



# MADURAI KAMARAJ UNIVERSITY

University with Potential for Excellence

(Re-accredited by NAAC with 'A<sup>++</sup>' Grade in the 4<sup>th</sup> Cycle)

## University Science Instrumentation Centre (USIC)

### Bio-Data

|                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                           |
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| <p><b>Dr. Aravind Dhandapani,</b><br/>BE., ME., MBA., PGDME., PhD., PGDHE., Ph.D.,<br/>Director I/C<br/>Assistant Professor (Academic Level – 11 (Stage II))</p> | <p><b>Nationality:</b> Indian</p>                                                                                                                                                                                                                                                                                         |
| <p><b>Professional Experience:</b> 14+ Years<br/><b>Date Birth:</b> 27<sup>th</sup> February, 1984<br/><b>Age:</b> 42 Years</p>                                  |                                                                                                                                                                                                                                                                                                                           |
| <p><b>Educational Qualification</b></p>                                                                                                                          | <div> <p>BE – Mechanical Engineering<br/>ME – Industrial Engineering<br/>MBA – Operations<br/>PGDME – Marine Engineering<br/>PhD – Business Administration<br/>PGDHE – Higher Education<br/>PhD – Mechanical Engineering</p>  </div> |
| <p><b>Field of Specialization</b></p>                                                                                                                            | <p>Mechanical Measurements</p>                                                                                                                                                                                                                                                                                            |
| <p><b>Subjects</b></p>                                                                                                                                           | <p>Mechanics, Marine Auxiliary, Numerical Methods, Industrial Instrumentation, Renewable Energy Sources &amp; its Application, Communication Systems and Networks, Process Control, Measurement and Control Systems, Workshop Technology, Mechanical Measurements and Instrumentation</p>                                 |

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| <b>Awards &amp; Recognitions</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | <ul style="list-style-type: none"> <li>▪ CADD Quiz Award</li> <li>▪ NTPC Scholar</li> <li>▪ GATE Scorer</li> <li>▪ JMET Scorer</li> </ul> |
| <p style="text-align: center;"><b>Patents details: 3 number</b></p> <ol style="list-style-type: none"> <li>1. RF BASED SPEED CONTROL SYSTEM FOR ELECTRIC VEHICLES, Intellectual Property, India, Application number: 202341012126, 22 February, 2023</li> <li>2. GLASS FIBRE HELMET, Intellectual Property Office, UK, Design number: 6329034, Grant date: 04 December 2023</li> <li>3. IoT BASED SMART MEDICAL ROBOT DEVELOPMENTS SYSTEM, Intellectual Property, India, Application number: 202441035952, 06 May, 2024</li> <li>4. <b>A Smart Energy Meter With Consolidated Daily and Weekly Power Consumption Updates Using GSM and WIFI</b>, Intellectual Property, India, Application number: 202441014841, 18 December, 2025</li> </ol>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                           |
| <p style="text-align: center;"><b>Publications – 49 numbers</b></p> <p><b>Book Chapters: 11 numbers</b></p> <p><b>2025 – 2026 (July – June)</b></p> <ol style="list-style-type: none"> <li>1. Physical, morphological, chemical, structural, thermal and tensile properties of banana fibres, Banana Fibres and Their Composites: Processing, Design, Properties and Applications, Woodhead Publishing Series in Composite Science and Engineering, ISBN: 978-0-443-30237-4 (Print), ISBN: 978-0-443-30238-1 (Print), <a href="https://doi.org/10.1016/B978-0-443-30237-4.65417-0">https://doi.org/10.1016/B978-0-443-30237-4.65417-0</a>, Elsevier, Page 103 - 128, December 2025</li> <li>2. Revolutionizing healthcare and dentistry: The transformative impact of 3D printing on customized solutions, Materials Science and Technologies Series, Mechanical and Thermal Properties of Engineering Thermoplastics Composites, ISBN: 979-8-89530-460-0 (Hardcover); ISBN: 979-8-89530-682-6 (eBook), DOI: <a href="https://doi.org/10.52305/ERCI6604">https://doi.org/10.52305/ERCI6604</a>, NOVA Science Publishers, Inc., New York, Page 175 – 186, 9 July 2025</li> </ol> <p><b>2023 – 2024 (July – June)</b></p> <ol style="list-style-type: none"> <li>3. Surface modification and engineering of nanoscale absorbent and their composite, Carbon Nanomaterials and their Composites as Adsorbents, Part of the book series: Carbon Nanostructures ((CARBON)), Print ISBN: 978-3-031-48718-7; Online ISBN 978-3-031-48719-4, DOI: <a href="https://doi.org/10.1007/978-3-031-48719-4_6">https://doi.org/10.1007/978-3-031-48719-4_6</a>, Springer, Cham, Page 89 – 104, 27 April 2024</li> <li>4. Mechanical performance of biofibres and biocomposites: Biocomposites – Bio-based Fibers and Polymers from Renewable Resources, Woodhead publishing Series in Composites Science and Engineering, eBook ISBN: 9780323993548, <a href="https://doi.org/10.1016/B978-0-323-97282-6.00007-4">https://doi.org/10.1016/B978-0-323-97282-6.00007-4</a>, Elsevier, Page 143 - 163, 2024</li> </ol> |                                                                                                                                           |

