

Dr. Vishwas Mahesh

Affiliation: Assistant Professor, Dept of IEM, SIT

Contact: +91-9986644944

Email: vishwasm@sit.ac.in

Vidwan ID: 91009

Scopus ID: 57209058584

OrcID: 0000-0002-1315-9462

Faculty ID: SIT0589

Education

	Degree	Year	Institute	Specialization
1	Post Doctoral	2021	Indian Institute of Science	Aerospace Structures
2	Ph.D.	2020	National Institute of Technology Karnataka, Surathkal	Impact Dynamics
3	M.Tech	2011	The National Institute of Engineering, Mysuru	Product Design and Manufacturing
4	B.E	2007	Siddaganga Institute of Technology, Tumakuru	Mechanical Engineering

Professional Experience

	Date (from-to)	Designation	Organization
1	22/08/2012 to Till Date	Assistant Professor	Siddaganga Institute of Technology, Tumakuru
2	12/12/2011 to 27/07/2012	Assistant Systems Engineer-Trainee	Tata Consultancy Services, Bengaluru
3	17/12/2017 to 18/09/2009	Senior Project Engineer	Wipro Technologies, Bengaluru

Positions held

- Co-convenor for ICSMMIE 2022 held on 1st and 2nd July 2022 at SIT Tumkur.
- Departmental Faculty Coordinator for Institute Innovation Council.
- Departmental Faculty Coordinator for Parakh.
- Departmental Major Project Coordinator.
- Member of Program Assessment and Quality Improvement Committee (PAQIC)
- Member of Curriculum Development Committee (CDC)
- Member of Department Seminar Evaluation Committee (DSEC)

Affiliations of Professional organizations

- Life Member Indian Society for Technical education (ISTE)
- Associate Member Institutions of Engineers India (FIE)

Awards and Honors

- Recognized as **Top 2% Scientist (Single Year Category)** by Stanford University and Elsevier in 2024 and 2025
- Received "**Highly Cited Award**" from *China Ordnance Society* for the journal "**An experimental study on ballistic impact response of jute reinforced polyethylene glycol and nano silica based shear thickening fluid composite (The cited time is 16 in the Web of Science, published in 2022)**" published in *Defence Technology*.
- One of the article published in "Elsevier" was linked to **United Nations Sustainable Development Goals** (SDG17: Strengthen the means of implementation and revitalize the Global Partnership for Sustainable Development).
- Selected for **INSA Visiting Scientist Programme-2022** for a duration of 1 Month to visit **NMCAD Laboratory, Department of Aerospace Engineering, Indian Institute of Science, Bangalore.**
- Received **TARE FELLOWSHIP** from SERB, New Delhi from Dec 2021 to a period of three years.

Courses Taught

Undergraduate Courses

- Product Design and Development
- Biology for Engineers
- Innovation and Design Thinking
- Industrial Design for Engineers
- Practices for Intelligent Product Design
- Research Methodology
- Metrology and Measurements
- Strength of Materials
- Theory of Machines
- Design of Machine Elements
- Flexible Manufacturing Systems
- Engineering Economics
- Material Science and Metallurgy
- Computational Methods in Engineering
- Project Management

Postgraduate Courses

- Advanced Materials Technology

- Product Design and Development
- Flexible Manufacturing Systems

Research Guidance

Sl. no	Name of the Scholar	Title	Year of completion
01	Akarsha R Kadadevaramath	Development and Performance Evaluation of Seashell Particulate Reinforced Sustainable Polymer Composites for Structural Applications in Electronic Devices	Ongoing
02	Shital Prakash Chavan	Investigating the effect of crack filler material on rotating shafts using vibrational analysis approach that integrates analytical and numerical techniques	Ongoing
03	Basavaraj K Karoshi	Parameter Optimization and Tribo-Mechanical Characterization of Additively Manufactured Syntactic Foams For Automobile and Aerospace Structural Applications	Ongoing

Research Areas

- Composite Materials
- Impact Dynamics
- Additive Manufacturing
- Product Design and Development
- Tribology

Certification Courses:

- Post Graduate Certificate Program on **“3D Printing and Additive Manufacturing”** from IIT Palakkad (Ongoing)

Sponsored Projects

Ongoing Projects:

1. Title: Indigenous Development of AI-Optimized Functionally Graded Composites using Additive Manufacturing for Strategic Impact-Resistant Applications
Funding Agency: ANRF
Amount: 43 Lakhs
Duration: 2026-2029 (Three Years)
Role: Co-PI

2. Title: Design and Development of Light Weight Impact Resistant Sandwich Composite Fabricated using CFRP Face sheet and Cenosphere Reinforced PEEK Auxetic Core: An Integrated Experimental-Computational Approach

Funding Agency: ANRF

Amount:36.8 lakhs

Duration: 2024-2027 (Three Years)

Role: Co-PI

Completed Projects:

1. Title: Development and Performance Evaluation of Light Weight Cenosphere Filled Carbon Reinforced Composites for Low Velocity Impact Applications

Funding Agency: ANRF

Amount: 18.3 Lakhs

Duration: 2021-2024 (Three Years)

Role: PI

Publications

Journals

- **Vishwas Mahesh**, Vinyas Mahesh, Sharnappa Joladarashi, B R Abdul Razik, R S Akshatha, N S Hamsa and R Sourav. (March 2026) Machine learning validation of mechanical performance in short carbon fibers-cenosphere reinforced polymer composites. *Iran Polym J*(2026). <https://doi.org/10.1007/s13726-026-01631-1>
- **Vishwas Mahesh**, Prashanthkumar Hadi, Vinyas Mahesh. (Accepted: Jan 2026). "Machine Learning-Assisted Optimization of FFF Parameters for Enhanced Dimensional Accuracy in PETG and CF-PETG Composites", *Journal of Materials Engineering and Performance*, <https://doi.org/10.1007/s11665-026-13416-x> (SCOPUS, SCIE, IF: 2.2, Q2)
- **Vishwas Mahesh**, Prashanthkumar Hadi, Vinyas Mahesh, Dineshkumar Harursampath, Mushraf Pasha, Pavan Kumar, Pramod B S and Raghavendra. (Nov 2025). "Experimental Investigation and Optimization of Fused Filament Fabrication Parameters for Enhanced Mechanical Performance of PETG and Carbon Fiber-Reinforced PETG Composites", *Journal of Thermoplastic Composites*, doi:10.1177/08927057251403516 (SCOPUS, SCIE IF: 3.5, Q1)
- **Vishwas Mahesh**. (Oct 2025). "Effect of Surface Modification on Wear Behaviour of Coconut Shell-Filled Epoxy Composites: Insights from ANOVA and Tukey Analysis", *Tribology in Industry*, DOI: 10.24874/ti.1945.05.25.09 (Scopus, Q3)
- **Vishwas Mahesh**, Dineshkumar Harursampath and Sreelakshmi S. (Accepted: Oct 2025, Online Jan 2026). "Integrated Experimental, Numerical, and Machine Learning Approach to Impact Resistance of SCF-Cenosphere Epoxy Composites", *Journal of the Brazilian Society of Mechanical Sciences and Engineering*, 48(98), <https://doi.org/10.1007/s40430-025-06076-w> (SCOPUS, SCIE, IF 2.1, Q2)
- Sharath B N, Vinyas Mahesh, Prashanthkumar Hadi, **Vishwas Mahesh** and Dineshkumar Harursampath. (Oct 2025). "Infrared-Assisted Precipitation Hardening of Stir-Cast Al2219 Alloy: Enhanced Mechanical and Tribological

Properties Achieved via Microstructural Refinement", *Infrared Physics and Technology*, 106189, ISSN 1350-4495, <https://doi.org/10.1016/j.infrared.2025.106189> (SCOPUS, SCIE, IF 3.4, Q2)

