Department R&D Committee Member	June 2020 to date
College level Interdisciplinary Projects Committee Member	August 2022 to date
IPR Activity Coordinator (IIC)	November 2022 to date
Institutional Research Advisory	August 2023 to date

Committee (IRAC)	
Malnad Technical Club Convener	May 2023 to date
NIRF Coordinator	December 2023 to date
Associate Dean (Research)	January 2024 to date

### 4.3 Organizational Experience

#### Short Term Course/ Conference/ Workshop

- **Co-ordinator** for One-week online FDP on "Advanced Materials Technology", Department of Mechanical Engineering, MCE Hassan. Duration: July1-5, 2020.
- Organizing Committee Memberin the International Conference on Trends in Mechanical Engineering Sciences - 2020 (ICTMES-2020) on the 6<sup>th</sup> and 7<sup>th</sup>of August 2020 organized by the Department of Mechanical Engineering Sciences at Malnad College of Engineering, Hassan.
- Workshop on "Being a Great Teacher", Department of Mechanical Engineering, MCE Hassan. Duration: November 3-4, 2018. Role: **Organizing Committee Member.**
- Organizing Committee Memberin the International Conference on Green Trends in Mechanical Engineering Sciences - 2018 (GTMES-2018) from 3rd to 5th October 2018 organized by the Department of Mechanical Engineering at Malnad College of Engineering, Hassan.
- Organizing Committee Memberin a Two-Day state-level event on MCE LEARNATHON AND SUPERCODERS conducted on 1<sup>st</sup>& 2<sup>nd</sup>July 2018, organized by Malnad College of Engineering, Hassan under the sponsorship of TEQIP-III.
- Organizing Committee Memberin the International Conference on Advances in Mechanical Sciences (ICAMS-2017) from 3<sup>rd</sup>to 5<sup>th</sup>May 2017 organized by the Department of Mechanical Engineering at Malnad College of Engineering, Hassan.
- Overseas Organizing Committee Member in the International Conference on Eco-friendly Fibers and Polymeric Materials (EFPM'24) on 19-20 February organized by King Mongkut's University of Technology North Bangkok, Thailand.
- Coordinator in SAMAVESHA (uniting Minds & Igniting innovations) on 13<sup>th</sup> March 2024 at MCE, Hassan organized by MCE, Hassan in association with ISTE facilities Map (I-Stem).

#### 5. Awards/ Fellowships/ Recognitions

#### 5.1 Awards

- 1. Recognized by Stanford University's list (published by Elsevier) of the World's Top 2% of the Most-Cited Scientists in Single Year Citation Impact 2021& 2022.
- Listed in AD Scientific Index Rankings (Ranked No. 1 MCE, Hassan) (Overall World Rankings in Mechanical Engineering -265 Rank in India; 1327 Rank in Asia and 4029 Rank in World)(as ofJuly2023 updated Data)
- 3. Young Researcher Award 2022 for the article "*A review on synthesis and characterization of commercially available natural fibers: Part-I*" from the Institute of Scholars(InSc).
- 4. Young Researcher (RSL078) from Global Academicians & Researchers Network (RSquareL) for the article "*Characterization and properties of natural fiber polymer composites: A comprehensive review*".
- 5. Top cited article 2020-21 "*A comprehensive review on cellulose nanocrystals and cellulose nanofibers: Pretreatment, preparation, and characterization*" Polymer Composites, Wiley.
- 6. Top cited article 2021-22 "*A comprehensive review on cellulose nanocrystals and cellulose nanofibers: Pretreatment, preparation, and characterization*" Polymer Composites, Wiley.
- 7. Top cited article 2021-22 "Influence of nanofillers on biodegradable composites: A comprehensive review" Polymer Composites, Wiley.
- 8. Top cited article 2022-23 "A comprehensive review on cellulose nanocrystals and cellulose nanofibers: Pretreatment, preparation, and characterization "Polymer Composites, Wiley.
- Top cited article 2022-23 "Carbon fiber reinforced areca/sisal hybrid composites for railway interior applications: Mechanical and morphological properties" Polymer Composites, Wiley.
- 10. Top cited article 2022-23 *"Recent developments and challenges in natural fiber composites: A review "Polymer Composites, Wiley.*
- Top downloaded article 2022-23 "A comprehensive review on cellulose nanocrystals and cellulose nanofibers: Pretreatment, preparation, and characterization" Polymer Composites, Wiley.
- 12. Top downloaded article 2022-23 "Sustainable recycling technologies for thermoplastic polymers and their composites: A review of the state of the art" Polymer Composites, Wiley.

13. Highly viewed Paper 2023 "*Role of Polymer Composites in Railway Sector: An Overview*" Applied Science and Engineering Progress (ISSN 2673-0421).

## **5.2 Fellowships**

 Associate Research Fellow (External), CACM Research Centre. Universiti Teknologi Malaysia (UTM) (September 2021 to September 2023).

### **5.3 Editorial Board Member for Journals**

- Editorial Board Member inAdvancement in Mechanical Engineering and Technology (<u>http://hbrppublication.com/OJS/index.php/AMET/about/editorialTeam</u>)
- Review Editor on Editorial Board for Polymeric and Composite Materials Frontiers in Materials (https://www.frontiersin.org/journals/materials/editors)
- Editorial Board Member in New Environmentally-Friendly Materials Journal (https://ojs.bilpub.com/index.php/nefm/about/editorialTeam)
- Editorial Board Member inArchives of Advanced Engineering Science(<u>https://ojs.bonviewpress.com/index.php/AAES/ebm</u>)
- Editorial Board Member in International Journal of Materials Science and Applications (https://www.sciencepublishinggroup.com/journal/editorialboard?journalid=123)
- Section Editor of Insight Material Science (<u>https://insight.piscomed.com/s.php?jid=31</u>)
- Editorial Board Member in Journal of Research Updates in Polymer Science
- Editorial Board Member in Discover Materials (Springer, Scopus indexed)

#### **5.4 Editor of Special Issues**

 "Trends and Developments in Natural Fiber Composites", Applied Science and Engineering Progress (ASEP) (ISSN: 2672-9156, E-ISSN: 2673-0421) (ISSN 2296-8016) indexed in SCOPUS. <u>http://ojs.kmutnb.ac.th/index.php/ijst/pages/view/AboutTheJournal</u>

#### **5.5 Reviewer of International Journals**

Details: (https://www.webofscience.com/wos/author/record/AAF-8444-2020)

- Journal of Cleaner Production, SCIE (Elsevier)
- Journal of Vinyl & Additive Technology, SCIE (Wiley)
- Symmetry (MDPI)

- Journal of Marine Science and Engineering (MDPI)
- Coatings (MDPI)
- Materials (MDPI)
- Applied Sciences (MDPI)
- Polymers (MDPI)
- Sustainable Materials and Technologies, SCIE (Elesvier)
- Archives of Computational Methods in Engineering, SCIE (Springer)
- Biomass Conversion and Biorefinery, SCIE (Springer)
- Journal of Nanomaterials, WOS (Hindawi)
- Journal of Natural Fibers, SCIE (Taylor and Francis)
- Composites Communications, SCIE (Elsevier)
- Fibers and Polymers, SCIE (Springer)
- Iranian Polymer Journal, SCIE (Springer)
- Frontiers in Materials, SCIE
- Silicon, SCIE (Springer)
- e-Polymers, SCIE (De Gruyter)
- Construction and Building Materials, SCIE (Elsevier)
- Journal of Polymers and the Environment, SCIE (Springer)
- Journal of Industrial Textiles, SCIE (Sage)
- Polymer Composites, SCIE (Wiley)
- International Journal of Industrial Chemistry, Scopus (Springer)
- Current Research in Green and Sustainable Chemistry, Scopus (Elsevier)
- Materials Today: Proceedings, Scopus (Elsevier)
- Applied Science and Engineering Progress (Scopus)
- Multiscale and Multidisciplinary Modeling, Experiments and Design, Scopus (Springer)
- Polímeros, SciELO, Google Scholar (Associação Brasileira de Polímeros ABPol)
- SN Applied Sciences, Scopus (Springer)
- The African Journal of Pure and Applied Chemistry, (Academic Journals)
- BioResources, Scopus (NC State University, USA)
- Bentham Science Publishers