5. Polyester based biocomposites for marine applications, Polyester - based biocomposites, eBook ISBN: 9781003270980, DOI: [10.1201/9781003270980-13](https://doi.org/10.1201/9781003270980-13), CRC press, Taylor & Francis, Page 1 – 22, September 2023
6. Recyclability of lightweight and sustainable materials, Light weight and sustainable composite materials: Preparation, properties and applications, Woodhead publishing series in composites science and engineering, ISBN: 978-0-323-95189-0 (print); ISBN: 978-0-323-95190-6 (online), DOI: <https://doi.org/10.1016/B978-0-323-95189-0.00005-6>, Elsevier, Page 79 – 96, August 2023
7. Advanced natural synthetic composite materials for marine applications, Green Hybrid Composite in Engineering and Non-Engineering Applications, Part of the Composites Science and Technology book series (CST), Print ISBN: 978-981-99-1582-8; Online ISBN: 978-981-99-1583-5, Springer, DOI: [10.1007/978-981-99-1583-5\\_13](https://doi.org/10.1007/978-981-99-1583-5_13), Page 211 – 231, 8 July 2023

#### 2022 – 2023 (July – June)

8. Review on coir fiber surface modification by various techniques, Coir Fiber and Its Composites (ISBN: 978-0-443-15186-6), Woodhead Publishing Series, Elsevier, <https://doi.org/10.1016/B978-0-443-15186-6.00044-8>, Page 55 – 77, October 2022

#### 2021 – 2022 (July – June)

9. Influencing effects of hybridization and addition of fillers on the viscoelastic properties of reinforced polymer-based composites, Vibration and Damping Behavior of Biocomposites (ISBN:9781003173625), CRC press, Taylor & Francis, <https://doi.org/10.1201/9781003173625>, Page 189 – 200, March 2022
10. Tribo Performance Analysis on Polymer - Based Composites, Polymer – Based Composites (eBook ISBN: 9781003126300), CRC press, Taylor & Francis, 1<sup>st</sup> Edition, <https://doi.org/10.1201/9781003126300>, Page 115 – 130, August 2021

#### 2020 – 2021 (July – June)

11. Plastics in marine engineering, Encyclopedia of Materials: Plastics and Polymers, Materials Science and Materials Engineering (ISBN: 9780128035818), Elsevier, <https://doi.org/10.1016/b978-0-12-820352-1.00058-4>, Volume 4, Page 225 – 236, December 2020