- **Vishwas Mahesh.** (Sep 2025). "Low Velocity Impact Response of Syntactic Foams Reinforced with Varying Volume Fractions of Cenosphere and Rubber Crumb", *International Journal of Automotive and Mechanical Engineering*, 22(3), <https://doi.org/10.15282/ijame.22.3.2025.13.0970> (SCOPUS, Q3).
- **Vishwas Mahesh, Vinyas Mahesh, Sharnappa Joladarashi, Madhu N, Manoj T U, Meghana D and Sinchana K V.** (April 2025). "Investigating Load and Time-Dependent Three-Body Abrasive Wear in Short Carbon Fiber and Cenosphere Reinforced Polymer Composites using Machine Learning Approach", *Iranian Polymer Journal*, <https://doi.org/10.1007/s13726-025-01495-x> (SCOPUS, SCIE, Q2, IF 2.4).
- **Vishwas Mahesh, Vinyas Mahesh, Karthik H N, Preksha K B, Sindhura Mohan, Dileep N.** (Mar 2025). "Eco-Friendly Composites: Harnessing Eggshell and Marble Waste in Polymer Innovation", *Iranian Polymer Journal*, <https://doi.org/10.1007/s13726-025-01493-z> (SCOPUS, SCIE, Q2, IF 2.4).
- Mohankumar TS, Sharnappa Joladarashi, S M Kulkarni and **Vishwas Mahesh*** (Feb 2025, Issue June 2025). "High-Velocity Impact Behavior of Sandwich Composite with Compliant Skin and Sea Sand Strengthened Functionally Graded Core: Experimental and FE Approach", *Fibers and Polymers*, 26, 2501–2517 <https://doi.org/10.1007/s12221-025-00907-2> (SCOPUS, SCI, Q2, IF 2.2).
- **Vishwas Mahesh.** (Feb 2025). "Mechanical Characterization and TOPSIS-Based Selection of Hybrid Natural Fiber-Cenosphere Reinforced Polymer Composites for Automotive Structures", *International Journal of Automotive and Mechanical Engineering (IJAME)*, vol. 22, no. 1, pp. 12103–12117, Mar. 2025, doi: 10.15282/ijame.22.1.2025.12.0929, (SCOPUS, Q3).
- **Vishwas Mahesh.** (Feb 2025). "Influence of Rubber Crumb Particle Size on Abrasive Behavior of Rubber Crumb Modified Epoxy Composites", *Tribology in Industry*, Vol. 47, No. 2, 250-259 DOI: 10.24874/ti.1781.11.24.02 (SCOPUS, Q3).
- Yash Aher, Vinyas Mahesh, Athul Joseph, **Vishwas Mahesh**, Subhashchandra Kattimani and Dineshkumar Harursampath (Jan 2025). "Machine Learning Enhanced Multi-Scale Dynamic Viscoelastic Analysis of 3-D printable PETG Nanocomposite filaments: Leveraging FFT-Based Mesh-Free Computational Homogenization for Complex Microstructures", *Physica B: Condensed Matter*, 701, 416965 <https://doi.org/10.1016/j.physb.2025.416965> (SCOPUS, SCI, Q2, IF 2.8).
- Sharath B N, Vinyas Mahesh, **Vishwas Mahesh**, Subhaschandra Kattimani and Dineshkumar Harursampath. (Jan 2025). "Tribological performance and 3D surface characterisation of age-hardened Al2090-based ceramic composites", *Proceedings of the Institution of Mechanical Engineers, Part L: Journal of Materials: Design and Applications*, doi:10.1177/14644207251315872 (SCOPUS, SCIE, Q2, IF 2.5).
- Harshavardhan B, **Vishwas Mahesh***, Vinyas Mahesh and Arun Dixit U. (Jan 2025). " Characterization of PTW and UHMWPE Reinforced PES/SCF Composites: Mechanical, Thermal, and Structural Insights", *Polymer Composites*, 46(9): 8290-8306, DOI:10.1002/pc.29493 (SCOPUS, SCI, Q1, IF 4.8)

- Prashanthkumar Hadi, Vinyas Mahesh, **Vishwas Mahesh** and Dineshkumar Harursampath. (Nov 2024). "Experimental evaluation of the use of Yttria ceramic particles to enhance the thermal, corrosion and electrical properties of sintered AA7075/Graphene nanocomposites", *Journal of Materials Engineering and Performance*, <https://doi.org/10.1007/s11665-024-10580-w> (SCOPUS, SCIE, Q2, IF 2.2).
- B N Sharath, Vinyas Mahesh, **Vishwas Mahesh**, Subhaschandra Kattimani and Dineshkumar Harursampath. (Nov 2024). "On enhancing the high-temperature wear behaviour of Al2090-based hybrid composites using tertiary ceramic particles", Part L: *Journal of Materials: Design and Applications*, 10.1177/14644207241304279 (SCOPUS, SCIE, Q2)
- **Vishwas Mahesh**. (Nov 2024, Issue 2025). "Enhancing Abrasion Resistance in Jute/Epoxy Composites: The Role of Silicon Carbide Fillers in Wear Prevention", *Tribology in Industry*, Vol. 47, No. 1 (2025) 1-11, DOI: 10.24874/ti.1733.08.24.11, (SCOPUS, Q3).
- **Vishwas Mahesh**. (Accepted: Nov 2024, Issue: June 2025). "Advanced Cenosphere-Reinforced Syntactic Foams: Focus on Specific Strength Enhancement," *Iranian Polymer Journal*, 34, 1135–1150, <https://doi.org/10.1007/s13726-024-01425-3>, (SCOPUS, SCIE, Q2).
- **Vishwas Mahesh** and Vinyas Mahesh. (Accepted: Oct 2024, Issue 2025). "Abrasion Resistance of Cenosphere-Reinforced Thermoplastic Composite for Tribological Applications", *Iranian Polymer Journal*, 34, 871–881 <https://doi.org/10.1007/s13726-024-01415-5> (SCOPUS, SCIE, Q2).
- B Adaveesh, **Vishwas Mahesh***, Rakesh M, Nithin H R, S M Channabasavaradhya and I G Disha. (Sep 2024, ISSUE: May 2025) Unveiling the Impact of Particle Size on Physio-Mechanical Properties of Eco-Friendly Polymer Composite, *Iranian Polymer Journal*, 34(5), 689-701, <https://doi.org/10.1007/s13726-024-01402-w> (SCOPUS, SCIE, Q2)
- **Vishwas Mahesh**, Vinyas Mahesh, Batluri Tilak Chandra and Naveenkumar H S. (Aug 2024). On Three Body Abrasive Wear Resistance of Eggshell and Marble Powder Reinforced Hybrid Sustainable Polymer Composites, *Journal of The Institution of Engineers (India): Series D*, 10.1007/s40033-024-00802-9. (SCI and SCOPUS Indexed, Q3).
- **Vishwas Mahesh**. (July 2024). "On Low Velocity Impact Behaviour of Flexible and Stiff Composites for better Energy Absorption", *Journal of the Brazilian Society of Mechanical Sciences and Engineering*, 46, 514 (2024). <https://doi.org/10.1007/s40430-024-05103-6> (SCIE and Scopus Indexed, Q2)
- Darshan Gowda, Vinyas Mahesh, **Vishwas Mahesh** and Ravishankar K S. (June 2024). "Low-velocity impact characterization of polyurethane rubber/ nano-clay enriched sustainable sandwich composites: synergy of experimentation and simulations", *Polymer Composites*, 45(15): 14191-14212. doi:10.1002/pc.28763 (SCI, Q1).
- **Vishwas Mahesh**, Vinyas Mahesh and Dineshkumar Harursampath. (June 2024). "On Low Velocity Impact Response of Sandwich Composite with Jute/Epoxy Facesheet and Cenosphere Reinforced Functionally Graded Core: Experimental and Finite Element Approach", *Polymer Composites*, 45(14): 13151-13163. doi:10.1002/pc.28693 (SCI, Q1).