#### 5.6 Reviewer/ Member of International Conference Proceedings

- International Conference on "Smart and Sustaianable Developments in Materials, Manufacturing and Energy (SME - 2019)". Duration: May 23-24, 2019, at Dept. of Mechanical Engineering, N.M.A.M. Institute of Technology, Nitte, Karnataka, India.
- International Conference on "Trends in Mechanical Sciences (ICTMES 2020)". Duration: August 6-7, 2020, at Dept. of Mechanical Engineering Sciences, MCE, Hassan, Karnataka, India.
- International Scientific Committee member in International Symposium on Lightweight and Sustainable Polymeric Materials (LSPM'23), Feb 17, 2023, King Mongkut's University of Technology North Bangkok (KMUTNB), Bangkok, Thailand.
- First Joint International Conference on "Advances in Mechanical and Aerospace Engineering (ICAMAE 2023)" Nov 28-30, 2023, Alliance University, India & University of Strathclyde, Glasgow, Scotland.
- Session Chair for the International Conference on Eco-friendly Fibers and Polymeric Materials (EFPM' 24), Bangkok, Thailand, 19-20 February 2024.
- Conference Chair in International Conference on Advnacements in Science, Technology and Management (ICASTM) 2024 – Jointly organised by Department of Computer Science, St. Xavier's College of Management & Technology, Patna, Bihar, India & Global Conference Hub, Coimbatore, Tamilnadu, India on April 25-26, 2024.

#### **5.7 Reviewer of International Book Proposals**

- 1. Springer Publication.
- 2. Elsevier Publication.

#### **5.8 Membership of Professional Societies**

- Life Member, LM-99122 (2014) Indian Society for Technical Education (ISTE), New Delhi, India.
- 2. Associate Member, AMI58376-2 (2015) Institution of Engineers (IE), India.
- 3. Member, MIAENG-172340 (2015) International Association of Engineers (IAENG).
- Life Member, M415090171 (2015) International Society for Research and Development (ISRD). London Press, United Kingdom.
- 5. F-R Square L, Fellow Life Member of RSquareL (2022).

## 6. LMINSC, Life Member of Institute of Scholars (2022).

## 6. Patents

Sl. No.	Title	Туре	Inventors	Application No.	Date of filing	Status
1.	Development of Hybrid Polymer Composites Reinforced with Prosopis Juliflora Bark Fibers, Phoenix Pusilla Leaf Fibers, Glass Fabrics and Carbon Fabrics	Indian Utility Patent	Madhu P, Sanjay M R, Pradeep S, H Mohit, Yogesha B, Suchart Siengchin	202041000392	04/01/2020	Granted (419287), 25/01/2023
2.	Development of Toolbox Material from Hybrid Composites Reinforced with NC, NDL, NK, GF and NP- MMC	Indian Utility Patent	H Mohit, G Hemath Kumar, V Arul Mozhi Selvan, Sanjay M R, Suchart Siengchin, Madhu P	201941045139	06/11/2019	Published
3.	Development of Advanced Prosthetic Device for Blind Amputees	Indian Utility Patent	Vivek S T, Rakesh K Y, Amit B, Madhu P, Vardhaman College of Engineering, Hyderabad, Telangana, Mohit Gupta, B K Sarkar	202141051978	12/11/2021	Granted (530306), 26/03/2024
4.	DeviceandSystem toMendPolymerandCompositeSheetsSheetsonGreenhousesandPolysheetShadenetShadenetStructures	Indian Utility Patent	K Bindu Kumar, Surakasi R, Suresh C, Nekkanti H, Madhu P, L Nagarajan	202241044724	05/08/2022	Awaiting Request for Examination
5.	Smart oil level and condition indicating brake lever	Indian design patent	S Premalatha, Madhu P, Yashas Gowda T G, R Kumaravelan, K M Akkoli,	399240-001	04/11/2023	Design accepted and published, 26/04/2024

			Vutukuru Shravan			
6.	Nano materials to replace the augment human tissues	Indian Utility Patent	KoundinyaMadhuP,ReenaSingh,Rahul,PawanKumar Singh,BKSarkar,Vandana Singh	202441011121	17/02/2024	Filed
7.		1117	S V Reddy, Sree Balaji V S,	6299074 (UK Design No.)	26/07/2023	09/08/2023
8.	Multi-Socketed Terminal Board with Wireless Audio Player	UK- Indian Dual Patent	Pritam P, Calwin P S, Prasoon P P, Dheivanai R, Madhu P	396980-001 (Indian Design No.)	26/07/2023	07/10/2023
9.	IoT based Paralysis Treatment Device	Indian design patent	S Vijayalakshmi, S Sweetkine Shamini, A Umarani, Madhu P, Raghavendra M Devadas, Anand Bhat B	414650-001	24/04/2024	Design accepted and published, 05/07/2024
10.	Advanced Prosthetic Limb with Adaptive Control and RealTime Monitoring	UK Design Patent	Lakshmi Kanthan B S, Madhu P, Hemanth T S, Saran Raja, Selvi V, Shri Om Mishra	6373631	23/06/2024	01/07/2024
11.	Eco-Friendly Venturimeter: Chemically Treated Coir Fiber Reinforced Bio-Pla Composite Via 3d Printing	Indian Utility Patent	Karthik S, Madhu P, Sharath B N, Prem Kumar B G, Madhu K S, Jeevan T P, Hemanth T S, Pradeep D G	202441053537	12/07/2024	02/08/2024
12.	Plant disease identification device using AI	Indian design patent	ShashankS,HarshaS,MadhuP.Pushpalata,MuktaJ,AnuragS,AmitS	421577-001	28/06/2024	02/08/2024

#### 7. Projects/ Research Grants

 Bio- Nanocomposites from organic waste for coatings and steel corrosion inhibitors (Awarded on 27<sup>th</sup> November 2023)

Funding agency: Institute for Research and Community Service, Brawijaya University.

Duration: 1 Year

Amount: IDR 2000.000.000 (Rs. 10,63,179.56/-)

Principal Investigator: Dr. Ir. Femiana Gapsari; My Role: World University's Partner

2. Experimental investigation on machining performance of cutting fluids derived from blended nonedible vegetable oil (Awarded in November 2020, Ongoing)

Funding agency: Vision Group on Science & Technology, Department of IT, BT and Science & Technology, Government of Karnataka.

Duration: 1 Year

Amount: Rs. 3,00,000/-

Principal Investigator: Dr. T. P. Jeevan; Co Investigator: Dr. Madhu P, MCE, Hassan

- Development of Areca/ Sisal/ Carbon Woven Fabrics Vinylester Hybrid Composites for Medium Load Structural Application (2019-20)(KSCST – Student Project (Rs. 6000/-)) (43S\_BE\_1772)
- Investigation on Ballistic Mechanical Characteristics of Ramie-Hemp-Kevlar Based Vinyl Ester Hybrid Composites (2021-22)(KSCST – Student Project (Rs. 7000/-)) (45S\_BE\_0987) (Selected for State Level Seminar)
- Irradiation Effect on Mechanical Properties of Flax Fabric Reinforced Polymer Compositesfor Spacecraft Application (2022-23) (KSCST – Student Project (Rs. 8000/-)) (46S BE 0493)
- Exploring Mechanical and Tribological Behaviour of Aramid Fiber-Based Phenolic Composites With Gr/Al Fillers for Potential Automotive Brake Pad Applications (2023-24) (KSCST – Student Project (Rs. 7000/-)) (47S\_BE\_0792)

#### 8. List of publications Book (1)

Sl. No.	Citations	Publisher
1.	Rangappa SM, <b>Madhu P</b> , Parameswaranpillai J, Siengchin S, Gorbatyuk SM, editors. Advances in Bio-Based Fiber: Moving Towards a Green Society. Woodhead Publishing; 2021 Dec	Publishing Elsovier

	1.eBook	ISBN:	9780128245446;	Paperback	ISBN:
	978012824	45439.			