**International Journal: 38 numbers**

**SCI Impact Factor: 19 numbers**

#### 2024 – 2025 (July – June)

12. Gum Arabic-based blend biopolymer electrolyte for electric double layer capacitor applications, *International Journal of Biological Macromolecules* (SCI - Q1), Elsevier, Print ISSN: 0141-8130, Online ISSN:1873-0003, doi: <https://doi.org/10.1016/j.ijbiomac.2025.141956>, Volume 30, Part 2, Page –, 10 May 2025, CiteScore: 13.7, **Impact Factor: 8.7**, Citescore: 11.4
13. Hybrid Glass/Kevlar Fiber Reinforced Phenolic Matrix Composites: Thermal degradation and Flammability studies, *Polymer Composites* (SCI - Q1), John Wiley & Sons, Online ISSN:1548-0569, doi:

<http://doi.org/10.1002/pc.29416>, Volume , Issue , Page –, 15 December 2024, **Impact Factor: 4.9**, Citescore: 7.7

14. The Global Challenge of Fluoride Contamination: Review on Implications for Human Health and Ecosystems, **Sustainability** (SCI – Q1), MDPI, Online ISSN: 2071-1050, doi: <https://doi.org/10.3390/su162411056>, 16 (24) , Page 1 – 26, 13 December 2024, CiteScore: 6.8, **Impact Factor: 4.1**, Citescore: 8.9
15. Navigating the Nano-World Future: Harnessing Cellulose Nanocrystal from Green Sources for Sustainable Innovation, **Heliyon** (SCI – Q1), CellPress, Elsevier, Online ISSN: 2405-8440, doi: <https://doi.org/10.1016/j.heliyon.2024.e41188>, 11 (2025) , Page 1 – 23, 12 December 2024, **Impact Factor: 3.6**, Citescore: 7.8
16. Exploring the Mechanical and Thermal Characteristics of Polypropylene Composites with Recycled Polyester Waste as Sustainable Reinforcement for Enhanced Protection in Safety Helmets, **Progress in Rubber Plastics and Recycling Technology** (SCI – Q2), Sage, ISSN: 1477-7606, Online ISSN: 1478-2413, doi: <https://doi.org/10.1177/14777606241313076>, Volume 42 , Issue 2, Page 161 – 180, 06 January 2025, **Impact Factor: 2.1**
17. Advancements in phytomass-derived activated carbon for applications in energy storage systems, **Chemical Industry & Chemical Engineering Quarterly** (SCI – Q3), Online ISSN: 1309-1042, doi: <https://doi.org/10.2298/CICEQ240526034P>, Volume 31 , Issue 4, Page 257 – 276, 07 November 2024, CiteScore: 2.1, **Impact Factor: 1.5**, Citescore: 0.8
18. Examining the performance of eco-friendly flax fiber composites: mechanical, thermal and durability properties, **Biomass Conversion and Biorefinery** (SCI – Q1), Springer Nature, Electronic ISSN: 2190 - 6823, Print ISSN: 2190 – 6815, doi: <https://doi.org/10.1007/s13399-024-06039-6>, Volume , Issue , Page 1 – 15, 07 August 2024, **Impact Factor: 4.3**

#### 2023 – 2024 (July – June)

19. Analysis of the thermal properties in short sansevieria cylindrica fibre/PLA composites processed by twin screw extruder followed by hot press molding technique, **Material Research Express** (SCI - Q2), IOPScience, Online ISSN: 2053-1591, doi: <https://doi.org/10.1088/2053-1591/ad32ea>, Volume 11 , Issue 2024, Page 1 – 18, March 2024, **Impact Factor: 2.5**, Citescore: 4.3
20. Evolution, prospects, and predicaments of polymers in marine applications: A potential successor to traditional materials, **Recycling** (SCI – Q1), MDPI, Online ISSN: 2313-4321, doi: <https://doi.org/10.3390/recycling9010008>, 9(1), 8 ,Page 1 – 20, 19 January 2024, CiteScore: 6.6, **Impact Factor: 5.2**, Citescore: 7.5
21. Recycling of thermoset waste/high-density polyethylene composites: Examining the thermal properties, **Polymer Composites** (SCI - Q1), John Wiley & Sons, Online ISSN:1548-0569, <https://doi.org/10.1002/pc.27953>, Volume 45, Issue 3, Page 2739 –2748, November 2023, **Impact Factor: 4.9**, Citescore: 7.7

