

## **Dr. VISHWAS MAHESH (Ph.D-NITK, Post Doc-IISc)**

### **IN NATIONAL/INTERNATIONAL CONFERENCES**

1. **Vishwas Mahesh**, Manoj D Yadav, Sinchana T C, Subhash SR and Sushmitha S (2022). "Conceptual Design and Development of Automated Waste Segregator", In: Papat, 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](https://doi.org/10.1007/978-981-19-0676-3_16), Pg 199-206 (Scopus Indexed).
2. 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).
3. **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).
4. **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).
5. **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).
6. **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).
7. **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/mateconf/201714401010> (Scopus Indexed).
8. **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).
9. **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).

10. **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).

11. **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).

12. **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).

13. 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).

14. 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)

## **JOURNAL PUBLICATIONS**

1. 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).

2. **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).

3. **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).

4. **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)

5. **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).

6. **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).

7. **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*, <https://doi.org/10.1177/09544062241229935> (SCIE and SCOPUS, Q2)

8. **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)

9. **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)

10. 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)

11. 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).

12. **Vishwas Mahesh** (July 2023). " Feasibility Study On Application Of Various MADM Approaches For Selection Of Kenaf/Saw Dust Composite", *Mechanics Of Advanced Composite Structures* (SCOPUS, Q3).

13. **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).
14. **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)
15. 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).
16. Vinyas Mahesh, Jerin P George, **Vishwas Mahesh**, Himadree Chakraborty, Sriram Mukunda and Sathiskumar A Ponnusami (June 2023). "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*, DOI: 10.1177/07316844231188853 (SCI Indexed, Q1).
17. **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).
18. 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).
19. 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).
20. 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*, <https://doi.org/10.1007/s13399-023-04487-0> (Scopus and SCI Indexed: Q3).
21. 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).

22. **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](https://doi.org/10.22075/MACS.2023.29029.1453) (SCOPUS).

23. 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).

24. 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)

25. 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).

26. **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)

27. **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](https://doi.org/10.22075/mac.2022.28671.1440) (SCOPUS Indexed).

28. 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).

29. 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).

30. **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).
31. 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*, <https://doi.org/10.1007/s12008-022-01078-7> (SCIE, SCOPUS Indexed).
32. **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).
33. **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).
34. **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).
35. Vinyas Mahesh, **Vishwas Mahesh**, Sriram Mukund and Dineshkumar Harursampath (Accepted: May 2022). "Influence of micro-topological textures of BaTiO<sub>3</sub>-CoFe<sub>2</sub>O<sub>4</sub> 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).
36. **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).
37. **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).
38. 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).

39. 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).

40. **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).

41. **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).

42. 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](https://doi.org/10.1080/15440478.2022.2036292), (SCIE and SCOPUS Indexed).

43. **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).

44. **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).

45. **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).

46. 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)

47. 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).

48. 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).

49. **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)

50. **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).

51. 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).

52. **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)

53. **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)

54. 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).



55. **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).
56. **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).
57. **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).
58. **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).
59. **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).
60. **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).
61. **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).
62. **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).
63. **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).

64. **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).
65. **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).
66. **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).
67. **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).
68. **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).
69. **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 Automatises (JESA)*, **52**(2), 137-142, DOI: <https://doi.org/10.18280/jesa.520204> (SCOPUS)
70. Vinyas, M., Kattimani, S.C., Loja Amelia and **Vishwas Mahesh**. (2018-Sep). “Effect of BaTiO<sub>3</sub>/CoFe<sub>2</sub>O<sub>4</sub> 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)
71. **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).
72. **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).

73. 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).

## **BOOK CHAPTERS**

1. 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](https://doi.org/10.1007/978-981-99-6030-9_30) **Volume 1** pp 343–353
2. 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
3. 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
4. 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
5. 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.
6. 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>

7. 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.
8. **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.
9. 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.
10. 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](https://doi.org/10.1007/978-981-16-8360-2_5)
11. 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>
12. 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>
13. 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>
14. 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>