## **Book Chapters (11)**

Sl. No.	Citations	Publisher
1.	Goilkar SS, Prasad SV, <b>Madhu P</b> , Goilkar SS, Chandra S. Biometric Authentication and Theft Alert System for Motorcycles Using IoT. InContemporary Solutions for Sustainable Transportation Practices 2024 (pp. 408-435). IGI Global. (Scopus)	IGI Global
2.	Sharath BN, <b>Madhu P</b> , Pradeep DG, Thanush HG, Kumar KM, Manoj S, Verma A. Unveiling the Potential of Age Hardened Aluminum Alloys: Strengthening Solutions for Engineering Challenges. InHybrid Composite Materials: Experimental and Theoretical Analysis 2024 May 19 (pp. 349-369). Singapore: Springer Nature Singapore.	Springer Singapore
3.	Sathyanarayana K, <b>Madhu P</b> , Rangappa SM, Siengchin S, Shivanna P, Nagaraju SB, Somashekara MK, Girijashankar PB, Girijappa YG. Metallic lightweight materials: properties and their applications. InLightweight and Sustainable Composite Materials 2023 Jan 1 (pp. 47-67). Woodhead Publishing.	Woodhead Publishing, Elsevier
4.	Nagaraju SB, Priya HC, Girijappa YG, <b>Madhu P</b> . Lightweight and sustainable materials for aerospace applications. InLightweight and Sustainable Composite Materials 2023 Jan 1 (pp. 157-178). Woodhead Publishing.	Woodhead Publishing, Elsevier
5.	Jagadeesh P, <b>Madhu P</b> , Girijappa YG, Sathyanarayana K, Rangappa SM, Siengchin S, Hassan SA. Lightweight and sustainable materials for structural applications. InLightweight and Sustainable Composite Materials 2023 Jan 1 (pp. 197-217). Woodhead Publishing.	Woodhead Publishing, Elsevier
6.	Rangappa SM, <b>Madhu P</b> , Parameswaranpillai J, Siengchin S, Ozbakkaloglu T, Wang H. Introduction to plant fibers and their composites. InPlant Fibers, their Composites, and Applications 2022 Jan 1 (pp. 1-24). Woodhead Publishing.	Woodhead Publishing, Elsevier
7.	<b>Madhu P</b> , Praveenkumara J, Sanjay MR, Siengchin S, Gorbatyuk S. Introduction to bio-based fibers and their composites. InAdvances in Bio-Based Fiber 2022 Jan 1 (pp. 1-20). Woodhead Publishing.	Woodhead Publishing, Elsevier
8.	Girijappa YG, Ayyappan V, <b>Madhu P</b> , Rangappa SM, Parameswaranpillai J, Siengchin S. Plastics in automotive applications.	Elsevier
9.	Jagadeesh P, <b>Madhu P</b> , Girijappa YG, Rangappa SM, Gupta MK, Siengchin S. Mechanical, electrical and thermal behaviour of additively manufactured thermoplastic composites for high performance applications. Additive and subtractive manufacturing of composites. 2021:167-99.	Springer
10.	<b>Madhu P</b> , Thyavihalli Girijappa YG, Mavinkere Rangappa S, Parameswaranpillai J, Siengchin S. Effect of process engineering on the performance of hybrid fiber composites. Hybrid fiber composites: materials, manufacturing, process engineering. 2020	Wiley-VCH Verlag GmbH & Co. KGaA

	Oct 12:17-40.	
11.	<b>Madhu P</b> , Rangappa SM, Jawaid M, Shivanna P, Basavegowda Y, Saba N. Potential of natural/synthetic hybrid composites for aerospace applications. InSustainable composites for aerospace applications 2018 Jan 1 (pp. 315-351). Woodhead Publishing.	Woodhead

## **Editorial Corner (2)**

Sl. No.	Citations	Publisher
1.	<b>Madhu P</b> , Pulikkalparambil H, Rangappa SM. Trends and developments in natural fiber composites. Applied Science and Engineering Progress. 2021 Oct 7;14(4):543-52.	
2.	<b>Madhu P</b> , Girijappa YG. Innovative polymer science: Groundbreaking materials for a sustainable future. Insight-Material Science. 2023 Oct 9;6(1).	-

## Journals (76)

Sl. No.	Citations	Indexing, Impact Factor and Quartile		
1.	Devendrappa SK, <b>Madhu P</b> , Sharath BN. Enhancing Wear Resistance, Mechanical Properties of Composite Materials through Sisal and Glass Fiber Reinforcement with Epoxy Resin and Graphite Filler. Journal of the Indian Chemical Society. 2024 Aug 30:101349.	SCIE, 3.2, Q3		
2.	<ol> <li>Nagaraju SB, Madhu P, Girijappa YG, Rawat NK, Verma A, Rangappa SM, Siengchin S. Mechanical Characterization and Water Absorption Behavior of Waste Coconut Leaf Stalk Fiber Reinforced Hybrid Polymer Composite: Impact of Chemical Treatment. Applied Science and Engineering Progress. 2024 Jul 2;17(3):7371</li> </ol>			
3.	Jagadeesh P, <b>Madhu P</b> , Suyambulingam I, Gupta MK, Mavinkere Rangappa S, Siengchin S. Analysis of friction and wear performance of eco-friendly basalt filler reinforced polylactic acid composite using the Taguchi approach. Journal of Thermoplastic Composite Materials. 2024 Jul;37(7):2479-504.	SCIE, 3.3, Q2		
4.	Sharath BN, <b>Madhu P</b> , Verma A. Wear behaviour of aluminium- based hybrid composites processed by equal channel angular pressing. Proceedings of the Institution of Mechanical Engineers, Part J: Journal of Engineering Tribology. 2024 Apr 17:13506501241247616.	SCIE, 2.0, Q2		
5.	Sharath BN, Yashas Gowda TG, <b>Madhu P</b> , Pradeep Kumar CB, Jain N, Verma A, Sanjay MR, Siengchin S. Fabrication of raw and chemically treated biodegradable Luffa aegyptica fruit fibre-based hybrid epoxy composite: a mechanical and morphological investigation. Biomass Conversion and Biorefinery. 2024 Apr 8:1-4.	SCIE, 4.0, Q2		

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6.	Nagaraju SB, <b>Madhu P</b> , Somashekara MK, Girijappa TG, Govindaswamy PD, Sathyanarayana K. Advancing the Performance of Ceramic-Reinforced Aluminum Hybrid Composites: A Comprehensive Review and Future Perspectives. Applied Science and Engineering Progress. 2024 Apr 3;17(2):7034-7034.		
7.	Nagaraju SB, Sathyanarayana K, Somashekara MK, Pradeep DG, <b>Madhu P</b> , Verma A. Artificial neural networks for predicting mechanical properties of Al2219-B4C-Gr composites with multireinforcements. Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science. 2024 Mar;238(6):2170-84.	SCI, 1.762, Q2	
8.	Gowda AH, Goud G, Sathynarayana K, <b>Madhu P</b> . Influence of Water Absorption on Mechanical and Morphological Behaviour of Roystonea-Regia/Banana Hybrid Polyester Composites. Applied Science and Engineering Progress. 2024 Feb 9;17(1):7074	Scopus, Q2	
9.	Sharath BN, Madhu KS, Pradeep DG, <b>Madhu P</b> , Premkumar BG, Karthik S. High Temperature Tensile Behaviour of Ceramic- Hybridized Metal Matrix Composites for Above-Room- Temperature Applications. Silicon. 2024 Feb;16(3):1205-16.	SCIE, 3.4, Q2	
10.	Jagadeesh P, <b>Madhu P</b> , Rangappa SM, Siengchin S. Accelerated weathering of sustainable and micro-filler Basalt reinforced polymer biocomposites: Physical, mechanical, thermal, wettability, and water absorption studies. Journal of Building Engineering. 2023 Dec 1;80:108040.	SCIE, 6.4, Q1	
11.	Nagaraju SB, Somashekara MK, Govindaswamy PD, <b>Madhu P</b> , Shankar PB, Sathyanarayana K. Wear behaviour of hybrid (boron carbide-graphite) aluminium matrix composites under high temperature. Journal of Engineering and Applied Science. 2023 Dec;70(1):124.	Scopus	
12.	Sharath BN, Karthik S, <b>Madhu P</b> , Madhu KS, Pradeep DG. Predictive Analysis of Slurry Erosion Behaviour in Aluminium- Based Hybrid Metal Matrix Composites: Experimental and Machine Learning Approach. Journal of Bio-and Tribo-Corrosion. 2023 Dec;9(4):70.	Scopus, Q2	
13.	Jagadeesh P, Rangappa SM, <b>Madhu P</b> , Suyambulingam I, Siengchin S. Thermal analysis of sustainable and micro-filler Basalt reinforced polymer biocomposites for lightweight applications. Journal of Building Engineering. 2023 Nov 15;79:107869.	SCIE, 6.4, Q1	
14.	Karthik S, Sharath BN, <b>Madhu P</b> , Madhu KS, Prem Kumar BG, Verma A. Experimental and artificial neural network-based slurry erosion behavior evaluation of cast iron. International Journal on Interactive Design and Manufacturing (IJIDeM). 2023 Nov 13:1-1.	Scopus, 2.1, Q2	
15.	Sharath BN, <b>Madhu P</b> , Verma A. Enhancing tribological performance: a review of ceramic reinforced aluminium hybrid composites for high-temperature engineering applications. Hybrid	DOAJ	

	Advances. 2023 Oct 1:100094.	
16.	Sharath BN, Madhu KS, Pradeep DG, <b>Madhu P</b> , Premkumar BG, Karthik S. Effects of tertiary ceramic additives on the micro hardness and wear characteristics of Al2618+ Si3N4-B4C-Gr hybrid composites for automotive applications. Journal of Alloys and Metallurgical Systems. 2023 Sep 1;3:100014.	Scopus
17.	Nagaraju SB, Somashekara MK, Govindaswamy PD, <b>Madhu P</b> , Girijashankar PB, Sathyanarayana K. Mechanical characterization of B4C-Gr Al2618 based composites synthesized by stir casting method. Applied Science and Engineering Progress. 2023 Aug 23;16(3):6579	Scopus, Q2
18.	TG YG, Ballupete Nagaraju S, <b>Madhu P</b> , Verma A, Rangappa SM, Siengchin S. Biopolymer-based composites: an eco-friendly alternative from agricultural waste biomass. Journal of Composites Science. 2023 Jun 11;7(6):242.	Scopus, 3.3, Q2
19.	Jagadeesh P, <b>Madhu P</b> , Thyavihalli Girijappa YG, Shivanna P, Mavinkere Rangappa S, Siengchin S. Investigations on physical, mechanical, morphological and water absorption properties of ramie/hemp/kevlar reinforced vinyl ester hybrid composites. Journal of Vinyl and Additive Technology. 2023 May;29(3):555- 67.	SCIE, 2.7, Q2
20.	Bharath KN, <b>Madhu P</b> , Yashas Gowda TG, Arpitha GR, Pradeep S, Rangappa SM, Siengchin S. Development of banana fabric incorporated polymer composites for printed circuit board application. Biomass Conversion and Biorefinery. 2023 Apr 29:1-4.	SCIE, 4.0, Q2
21.	Manjulaiah H, Dhanraj S, Basavegowda Y, Lamani LN, <b>Madhu P</b> , Rangappa SM, Siengchin S. A novel study on the development of sisal-jute fiber epoxy filler–based composites for brake pad application. Biomass Conversion and Biorefinery. 2023 Apr 25:1-3.	SCIE, 4.0, Q2
22.	Bharath KN, <b>Madhu P</b> , Mavinkere Rangappa S, Basavarajappa S, Siengchin S, Khan A, Gorbatyuk SM. Study of treatment effect on the Cocos Nucifera lignocellulosic fibers as alternative for polymer composites. Journal of Natural Fibers. 2023 Apr 24;20(1):2134257.	SCIE, 3.5, Q2
23.	Jagadeesh P, Rangappa SM, Suyambulingam I, Siengchin S, <b>Madhu P</b> , Binoj JS, Gorbatyuk S, Khan A, Doddamani M, Fiore V, Cuadrado MM. Drilling characteristics and properties analysis of fiber reinforced polymer composites: A comprehensive review. Heliyon. 2023 Mar 1.	SCIE, 4.0, Q1
24.	Arpitha GR, Mohit H, <b>Madhu P</b> , Verma A. Effect of sugarcane bagasse and alumina reinforcements on physical, mechanical, and thermal characteristics of epoxy composites using artificial neural networks and response surface methodology. Biomass Conversion and Biorefinery. 2023 Feb 3:1-9.	SCIE, 4.0, Q2
25.	Sharath BN, Madhu KS, Pradeep DG, Madhu P, Premkumar BG, Karthik S. Conjectured hybrid power with artificial intelligence and single-axis solar tracking wind turbine. International Journal of	Scopus

	Energy and Water Resources. 2023 Jan 24:1-7.	
26.	Ballupete Nagaraju S, Kodigarahalli Somashekara M, <b>Madhu P</b> , Manjulaiah H, Kini CR, Channarayapattana Venkataramaiah V. Effect of B4C/Gr on hardness and wear behavior of Al2618 based hybrid composites through taguchi and artificial neural network analysis. Catalysts. 2022 Dec 15;12(12):1654.	SCIE, 3.9, Q2
27.	Manimaran P, Vignesh V, Khan A, Pillai GP, Nagarajan KJ, Prithiviraj M, Al-Romaizan AN, Hussein MA, <b>Madhu P</b> , Asiri AM. Extraction and characterization of natural lignocellulosic fibres from Typha angustata grass. International Journal of Biological Macromolecules. 2022 Dec 1;222:1840-51.	SCIE, 8.2, Q1
28.	<b>Madhu P</b> , Rangappa SM, Khan A, Al-Zahrani SA, Otaibi AA, Shivanna P, Liu Y, Siengchin S. Effect of layering sequence on impact properties of alkali treated phoenix pusilla fibers-glass-carbon fabrics reinforced hybrid composite laminates. Journal of Natural Fibers. 2022 Dec 1;19(13):6878-88.	SCIE, 3.5, Q2
29.	Jagadeesh P, <b>Madhu P</b> , Thyavihalli Girijappa YG, Rangappa SM, Siengchin S. Effect of natural filler materials on fiber reinforced hybrid polymer composites: An Overview. Journal of Natural Fibers. 2022 Nov 2;19(11):4132-47.	SCIE, 3.5, Q2
30.	<b>Madhu P</b> , Sanjay MR, Khan A, Otaibi AA, Al-Zahrani SA, Pradeep S, Yogesha B, Boonyasopon P, Siengchin S. Hybrid effect of PJFs/E-glass/carbon fabric reinforced hybrid epoxy composites for structural applications. Journal of Natural Fibers. 2022 Oct 3;19(10):3742-52.	SCIE, 3.5, Q2
31.	Patil MB, Rajamani SB, Mathad SN, Patil AY, Hussain MA, Alorfii HS, Khan A, Asiri AM, Khan I, <b>Madhu P</b> . Microwave-assisted synthesis of poly (acrylamide-co-2-hydroxyethyl methacrylate)/chitosan semi-IPN ZnO nanocomposite membranes for food packaging applications. Journal of Materials Research and Technology. 2022 Sep 1;20:3537-48.	SCIE, 6.4, Q1
32.	Jagadeesh P, Mavinkere Rangappa S, Siengchin S, <b>Madhu P</b> , Thiagamani SM, Hemath Kumar M, Oladijo OP, Fiore V, Moure Cuadrado MM. Sustainable recycling technologies for thermoplastic polymers and their composites: A review of the state of the art. Polymer Composites. 2022 Sep;43(9):5831-62.	SCIE, 5.2, Q1
33.	Yashas Gowda TG, Vinod A, <b>Madhu P</b> , Sanjay MR, Siengchin S, Jawaid M. Areca/Synthetic fibers reinforced based epoxy hybrid composites for semi-structural applications. Polymer Composites. 2022 Aug;43(8):5222-34.	SCIE, 5.2, Q1
34.	Yashas Gowda TG, <b>Madhu P</b> , Mavinkere Rangappa S, Siengchin S, Jawaid M. Mechanical and thermal properties of flax/carbon/kevlar based epoxy hybrid composites. Polymer Composites. 2022 Aug;43(8):5649-62.	SCIE, 5.2, Q1
35.	Praveenkumara J, <b>Madhu P</b> , Yashas Gowda TG, Sanjay MR, Siengchin S. A comprehensive review on the effect of synthetic	Scopus, 1.7, Q2

	filler materials on fiber-reinforced hybrid polymer composites. The Journal of the Textile Institute. 2022 Jul 3;113(7):1231-9.	
36.	Yashas Gowda TG, <b>Madhu P</b> , Kushvaha V, Rangappa SM, Siengchin S. Comparative evaluation of areca/carbon/basalt fiber reinforced epoxy/bio epoxy based hybrid composites. Polymer Composites. 2022 Jul;43(7):4179-90.	SCIE, 5.2, Q1
37.	Jagadeesh P, <b>Madhu P</b> , Rangappa SM, Alexey K, Gorbatyuk S, Khan A, Doddamani M, Siengchin S. A comprehensive review on 3D printing advancements in polymer composites: Technologies, materials, and applications. The International Journal of Advanced Manufacturing Technology. 2022 Jul;121(1):127-69.	SCIE, 3.4, Q2
38.	Sangeetha P, Nageshwari M, Kumari CR, Srividhya S, Vinitha G, Mathubala G, Manikandan A, Caroline ML, Khan A, Alorfi HS, <b>Madhu P</b> , Hussein MA. Growth and characterization of second and third order acentric studies of 1-phenylalanine 1-phenylalaninium malonate single crystal. Crystals. 2022 Jun 20;12(6):869.	SCIE, 2.7, Q2
39.	Kangokar Mukesh S, Bettagowda N, Praveenkumara J, Thyavihalli Girijappa YG, <b>Madhu P</b> , Mavinkere Rangappa S, Siengchin S, Gorbatyuk S. Influence of stacking sequence on flax/kevlar hybrid epoxy composites: Mechanical and morphological studies. Polymer Composites. 2022 Jun;43(6):3782-93.	SCIE, 5.2, Q1
40.	Jagadeesh P, <b>Madhu P</b> , Rangappa SM, Siengchin S. Role of polymer composites in railway sector: an overview. Applied Science and Engineering Progress. 2022 May 27;15(2):5745	Scopus, Q2
41.	Ajeesha TL, Manikandan A, Anantharaman A, Jansi S, Durka M, Almessiere MA, Slimani Y, Baykal A, Asiri AM, Kasmery HA, <b>Madhu P</b> , Khan A. Structural investigation of Cu doped calcium ferrite (Ca1-xCuxFe2O4; $x = 0, 0.2, 0.4, 0.6, 0.8, 1$ ) nanomaterials prepared by co-precipitation method. Journal of Materials Research and Technology. 2022 May 1;18:705-19.	SCIE, 6.4, Q1
42.	Jagadeesh P, <b>Madhu P</b> , Boonyasopon P, Rangappa SM, Khan A, Siengchin S. Recent developments and challenges in natural fiber composites: A review. Polymer Composites. 2022 May;43(5):2545-61.	SCIE, 5.2, Q1
43.	Khan A, <b>Madhu P</b> , Jagadeesh P, Marwani HM, Asiri AM, Manikandan A, Khan AA, Ashraf GM, Rangappa SM, Siengchin S. Review on nitride compounds and its polymer composites: a multifunctional material. Journal of Materials Research and Technology. 2022 May 1;18:2175-93.	SCIE, 6.4, Q1
44.	Bharath KN, <b>Madhu P</b> , Mavinkere Rangappa S, S B, Siengchin S, Alexey K, Gorbatyuk S. Waste coconut leaf sheath as reinforcement composite material with phenol-formaldehyde matrix. Polymer Composites. 2022 Apr;43(4):1985-95.	SCIE, 5.2, Q1
45.	Jagadeesh P, <b>Madhu P</b> , Oladijo OP, Lai CW, Gorbatyuk S, Matykiewicz D, Rangappa SM, Siengchin S. A comprehensive review on polymer composites in railway applications. Polymer	SCIE, 5.2, Q1

	Composites. 2022 Mar;43(3):1238-51.	
46.	Muthuppalani M, Otaibi AA, Balasubramaniyan S, Manikandan S, Manimaran P, Mathubala G, Manikandan A, Arshad MN, <b>Madhu</b> <b>P</b> , Alorfi HS, Khan A. Synthesis, Characterization and Bio- Potential Activities of Co (II) and Ni (II) Complexes with O and N Donor Mixed Ligands. Crystals. 2022 Feb 26;12(3):326.	SCIE, 2.7, Q2
47.	Patil M, Mathad SN, Patil AY, Arshad MN, Alorfi HS, <b>Madhu P</b> , Asiri AM, Khan A, Azum N. Synthesis and Characterization of Microwave-Assisted Copolymer Membranes of Poly (vinyl alcohol)-g-starch-methacrylate and Their Evaluation for Gas Transport Properties. Polymers. 2022 Jan 17;14(2):350.	SCIE, 5.0, Q1
48.	Jagadeesh P, <b>Madhu P</b> , Girijappa YG, Rangappa SM, Siengchin S. Carbon fiber reinforced areca/sisal hybrid composites for railway interior applications: Mechanical and morphological properties. Polymer Composites. 2022 Jan;43(1):160-72.	SCIE, 5.2, Q1
49.	Ansari A, Siddiqui VU, Akram MK, Siddiqi WA, Khan A, Al- Romaizan AN, Hussein MA, <b>Madhu P</b> . Synthesis of atmospherically stable zero-valent iron nanoparticles (nZVI) for the efficient catalytic treatment of high-strength domestic wastewater. Catalysts. 2021 Dec 27;12(1):26.	SCIE, 3.9, Q2
50.	Jagadeesh P, <b>Madhu P</b> , Mavinkere Rangappa S, Siengchin S. A review on extraction, chemical treatment, characterization of natural fibers and its composites for potential applications. Polymer Composites. 2021 Dec;42(12):6239-64.	SCIE, 5.2, Q1
51.	Jagadeesh P, <b>Madhu P</b> , Mavinkere Rangappa S, Siengchin S. Influence of nanofillers on biodegradable composites: A comprehensive review. Polymer composites. 2021 Nov;42(11):5691-711.	SCIE, 5.2, Q1
52.	Kabeerdass N, Al Otaibi A, Rajendran M, Manikandan A, Kashmery HA, Rahman MM, <b>Madhu P</b> , Khan A, Asiri AM, Mathanmohun M. Bacillus-mediated silver nanoparticle synthesis and its antagonistic activity against bacterial and fungal pathogens. Antibiotics. 2021 Nov 1;10(11):1334.	SCIE, 4.8, Q1
53.	Sri VS, Manikandan A, Mathankumar M, Tamizhselvi R, George M, Murugaiah K, Kashmery HA, Al-Zahrani SA, <b>Madhu P</b> , Khan A, Asiri AM. Unveiling the photosensitive and magnetic properties of amorphous iron nanoparticles with its application towards decontamination of water and cancer treatment. Journal of Materials Research and Technology. 2021 Nov 1;15:99-118.	SCIE, 6.4, Q1
54.	Kumari CR, Al Otaibi A, Kamaraj T, Nageshwari M, Mathubala G, Manikandan A, Caroline ML, Sudha S, Kashmery HA, <b>Madhu P</b> , Khan A. A brief study on optical and mechanical properties of an organic material: urea glutaric acid (2/1)—a third order nonlinear optical single crystal. Crystals. 2021 Oct 14;11(10):1239.	SCIE, 2.7, Q2
55.	Jagadeesh P, Ningappa VS, <b>Madhu P</b> , Girijappa YG, Rangappa SM, Khan MR, Khan I, Siengchin S. Pongamia pinnata shell	SCIE, 5.2, Q1

	powder filled sisal/kevlar hybrid composites: physicomechanical and morphological characteristics. Polymer Composites. 2021 Sep;42(9):4434-47.	
56.	Nagarajan KJ, Ramanujam NR, Sanjay MR, Siengchin S, Surya Rajan B, Sathick Basha K, <b>Madhu P</b> , Raghav GR. A comprehensive review on cellulose nanocrystals and cellulose nanofibers: Pretreatment, preparation, and characterization. Polymer Composites. 2021 Apr;42(4):1588-630.	SCIE, 5.2, Q1
57.	TG YG, <b>Madhu P</b> , Kushvaha V, MR S, Siengchin S. A new study on flax-basalt-carbon fiber reinforced epoxy/bioepoxy hybrid composites. Polymer Composites. 2021 Apr;42(4):1891-900.	SCIE, 5.2, Q1
58.	Bharath KN, <b>Madhu P</b> , Yashas Gowda TG, Verma A, Sanjay MR, Siengchin S. Mechanical and chemical properties evaluation of sheep wool fiber–reinforced vinylester and polyester composites. Materials Performance and Characterization. 2021 Mar 15;10(1):99-109.	Scopus, Q3
59.	Madhu P, Bharath KN, Sanjay MR, Arpitha GR, Saravanabavan D. Effect of nano fillers on glass/silk fibers based reinforced polymer composites. Materials Today: Proceedings. 2021 Jan 1;46:9032-5.	Scopus
60.	<b>Madhu P</b> , Mavinkere Rangappa S, Khan A, Al Otaibi A, Al-Zahrani SA, Pradeep S, Gupta MK, Boonyasopon P, Siengchin S. Experimental investigation on the mechanical and morphological behavior of Prosopis juliflora bark fibers/E-glass/carbon fabrics reinforced hybrid polymeric composites for structural applications. Polymer Composites. 2020 Dec;41(12):4983-93.	SCIE, 5.2, Q1
61.	Madhu P, M. Rangappa S, Khan A, Al-Zahrani SA, Al Otaibi A, Shivanna P, Moure MM, Siengchin S. Preparation and characterization of new hybrid polymer composites from Phoenix pusilla fibers/E-glass/carbon fabrics on potential engineering applications: Effect of stacking sequence. Polymer Composites. 2020 Nov;41(11):4572-82.	SCIE, 5.2, Q1
62.	Bharath KN, <b>Madhu P</b> , Gowda TG, Verma A, Sanjay MR, Siengchin S. A novel approach for development of printed circuit board from biofiber based composites. Polymer Composites. 2020 Nov;41(11):4550-8.	SCIE, 5.2, Q1
63.	Bharath KN, <b>Madhu P</b> , Gowda TY, Sanjay MR, Kushvaha V, Siengchin S. Alkaline effect on characterization of discarded waste of Moringa oleifera fiber as a potential eco-friendly reinforcement for biocomposites. Journal of Polymers and the Environment. 2020 Nov;28:2823-36.	SCIE, 5.3, Q1
64.	Madhu P, Sanjay MR, Jawaid M, Siengchin S, Khan A, Pruncu CI. A new study on effect of various chemical treatments on Agave Americana fiber for composite reinforcement: Physico-chemical, thermal, mechanical and morphological properties. Polymer Testing. 2020 May 1;85:106437.	SCIE, 5.1, Q1

65.	<b>Madhu P</b> , Sanjay MR, Senthamaraikannan P, Pradeep S, Saravanakumar SS, Yogesha B. A review on synthesis and characterization of commercially available natural fibers: Part-I. Journal of Natural Fibers. 2018 Apr 5.	SCIE, 3.5, Q2
66.	Madhu P, Pradeep S, Sanjay MR, Siengchin S. Characterization of raw and alkali treated prosopis juliflora fibers for potential polymer composite reinforcement. InIOP Conference Series: Materials Science and Engineering 2019 Nov 1 (Vol. 653, No. 1, p. 012016). IOP Publishing.	Peer Reviewed
67.	Madhu P, Sanjay MR, Pradeep S, Bhat KS, Yogesha B, Siengchin S. Characterization of cellulosic fibre from Phoenix pusilla leaves as potential reinforcement for polymeric composites. Journal of Materials Research and Technology. 2019 May 1;8(3):2597-604.	SCIE, 6.4, Q1
68.	<b>Madhu P</b> , Sanjay MR, Senthamaraikannan P, Pradeep S, Saravanakumar SS, Yogesha B. A review on synthesis and characterization of commercially available natural fibers: Part II. Journal of Natural Fibers. 2019 Jan 2;16(1):25-36.	SCIE, 3.5, Q2
69.	Madhu P, Sanjay MR, Senthamaraikannan P, Pradeep S, Siengchin S, Jawaid M, Kathiresan M. Effect of various chemical treatments of Prosopis juliflora fibers as composite reinforcement: Physicochemical, thermal, mechanical, and morphological properties. Journal of Natural Fibers. 2018 Oct 22.	SCIE, 3.5, Q2
70.	Athith D, Sanjay MR, Yashas Gowda TG, <b>Madhu P</b> , Arpitha GR, Yogesha B, Omri MA. Effect of tungsten carbide on mechanical and tribological properties of jute/sisal/E-glass fabrics reinforced natural rubber/epoxy composites. Journal of Industrial Textiles. 2018 Oct;48(4):713-37.	SCIE, 3.2, Q2
71.	Sanjay MR, <b>Madhu P</b> , Jawaid M, Senthamaraikannan P, Senthil S, Pradeep S. Characterization and properties of natural fiber polymer composites: A comprehensive review. Journal of Cleaner Production. 2018 Jan 20;172:566-81.	SCIE, 11.1, Q1
72.	Praveenkumara J, <b>Madhu P</b> , Yashas Gowda TG, Pradeep S. Studies on mechanical properties of bamboo/carbon fiber reinforced epoxy hybrid composites filled with SiC particulates. International Journal of Engineering Research and General Science. 2018;6(5):43-50.	Peer Reviewed
73.	Praveenkumara J, Sunder RN, Chandan HR, Srivathsa M, Madhu P. Natural fibers and its composites for engineering applications: An Overview. InSARC International Conference, Chennai India 2017 Dec 13.	Peer Reviewed
74.	Yashas Gowda TG, Sanjay MR, Subrahmanya Bhat K, <b>Madhu P</b> , Senthamaraikannan P, Yogesha B. Polymer matrix-natural fiber composites: An overview. Cogent Engineering. 2018 Jan 1;5(1):1446667.	Scopus, Q2
75.	Madhu P. Stress analysis and life estimation of gas turbine blisk for different materials of a jet engine. International Journal of	Peer Reviewed

	Science and Research. 2016;5(6):1103-7.	
76.	<b>Madhu P</b> , Pradeep S, Mallappa D, Manjunath H, Ningappa N, Prashant M. Electrical Power Generation by Footsteps using Piezo- electric Transducers. International Journal of Recent Trends in Engineering & Research. 2016.	Peer Reviewed

#### **Conferences**

#### **International Conferences**

- Kiran Kumar, Pradeep S, Madhu P, Jeevan T. P. "Experimental Investigation of SiC/ Al<sub>2</sub>O<sub>3</sub> Reinforced Al 6082 Hybrid Metal Matrix Composites", International Conference on Trends in Mechanical Engineering Sciences (ICTMES-2020), August 6-7<sup>th</sup> 2020 at Malnad College of Engineering, Hassan.
- P. Madhu, K. N. Bharath, M. R. Sanjay, G. R. Arpitha, D. Saravanabavan, "Effect of Nano Fillers on Glass/ Silk Fibers Based Reinforced Polymer Composites", International Conference onAdvanced Trends in Mechanical & Aerospace Engineering (ATMA-2019), February 7-9<sup>th</sup> 2019 atDayananda Sagar University, Bengaluru, Karnataka.
- P. Madhu, M. R. Sanjay, S. Pradeep, Suchart Siengchin, "Characterization of raw and alkali treated prosopis juliflora fibers for potential polymer composite reinforcement", International Conference on Advances in Material and Manufacturing Engineering – 2019 (ICAMME-2019), March 15-17th 2019 at KIIT University, Bhubaneswar, Odisha.
- Praveenkumara J, Sunderraj N, Chandan H R, Srivathsa Marathe, Madhu P, "Natural Fibers and Its Composites for Engineering Applications: An Overview" SARC International Conference on Mechanical and Production Engineering (ICMAPE – CHENNAI), December 3rd, 2017, at Chennai, India.

#### National Conferences

 P Madhu, Sanjay M R, S Pradeep, B Yogesha, "Study on Tensile Behaviour of Century/Carbon Fiber Reinforced Polyester Based Composites" 14<sup>th</sup> State Level ISTE Student's Annual Convention and 5th National Conference on Emerging Trends in Engineering, Research and Management (NCETERM - 2017), 8<sup>th</sup> and 9<sup>th</sup> September 2017at GM Institute of Technology, Davangere, Karnataka, India.

#### 9. Certification Courses

 Outcome Based Pedagogic Principles for Effective Teaching (NPTEL 4 Weeks Course). Conducted by IIT Kharagpur. Duration: August – September 2018.

- Educational Leadership (NPTEL 8 Weeks Course). Conducted by IIT Kharagpur. Duration: July – September 2019.
- Introduction to Composites (NPTEL 12 Weeks Course). Conducted by IIT Kanpur. Duration: September – December 2020.
- Python for Data Science (NPTEL 4 Weeks Course). Conducted by IIT Madras. Duration: January - February 2023.
- 5. MATLAB Onramp (Self-paced learning course) by MathWorks.
- 6. Learn Python Basic to Advance in Easy Way 2022(Self-paced learning course) by Udemy.

#### 10. Short Term Courses/ Workshops/ Webinars Attended

- Rapid Prototyping and Manufacturing Technologies, Department of Mechanical Engineering, NIE, Mysore. Duration: November 12, 2011.
- International Conference and Exhibition on "Additive Manufacturing Technologies". Nimhans Convention Centre, Bangalore. Duration: August 27-28, 2012.
- Empowering Teachers, Department of Industrial and Production Engineering, MCE Hassan. Duration: October 24-25, 2013.
- 4. Hydraulic, Pneumatic Systems in Industrial Automation, MCE-Bosch Rexroth, MCE, Hassan. Duration: November 27-29, 2014.
- 5. Analytical and Numerical Techniques in Applied Mathematics and Engineering, Department of Mathematics, MCE Hassan. Duration: July 28 to August 2, 2014.
- Finite Element Analysis Using Ansys, Department of Mechanical Engineering, NIT Calicut. Duration: August 16-18, 2014.
- Essentials Skills for Mechanical Engineers, Department of Mechanical Engineering, MCE Hassan. Duration: September 1-5, 2014.
- Advances in Bio-Lubricants and Cutting Fluids, Department of Mechanical Engineering, MCE Hassan. Duration: December 8-12, 2014.
- Materials Microstructure Characterization using Optical & Scanning Electron Microscopy, IIT Hyderabad. Duration: December 20-24, 2015.
- 10. Feel Teacher, MCE Hassan. Duration: June 6-11, 2016.
- 11. Realistic Approach to Wear Measurements and Mechanisms, Department of Mechanical Engineering, NMIT, Bangalore. Duration: September 19-21, 2016.

- Virtual Laboratory, Department of E&C Engineering, MCE Hassan, Duration: February 16, 2017.
- Technology Involved in Rapid Prototyping and Reverse Engineering, III Cell, MCE Hassan. Duration: February 20, 2017.
- 14. Emerging Trends in Materials and Manufacturing Technology, III Cell, MCE Hassan. Duration: February 27 to March 3, 2017.
- Advanced Material Characterization Techniques, CMTI, Bengaluru. Duration: March 13-15, 2017.
- Advances in Tribology and Surface Engineering, Department of Mechanical Engineering, MCE Hassan. Duration: March 20-21, 2017.
- 17. Research Methodology and Intellectual Property Rights, Department of Mechanical Engineering, MCE Hassan. Duration: March 23-25, 2017.
- Advanced Materials & Manufacturing Technology, Department of Mechanical Engineering, RIT, Bangalore. Duration: December 4-16, 2017.
- Challenges in Non-Conventional Energy Sources, Department of Automobile Engineering, MCE Hassan. Duration: April 9-13, 2018.
- Total Quality Management, Department of Industrial and Production Engineering, MCE Hassan. Duration: May 28 – June 1, 2018.
- 21. Recent Trends in Automotive Technology, Department of Automobile Engineering, MCE Hassan. Duration: June 25-29, 2018.
- 22. Hands on Training Program for Mechanical Engineering Faculty Members on Thermo-Mechanical Simulator, Department of Metallurgical and Materials Engineering, IIT Roorkee. Duration: July 17-20, 2018.
- 23. Outcomes Based Education, MCE Hassan. Duration: August 4-5, 2018.
- Being a Great Teacher, Department of Mechanical Engineering, MCE Hassan. Duration: November 3-4, 2018.
- 25. Lightweight Structures for Engineering Applications through Composites and Topology Optimization, GEC, Hassan. Duration: January 27 to February 7, 2020.
- 26. Tailor Made Nanomaterials for Applications in Sensors, LED's & Water Remediation, Department of Mechanical Engineering, ACS College of Engineering & RajaRajeswari College of Engineering, Bengaluru. Duration: June 5, 2020.

- 27. Advances in Automotive Engines, Department of Automobile Engineering & Department of Mechanical Engineering, Jain (Deemed to be University), Bengaluru. Duration: June 6, 2020
- A Paradigm Shift in Management, Department of Mechanical Engineering, BITM, Ballari. Duration: June 16-20, 2020.
- 29. Advances in Machining Process, Department of Mechanical Engineering, PESITM, Shivamogga. Duration: June 17-19, 2020.
- Composite Materials and its Characterizations, Department of Mechanical Engineering, AIT, Bengaluru. Duration: June 22-26, 2020.
- Intellectual Property Rights and Innovations, East West Institute of Technology, Bengaluru. Duration:June23-27, 2020.
- 32. Nuclear Energy: Myth v/s Reality,School of Mechanical Engineering,REVA University, Bengaluru. Duration: June 29, 2020.
- 33. Trends in Energy Conservation Technologies, Department of Mechanical Engineering, Vidyavardhaka College of Engineering, Mysuru. Duration:July 6-11, 2020.
- 34. Advanced Technologies in Materials & Manufacturing Engineering, Department of Mechanical Engineering, Dayananda Sagar University School of Engineering, Bengaluru. Duration: July 6-11, 2020.
- 35. Advancements in Dynamic Analysis of Machine Elements, Department of Mechanical Engineering, Vidyavardhaka College of Engineering, Mysuru. Duration: July 27-29, 2020.
- 36. Recent Advances & Trends in Mechanical Engineering & Material Science, Department of Mechanical Engineering, K. S. Institute of Technology, Bengaluru. Duration: July 27-31, 2020.
- 37. Challenges and Opportunities in Biocomposites, School of Automotive and Mechanical Engineering, Kalasalingam Academy of Research & Education, Tamilnadu. Duration: July 29, 2020.
- 38. Developments in Solar Energy Applications and Solar Tracking System, Departments of Mechanical and E & C Engineering, University BDT College of Engineering, Davanagere and Department of MechanicalEngineering, SDM Institute of Technology, Ujire. Duration: July 27 - 31, 2020.

- 39. Advanced Nano Materials, Nano FabricationTechniques & Devices,Department of Mechanical Engineering, BMS Institute of Technology and Management, Bengaluru. Duration: August 10 – 14, 2020.
- 40. Computational Fluid Dynamics, Department of Mechanical and ManufacturingEngineering, Ramaiah University of Applied Sciences, Bengaluru. Duration: August 12 – 14, 2020.
- 41. Research & Innovation, Department of Information Scienceand Engineering, VVCE, Mysuru. Duration: August 17 21, 2020.
- 42. Basic Concepts in Turbo Machinery and its Applications, Department of Mechanical Engineering, The National Institute of Engineering, Mysuru. Duration: August 24 28, 2020.
- 43. 3D Printing & Design(ATAL FDP), BMS College of Engineering, Bengaluru. Duration: September 1 – 5, 2020.
- 44. Recent Advances in Tribology and Surface Engineering: Series 2 of 4 *Tribology of Machine Components and Applied Tribology*, Department of Mechanical Engineering, Saintgits College of Engineering, Kottayam, Kerala. Duration: September 14 19, 2020. (AICTE sponsored STTP).
- 45. Recent Advances in Tribology and Surface Engineering: Series 3 of 4 Introduction to Special Topics like – Nanotribology, Biotribology, Space tribology, Biomimetics and Tribology in Industry, Department of Mechanical Engineering, Saintgits College of Engineering, Kottayam, Kerala. Duration: October 12 – 17, 2020. (AICTE sponsored STTP).
- 46. Creating Smart and Green Society through Advance Technology of Green Energy (Phase 1), Malnad College of Engineering, Hassan, Karnataka. Duration: December 10 – 15, 2020. (AICTE sponsored STTP).
- 47. Creating Smart and Green Society through Advance Technology of Green Energy (Phase 2), Malnad College of Engineering, Hassan, Karnataka. Duration: December 17 – 22, 2020. (AICTE sponsored STTP).
- 48. Renewable Energy for Sustainable Development, Bharatratna Indira Gandhi College of Engineering, Solapur. Duration: 1 5 March 2022.
- 49. Make in India: Through 3D Printing and Industry 4.0 for Indian Industries Phase II, Department of Mechanical Engineering, Kamaraj College of Engineering and Technology (Autonomous), Madurai, Tamilnadu. Duration: April 12 - 17, 2021.(AICTE Sponsored Online STTP).

- 50. Sources of Research Grants and Art of Writing a Research Paper. Department of Mechanical Engineering, R L Jalappa Institute of Technology, Doddaballapur, Bengaluru Rural District. Duration: June 3, 2021.
- Novel Materials for Next-Generation Applications (ATAL FDP), M S Ramaiah Institute of Technology, Bengaluru. Duration: July 12 - 16, 2021.
- 52. Refresher course on Advanced Pedagogy (STTP). NITTTR, Kolkata. Duration: Jan 24 Feb 4, 2022.
- 53. Robotics and Artificial Intelligence (ATAL FDP), Lakireddy Bali Reddy College of Engineering, Mylavaram. Duration: Feb 7 11, 2022.
- 54. Application of Geoinformatics and Remote Sensing in Engineering &Technology, Dept. of Civil Engineering, Bharat-Ratna Indira Gandhi College of Engineering,Kegaon, Solapur, Maharashtra, Duration: 19 - 23 September 2022.
- 55. Advanced Tools and Techniques for Best Research, Department of Information Science& Engineering and IPR-Cell, RV Institute of Technology and Management, Bengaluru. Duration: 26 - 30 September 2022.
- 56. Recent Trends in Composites, Department of Mechanical Engineering, Alliance College of Engineering and Design (ACED), Alliance University, Bengaluru. Duration: 2-6 Jan 2023.
- 57. Opportunities and Challenges in Entrepreneurship, JSSATE, Science & Technology Entrepreneurship Park, Bengaluru. (NSTEDB), Dept. of Science & Technology, GOI. Duration: 3<sup>rd</sup> – 19<sup>th</sup> January 2024.
- 58. Advances in Materials Technology for Next Generation Manufacturing, Ballari Institute of Technology & Management, Ballari. Duration: 1<sup>st</sup> to 5<sup>th</sup> February 2024.
- 59. Sustainable & Eco-friendly products, Digital & E-commerce Businesses, JSSATE, Science & Technology Entrepreneurship Park, Bengaluru. (NSTEDB), Dept. of Science & Technology, GOI. Duration: 7<sup>th</sup> 24<sup>th</sup>Febraury 2024.
- 60. Brainstorming session on Intellectual Property Rights, KSCST, IISc Campus, Bengaluru in association with Vemana-KSCST IP Cell, VIT, Bengaluru. Duration: 29<sup>th</sup>Febraury 2024.
- IoT, Embedded Systems & AI, JSSATE, Science & Technology Entrepreneurship Park, Bengaluru. (NSTEDB), Dept. of Science & Technology, GOI. Duration: 4<sup>th</sup> – 29<sup>th</sup> March 2024.

## **For Further Details**

<b>Google Scholar</b>	:	https://scholar.google.co.in/citations?user=dT5VZiUAAAAJ&hl=en	
Research gate	••	https://www.researchgate.net/profile/Madhu-P	
Publons	:	https://publons.com/researcher/3075371/p-madhu/	
Scopus	:	https://www.scopus.com/authid/detail.uri?authorId=57209185670	
Orcid ID	:	https://orcid.org/0000-0003-2774-4926	
Web of Science		A A E 9444 2020	
<b>Researcher ID</b>	:	AAF-8444-2020	
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Microsoft Academic Search Id		2766250938	

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I hereby declare that the above-mentioned information is true to my knowledge, and I bear the responsibility for the above-mentioned.

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