#### 2022 – 2023 (July – June)

22. Exploring the Recycling Potential of HDPE Films Reinforced with Flax Fiber for making Sustainable Decorative Tiles, *Journal of Materials Research and Technology* (SCI – Q1), Elsevier, Online ISSN: 2214-0697; Print ISSN: 2238-7854, doi: <https://doi.org/10.1016/j.jmrt.2023.06.067>, Volume 25, Issue , Page 2049 – 2060, 7 June 2023, **Impact Factor: 7.3**, Citescore: 11.2
23. Flexural, impact and dynamic mechanical analysis of glass fibre/ABS and glass fibre/carbon fibre/ABS composites, *Journal of Applied Polymer Science* (SCI – Q2), Wiley, Online ISSN: 1097-4628, doi: <https://doi.org/10.1002/app.54007>, Volume 140 , Issue 27, Page 1 – 17, 9 April 2023, **Impact Factor: 3.1**, Citescore: 5.6
24. Thermal and tensile properties of 3D printed ABS-glass fibre, ABS-glass fibre-carbon fibre hybrid composites made by novel hybrid manufacturing technique, *Journal of Thermoplastic Composite Materials* (SCI – Q2), Sage, ISSN: 0892-7057 Online ISSN: 1530-7980, doi: <https://doi.org/10.1177/08927057231170805>, Volume 37, Issue 1, Page 1 – 20, 31 March 2023, **Impact Factor: 4.0**, Citescore: 3.9
25. Investigation of Wear Behavior in Self-Lubricating ABS Polymer Composites Reinforced with Glass Fiber/ABS and Glass Fiber/Carbon Fiber/ABS Hybrid, *Lubricants* (SCI – Q1), MDPI, Online ISSN: 2075-4442, doi: <https://doi.org/10.3390/lubricants11030131>, 11 (131), Page 1 – 16, 08 March 2023, **Impact Factor: 3.6**, Citescore: 5.6
26. PVA and PMMA nano-composites a review on strategies, applications and future prospects, *Material Research Express* (SCI - Q2), Online ISSN: 2053-1591, IOPScience, doi: <https://doi.org/10.1088/2053-1591/acb527>, Volume 10, Issue 2, Page 1 – 22, 20 January 2023, **Impact Factor: 2.5**, Citescore: 4.3
27. A study on methylene blue degradation: Enhanced photocatalytic activity of Ag-ZnO nanocomposites, *Material Research Express* (SCI - Q2), IOPScience, Online ISSN: 2053-1591, doi: <https://doi.org/10.1088/2053-1591/aca245>, Volume 9, Issue 11, 115505, 11 November 2022, Page 1 – 12, CiteScore: 3, **Impact Factor: 2.5**, Citescore: 4.3

#### **2021 – 2022 (July – June)**

28. A Compendious Review on Fatigue Properties of the Bio-nanocomposites, *Polymer Composites* (SCI - Q1), John Wiley & Sons, Online ISSN:1548-0569, doi: <https://doi.org/10.1002/pc.26859>, Volume 43, Issue 10, Page 6803 – 6816, 18 June 2022, **Impact Factor: 4.9**, Citescore: 7.7
29. Feasibility of Elastomers as an Alternate Material for Marine Applications - A Compendious Review on Properties and Opportunities, *Proceedings of the Institution of Mechanical Engineers, Part M: Journal of Engineering for the Maritime Environment* (SCI - Q2), Sage, ISSN: 1475-0902, Online ISSN: 2041-3084, doi: <https://doi.org/10.1177/14750902221095321>, Volume 236, Issue 4, Page 839 – 855, 30 March 2022, **Impact Factor: 1.8**