- Vinyas Mahesh, Jerin P George, **Vishwas Mahesh**, Himadree Chakraborty, Sriram Mukunda and Sathiskumar A Ponnusami (Accepted: June 2023, ISSUE: June 2024). "Dry-sliding wear properties of 3D printed PETG/SCF/OMMT nanocomposites: Experimentation and model predictions using artificial neural network", *Journal of Reinforced Plastics and Composites*, 43 (11-12), 682-693, DOI: 10.1177/07316844231188853 (SCI Indexed, Q1).
- Darshan Gowda, **Vishwas Mahesh**, Vinyas Mahesh, KS Ravishankar. (Feb 2024). "Experimentation on dynamic compressive response of bio-inspired helicoidal structured Basalt/Hemp/polyurethane rubber sandwich composites", *Materials Today Communications*, vol 38, 108343, <https://doi.org/10.1016/j.mtcomm.2024.108343>, (SCOPUS, SCI, Q2).
- **Vishwas Mahesh** and Vinyas Mahesh (Feb 2024). Influence of Graphene Powder on the Physio-Mechanical Properties of Jute Reinforced Epoxy Composites for Automobile Applications. *Mechanics of Advanced Composite Structures*, 2024; 11(1): 239-248. doi: 10.22075/mac.2023.30685.1505 (SCOPUS, Q3).
- **Vishwas Mahesh** and Vinyas Mahesh (Feb 2024). "Development and Mechanical Characterization of Light Weight Fiber Metal Laminate using Jute, Kenaf and Aluminium". *Mechanics of Advanced Composite Structures*, 2024; 11(2): 259-270. doi: 10.22075/mac.2023.30686.1506 (SCOPUS, Q3).
- **Vishwas Mahesh** (2024). "Comparative Study on Three Body Abrasive Wear Behaviour of Natural Compliant Thermoplastic Composite under Dry and Lubricated Conditions", *Journal of Thermoplastic Composite Materials*, 37(1), 276-292, <https://doi.org/10.1177/08927057231173592> (SCIE Indexed, Q2)
- **Vishwas Mahesh**, Vinyas Mahesh, Prashanthkumar Hadi and Dineshkumar Harursampath (Accepted: Jan 2024). "An Investigation into Low Velocity Impact Behaviour of Functionally Graded Treated and Untreated Cenosphere Based Syntactic Foams", 46:170, *Journal of the Brazilian Society of Mechanical Sciences and Engineering*, <https://doi.org/10.1007/s40430-024-04744-x> (SCIE and SCOPUS Indexed, Q2).
- **Vishwas Mahesh**, Vinyas Mahesh, Prashanthkumar Hadi and Dineshkumar Harursampath (Accepted: Jan 2024). "Ageing Effect on Low Velocity Impact Response on Sustainable Compliant Sandwich Composite", 46:169, *Journal of the Brazilian Society of Mechanical Sciences and Engineering*, <https://doi.org/10.1007/s40430-024-04745-w> (SCIE and SCOPUS Indexed, Q2).
- **Vishwas Mahesh** (Accepted 2024). "Mechanical Characterization of Novel Parthenium Hysterophorus and Jute Reinforced Polymer Matrix Composites for Light Weight Medium Load Applications and Application of MADM-VIKOR Approach", *Proceedings of the Institution of Mechanical Engineers , Part C: Journal of Mechanical Engineering Science*, 238(14), 7123-7133, <https://doi.org/10.1177/09544062241229935> (SCIE and SCOPUS, Q2)
- **Vishwas Mahesh** (2024). "Study on Slurry Erosion Resistance and Damage Mechanism in Cenosphere Reinforced Syntactic Foams for Light Weight Applications", *International Journal of Light Weight Materials and Manufacture*, 7(2), 285-292, <https://doi.org/10.1016/j.ijlmm.2023.11.004> (SCOPUS, Q1)
- **Vishwas Mahesh** (2024). "Comparative Study on Low Velocity Impact Response of CFRP/ Thermoplastic Elastomer Based Fiber Metal Laminates with and without

Interleaving of Elastomeric Layer " Journal of Thermoplastic Composite Materials, 37(20), 604-624, DOI: 10.1177/08927057231180487 (SCIE Indexed, Q1)

- Nithin U Aithal, **Vishwas Mahesh**, Vinyas Mahesh, Sathiskumar Anusuya Ponnusami and Dineshkumar Harursampath (August 2023). "Development and Mechanical Characterization of Cenosphere Reinforced CFRP and Natural Rubber Core Sandwich Composite ", Journal of the Brazilian Society of Mechanical Sciences and Engineering, 45, 498 (2023). <https://doi.org/10.1007/s40430-023-04424-2> (SCI, SCIE, SCOPUS, Q2)
- Vinyas Mahesh, **Vishwas Mahesh**, Sathiskumar A Ponnusami and Dineshkumar Harursampath (July 2023). "Machine learning assisted coupled frequency analysis of skewed multi-phase magnetoelectric composite plates with temperature and moisture dependent properties", Mechanics of Advanced Materials and Structures, <https://doi.org/10.1080/15376494.2023.2242858> (SCIE Indexed, Q1).
- **Vishwas Mahesh** (July 2023). " Feasibility Study On Application Of Various MADM Approaches For Selection Of Kenaf/Saw Dust Composite", Mechanics Of Advanced Composite Structures, 12(1), 13-24, <https://doi.org/10.22075/MACS.2023.30835.1513> (SCOPUS, Q3).
- **Vishwas Mahesh** (July 2023). "Development and Ballistic Impact Study on Environment Friendly Sustainable Jute Reinforced Carbon Black/Lignin based Elastomeric Flexible Composites", Proceedings of the Institution of Mechanical Engineers, Part E: Journal of Process Mechanical Engineering, (SCI, Q3).
- **Vishwas Mahesh**, Vinyas Mahesh, Dineshkumar Harursampath, Jayadev S, Rakesh CL, Gagana T R and Babitha C M (July 2023). "Three Body Abrasion Wear Resistance of Cenosphere Particle Reinforced Syntactic Foams Developed using Moulding Method", Polymer Engineering and Science, 63(9), 3091-3104 <https://doi.org/10.1002/pen.26430>(SCIE and SCOPUS, Q2)
- Surjeeth Singh Bedi, Vasu Mallesh, **Vishwas Mahesh**, Vinyas Mahesh, and Sathiskumar Anusuya Ponnusami (June 2023). "Investigation of low-percentage graphene reinforcement on the mechanical behaviour of additively manufactured polyethylene terephthalate glycol composites", Journal of Thermoplastic Composite Materials, DOI: 10.1177/08927057231188025 (SCIE Indexed, Q2).
- **Vishwas Mahesh**, Vinyas Mahesh and Dineshkumar Harursampath (June 2023). "Evaluating energy absorption of sustainable rubber crumb/kenaf composites through artificial neural network strategies for low-velocity impact loads", Polymer Composites, 44(9), 6122-6135, <https://doi.org/10.1002/pc.27551> (SCI and SCOPUS Indexed, Q1).
- Vinyas Mahesh, **Vishwas Mahesh** and Sathiskumar A Ponnusami (June 2023). "Nonlinear active control of thermally induced pyro-coupled vibrations in porous-agglomerated CNT core sandwich plate with magneto-piezo-elastic facings", Acta Mechanica, <https://doi.org/10.1007/s00707-023-03641-z> (SCI and SCOPUS Indexed, Q2).
- Surjeeth Singh Bedi, Vasu Mallesh, Vinyas Mahesh, **Vishwas Mahesh**, Sriram Mukund, Sushanth Negi and Sathiskumar Anusuya Ponnusami (June 2023). "Thermal Characterization of 3D Printable Multifunctional Graphene-Reinforced Polyethylene Terephthalate Glycol (PETG) Composite Filaments Enabled for

Smart Structural Applications", Polymer Engineering and Science, 63(9), 2841-2856, 10.1002/pen.26409 (SCOPUS and SCIE Indexed: Q2).

- Nithin U Aithal, Vinyas Mahesh and **Vishwas Mahesh** (June 2023). "Harnessing of Waste Cenosphere in Development of Natural/Synthetic and Rubber Core Sandwich Composite and its Mechanical Characterization", Biomass Conversion and Biorefinery, 14, 25057-25069, <https://doi.org/10.1007/s13399-023-04487-0> (Scopus and SCI Indexed: Q3).
- Vinyas Mahesh, **Vishwas Mahesh** and Sathiskumar A Ponnusami (April 2023). "FEM-ANN Approach to Predict Nonlinear Pyro-Coupled Deflection of Sandwich Plates with Agglomerated Porous Nanocomposite Core and Piezo-Magneto-Elastic Facings in Thermal Environment", Mechanics of Advanced Materials and Structures, <https://doi.org/10.1080/15376494.2023.2201927> (SCIE and SCOPUS).
- **Vishwas Mahesh** (March 2023). "Thermo-Mechanical Characterization of Jute-Bamboo Hybrid Thermoplastic Polymer Matrix Composites with Different Stacking Sequences for Automobile Applications", Mechanics Of Advanced Composite Structures, 10(2), 375-382 , 10.22075/MACS.2023.29029.1453 (SCOPUS).
- Arjun Siddharth, Vinyas Mahesh, **Vishwas Mahesh**, Sathiskumar A Ponnusami, Dineshkumar Harursampath and Sriram Mukund (Accepted: May 2022, Published January 2023). "Vibration based energy harvesting performance of magneto-electro-elastic beams reinforced with carbon nanotubes", Advances in Nano Research, 14 (1), 27-43, <https://doi.org/10.12989/anr.2023.14.1.027> (SCI Indexed).
- Kanav Chada, Vinyas Mahesh, Arjun S M and **Vishwas Mahesh** (March 2023). "On analysing vibration energy harvester with auxetic core and magneto-electro-elastic facings", Thin Walled Structures, 184, 110533 <https://doi.org/10.1016/j.tws.2023.110533> (SCI and Scopus Indexed)
- Swapmil Vyavahare, Vinyas Mahesh, **Vishwas Mahesh** and Dineshkumar Harursampath (2023). "Additively Manufactured Meta-biomaterials: A State-of-the-Art Review , Composite Structures, 305, 11649 <https://doi.org/10.1016/j.compstruct.2022.116491> (SCI Indexed).
- **Vishwas Mahesh**, Vinyas Mahesh and Dineshkumar Harursampath (Accepted: Jan 2023). "Mechanical Characterization of Natural and Synthetic Fiber based Penta Layered Hybrid Polymer Composite", Proceedings of the Institution of Mechanical Engineers , Part C: Journal of Mechanical Engineering Science, DOI: 10.1177/09544062231152346 (SCIE and Scopus Indexed)
- **Vishwas Mahesh** (January 2023). "Statistical Approach of Determining the Effect of Cenosphere on the Tribological Behaviour of Jute Reinforced Polymer Based Composite", Mechanics Of Advanced Composite Structures, 10(1), 211-220, 10.22075/mac.2022.28671.1440 (SCOPUS Indexed).
- Vinyas Mahesh, Prasad G Maladkar, Gangu Sasi Sekharan Sadaram, Athul Joseph, **Vishwas Mahesh** and Dineshkumar Harursampath (Accepted: Dec 2022). "Experimental investigation of the in-plane quasi-static mechanical behaviour of additively-manufactured PETG/OMMT nanoclay composite auxetic structures", Journal of Thermoplastic Composite Materials, DOI: 10.1177/08927057221147826 (SCIE Indexed).

- Kartik S Kumbhare, **Vishwas Mahesh**, Sharnappa Joladarashi and S M Kulkarni (Accepted: Nov 2022). "Comparative Study on Low Velocity Impact Behavior of Natural Hybrid and Non Hybrid Flexible Thermoplastic Based Composites", Journal of Thermoplastic Composite Materials, DOI: 10.1177/08927057221145530 (SCIE Indexed).
- **Vishwas Mahesh**, Vinyas Mahesh, Tejaswini J N, Deekshitha J, Gunashree P and Ramyashree G (Accepted: Oct 2022). "Development of Sustainable Abrasive Wear Resistant Waste Rubber Crumb Reinforced Polymer Matrix Composites ", Proceedings of the Institution of Mechanical Engineers , Part C: Journal of Mechanical Engineering Science, 237 (9), 2141-2150, DOI: 10.1177/09544062221136441 (SCIE and SCOPUS Indexed).
- Chandrika S, Hemanth Kumar and **Vishwas Mahesh** (Accepted: Oct 2022). "Physio-Mechanical Characterization of Kenaf/Saw Dust Reinforced Polymer Matrix Composite and Selection of Optimal Configuration Using MADM-VIKOR Approach", International Journal of Interactive Design and Manufacturing, 18, 6359-6369, <https://doi.org/10.1007/s12008-022-01078-7> (SCIE, SCOPUS Indexed).
- **Vishwas Mahesh** and Vinyas Mahesh (Accepted: September 2022). "Harnessing of Waste Rubber Crumb and Development of Sustainable Hybrid Composite using Kenaf (Hibiscus Cannabinus) for Structural Applications", Journal of Natural Fibers, 20(1), 45-55, 10.1080/15440478.2022.2126423 (SCIE and SCOPUS Indexed).
- **Vishwas Mahesh**, Vinyas Mahesh, Satis Anusuya Ponnusami (Accepted: August 2022). "Influence of Alkali Treatment on Mechanical Properties of Short Cocos nucifera Fiber Reinforced Epoxy Based Sustainable Green Composite" Journal of Natural Fibers, 19(17), 15291-15299, 10.1080/15440478.2022.2123077 (SCIE and SCOPUS Indexed).
- **Vishwas Mahesh** (Accepted: August 2022). "Development and Physio-Mechanical Characterization of Sustainable Jute-Wood Dust Reinforced Hybrid Composites", Journal of Natural Fibers, 19(16), 13995-14004, <http://dx.doi.org/10.1080/15440478.2022.2113852>. (SCIE and SCOPUS Indexed).
- Vinyas Mahesh, **Vishwas Mahesh**, Sriram Mukund and Dineshkumar Harursampath (Accepted: May 2022). "Influence of micro-topological textures of BaTiO₃-CoFe₂O₄ composites on the nonlinear pyrocoupled dynamic response of blast loaded magneto-electro-elastic plates in thermal environment", The European Physical Journal Plus, 137, 675 (2022). <https://doi.org/10.1140/epjp/s13360-022-02829-x> (SCIE and SCOPUS Indexed).
- **Vishwas Mahesh** and Vinyas Mahesh (Accepted: May 2022). "Tribological Characterization of Sustainable Jute-Epoxy-Rubber Crumb Hybrid Composite ", Part C: Journal of Mechanical Engineering Science , 236(19), 10281-10289 <https://doi.org/10.1177/095440622211039> (SCOPUS and SCIE Indexed).
- **Vishwas Mahesh** (Accepted: April 2022). "Conceptual Design on Optimal Thickness Selection of Natural Compliant Composite for Ballistic Protection", International Journal of Interactive Design and Manufacturing, 10.1007/s12008-022-00900-6 (SCIE, SCOPUS and ESCI Indexed).

- Arjun Siddharth, Vinyas Mahesh, **Vishwas Mahesh**, Sathiskumar A Ponnusami and Dineshkumar Harursampath (Accepted: April 2022). "Investigation on the interphase effects on the energy harvesting characteristics of three phase magneto-electro-elastic cantilever beam", *Mechanics of Advanced Materials and Structures*, <https://doi.org/10.1080/15376494.2022.2062630> (SCIE and SCOPUS Indexed).
- Arjun Siddharth, Vinyas Mahesh, **Vishwas Mahesh**, Sriram Mukunda, Sathiskumar A Ponnusami and Dineshkumar Harursampath (Accepted: March 2022). "Vibration based energy harvesting characteristics of functionally graded magneto-electro-elastic beam structures using lumped parameter model", *Journal of Vibration Engineering and Technologies*, 10, 1705–1720, <https://doi.org/10.1007/s42417-022-00477-0> (SCIE and SCOPUS Indexed).
- **Vishwas Mahesh**, Vinyas Mahesh, Sowjanya M Nagaraj, Pratiksha S and Gopal Singh T S. "Physio-Mechanical and Thermal Characterization of Jute/Rubber Crumb Hybrid Composites and Selection of Optimal Configuration using MADM Approach". Part C: *Journal of Mechanical Engineering Science*, 236(14), 7942-7952, <https://doi.org/10.1177/09544062221079166> (Accepted- January 2022), (SCIE and SCOPUS Indexed).
- **Vishwas Mahesh**, Vinyas Mahesh, Dineshkumar Harursampath, Sharnappa Joladarashi and S M Kulkarni (Nov 2022). "Development of Sustainable Jute/Epoxy Composite and Assessing the Effect of Rubber Crumb on Low Velocity Impact Response". *Journal of Natural Fibers*, 19(15), 12268-12279, DOI: 10.1080/15440478.2022.2054897 (SCIE and SCOPUS Indexed).
- Dasari Rajkumar, **Vishwas Mahesh**, Sharnappa Joladarashi and Satyabodh M Kulkarni (February 2022). "A Novel Flexible Green Composite with Sisal and Natural Rubber- Investigation under Low Velocity Impact". *Journal of Natural Fibers*, DOI: 10.1080/15440478.2022.2036292, (SCIE and SCOPUS Indexed).
- **Vishwas Mahesh**, Vinyas Mahesh and Dineshkumar Harursampath (February-2022). "Ballistic Characterization of Fiber Elastomer Metal Laminate Composites and Effect of Positioning of Fiber Reinforced Elastomer", *Proceedings of the Institution of Mechanical Engineers, Part L: Journal of Materials: Design and Applications*, 236(3), 663-673, DOI: 10.1177/14644207211053963 (SCIE & SCOPUS Indexed).
- **Vishwas Mahesh**, Sharnappa Joladarashi and Satyabodh M Kulkarni. (January 2022). "An experimental study on adhesion, flexibility, interlaminar shear strength, and damage mechanism of jute/rubber-based flexible "green" composite", *Journal of Thermoplastic Composite Materials*, 35(2), 149-176, <https://doi.org/10.1177/0892705719882074>, (SCIE Indexed).
- **Vishwas Mahesh**, Vinyas Mahesh, Sharnappa Joladarashi and S M Kulkarni. "Experimental Study on Two-Body and Three-Body Abrasive Wear Behaviour of Jute-Natural Rubber Flexible Green Composite". *Journal of Thermoplastic Composite Materials*, 36(4), 1422-1436, DOI: 10.1177/08927057211062559, 1-15 (Accepted- Nov 2021), (SCIE Indexed).
- Vinyas Mahesh, **Vishwas Mahesh** and Dineshkumar Harursampath. "Physio-Mechanical Characterization of Jute/Kevlar Hybrid Composites Coupled with MADM Approach for Selection of Composites". *Journal of Natural Fibers*, 19(15),

11105-11113, DOI:10.1080/15440478.2021.2009403 (Accepted-Nov 2021), (SCIE and SCOPUS Indexed)

- Atul Joseph, **Vishwas Mahesh** and Vinyas Mahesh. (2021-September). "Effect of loading rates on the in-plane compressive properties of additively manufactured ABS and PLA-based hexagonal honeycomb structures", *Journal of Thermoplastic Composite Materials*, DOI: 10.1177/08927057211051416, 1-22 (Accepted), (SCIE Indexed).
- Vinyas Mahesh, Atul J, **Vishwas Mahesh** and Dineshkumar Harursampath. (2021-September). "Thermal characterization of organically-modified montmorillonite and short carbon fibres reinforced glycol-modified polyethylene terephthalate nanocomposite filaments", 42(9), 4478–4496, *Polymer Composites*, 10.1002/pc.26163, (SCI Indexed).
- **Vishwas Mahesh**, Sharnappa Joladarashi and Satyabodh M Kulkarni. (2021-August). "Comparative Study on Ballistic Impact Response of Neat Fabric, Compliant, Hybrid Compliant and Stiff Composite", *Thin Walled Structures*, 165, 107986, <https://doi.org/10.1016/j.tws.2021.107986> (SCOPUS and SCI Indexed)
- Vinyas Mahesh, **Vishwas Mahesh**, Dineshkumar Harursampath and Abouelregal A. (2021-June). "Simulation-based assessment of coupled frequency response of magneto electro elastic auxetic multifunctional structures subjected to various electromagnetic circuits", *Proceedings of the Institution of Mechanical Engineers, Part L: Journal of Materials: Design and Applications*, DOI: 10.1177/14644207211021933 (Accepted), (SCOPUS & SCIE Indexed).
- Vinyas Mahesh, **Vishwas Mahesh** and Dineshkumar Harursampath. (2021-May). "Influence of Alkali Treatment on Physio-Mechanical Properties of Jute-Epoxy Composite", *Advances in Materials and Processing Technologies*, <https://doi.org/10.1080/2374068X.2021.1934643> (Accepted), (SCOPUS and ESCI Indexed).
- **Vishwas Mahesh**, Sharnappa Joladarashi and Satyabodh M Kulkarni. (2021-May). "Three Body Abrasive Wear Assessment of Novel Jute/Natural Rubber Flexible Green Composite", *Journal of Thermoplastic Composites*, 34 (11), 1566-1576, DOI: 10.1177/08927057211017185 (SCIE Indexed)
- **Vishwas Mahesh**, Dineshkumar Harursampath and Vinyas Mahesh. (Accepted: 2021-March, Published: March 2022). "An Experimental Study on Ballistic Impact Response of Jute Reinforced Polyethylene Glycol and Nano Silica Based Shear Thickening Fluid Composite", *Defence Technology*, 18(3), 401-409, <https://doi.org/10.1016/j.dt.2021.03.013> (SCIE Indexed)
- Vinyas Mahesh, Atul J, **Vishwas Mahesh**, Dineshkumar Harursampath and Chetan V N. (2021-May). "Investigation on the Mechanical Properties of Additively Manufactured PETG Composites Reinforced with OMMT Nanoclay and Carbon Fibres", *Polymer Composites*, 42(5), 2380-2395, DOI: 10.1002/pc.25985 (SCI Indexed).
- **Vishwas Mahesh**, Ashutosh Nilabh, Sharnappa Joladarashi and Satyabodh M Kulkarni. (2021-Feb). "Analysis of Impact Behaviour of Sisal-Epoxy Composites under Low Velocity Regime", *Journal of Composite and Advanced Materials (Revue des Composites et des Matériaux Avancés)*, 31(1), 57-63, DOI: <https://doi.org/10.18280/rcma.310108> (SCOPUS and ESCI Indexed).

- **Vishwas Mahesh**, Sharnappa Joladarashi and Satyabodh M Kulkarni. (2021-Feb). “Damage Mechanics and Energy Absorption Capabilities of Natural Fiber Reinforced Elastomeric Based Bio Composite for Sacrificial Structural Applications”, *Defence Technology*, 17(1), 161-176, DOI: <https://doi.org/10.1016/j.dt.2020.02.013> (SCIE Indexed).
- **Vishwas Mahesh**, Sharnappa Joladarashi and Satyabodh M Kulkarni. (2021-Feb). “Influence of Thickness and Projectile Shape on Penetration Resistance of the Compliant Composite”, *Defence Technology*, 17(1), 245-256, DOI: <https://doi.org/10.1016/j.dt.2020.03.006> (SCIE Indexed).
- **Vishwas Mahesh**, Sharnappa Joladarashi and Satyabodh M Kulkarni. (2021-Feb). “A Comprehensive Review on Material Selection for Polymer Matrix Composites Subjected to Impact Load”, *Defence Technology*, 17(1), 257-277, <https://doi.org/10.1016/j.dt.2020.04.002> (SCIE Indexed).
- **Vishwas, M.**, Sharnappa Joladarashi and S M Kulkarni (2020-Feb). “Comparative Study on Damage Behaviour of Synthetic and Natural Fiber Reinforced Brittle Composite and Natural Fiber Reinforced Flexible Composite Subjected to Low Velocity Impact”, *Scientia Iranica, Transaction on Mechanical Engineering B*, 27(1), 341-349, DOI: 10.24200/sci.2018.51294.2100, (SCIE and Scopus Indexed).
- **Vishwas Mahesh**, Sharnappa Joladarashi and Satyabodh M Kulkarni. (2020-May). “Evaluation of Tensile Strength and Slurry Erosive behaviour of Jute Reinforced Natural Rubber Based Flexible Composite”, *Journal of Composite and Advanced Materials (Revue des Composites et des Matériaux Avancés)*, 30(2), 77-82, DOI: <https://doi.org/10.18280/rcma.300204>, (SCOPUS and ESCI Indexed).
- **Vishwas Mahesh**, Vinyas M and Puneeth K (2020-Aug). “Influence of Areca Nut Nano Filler on Mechanical and Tribological Properties of Coir Fiber Reinforced Epoxy Based Polymer Composite”, *Scientia Iranica, Transaction on Mechanical Engineering B*, 27(4), 1972-1981, DOI: 10.24200/sci.2019.52083.2527, (SCIE and Scopus Indexed).
- **Vishwas Mahesh**, Sharnappa Joladarashi and Satyabodh M Kulkarni. (2020-Sep). “Tribo-Mechanical Characterization and Optimization of Green Flexible Composite”, *Emerging Materials Research*, 9(3), 1-10, <https://doi.org/10.1680/jemmr.19.00145>, (SCIE Indexed).
- **Vishwas, M.**, Sharnappa Joladarashi and S M Kulkarni (2019-Jan). “Physio-Mechanical and Wear Properties of Novel Jute Reinforced Natural Rubber Based Flexible Composite”, *Material Research Express*, 6(5), 055503, <https://doi.org/10.1088/2053-1591/ab0164> (SCIE and Scopus Indexed).
- **Vishwas, M.**, Sharnappa Joladarashi and S M Kulkarni, (2019-Apr). “Investigation on effect of using rubber as core material in sandwich composite plate subjected to low velocity normal and oblique impact loading”, *Scientia Iranica, Transaction on Mechanical Engineering B*, 26(2), 897-907, DOI: 10.24200/sci.2018.5538.1331 (SCIE and Scopus Indexed).
- **Vishwas Mahesh**, Sharnappa Joladarashi and S M Kulkarni (2019-May). “Study on Stacking Sequence of Plies in Green Sandwiches for Low Velocity Impact Application”, *Key Engineering Materials*, 801, 59-64, doi:10.4028/www.scientific.net/KEM.801.59 (Scopus Indexed).
- **Vishwas Mahesh**, Sharnappa Joladarashi and Satyabodh M Kulkarni. (2019-Jan). “Experimental study on abrasive wear behaviour of flexible green composite

intended to be used as protective cladding for structures”, International Journal of Modern Manufacturing Technologies (IJMMT), 11(1), 69-76, DOI: 10.6084/m9.figshare.8287706.v1 (Scopus Indexed).

- **Vishwas Mahesh**, Sharnappa Joladarashi and Satyabodh M Kulkarni.(2019-Oct). “An Experimental Investigation on Low-Velocity Impact Response of Novel Jute/ Rubber Flexible Bio-Composite”, Composite Structures, 225, 111190, 1-12 <https://doi.org/10.1016/j.compstruct.2019.111190> (SCI Indexed).
- **Vishwas Mahesh**, Sharnappa Joladarashi and Satyabodh M Kulkarni. (2019-July). “Development and mechanical characterization of novel polymer-based flexible composite and optimization of stacking sequences using VIKOR and PSI techniques”, Journal of Thermoplastic Composite Materials, 34(8), 1080-1102 <https://doi.org/10.1177/0892705719864619> (SCIE Indexed).
- **Vishwas Mahesh**, Sudheendra Shastry, Vasudev Murthy, Vijay Kumar and Vinyas Mahesh. (2019-July). “Approach to reduce throughput time in grinding of gun drills”, Journal Europeen des Systemes Automatisés (JESA), 52(2), 137-142, DOI: <https://doi.org/10.18280/jesa.520204> (SCOPUS)
- Vinyas, M., Kattimani, S.C., Loja Amelia and **Vishwas Mahesh**. (2018-Sep). “Effect of BaTiO₃/CoFe₂O₄ micro-topological textures on the coupled static behaviour of magneto-electro-thermo-elastic beams in different thermal environment”, Materials Research Express, 5(12), <https://doi.org/10.1088/2053-1591/aae0c8> (SCIE Indexed)
- **Vishwas Mahesh**., Sharnappa Joladarashi and Satyabodh M Kulkarni. (2018-Sep). “Experimental Investigation on Slurry Erosive Behaviour of Biodegradable Flexible Composite and Optimization of Parameters using Taguchi’s Approach”, Journal of Composite and Advanced Materials (Revue des Composites et des Matériaux Avancés), 28 (3), 345-355, doi:10.3166/rcma.28.345-355 (SCOPUS and ESCI Indexed).
- **Vishwas M**, Vinyas M, Ishwarkumar Teggi, Arpit Bansal and Manjesh S. (2018-Oct). “Product Design Methodology Applied in Developing Liquid Petroleum Gas Level Indicator using Android Technology”, Networking and Information Systems (Ingénierie des Systèmes d'Information), 23 (5), 175-184, doi:10.3166/isi.23.5.175-184 (Scopus Indexed).
- Vinyas, M., **Vishwas, M.**, Venkatesha, C.S. and Srinivasa Rao, G. (2016-Oct). “Design modification and structural behavior study of a CFRP star sensor baffle”, Advances in Aircraft and Spacecraft Science, 3(4), pp. 427-445 DOI: <http://dx.doi.org/10.12989/aas.2016.3.4.427>. (Scopus and ESCI Indexed).

Conference Proceedings

- **Vishwas Mahesh**, Manoj D Yadav, Sinchana T C, Subhash SR and Sushmitha S (2022). "Conceptual Design and Development of Automated Waste Segregator", In: Popat, K.C., Kanagaraj, S., Sreekanth, P.S.R., Kumar, V.M.R. (eds) Advances in Mechanical Engineering and Material Science. ICAMEMS 2022. Lecture Notes in Mechanical Engineering. Springer, Singapore. https://doi.org/10.1007/978-981-19-0676-3_16, Pg 199-206 (Scopus Indexed).
- Dasari Rajkumar, **Vishwas Mahesh**, Sharnappa Joladarashi and S M Kulkarni (2021). "Parametric Study on Impact Behaviour of Sisal and Cenosphere

Reinforced Natural Rubber-Based Hybrid Composites: FE Approach", *Materials Today: Proceedings*, **47** (Part 17), 8767-8771, <https://doi.org/10.1016/j.matpr.2021.04.090> (Scopus Indexed).

- **Vishwas Mahesh**, Sharnappa Joladarashi and Satyabodh M Kulkarni (2021). "Comparative Study on Kevlar/Carbon Epoxy Face sheets with Rubber Core Sandwich Composite for Low Velocity Impact Response: FE Approach", *Materials Today: Proceedings*, **44** (Part 1), 1495-1499, <https://doi.org/10.1016/j.matpr.2020.11.688> (Scopus Indexed).
- **Vishwas Mahesh**, Sharnappa Joladarashi and Satyabodh M Kulkarni. (2020). "Slurry erosive study and optimization of material and process parameters of single and hybrid matrix flexible composites using Taguchi approach", *AIP Conference Proceedings*, **2204**(1), 040033-1 to 040033-8, <https://doi.org/10.1063/1.5141606>. (Scopus Indexed).
- **Vishwas Mahesh**, Sharnappa Joladarashi and Satyabodh M Kulkarni. (2020). "Influence of laminate thickness and impactor shape on low velocity impact response of jute-epoxy composite: FE study", *Materials Today: Proceedings*, **28** (Part 2), 545-550, <https://doi.org/10.1016/j.matpr.2019.12.216>. (Scopus Indexed).
- **Vishwas Mahesh**, Sharnappa Joladarashi and Satyabodh M Kulkarni. (2019). "Comparative Study on Energy Absorbing Behavior of Stiff and Flexible Composites under Low Velocity Impact", *AIP Conference Proceedings*, **2057** (1), pp. 020025-1 – 020025-6, <https://doi.org/10.1063/1.5085596> (Scopus Indexed).
- **Vishwas, M.**, Sharnappa Joladarashi and Satyabodh M Kulkarni. (2018). "Finite element simulation of low velocity impact loading on a sandwich composite", *MATEC Web of Conferences*, **144**, DOI: <https://doi.org/10.1051/matecconf/201714401010> (Scopus Indexed).
- **Vishwas, M.**, Sharnappa Joladarashi and S M Kulkarni. (2018). "Modelling and Analysis of Material Behaviour under Normal and Oblique Low Velocity Impact", *Materials Today: Proceedings*, **5**(2P2), pp. 6635-6644, <https://doi.org/10.1016/j.matpr.2017.11.319> (Scopus Indexed).
- **Vishwas, M.**, Basavaraj, C.K and Vinyas M. (2018). "Experimental Investigation using Taguchi Method to Optimize Process Parameters of Fused Deposition Modeling for ABS and Nylon Materials", *Materials Today: Proceedings*, **5**(2P2), pp. 7106-7114, <https://doi.org/10.1016/j.matpr.2017.11.375> (Scopus Indexed).
- **Vishwas, M.**, Sharnappa Joladarashi and Kulkarni, S.M. (2018). "Suitability Study of Jute-Epoxy Composite Laminate for Low and High Velocity Impact Applications", *AIP Conference Proceedings*, **1943**(1), pp. 020106-1–020106-7, <https://doi.org/10.1063/1.5029682> (Scopus Indexed).
- **Vishwas, M.** and Basavaraj, C.K. (2017). "Studies on Optimizing Process Parameters of Fused Deposition Modelling Technology for ABS", *Materials Today: Proceedings*, **4**(10), pp. 10993-11002, <https://doi.org/10.1016/j.matpr.2017.08.057>, (Scopus Indexed).
- **Vishwas, M.**, Sharnappa Joladarashi and Satyabodh M Kulkarni. (2017). "Behaviour of Natural Rubber in Comparison with Structural Steel, Aluminium and Glass Epoxy Composite under Low Velocity Impact Loading", *Materials Today: Proceedings*, **4**(10), pp. 10720-10727, <https://doi.org/10.1016/j.matpr.2017.08.019>. (Scopus Indexed).

- Basavaraj, C.K. and **Vishwas, M.** (2016). “Studies on effect of fused deposition modelling process parameters on ultimate tensile strength and dimensional accuracy of nylon”, *International Journal of Material Science and Engineering-IOP Conference Series*, **149**, doi:10.1088/1757-899X/149/1/012035. (Scopus Indexed).
- Dr Adaveesh, B., Anil, K.C., **Vishwas, M.** and Archana, R. P. (2015). “Development and Property Evaluation of Fiber Reinforced Hybrid Epoxy Laminate Composite: Jute/E-Glass/Carbon-Fabric”, *Applied Mechanics and Materials*, **787**, pp. 534-537, <https://doi.org/10.4028/www.scientific.net/AMM.787.534> (August 2015)

Book Chapters

- Kartik Kumbhare, **Vishwas Mahesh** and Sharnappa Joladarashi (Jan 2024). "Low-velocity Impact Response of Jute/Banana Fiber in Natural Rubber-Based Hybrid Composites: FE Approach" . In: Velmurugan, R., Balaganesan, G., Kakur, N., Kanny, K. (eds) *Dynamic Behavior of Soft and Hard Materials Volume 1. IMPLAST 2022. Springer Proceedings in Materials*, vol 34. Springer, Singapore. https://doi.org/10.1007/978-981-99-6030-9_30 **Volume 1** pp 343–353
- Renuka Sahu, Athul Joseph, **Vishwas Mahesh**, Vinyas Mahesh and Dineshkumar Harursampath (Jan 2024). "*Recent studies on modeling of the hygrothermal ageing of the natural fibre reinforced composite*", Chapter 2, Part 1, Book- Biocomposites for Industrial Applications, Elsevier, Woodhead publishing, Pg 29-60, ISBN: 9780323918664.. Book- Biocomposites for Industrial Applications, Elsevier. Eds: Senthil Muthukumar T, Enamul Hoque, Senthilkumar K, Chandrasekar M, Suchart S
- Renuka S, Athul SJ, **Vishwas M**, Vinyas M, Bhowmik S, Harursampath D (Jan 2024). “Finite element modeling studies on the static properties of the biocomposites: A review”, Chapter 14, Part 3, Book- Biocomposites for Industrial Applications, Elsevier, Woodhead publishing, Pg 275-309, ISBN: 9780323918664.. Book- Biocomposites for Industrial Applications, Elsevier. Eds: Senthil Muthukumar T, Enamul Hoque, Senthilkumar K, Chandrasekar M, Suchart S
- Athul SJ, **Vishwas M**, Vinyas M, Harursampath D, MAR Loja, Bhowmik S (Jan 2024) “Crashworthiness of the biocomposites in automotive applications”, Chapter 9, Part 3, Book- Biocomposites for Industrial Applications, Elsevier, Woodhead publishing, Pg. 169-194, ISBN: 9780323918664. Eds: Senthil Muthukumar T, Enamul Hoque, Senthilkumar K, Chandrasekar M, Suchart S
- Vinyas Mahesh, **Vishwas Mahesh**, Arjun Siddharth Mangalasseri, Dineshkumar Harursampath and Sathiskumar A Ponnusami. (2023). "Effect of functionally graded magneto-electro-elastic facings on the damped nonlinear transient response of a sandwich plate with agglomerated CNT core", Chapter 11, Book- Functionally Graded Structures- Modelling and Computation of Static and Dynamic Problems, IOP Publishing, Bristol, UK, ISBN: 978-0-7503-5301-4, 978-0-7503-5299-4, 978-0-7503-5302-1, 978-0-7503-5300-7, DOI: 10.1088/978-0-7503-5301-4.

- Arjun Siddharth Mangalasseri, Vinyas Mahesh, **Vishwas Mahesh**, Sriram Mukunda, Sathiskumar A. Ponnusami, Dineshkumar Harursampath. (2023). "*Effect of External Resistances on Energy Harvesting Behaviour of Porous Functionally Graded Magneto-Electro-Elastic Beam*" Chapter-3, Book- **Mathematical Methods in Dynamical Systems** , CRC Press, Taylor and Francis, 1st Edition, Location: Boca Raton ISBN: 9781003328032 , <https://doi.org/10.1201/9781003328032>
- Athul SJ, Vinyas M, **Vishwas M**, Harursampath D. (January 2022). "*Introduction to the composite sandwich panels and their fabrication methods*" Chapter 1, Book- **Sandwich composites: Fabrication and Characterization**, CRC Press, Taylor & Francis, 1st Edition, Location: Boca Raton, <https://doi.org/10.1201/9781003143031> , EBook ISBN: 9781003143031.
- **Vishwas M**, Vinyas M, Harursampath D. (January-2022). "*Low velocity impact response of the composite sandwich panels*" Chapter 6, Book- **Sandwich composites: Fabrication and Characterization**, CRC Press, Taylor & Francis, 1st Edition, Location: Boca Raton, <https://doi.org/10.1201/9781003143031> , EBook ISBN: 9781003143031.
- Atul Joseph, Vinyas Mahesh, **Vishwas Mahesh**, Dineshkumar Harursampath and Vasu Mallesha. (January-2022). "*Role of 3D Printing in the Fabrication of Composite Sandwich Structures*" Chapter 17, Book- **Sandwich composites: Fabrication and Characterization**, CRC Press, Taylor & Francis, 1st Edition, Location: Boca Raton, <https://doi.org/10.1201/9781003143031> , EBook ISBN: 9781003143031.
- Joseph A., Mahesh V., **Mahesh V.**, Harursampath D., Loja M.A.R. (2022). "*Effects of Hygrothermal Aging on the Mechanical Properties of the Biocomposites*". In: Muthukumar C., Krishnasamy S., Thiagamani S.M.K., Siengchin S. (eds) **Aging Effects on Natural Fiber-Reinforced Polymer Composites. Composites Science and Technology**. Springer, Singapore. https://doi.org/10.1007/978-981-16-8360-2_5
- Vinyas Mahesh, **Vishwas Mahesh**, Subhashchandra Kattimani, Vinayak Kallannavar, Dineshkumar Harursampath. (2022). "*Free vibration and damping characteristics of completely biodegradable polymer-based composites*". Book- **Vibration and Damping Behavior of Biocomposites**, Boca raton, CRC Press, Taylor and Francis, <https://doi.org/10.1201/9781003173625>
- Vinyas Mahesh, **Vishwas Mahesh**, Sriram Mukunda, Arjun Siddharth, Athul S. Joseph, Dineshkumar Harursampath. (2022). "*Effect of Organic Nanofillers on the Free Vibration and Damping Characteristics of Polymer-Based Nanocomposites*". Book- **Vibration and Damping Behavior of Biocomposites**, Boca raton, CRC Press, Taylor and Francis, <https://doi.org/10.1201/9781003173625>

- Renuka Sahu, Athul Joseph, **Vishwas Mahesh**, Vinyas Mahesh and Dineshkumar Harursampath. "*Recent developments on computational modeling of viscoelastic properties of the biocomposites*". Book- **Vibration and Damping Behavior of Biocomposites**, Boca raton, CRC Press, Taylor and Francis, <https://doi.org/10.1201/9781003173625>
- Athul SJ, Vinyas M, **Vishwas M**, Harursampath D. "*Structural analysis of graphene-based composites*". Book- **Innovations in Graphene-Based Polymer Composites**, Elsevier, <https://doi.org/10.1016/B978-0-12-823789-2.00006-6>

Books

- NIL

Editorial

- Editorial Board Member- Discover Applied Science (Springer Nature) since 2024
- Editorial Board Member- Advances in Polymer Technology (Wiley-SCOPUS and WoS Indexed, IF 2, Q2) since March 2025

Reviewer of Journals

- Composite Structures
- International Journal of Impact Engineering
- Polymer Composites
- IEEE Explore
- Acta Mechanica
- Journal of Brazilian Society of Mechanical Sciences and Engineering
- Nature Communications
- Wear
- Scientia Iranica
- Material Research Express
- Mechanics Based Design of Structures
- Journal of Testing and Evaluation
- Engineering Research Express
- Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science
- SN Applied Science Journal
- Journal of Material Engineering and Performance
- Cleaner Materials
- Materials and Design
- Composites - Part A: Applied Science and Manufacturing
- Acta Mechanica
- Fibers and Polymers

Editor/ Reviewer of Journal

- Editorial Board Member- Discover Applied Science (Springer Nature) since 2024

- Editorial Board Member- Advances in Polymer Technology (Wiley-SCOPUS and WoS Indexed, IF 2, Q2) since March 2025.

Reviewer of Journals

- Composite Structures
- International Journal of Impact Engineering
- Polymer Composites
- IEEE Explore
- Acta Mechanica
- Journal of Brazilian Society of Mechanical Sciences and Engineering
- Nature Communications
- Wear
- Scientia Iranica
- Material Research Express
- Mechanics Based Design of Structures
- Journal of Testing and Evaluation
- Engineering Research Express
- Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science
- SN Applied Science Journal
- Journal of Material Engineering and Performance
- Cleaner Materials
- Materials and Design
- Composites - Part A: Applied Science and Manufacturing
- Acta Mechanica
- Fibers and Polymers

Patents

- DUAL FUNCTION ORTHOPAEDIC CUSHION: Indian Design Patent Filed on 11/11/2025 (Vishwas Mahesh, Vinyas Mahesh, Shwetha N V, Bhavana U, Hema J and Rakshitha N), Ref. No/ Application No.- 479796-001
- MANUAL GRASS CUTTER: Indian Design Patent Filed on 10/11/2025 (Vishwas Mahesh, Vinyas Mahesh, Somashekhara G R, Uday A, Harshith D and Vedamurthy K), Ref. No/ Application No.- 479674-001
- VEGETABLE CLEANING EQUIPMENT: Indian Design Patent Filed on 14/08/2024 (Vishwas Mahesh, Vinyas Mahesh, Venugopal K, Dhanush CR, Arshad Ahamed Khan, Divyanshu Singh)
- Automated Fertilizer Sprayer Equipment for Sericulture: Indian Design Patent (Design Number:408315-001), Granted on 21/02/2024, Patentee: Vishwas Mahesh

- WALKING STICK: Indian Design Patent filed on 20/06/2024 and granted on 21/08/2024 (Vishwas Mahesh, Akshatha R S, Sourav R, Abdul Razik B R and Hamsa N S) Design Number: 420667-001.
- VEGETABLE WASHER: Indian Design Patent Granted on 19/07/2024 (Vishwas Mahesh, Dhanush CR, Arshad Ahamed Khan, Divyanshu Singh, Venugopal K), Design Number: 421666-001
- SMART FORCE INDICATING TOGGLE LEVER CLAMP: Indian Design patent, Granted on 30/05/2024 (Vishwas Mahesh and Vinyas Mahesh)

Invited Lectures, talks and workshops

- Delivered a guest lecture on "**Introduction to Polymers**" during FDP conducted by Department of Mechanical Engineering, SIT, Tumakuru on 19/08/2025.
- Delivered a guest lecture on "**Introduction to Operations Management, Forecasting Methods and Demand Forecasting**" to students of 2nd Semester, Department of Mechanical Engineering, Govt. Polytechnic, Holenarasipura on 24th February 2025.
- Delivered a guest lecture on "**Impact behaviour of natural & sustainable composites**" at Workshop Integrating NMCAD Delft Structures, Indian Institute of Science (IISc), Bengaluru on 16/03/2023.
- Delivered a guest lecture on "**Introduction to Advanced Materials**" to students of 5th Semester, Department of Mechanical Engineering, Govt. Polytechnic, Hiriyur on 2nd September 2023.
- Served as "**Session Chair**" in 13th International Conference on Materials Processing and Characterization 2022 (ICMPC 2022)
- Delivered a guest lecture on "**Art of Executing a Good Research Project, Presentation Skills and Paper Writing**" at Inauguration of Mechanical Engineering Association Activities- 2022-23, 08th October 2022 at the Department of Mechanical Engineering, Sri Siddhartha Institute of Technology, Tumakuru.
- Delivered a guest lecture on "**Assessment of Natural Material Based Flexible Composites for Impact Applications**" at Five Day National E-Workshop on Design & Manufacturing of Advanced Materials (DMAM 2021), 15th-19th February 2021 at Dept. of Mechanical Engineering, National Institute of Mechanical Engineering, NITK Surathkal
- Delivered a guest lecture on "**Importance of Mechanical Engineering and Mechanical Science**" at Siddaganga Polytechnic, Tumkur on 28.11.2020.