**Scopus: 6 numbers**

#### **2022 – 2023 (July – June)**

30. Reducing the frictional resistance in ship's hull using air bubble lubrication techniques: A short review, **Ion Exchange and Adsorption** (SCI – Q3), Nankai Daxue, ISSN:1001-5493, doi: <https://www.lzihyxf.cn/abstract-2023/235.php>, Volume 23, Issue 01, Page 235-240, January 2023
31. Study on the inter-laminar shear strength and contact angle of glass fiber/ ABS and glass fiber / carbon fiber / ABS hybrid composites, **Applied Science and Engineering Progress** (SCI – Q2), ISSN: 2672 – 9156, E – ISSN: 2673 – 0421, doi: [10.14416/j.asep.2023.02.004](https://doi.org/10.14416/j.asep.2023.02.004), Volume 16, No. 3, Page , 16 January 2023, CiteScore: 5.3
32. SBR Sewage Treatment Plant Automation Using PLC AND SCADA, **Advanced Engineering Science** (SCI – Q3), ISSN: 2096-3246, Editorial Department of Journal of Sichuan University, doi: <https://advancedengineeringscience.com/article/383.html>, Volume 54, Issue 02, Page 2899 – 2910, October 2022
33. Reduction of Engine Emission into the Environment by Effective Functioning of Catalytic Converter in Proportion with Concentration of Pollutants, **Specialusis Ugdymas** (SCI – Q4), ISSN: 1392-5369, Siauliai University, doi: <https://www.sumc.lt/index.php/se/article/view/435>, Volume 1, Issue 43, Page 3706 - 3713, July 2022

#### 2020 – 2021 (July – June)

34. Desirability of Tribo-performance of Natural Based Thermoset and Thermoplastic Composites: A Concise Review, **Applied Science and Engineering Progress** (SCI – Q2), ISSN: 2672 – 9156, E – ISSN: 2673 – 0421), doi: 10.14416/j.asep.2021.07.001, Volume 14, Issue 4, Page 606 – 613, 31 May 2021, CiteScore: 5.3

#### 2019 – 2020 (July – June)

35. Evolution, Problems and Prospects of Composite Materials in Marine Applications, **Key Engineering Materials** (SCI – Q4), 2019 (accepted)

#### UGC – CARE: 14 numbers

#### 2023 – 2024 (July – June)

36. Quasi static indentation response of the Glass/basalt fibre reinforced hybrid composites, **Materials Circular Economy**, ISSN - Print: 2524-8746, ISSN-Electronic: 2524-8154, Springer Nature, Volume 6, Issue 38 (2024), Page 1 - 8, 20 June 2024
37. Implications of Student's Learning Skills in Higher Education (Marine Engineering) – From the point of view of teachers and students, **ANVESAK**, Sardar Patel Institute of Economic and Social Research, ISSN - Print: 0378-4568, Volume 54, Issue 1 (I), Page 60-66, January - June 2024

#### 2022 – 2023 (July – June)

38. Ceramics in Marine Diesel Engines - A Short Review, **NIU International Journal of Human Rights**, Noida International University, ISSN - Print: 2394-0298, Volume 10, Issue III, Page 67-73, June 2023
39. Materials and Their Effects on Marine Anti-Fouling Systems, **Dogo Rangsang Research Journal**, ISSN - Print: 2347-7180, Dogo Rangsang Research Society, Volume 14, Issue 01, Page 1 - 9, January 2023
40. Automated Water Irrigation Aided by Moisture Sensor and Self-Developed Mobile App, **SAMRIDDI: A Journal of Physical Sciences, Engineering and Technology**, ISSN - Print: 2229-7111, ISSN-Online: 2454-5767,

**2021 – 2022 (July – June)**

41. Development of pH Value Detection Sensor for Water to Detect and Automate Water Neutralization Process, *International Journal of Research and Analytical Reviews*, E-ISSN: 2348-1269, P- ISSN: 2349-5138, doi: <https://www.ijrar.org/papers/IJRAR22B3319.pdf>, Volume 9, Issue 2, Page 924 – 929, June 2022

**2020 – 2021 (July – June)**

42. An Alternate Charging System for EVs Using Wireless Technology and LabVIEW, *Journal of Emerging Technologies and Innovative Research*, E-ISSN 2348-1269, P- ISSN 2349-5138, <http://doi.one/10.1729/Journal.24885>, Volume 7, Issue 10, Page 3730 – 3733, October 2020

**2018 – 2019 (July – June)**

43. Managing India's Inceptive Import Requirement of LNG Through Shipping Business, *Journal of Emerging Technologies and Innovative Research*, ISSN: 2349-5162, doi: <https://www.jetir.org/papers/JETIR1903N06.pdf>, Volume 6, Issue 3, Page 73 – 78, March 2019
44. Performance Evaluation of an Automobile Alternator, *International Journal of Advanced Research in Electrical, Electronics and Instrumentation Engineering*, ISSN (Print): 2320 – 3765, ISSN (Online): 2278 – 8875, doi: 10.15662/IJAREEIE.2018.0711004, Vol. 7, Issue 11, Page 3962 – 3967, November 2018

**2017 – 2018 (July – June)**

45. A Concise Review On The Growth of Indian Shipping Business And The Role of Indian Ports in Handling Cargo Traffic, *International Journal of Research and Analytical Reviews*, ISSN: 2348 – 1269, doi: <https://www.ijrar.org/papers/IJRAR19D3584.pdf>, Volume 5, Issue 1, Page 143 – 149, March 2018

**Upto June 2017**

46. Managing Evaluation for an Automobile Testing, *Journal of Management in Manufacturing and Services*, ISSN: 2350 – 1480, International Society for Green, Sustainable Engineering and Management, Volume No. 1, Issue No. 16, Page 1 – 4, December 2014
47. Problems and Prospects of Shipping Business in India (A Case Study of an Indian Shipping Company), *International Journal of Scientific and Technology*, ISSN: 2277 – 1581, Volume No. 1, Issue No. 6, Page 299 – 300, December 2012
48. Beneficiaries of Operation Research and Simulation, *International Journal of Scientific and Technology*, ISSN: 2277 – 1581, Volume No. 1, Issue No. 6, Page 295 – 298, December 2012
49. Quality Policy Deployment in an Electrical Limited, *International Journal of Scientific and Technology*, ISSN: 2277 – 1581, Volume No. 1, Issue No. 6, Page 292 – 294, December 2012

**As Reviewer for Journals**

**SCI Journals:**

1. Assessment of water quality parameters in Jharkhand using GPS mapping with special mention of Uranium, *Journal of Water and Health*, IWK, ISSN: 1477-8920, EISSN: 1996-7829, April 2022, **Impact Factor: 2.5**

2. Proposal for Gemba-Kaizen implementation to enhance efficiency in the medium-scale bus body fabrication industry, SAE Technical Papers, SAE International, September 2023
3. Ultra-sensitive detection of Triethylamine (TEA) using LMR/LSPR based Fibre Optic Probe, *Physica Scripta*, IOPscience, ISSN: 1402-4896, December 2023, Cite Score: 3.7, **Impact Factor: 2.6**
4. Tribological performance of functional coated fiber reinforced additively manufactured polymer composite, *Engineering Research Express*, IOPscience, ISSN: 2631-8695, February 2024, **Impact Factor: 1.5**
5. Enhancing the Mechanical Properties of Alkali Treated Smilax zelanica /Glass Fiber Composite with Silica Nanoparticle Addition: A Experimental Study and Numerical Validation, *Materials Research Express*, ISSN: 2053-1591, April 2024, Cite Score: 4.8, **Impact Factor: 1.5**
6. A DFT study of physical properties of thallium-based fluoro-perovskite TIXF3 (X= Ba, Ca, Mg, Sr, Ge, Si, and Sn) for optoelectronic technologies, *Physica Scripta*, IOPscience, ISSN: 1402-4896, December 2023, Cite Score: 3.7, **Impact Factor: 2.6**
7. Structural, Optical, and Dielectric Properties of Gadolinium Substituted Barium Titanate, *Iranian Journal of Science*, Springer Nature, ISSN: 2731-8095, EISSN: 2731-8109, August 2024
8. Composite filaments of ABS/expanded perlite microspheres for Fused Deposition Modelling (FDM) applications; the effect of filler size and density, *Progress in Additive Manufacturing*, Springer Nature, ISSN: 2363-9520, EISSN: 2363-9512, August 2024, **Impact Factor: 4.4**
9. High-Performance NiCu-Bimetallic MOF/CuCr2S4/Activated Carbon Nanocomposite Electrode for Improved Energy Storage and Fast Response Sensor Applications, *Engineering Research Express*, IOPscience, ISSN: 2631-8695, February 2024, **Impact Factor: 1.5**

#### Papers Presented: 22 numbers

##### Topics on

1. Quasi static indentation response of the glass / basalt fiber reinforced hybrid composites, International Conference of Sustainable Materials for Engineering Applications, IIT Madras, 1<sup>st</sup> – 3<sup>rd</sup> February 2024
2. A review on emergence, viability and future of composite materials in marine sectors, International Conference on Sugar Palm and Allied Fibre Polymer Composites (SAPC2021), December 2021
3. Tribological study on thermoplastic based composites – A review, International Tribology Research Symposium – 2020, November 2020
4. Impact of black carbon on tribological behaviors, International Tribology Research Symposium – 2020, November 2020
5. Evolution, prospects, and predicaments of polymers in marine applications: A potential successor to traditional materials, International Virtual Conference on Future Trends in Automotive Technology, VIT, July 2020
6. Elastomer in marine applications: A review, First International Virtual Conference on Advanced Materials and Manufacturing Process, KARE, June 2020

7. Evolution, Problems and Prospects of Composite Materials in Marine Applications – A Review of Literature, Kalasalingam Global Conference, December 2019
8. Passive Integration Systems, EVATAR 2K19, August, 2019
9. Global Positioning System for Marine Vessels, EVATAR 2K19, August, 2019
10. Efficient Technology for Highway Wind Energy Generation and its Application for Road Safety, WEECON'19, March, 2019
11. Sensor Development for Detection of pH of Water to Automate Water Neutralization Process, WEECON'19, March, 2019
12. Effective Control of Catalytic Converters to Reduce Engine Emission in Environment in Proportion with Concentration of Pollution, WEECON'19, March, 2019
13. Integrating Functional Management System of Shipping Business using Engineering, International Conference on Management Practices Beyond the Horizon, March, 2015
14. Role of Shipping in Mitigating Climate Change, ICGTEM'15, March 2015
15. Engineering as a Solution for Shipping Business, ICGTEM'15, March 2015
16. Role of Engineering Industries in Rural Development, National Seminar on People's Participation in Rural Development, January, 2009
17. Operations Research and Quality Policy Deployment for Rural Development, National Seminar on People's Participation in Rural Development, January, 2009
18. Strategic Planning for Rural Development, National Seminar on People's Participation in Rural Development, January, 2009
19. Reasons for Emergence of Industries around Rural Areas, National Seminar on People's Participation in Rural Development, January, 2009
20. Contribution of MNC's to Rural Development, National Seminar on People's Participation in Rural Development, January, 2009
21. Quality Policy Deployment in an Electrical Limited, International Seminar on Case Study Method of Teaching in Commerce / Management Education, January, 2007
22. Beneficiaries of Operations Research, International Conference on Global Business and Policy Modelling, September, 2006

**Seminar Attended: 3 numbers**

1. Participated in National Seminar on "Role of Power Converters and Control System in Renewable Energy", 2020
2. Participated in National Seminar on People's Participation in Rural Development, January, 2009
3. Participated in International Seminar on Case Study Method of Teaching in Commerce / Management Education, January, 2007

**Webinar Attended: 1 number**

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| 1. Participated in Webinar on “Natural Fiber Composites & Use of Agro waste as Filler”, Institute of Tropical Forestry & Forest Product, Universiti Putra Malaysia, November 2020                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                           |
| <b>Workshop Attended: 1 number</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                           |
| 1. Participated in IWRAE’19 (International Workshop on Recent Advances in Electronics), March 2019                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                           |
| <b>Summit: 1 number</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                           |
| 1. As a representative of Madurai Kamaraj University in Indo Global Education Summit, November 2013                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                           |
| <b>Other Academic Participations: 11 numbers</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                           |
| 1. Delivered an Invited Lecture in Hindustan Institute of Technology and Science, November 2022<br>2. Delivered an Invited Lecture in Hindustan Institute of Technology and Science, November 2020<br>3. Completed the National level E-Quiz in ‘ANALYZING TOOLS IN CHEMISTRY’, June 2020<br>4. Completed TOT training on Counselling Skill During COVID19 offered by NIMHANS<br>5. Delivered an Invited Lecture in Hindustan Institute of Technology and Science,<br>6. Completed Training on “Basic Counselling Skill” sponsored by Madurai Kamaraj University<br>7. Keynote Lecture given in WEECON’19 (National Conference on Water, Energy and Environment)<br>8. Technical Expertise for WEECON’19 (National Conference on Water, Energy and Environment)<br>9. Advisory Committee Member in ICGTEM ‘15 (International Conference on Green Technologies for Energy Management)<br>10. Chairperson for a paper presentation session in ICGTEM ‘15 (International Conference on Green Technologies for Energy Management)<br>11. Keynote Lecture given in ICGTEM ‘15 (International Conference on Green Technologies for Energy Management) |                                                                                                                                                                                                                                           |
| <b>Trainings Attended</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | <ul style="list-style-type: none"> <li>▪ Basic Counselling Skills</li> <li>▪ TOT Training by NIMHANS</li> </ul>                                                                                                                           |
| <b>Academic Staff College Orientation/Refresher Courses attended</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | <ul style="list-style-type: none"> <li>▪ Refresher Course – Environmental Studies, Subject: Engineering Sciences</li> <li>▪ Refresher Course – Community Engagement</li> <li>▪ Workshop on Leadership Development Programme</li> </ul>    |
| <b>Academic Responsibilities</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | <ul style="list-style-type: none"> <li>▪ Technical / Purchase Committee</li> <li>▪ Staff In – charge for program on Basic skills in glass blowing</li> <li>▪ Observer for University Examination</li> <li>▪ Teacher Counsellor</li> </ul> |

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|                                        | <ul style="list-style-type: none"> <li>▪ Programme Co-ordinator for USIC</li> <li>▪ Nodal person for MOOCs courses for USIC</li> <li>▪ Co-ordinator for NAAC in USIC</li> <li>▪ Students' Advisor for an Electives offered by USIC</li> <li>▪ Examination Co-ordinator for USIC</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Administrative Responsibilities</b> | <ul style="list-style-type: none"> <li>▪ Senate Member – Governor's Nominee, Madurai Kamaraj University (Feb' 2014 - Feb'2017)</li> <li>▪ Warden for Mens' Hostel and Hostel Committee Member (2014 – 2016)</li> <li>▪ Additional Responsibilities in the office of Public Relations Office (2013 – 2016)</li> <li>▪ Standing Committee Member for SC / ST Cell</li> <li>▪ Committee Member for Green and Clean Campus Committee</li> <li>▪ University Nominee, Board of Studies, Mannar College</li> <li>▪ Representative of Madurai Kamaraj University, Management Committee – Arulmigu Kalasalingam College of Arts and Science</li> <li>▪ Representative of Madurai Kamaraj University, Management Committee – , Theni</li> <li>▪ University Nominee, Board of Studies, Subbalakshmi Lakshmipathy College of Science</li> <li>▪ University Nominee for DDE Centre Allocation</li> </ul> |
| <b>Academic Membership</b>             | International Association of Engineers, International Society for Development and Sustainability, Institute of Marine Engineers, and Indian Seafarers' Association                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Contact Info</b>                    | <p>Dr. D. Aravind<br/> Assistant Professor,<br/> University Science Instrumentation Centre (USIC),<br/> Madurai Kamaraj University,<br/> Palkalai Nagar,<br/> Madurai – 625021.</p> <p>Mobile No: +91 9940642301<br/> E – Mail Id: <a href="mailto:aravind.usic@mkuniversity.ac.in">aravind.usic@mkuniversity.ac.in</a><br/> <a href="mailto:rvinddask@gmail.com">rvinddask@gmail.com</a></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |