Curriculum Vitae

1.	Name	Dr. C. SENTHAMARAIKANNAN
2	Father's/Husband's Name	P. CHINNASAMY
3.	Age	Age : 46

4. Permanent Address

Plot 3, Flat F, Amirtham Apartment, Nehru St., Saraswathi Nagar,
Thirumullaivoyal, Ambattur Post
Chennai, Tamilnadu- 600062
Mobile: 9942860999
mailid: csenthamaraikannan@gmail.com

5. Educational qualification

Degree	Subject / Area of specialization	Year of passing	Name of College	University	% with Class
SSLC	Maths, Science	1993	PAK Palanisamy Hr. Sec School	State board of Tamilnadu	83
HSC	Maths, Science General Machinist	1995			83
UG : B.E	Production	1999	St.Peter's Engineering College	University of Madras	77.8 % First Class with Distinction
PG : M.E	CAD	2006	College of Engineering, Guindy	Anna University	8.56 CGPA First Class with Distinction
Ph.D.	Mechanical Engineering specialised in Design Engg	2017	Sri Venkateswara College of Engg	Anna University	NA

6 Ph.D Thesis Title: Study of Free and Forced vibration characteristics of micro rubber and nano silica reinforced hybrid carbon epoxy composite beams for structural applications

<table>
<tr><td>7.</td><td colspan="5">Experience details: Total = <u>23 years</u></td></tr>
<tr><td></td><td rowspan="2">Name of employer</td><td rowspan="2">Designation</td><td colspan="2">Period</td><td rowspan="2">Year of Experience</td></tr>
<tr><td></td><td>From</td><td>To</td></tr>
<tr><td></td><td>Sri Venkateswara College of Engineering (Autonomous Institute)</td><td>Associate Professor & Academics - Coordinator -SVCE</td><td>01/05/2022</td><td>Till to date</td><td>16.6 years</td></tr>
<tr><td></td><td rowspan="3">Sri Venkateswara College of Engineering (Autonomous Institute)</td><td>Assistant Professor Gr 3</td><td>01/07/2014</td><td>31/05/2021</td><td rowspan="3"></td></tr>
<tr><td></td><td>Assistant Professor Gr 2/Senior Lecturer</td><td>01/01/2008</td><td>30/06/2014</td></tr>
<tr><td></td><td>Lecturer</td><td>08/02/2006</td><td>31/12/2007</td></tr>
<tr><td></td><td>Kings Engineering college</td><td>Lecturer</td><td>28 / 06 / 2005</td><td>03/02/2006</td><td>0.8 years</td></tr>
<tr><td></td><td>Sri Padmavathi college of Engineering</td><td>Lecturer & Sr. Lecturer</td><td>01/ 06 /1999</td><td>27/6/2005</td><td>6 years</td></tr>
<tr><td>8.</td><td colspan="5">Number of papers published: Total: 73 Nos.</td></tr>
<tr><td></td><td colspan="5">Journals: 27 ,
Book : 1 Control and Instrumentation for Industry 4.0, SIPH Publications
International conferences: 45 National conferences: 6</td></tr>
<tr><td>9.</td><td colspan="5">ADDITIONAL INFORMATION (Enclose the details as annexure)</td></tr>
<tr><td></td><td colspan="2">Funded Projects
Completed -1 No.
Applied - 8</td><td colspan="3">Completed: One -AICTE RPS Project, titled
Applied: , 8 Nos</td></tr>
<tr><td></td><td colspan="2">Patent Granted 1 No, and
Patent Published -1 No.</td><td colspan="3">Patent Grant – 1 Title “Design and Development of a Higher Order Device with Adjustable Deflection Corrective Mechanism”
<u>Patent No. 499411 Date of Grant: 15/01/2024</u>, Application Number: 201841015943.</td></tr>
<tr><td></td><td colspan="2">Academics -Coordinator, SVCE</td><td colspan="3">Main Contribution
Assisting Dean Academics, SVCE in all academic related activities, Curriculum design and Development, Stakeholders feedback, and For mechanical department curriculum related activities, planning and conduct Board of studies meetings, Curriculum development meetings, also to conduct remedial classes for slow learners, counsel the slow learners to improve their performance.
Additional Contribution
▪ Planning academic activities</td></tr>
</table>

		▪ Planning & Executing important College level events like Student Induction Program, College Day, Graduation Day. ▪ Overall Performance Analysis and proposing necessary measures. ▪ Assisting for preparing for various accreditation agencies like NAAC & NBA. ▪ Organizing workshops ▪ Assisting in conducting Academic Objective coordinators meetings ▪ Assisting in conducting Grievance Appeal committee meetings
	Evaluator for Central Government Schemes	1. Exceptional contribution as a primary evaluator in "Toycathon 2021" from Ministry of Education, India 2. Reviewer for Innovative ideas received under the Inspire Awards - Manak for the year 2021 – 22, 2022-2023 and 2023-24 from National Innovation Foundation, India
	Journal reviewer	Elsevier, Springer, Sage
	Content Creator	Mentor, Syllabus and Content Creator for Design Engineering Finishing School conducted by TVS training and services, Chennai
	FDP's/Workshop Organized	Total: 31 Regular: 21 and in Online: 10
	MOOC/ FDP/ Webinar Attended	MOOC: 15 FDP: 57 Webinar: 35
	Industrial training & Consultancy	Western Thomson Pvt Ltd., and TAFE Pvt Ltd., Consultancy services for the various Engg Colleges
	Guest Lecture Given	Seven
	Membership in Professional Bodies	Indian Society of Technical Education (ISTE) Tribology Society of India, (TSI) Scientific and Technical Research Association (STRA) International Association of Engineers (IAENG)
10.	Proficiency in Software's	AUTOCAD, CREO, CATIA, ANSYS, Solid works, MATLAB, RTPRo, MEScopeves
11.	Area of Interest	3D Printing, Vibration Analysis and Control, Composite Materials, Mechanical behaviour of Materials
11.	Achievements, if any	• University Fifth Rank Holder- B.E Production • Topper in NPTEL certificate courses • Received Four Best Paper Awards

		• Secured S Grade in the GIAN Course on Artificial Intelligence techniques and their applications in design and Manufacturing, NIT, Jhalandhar, Dec 2018. • Organising Committee member for two conferences.
12	Teaching Subjects	Mechanics of Solids, Kinematics of Machineries, Dynamic of Machinery, Design of Machine elements, Design of transmission systems, Design Thinking, Additive Manufacturing, Finite Element analysis, ANSYS lab, CREO Lab, MAT Lab
	Faculty Advisor and Class Committee Chair person	From 2006 to 2019 _Undergraduate Students Counsellor From 2019 to till to date – Post Graduate Students Counseller From 2020 -Class Committee Chairperson
	References	1. Vivek 2. Dr. R. Ramesh Dean Academics, Sri Venkateswara College of Engineering 9445247374

Research Objective

- From my research studies, I established that the material damping dominantly improves the damping capability of the structures. I will continue my research work in this line to continuously explore the new material combination to reduce vibration and thereby increase comfortability, which is one of the agenda Norms and regulation mooted by Autonomous bodies.
- I attempt to incorporate emerging technologies like 3D printing to find solutions by looking at various views of collaboration with experts of different backgrounds to solve existing problems. I am now researching with the 3D printing of carbon fibre composites with my research group. I introduce recent research about new technologies and materials and allow students to creatively apply these findings in a research-based design process.
- Over the next several years, I have plans for three major research areas. First, I will keep updating emerging technologies, techniques, and materials. I will search for creative applications that can lead to successful grant and funding supports and publish journals with the synergies of educative and creative scholarship activities.
- From the efforts of collaborative research, the following is expected: publishing two journals of each discipline and trans discipline I will attempt to develop proposals for

securing intramural and extramural funds from the inter- and transdisciplinary research efforts on developing products using 3D printing.

- My future involves continuing my work toward the previously stated goals using innovative and collaborative research methods. Ultimately, I will disseminate my research findings through a variety of avenues, including academic publications, a book geared towards a professional audience, and workshops and seminars targeting non-academics.

Teaching objectives

- I adhere to my teaching goals of facilitating the ability to think, read, write, and speak critically and I am flexible and relatable as an instructor, I believe that I can create a challenging, stimulating, and enjoyable environment for students each semester. My teaching style combines innovation, enthusiasm, and critical analysis.
- I actively seek out up-to-date media clips, in-class simulations, and thought-provoking activities that challenge students' thinking with the intent of making the class period engaging and memorable. These sorts of activities promote reflection, analysis, and great discussions that often seep into hallway discussions after class ends. I also prepared e-content for today's generation for after class studies.
- Also, I will challenge my students to explore outside of their comfort zones and take advantage of the opportunities available to them to gain new experiences. I will also encourage the students to get involved in voluntary work for the same reasons.
- Early in my career, I developed a passion for helping students to think critically about quantitative methods and development. This desire grew out of my own experiences first as a student and then as an instructor.
- Finally, I have had the pleasure of interacting with many of my undergraduate and graduate students after their semester with me has ended. Over the past several years, I have integrated many students into my lab after they expressed interest in working with me in a research setting. By that way, I have published more research papers with my students.

I. LIST OF PUBLICATIONS

JOURNAL

SCI: 5 SCOPUS: 14 UGC: 7

1. Kirubakaran G, Senthamaraikannan C, Vignesh M. Effect of raster orientation on pure nylon, carbon fibre nylon, and glass fibre nylon using three-dimensional printing. Proceedings of the Institution of Mechanical Engineers, Part E: Journal of Process Mechanical Engineering. 2024;0(0). doi:10.1177/09544089241239821 **(SCI)**
2. Kirubakaran, G., Senthamaraikannan, C. Mechanical, wear, and water absorption behavior of polyester biocomposite using jackfruit seed husk cellulose and pineapple fiber. Biomass Conv. Bioref. (2024). https://doi.org/10.1007/s13399-024-05268-z **(SCI)**
3. Senthamaraikannan Chinnasamy, Kowsik, K. V. & Raviram, R. Mechanical and Vibration Properties of Epoxy Composites Reinforced with Sisal, Areca, and Hemp Fibers,

Enhanced by Sugarcane Bagasse and Coconut Husk Fillers. *Mater Circular Economy* **6**, 24 (2024)

4. G. Shashang, M.S.K. Tharun, S.S. Sriram, Journal of University of Shanghai for Science and Technology ISSN: 1007-6735 **(Scopus)**
5. Chinnasamy, Senthamarai Kannan, et al. "Digital twin of robot manipulator using ROS." AIP Conference Proceedings. Vol. 2946. No. 1. AIP Publishing, Nov 2023. **(Scopus)**
6. C. Senthamaraikannan, B. ParthaaSarathy, Sai Surya, S. Tharun Rajan, Study on the free vibration analysis and mechanical behaviour of 3D printed composite I shaped beams made up of short carbon fiber reinforced ABS and PLA materials, Materials Today: Proceedings, July 2023, ISSN 2214-7853, https://doi.org/10.1016/j.matpr.2023.07.141. **(Scopus)**
7. C. Senthamarai Kannan, R. Ramesh, R. Raviram, M. Aadithya, Study of mechanical properties of sustainable biocomposite panels using Jute-PLA and Sisal-PLA, Materials Today: Proceedings, Aug 2023, ISSN 2214-7853, https://doi.org/10.1016/j.matpr.2023.08.138. **(Scopus)**
8. C Senthamaraikannan et al, Dec, 2022, Spider Bot – A Quadruped Robot for Data Gathering, Journal of Engineering Science and Technology Review 15 (6) (2022) 15 – 19. ISSN: 1791-2377. **(Scopus)**
9. C Senthamaraikannan et al, Dec 2020, Overview of Polylactic acid and its derivatives in medicinal applications, IOP Conf. Ser.: Mater. Sci. Eng. 988 012003. **Scopus Indexed**, doi:10.1088/1757-899X/988/1/012003
10. C Senthamarai Kannan et al Dec 2020, A review on additive manufacturing of AA2024 and AA6061 alloys using powder bed fusion, IOP Conf. Ser.: Mater. Sci. Eng. 988 012002. **Scopus Indexed**
11. Dhannush, S. and Aushwin, S. and Arunagiri, Adhithian R. and Senthamaraikannan,C, Investigation on Mechanical Behavior of Sisal Fiber Reinforced Polylactic Acid and Sisal/Epoxy Composites, Key Engineering Materials, ISSN: 1013-9826, May 2020, Vol. 841, pp 322-326., **Scopus Indexed,** https://doi.org/10.4028/www.scientific.net/KEM.841.322
12. Aadithya, M. and Kirubakar, V.K. and Aakash, T. and Senthamaraikannan, C, Investigation of the Tensile and Flexural Behaviour of Polylactic Acid Based Jute Fiber Bio Composite, Key Engineering Materials, ISSN: 1013-9826, May 2020, Vol. 841, pp 283-287. **Scopus Indexed**,
13. N.Rajapandian, C. Senthamaraikannan, S Rahul, R Anand Vijay Raj , T.V. Nithin Kumar, Investigation on Mechanical Performance of 3D printed Carbon and Glass Fiber reinforced Poly lactic Acid laminates, Elsevier, Materials Today Proceedings, April 2020, Volume 46, Part 19, 2021, Pages 9429-9432, ISSN 2214-7853, https://doi.org/10.1016/j.matpr.2020.03.114., **Scopus Indexed,** ISSN: 2214-7853,
14. M.Dhinesh Kumar, C.Senthamaraikannan, S.Jayasrinivasan, S.Aushwin, Study on Static and dynamic behavior of Jute/Sisal fiber reinforced epoxy composites, Elsevier, Materials Today Proceedings, April 2020, doi.org/10.1016/j.matpr.2020.03.064, **Scopus Indexed,** ISSN: 2214-7853
15. Aadithya.M, Athul Nelliparambil Mohandas, C. Senthamaraikannan, Study and Implementation of Just-In-Time Philosophy in the Manufacturing Industries to Increase

Productivity, Solid State Technology Volume: 63 Issue: 2s Publication Year: 2020, **Scopus Indexed.**

16. C Senthamaraikannan and R Ramesh, Evaluation of mechanical and vibration behavior of hybrid epoxy carbon composite beam carrying micron-sized CTBN rubber and nanosilica particles, Proceedings of the Institution of Mechanical Engineers, Part L: Journal of Materials: Design and Applications, 2019, Vol. 233(9) pp 1738–1752. **SCI indexed,** DOI: 10.1177/1464420718784315.Impact Factor 1.568, ISSN 1464-4207.
17. Senthamaraikannan, C, K., GiriPrasath, Kabilan, K. Karthikbalaji, P. (2019). Evaluation of Mechanical Properties Of Hybrid Intralayer Jute/Sisal And Flax/Sisal Epoxy Composites. Think India, 22(4), 1684-1691. https://doi.org/10.26643/think-india.v22-2.9056, listed journal, ISSN:0971-1260 **UGC CARE**
18. Kirubakaran, G., Aadithya, M., Madankumar, C., Senthamaraikannan, C. (2019). Effect of Alkaline Treatment on banana fiber reinforced Epoxide Composites. Think India, 22(4), 1755-1761. https://doi.org/10.26643/think-india.v22-2.9071. ISSN:0971-1260 **UGC CARE**
19. C Senthamaraikannan and R Ramesh, Experimental investigation on vibration characteristics of woven carbon fabric-reinforced composite beams of various cross-sectional shapes, Proceedings of the Institution of Mechanical and Applications Engineers, Part L: Journal of Materials Design, Sage Publications, Vol.230(1),pp 64–74,2016, **SCI indexed,** Impact Factor 1.568, , https://doi.org/10.1177/1464420714545368, ISSN 1464-4207.(2016)
20. Senthamaraikannan C, R. Ramesh, R. S. Vaidya and B. Vijayaram, "Investigation on forced vibration response of micro rubber/nano silica added carbon composite beams for structural applications," IEEE Explore, London, 2016, pp. 54-58, doi: 10.1109/ICMAE.2016.7549507, 978-1-4673-8829-0/16**, SCI indexed**
21. C. Senthamaraikannan, S.K.SharathKumar, R. Ramesh, Experimental Investigation on Modal Response of Woven fabric Carbon Composite plate reinforced with particles of micro rubber blended epoxy matrix under Free Vibration Condition, Advanced Materials Research Vols. 984-985 (2014) pp 273-279. **Scopus Indexed,** https://doi.org/10.4028/www.scientific.net/AMR.984-985.273, ISSN 10226680.
22. L.Radhaswamy, C.Senthamaraikannan, R. Ramesh, Investigation of the elastic modulus effect on free vibration characteristics of fiber reinforced polymer composite beams made of various fundamental shapes, Advanced Materials Research Vols. 1088 (2015) pp 401-406, https://doi.org/10.4028/www.scientific.net/AMR.1088.401, 1662-8985, **Scopus Indexed.**
23. Rajapandian N, Nithinkumar T V ,Rahul S, C. Senthamaraikannan , Review Of Materials and Methods For 3d Printing/Additive Manufacturing , International Journal Of Management, Technology And Engineering, vol-9-issue-04-2019-4, DOI:16.10089. IJMTE.2019. V9I4.19.27599. **UGC CARE**
24. C.Senthamaraikannan, M. Monish Kumbhat, R.Ramesh, Investigation on Experimental Modal Response of Hybrid Carbon Composite Plates, Composed of Varying Weight Fraction of Micro Rubber Particulates, International Journal Of Science And Innovative Engineering & Technology, May 2017 Issue Volume 5. **UGC CARE**

25. Agarshna Murari M, Ashwin Nambi, C.Senthamaraikannan, R.Ramesh, Experimental Investigation on the Effects of Helically arranged Unconstrained Elastomer Layered Treatment over Structural Steel Beams of Various Cross-section, for Improved Vibration Characteristics, International Journal for Technological Research in Engineering, Volume 2, Issue 7, March- 2015,GIF Impact factor: 1.46,ISSN: 2347-4718(online), 2347-9450(print) **UGC CARE**
26. C.Senthamaraikannan, L.Radha swamy, R.Ramesh, Comparative Study on Vibration characteristics of Straight and Curved beam of box shaped cross section subjected under Cantilever end condition, International Journal of Applied Engineering Research ISSN 09734562 Volume 10, Number 8 (2015). **UGC CARE**
27. R.Ramesh, Siddharth.B, C.Senthamaraikannan, Study of Free Vibration Characteristics of Carbon Epoxy based Composite Beams, Applied Mechanics and Materials Vols. 813-814 (2015) pp 1042-1046,Trans Tech Publications, Switzerland, https://doi.org/10.4028/www.scientific.net/AMM.813-814.1042 **UGC CARE**

Book and Book Chapters Published

1. Control and Instrumentation for Industry 4.0 ISBN: 9789356255210.
2. Digital Education System During the COVID-19 Pandemic, Using Assistive Technology for Inclusive Learning in K-12 Classrooms, Advances in Educational Technologies, and Instructional Design (AETID) Book Series Editor-in-Chief: Lawrence A. Tomei, Robert Morris University, USA Mission ISSN:2326-8905, DOI: 10.4018/978-1-6684-6424-3.ch005
3. Ramesh R., Senthamaraikannan C., Suresh N., Lokesh B. (2021) Study on the Influence of Nanosized Silica Reinforcement in Microrubber Blended Epoxy Carbon Composite Laminate Subjected Under Dynamic Mechanical Analysis. In: Rajmohan T., Palanikumar K., Davim J.P. (eds) Advances in Materials and Manufacturing Engineering. Springer Proceedings in Materials, vol 7. Springer, Singapore. https://doi.org/10.1007/978-981-15-6267-9_42, 2662-3161

Research Paper currently working.

1. Study on Mechanical and dynamic properties of 3d printed sustainable bio composites.
2. Dynamic and Mechanical behaviour of 3d carbon nano fiber composites
3. Investigation of mechanical properties of Cellulose0 fiber reinforced epoxy and polylactic acid-based bio-composites
4. Free vibration characteristics of banana fiber reinforced epoxy and PLA based bio-composites.
5. Forced Vibration of modified carbon epoxy composites

INTERNATIONAL CONFERENCE

1. Mechanical and Vibration Behaviour of Hybrid Glass-Polyester Composite Composed of Graphite Flakes 1st International Conference on Advances in Multi-Material

Additive Manufacturing (AiM AM-24) at Karunya Institute of Technology and sciences, April 03-05, 2024.

2. Mechanical and Vibration Properties of Epoxy Composites Reinforced with Sisal, Areca, and Hemp Fibers, Enhanced by Sugarcane Bagasse and Coconut Husk Fillers, International Conference on Sustainable Materials for Engineering Applications ICSMEA 2024, IIT Madras, Feb 2024.
3. Design and Analysis of Parallel manipulator with six rotational motions" in the Second International Conference on "Advanced Trends in Renewable Energy (ICATRE 2023)" conducted by the Centre for Renewable Energy, Nehru Institute of Technology, Coimbatore on 29th and 30th September 2023.
4. Study On the Free Vibration Analysis And Mechanical Behaviour Of 3D Printed Composite Hollow shaped Beams, TAMMIE 2023, a SERB-sponsored international conference organized by the Department of Mechanical Engineering, KPRIET scheduled on 5 – 6 May 2023.
5. Received Outstanding Oral Presentation Award for the Digital twin of robot manipulator using ROS, conducted on Third International Conference on Robotics, Intelligent Automation and Control Technologies, VIT, Chennai (RIACT 2022) 25th September 2022
6. Study of Mechanical Properties of Sustainable Biocomposite Panels Using Jute-PLA And Sisal-PLA, ICMMM2023 24th March - 26th March 2023 at VIT,Vellore, TN, India
7. Study On the Free Vibration Analysis And Mechanical Behaviour Of 3D Printed Composite I-Beams Made Up Of Short Carbon Fiber Reinforced ABS And PLA Materials, ICMMM2023 24th March - 26th March 2023 at VIT,Vellore, TN, India
8. Dynamic mechanical analysis of 3D printed Composites under varying temperature condition, International Conference on Materials and Manufacturing Engineering, Sri Shakthi Institute of Engineering and Technology, Coimbatore, on 10 -11 December 2021.
9. C.Senthamaraikannan, “Topology optimization and life cycle assessment of quick connector sheath” in the International Conference On "Green Materials and Renewable Energy" (10.06.2021&11.06.2021), organized by the Department of Applied Chemistry in association with Department of Chemical Engineering, Sri Venkateswara College of Engineering Sriperumbudur
10. C.Senthamaraikannan, “Study on Mechanical Properties of Sustainable Bio Composite Panels Using Jute-PLA And Sisal-PLA” in the AICTE sponsored International Conference on “Smart Materials & Emerging Technologies for Industry 4.0” Organised by Sri Venkateswara College of Engineering, Pennalur on 16th and 17th October 2020.
11. C.Senthamaraikannan, “Dynamic and Mechanical behavior of 3D carbon nano fiber composites” in the AICTE sponsored International Conference on “Smart Materials & Emerging Technologies for Industry 4.0” Organised by Sri Venkateswara College of Engineering, Pennalur on 16th and 17th October 2020.
12. C.Senthamaraikannan, Free Vibration Characteristics of Banana Fiber Reinforced Epoxy and Pla Based Bio-Composites in the AICTE sponsored International Conference on “Smart Materials & Emerging Technologies for Industry 4.0” Organised by Sri Venkateswara College of Engineering, Pennalur on 16th and 17th October 2020.
13. C.Senthamaraikannan, Investigation of Mechanical Properties of Aloe-Vera Fiber Reinforced Epoxy And Polylactic Acid Based Bio-Composites in the AICTE sponsored

International Conference on "Smart Materials & Emerging Technologies for Industry 4.0" Organised by Sri Venkateswara College of Engineering, Pennalur on 16th and 17th October, 2020.

14. C Senthamaraikannan, Akash K, Amanullah S, M. Barath, R. Manojkumar, Jagadeeshwaran. J, Overview of Polylactic acid and its derivatives in medicinal applications, International Conference on Recent Developments in Material Science and Applications (ICRDMSA 2020), Chennai Institute of Technology, 25 & 26th September 2020
15. Kirubakaran G, Senthamaraikannan C, Ajay T, Ashwin kumar V, Balakrishnan D R, Review on Enhancing the Mechanical Properties of Epoxy Resin, International Conference on Recent Developments in Material Science And Applications (ICRDMSA 2020), Chennai Institute of Technology, 25 & 26th September 2020
16. Sai Sree Chandra, Pravin Raj S, G Punith Krishnan, A review on additive manufacturing of AA2024 and AA6061 alloys using powder bed fusion, International Conference on Recent Developments in Material Science and Applications (ICRDMSA 2020), Chennai Institute of Technology, 25 & 26th September 2020
17. Mr.Rajapandian N, Dr. C.Senthamaraikannan, Investigation on Mechanical Performance of 3D Printed Carbon and Glass Fiber reinforced Poly lactic Acid laminates, 2nd International Mechanical Engineering Congress (IMEC) – 2019, National Institute of Technology, Trichy (NITT), during 29th November, to 1st December 2019.
18. M.Dhinesh Kumar, Dr.C.Senthamaraikannan, Study on Static and dynamic behaviour of Jute/Sisal fiber reinforced epoxy composites, 2nd International Mechanical Engineering Congress (IMEC) – 2019, National Institute of Technology, Trichy (NITT). during 29th November, to 1st December 2019.
19. Dr.C.Senthamaraikannan, Mr G.Kirubakaran, Assistant Professor , Mechanical Engineering, Study on Mechanical Behavior of Aloevera and Sisal fiber reinforced epoxy composites, International Conference on Multifunctional and hybrid materials for chemical process, energy, environment and medical applications (ICMHCEE 2019) conducted by **National Institute of Technology, Tiruchirappalli (NITT)** during 9th to 11th September 2019. **(Awarded best oral presented paper in the conference)**
20. C.Senthamaraikannan, Kirubakaran.G, Ananda Karthick N Evaluation of Mechanical properties of hybrid intralayer Jute/Flax and Sisal/Flax polymer epoxy Composites, International Conference on Innovative research in science and technology (ICIRST2019), Madurai, 30-31st August 2019.
21. G. Kirubakaran, M. Aadithya, C. Madankumar, C. Senthamaraikannan, Effect of Alkaline treatment on banana fiber reinforced Epoxide Composites, International Conference on Innovative research in science and technology (ICIRST-2019), Madurai, 30-31st August, 2019.
22. Arunagiri Adhithian.R, S.Dhannush, Aushwin.S, C. Senthamaraikannan, Investigation on Mechanical Behavior of sisal fiber reinforced polylactic acid and Sisal/Epoxy composites, 4th International Conference on Material Engineering and Application (4th ICMEA 2019) will be held in **Malaysia** during August 23-25, 2019.
23. M.Aadithya, V.K. Kirubakar, T. Aakash, C. Senthamaraikannan, Investigation of the Tensile and Flexural behaviour of Polylactic Acid-based Jute fibre Biocomposite, 4th International Conference on Material Engineering and Application (4th ICMEA 2019) will be held in **Malaysia** during August 23-25, 2019.

24. C.Senthamaraikannan, Niranjan Suresh and Dr.R.Ramesh, Study on the influence of nano sized silica reinforcement in micro rubber blended epoxy carbon composite laminate subjected under dynamic mechanical analysis, 4th International conference on Materials and Manufacturing Engineering, ICMME, 2019, Conducted by Sri Chandrasekharendra Saraswathi Viswa Mahavidyalaya, 21-22 March, 2019, (**Awarded best oral presented paper in the conference)**

25. C.Senthamarai Kannan, Review of Materials and Methods for 3D printing/Additive Manufacturing, International Conference on Recent Trends in Engineering Technology and Management (ICRETM), Coimbatore Institute of Engineering and Technology, Coimbatore, 29th- 30th March 2019.
26. R.Ramesh, V.Vishal C.Senthamaraikannan, Experimental Free Vibration Characteristics of Micro-Rubber Blended Carbon Composite Plates of Varying Thickness Conditions, 2nd International Conference on Recent Trends in Engineering and Technology, St. Joseph's Institute of Technology, 5-6th May 2017.
27. C.Senthamaraikannan, M. Monish Kumbhat and Dr.R.Ramesh, Investigation on Experimental Modal Response of Hybrid Carbon Composite Plates, Composed of Varying Weight Fraction of Micro Rubber Particulates, 7 th International conference on Advances in Science Engineering and Technology (7 ICASET 2017), April 24th 2017 at Rajiv Gandhi Institute of Technology, Bangalore, India
28. G.Vignesh, N.S.TharunKrishna, C.Senthamaraikannan, R.Ramesh, Dynamic Mechanical behaviour of Carbon fibre based Composite laminate made of micro rubber blended epoxy matrix for Structural Applications, International conference on Aerospace and Mechanical Engineering, TKM College of Engineering, Kollam, 14-16 Dec 2016.
29. Vinoth Kumar.M, R.Ramesh, C.Senthamarai Kannan. "Experimental and Analytical Free Vibration Study On Nano-Silica Based Carbon Composite Beams Of Basics Shapes". International Conference on Recent Trends in Engineering and Technology (ICET2016)", Department Of Mechanical Engineering, St.Joseph's Institute Of Technology, Chennai, Dated on 28th and 29th of April 2016.
30. Senthamaraikannan C, Ramesh R, Rishi S Vaidya V and B.Vijayaram B, Experimental Forced Vibration Response Of Micro Rubber And Nano Silica Particles Added Carbon Epoxy Composite Beams For Various Cross Sectional Shapes, The 7th International Conference On Mechanical And Aerospace Engineering (ICMAE 2016), **London**, United Kingdom, 18-22 July 2016
31. Dr.R.Ramesh, Siddharth.B, C.Senthamaraikannan, Study on free vibration characteristics of carbon epoxy based composite beams, International conference on mechanical and manufacturing engineering, ICMME 2015, Sri Chandrasekharendra Saraswathi Viswa Mahavidyalaya,2 and 3rd April 2015. **(Awarded best paper in the conference)**
32. C. Senthamaraikannan, S.K.SharathKumar, Dr. R. Ramesh, " Experimental investigation on Modal response of woven fabric carbon composite plate reinforced with particles of micro rubber blended epoxy matrix under free vibration condtion", International conference on Recent Advances in Mechanical Engineering and

Interdisciplinary Developments (ICRAMID 2014) , 7th & 8th march 2014, held at Ponjesly College of Engineering.

33. C. Senthamaraikannan, Dr. R. Ramesh, "Experimental Investigation on Vibration and Modal Response of Woven Carbon Fabric Epoxy Composite Curved Beams of Various fundamental Shapes", in International Conference on Computational Systems in Engineering and Technology (ICCSET2014), held on 7-8 March 2014 at Sri Venkateswara College of Engineering, Sriperumbudur.
34. C.Senthamaraikannan, L.Radha swamy, Dr.R.Ramesh, "Comparative Study on Vibration Characteristics of Straight and Curved Beam of Box Shaped Cross Section Subjected under Cantilever End Condition", International Conference on Modeling Optimisation and Computing, Department of Mechanical Engineering(ICMOC-2014), organised by Nooral Islam University, Kumaracoil , India jointly with Universiti Teknologi, Mara, Malaysia & Oulun Yliopisto, University of Oulu, Oulu, Finland, 10th & 11th April 2014. (Awarded best paper in the conference)
35. L.Radhaswamy, C.Senthamaraikannan, Dr. R. Ramesh, Investigation of the elastic modulus effect on free vibration characteristics of fiber reinforeced polymer composite beams made of various fundamental shapes, International conference on Advance in materials, (ICAM 2014), **Shangai, China**, 14-15 December 2014.
36. Arun kumar D, C.Senthamaraikannan, Dr.R.Ramesh, Evaluating forced vibration characteristics of carbon fiber reinforced composite beams of various cross sectional shapes using finite element analysis, International Conference on Polymer Composites, funded by TEQIP Phase-II, December 19th-20th, 2014, National Institute of Technology, NITK Surathkal.
37. Agarshna Murari M, Ashwin Nambi, C.Senthamaraikannan, Dr.R.Ramesh, Experimental Investigation on the Effects of Helically arranged Unconstrained Elastomer Layered Treatment Over Structural Steel Beams of Various Cross-section , for Improved Vibration Characteristics, International Conference on Newest Drift in Mechanical Engineering ICNDME -14, 20th - 21st December, 2014 , M. M. University, Mullana (Ambala).
38. C. Senthamaraikannan, Dr. R. Ramesh, B. Kamesh, "Investigation of Hybrid Carbon Channel Beam under Free Vibration Condition", IEEE International Conference on Energy Efficient Technologies for Sustainability, (ICEETS 2013), held at St. Xaviers Catholic College of Engineering, April 2013.
39. C.Senthamaraikannan, B.Nagarjun , S.Manishankar , Dr.R.Ramesh " Experimental Investigation on the performance of passive damping in rectilinear and curved glass fiber/epoxy composite beams subjected under different boundary conditions." ESTCON 2012 (ICCOEE-2012), held at Petronas Technological University-Malaysia from 12th June to 16th June -2012
40. C. Senthamaraikannan, R. Ramesh, Experimental investigation on modal analysis of carbon fiber reinforced composite beams made up of various cross-sectional shapes, Asian Conference on Mechanics of Functional Materials and Structures (ACMFMS 2012), IIT Delhi, 5-8 December,2012**, (Awarded best paper in the conference)**

41. Balaji S, Senthamarai Kannan.C, Ramesh.R "Dynamic analysis of Woven Fabric carbon/Epoxy composite Beams" International conference on Advancements in Polymeric Materials held at CIPET, Chennai During, March 25-27, 2011
42. Senthamarai Kannan.C, Ramesh. R "Investigation on the Passive Damping performance of various shapes of Thin-walled Carbon/Epoxy Composite Beams with different aspect ratio using Finite element Method", International Conference on Advances in Mechanical Engineering – ICAM2010, held at NIT, Surat during 4-6, January 2010.
43. Senthamarai Kannan.C, Ramesh. R "Investigation on the Damping performance of various shapes of Thin-Walled Carbon/Epoxy Composite Beams", International Symposium for Research Scholars (ISRS-2010) on Metallurgy, Materials Science and Engineering, Indian Institute of Technology (IITM), Chennai During Dec 20 – 22, 2010
44. C.Senthamaraikannan, R.Ramesh, "Analysis of the damping performance of thin walled composite structures using Finite element method",14-16 Dec 2009,ICAMB 2009, VIT, Vellore. (Awarded best paper in the conference)
45. C.Senthamaraikannan, R.DineshKumar, M.S.AbhishekSrinivas, "Study on the interlaminar stresses in Zylon Fiber Reinforced composite plates ", 14-16 Dec 2009, ICAMB 2009, VIT,Vellore
46. R. Shyamsundar, G K Yashwanth, and Mr. C.SenthamaraiKannan, "Need for Non Polluting Vehicle in India" at the Two Wheeler particle Emission Conference held at the Monza, Milan during 11th-12th June 2009 conducted by FIA and EU-JRC.

NATIONAL CONFERENCE

1. B.Prabhakaran, C.Senthamarai Kannan, R.Ramesh. " Experimental Free Vibration Characteristics Of Nano-Silica Reinforced Carbon Composite Beams For Varying Weight Fraction". National Conference On" Recent Advances In Mechanical Engineering", Department Of Mechanical Engineering, National Engineering College, Kovilpatti, Dated on 1st April 2016.
2. B Umamaheswaran, C Senthamarai Kannan, Dr R Ramesh "Investigation on Structural Beams Made Up of Hybrid Carbon Composites" National Conference on Polymers & Composites in Medicine, Engineering and Defence (PCMED 2012), held at Velammal Engineering College, Chennai, 24 March 2012.
3. Ramesh .R , Gouthaman.S, C.Senthamaraikannan, "Analysis of Flexible jaw coupling using FEM" National conference on recent trends in Mechanical Engineering held at Pavai Engineering College during24-25 April 2009.
4. C.Senthamaraikannan, T.Rajan, Investigation on Fracture Analysis of Carbon Fibre Reinforced Polymer Composites, Apr 20-21, 2009, HKBK college of engineering, Bangalore
5. C.Senthamaraikannan, Velarasan , Optimisation of Radial Fan Impeller using FEA, March 27-28, 2009,Bannari Amman Institute of Technology
6. C.Senthamaraikannan, A.Elayaperumal, Vibration Analysis of ETC Motor, Proceedings of National conference on computing conducted by SVCE, Mar 2006.

II. List of Patent Published

1. Dr C Senthamaraikannan, published a patent titled " A method of preparing metal matrix composite made from reinforced carbon fiber, for use in electric vehicles", Application No. 202341007968 A, Publication date: 24/02/2023
2. Dr C Senthamaraikannan, filed a patent titled, "Design and development of higher order device with adjustable deflection corrective mechanism for forced vibration study" On 27-04-2018 at, IPR office, Chennai. (Application Number **201841015943**). - Detailed resubmission for Queries, from Patent Office, New Delhi and Examiners, waiting for final examination and subsequently awaiting for award of patent.
   The Patent Office Journal No. 50/2019 Dated 13/12/2019 60430
3. Dr C Senthamaraikannan, filed a patent titled, "Groundnut Harvester for Indian Farmers" in IPR on 29.04.2019 (Application No. 201941016928)

III Grant received

1. AICTE RPS grant was received and completed as Co Principal Investigator, Sanctioned an amount of **Rs 9.88 Lakhs**
   Project Title:
   Investigation on Vibration Characteristics of Nano Silica\Micro Rubber reinforced Carbon fiber reinforced composite Structural beams.
2. Revised Assessment & Accreditation Framework of NAAC, Proposal has been accepted for academic support of NAAC – Rs 3 LAkhs

IV . Proposal submitted -8 Nos

1. SERB-CRG – Evaluation of a high modulus and strength ratio-based hybrid carbon-epoxy composite structure for electric vehicle applications exhibiting improved forced vibration characteristics - CRG/2023/003731
2. SERB -MATRICS Structural health monitoring of structures under forced vibration through digital twinning using Numerical modelling application software - MTR/2023/000758
3. MEME- Design and Development of Bio Composite Filament Extruder for 3D Printing -IDEATN007461
4. MSME – Tuned Vibration absorber -IDEATN007636
5. SERB-CRG- Study on Mechanical response and Vibration characteristics of Carbon fiber - PEEK additively printed on surface textured titanium alloy strips for belly region of cargo aircraft structural applications, SERB-CRG.
6. Revised Assessment & Accreditation Framework of NAAC, Proposal has been accepted for academic support of NAAC
7. SERB-SUPRA-Design and development of MultiJet multi material 3d printing machine to harvest negative poison ratio and enhance mechanical properties,
8. DST-SERB-CRG - Study on Mechanical response and Vibration characteristics of Carbon fiber - PEEK additively printed on surface textured titanium alloy strips

for belly region of cargo aircraft structural applications 23-Jun-2021, : 02-May-2022

9. DST- SERB-SUPRA -Design and Development of MultiJet Multi Material 3d Printing Machine to Harvest Negative Poisson Ratio and Enhance Mechanical Properties - SPR/2021/000561
10. DST SERB -Core research grant - Free and forced vibration analysis of Hybrid carbon epoxy composite for building up of lighter weight electric vehicle structure (Mar 2020) CRG/2020/005638
11. AICTE STTP - "Artificial Intelligence Techniques and Their Applications in Design and Manufacturing", Under Evaluation.
12. ATAL -FDP -3D Printing – Rs 90,000/-
13. AU -Summer FDTP, - Design of Machine Elements -Rs 30,000/-
14. TNSCST, Science and Technology Projects -March 2020 Development Of Sustainable Hybrid Flax/Banana, Flax/Jute And Flax/Banana/Jute Fibers Reinforced With Hybrid Epoxy Matrix PLA Bio composites For "Scooter-Front Panel", March 2020.
15. DST SERB -Core research grant - Investigation on Forced vibration characteristics of basic machine tool structures tailored by carbon epoxy hybrid composite with blends of nano graphite/clay/rubber particulates, as an effective functional material CRG/2019/001760
16. DST SERB -Core research grant Experimental forced vibration study on simplified physical structural model made up of nano: graphite/clay/rubber particulates blended, carbon-epoxy functional composite, for machine tool structural applications CRG/2018/ 0033772
17. SERB Seminar Scheme -three-day workshop on Fundamentals of Vibration Measurement, Analysis and Recent Mitigation Approaches For machinery vibration control - -SSY/2017/000159
18. TNSCST Project Proposal – Digital Twinning of Robot
19. TNSCST student Project Proposal, Design and Development of IOT based 3D Printer using Fused Deposition Modelling, Dec 2019
20. TNSCST student Project Proposal, Design and Development of Groundnut separator, Dec 2018

V. Current Responsibilities in the Department

1. Coordinator -Academics (College Level responsibility)
   Responsibilities-
   - Assisting to Conduct Induction Program, College Day, Graduation day.
   - Result Analysis for Overall Performance Analysis,
   - NAAC Criteria 1, NBA Criteria -8,
   - Organizing workshops like Disaster Awareness and management training,
   - Assisting in conducting AO coordinators meetings, and preparation of minutes of the same.
   - Grievance Appeal committee minutes preparation and assistance

- Preparation of New result Analysis formats

2. Dynamics Lab Incharge
3. Vibration Lab Incharge
4. Department NAAC IQAC Incharge
5. Department PALS Faculty Incharge
6. Faculty Data Base I/C -Maintaining and preparing reports for all Academic activities, like AICTE, NAAC, NIRF, NBA, IIC, AQAR, DST etc.,
7. Seating Arrangement for graduation day from the Year 2013 and there on continued for 2014, 2015, 2017. 2018,2019.
8. Searing Arrangement for College Day Function 2017,2018

VI. Previous – Main Responsibilities

1. Faculty Advisor
2. Department Library I/C
3. Budget Coordinator
4. Department Timetable Coordinator
5. Continuous Assessment Test Coordinator
6. University Practical Exam Coordinator
7. Assistant Chief Superintendents -Anna University Examinations

VII. Workshop Conducted

As a Coordinator successfully organized following Workshops and faculty development Program (FDP)

Total FDP and Workshops organized as coordinator	:	**31 Nos**
Certificate Program	:	**3 Nos**

VIII. FDP/Workshops/Webinar **Organised Details**

1. International workshop on "PLC and Automation" on 27th & 28th December 2022 by Dr. Ravindra Thamma, Professor & Department Chair, Manufacturing & Construction Management, Central Connecticut State University, USA
2. NAAC Collaborated Two Day Seminar on -Revised Assessment and Accreditation Framework in collaboration with NAAC on 24-25th November 2022.
3. Disaster management and Training in collaboration with Sri Sathys Sai Seva Organissation (SSSO), 18th February 2022
4. Disaster management and Training in collaboration with Sri Sathys Sai Seva Organissation (SSSO), 17th December 2022
5. Disaster management and Training in collaboration with Sri Sathys Sai Seva Organissation (SSSO) on 21.05.2022.
6. Webinar on “Innovative Disinfectant Systems - For Safe Business” on 12-08-2021, collaborated with Gulf engineering Systems.
7. Webinar on “Safety & Quality Guidelines for Selection of PSA Based Oxygen Generators” on 24-08-2021 collaborated with Gulf engineering Systems.

8. Workshop on “Disaster Awareness and Management Training Program” on 21-05-2022
9. Workshop on “Recent Trends on Piping Materials/Corrosion” on 23-04-2022 Collaborated with Technip
10. Webinar on “Digital Twin Driven Smart Manufacturing”, Dr. N. Arunachalam, Associate Professor, Department of Mechanical Engineering, Indian Institute of Technology (IIT Madras), 17th June 2021
11. Webinar on “Vacuum Thermoform Mold Tool Design”, Sankar Mahalingam, Managing Director, Profenaa Industrial Training Centre, Erode on 24th June,2021.
12. Webinar on “Art of Publishing Review and Research Articles”, 8th August 2020
13. Expert Webinar on "CFD application in Bluff Body Flow Analysis” on 1st August 2020.
14. Expert Webinar on “Insightful Introduction to MATLAB” on 11th July 2020.
15. International Webinar on “Cloud Computing for Everyone”, delivered by Shri. Kandaswamy Umapathy, Senior Director, HCM Cloud Operations, Oracle USA Inc., Redwoodshores, CA, on 19th July 2020.
16. International Webinar on “Lean Manufacturing in Automobile Industry Shri. K. Venkatapathy, Senior General Manager, WABCO Compressor Manufacturing, North Charleston, South Carolina, U.S.A., CASE STUDY on 27-06-2020
17. Hydrogen Embrittlement Degradation of Engineering Metals on 10-07-2020
18. Five-day FDP on Mechanical Properties & Failure Behaviour of New Materials and Its Scope for Engineering from 10/06/2020 to 14/06/2020
19. Webinar on Enterprise Resource Planning, 05/06/2020
20. Webinar on Industrial Internet on Thing, 30/05/2020
21. Pathways -Road to Success, on 1st July 2020
22. Electric vehicle technology with live testing and analysis with Atalon and Techx India Pvt Ltd, in the month of 16TH February,2020.
23. Two-day value-added course on Design Thinking, 26 & 27th July 2019.
24. TWO DAY SKILL ENHANCEMENT TRAINING ON IC ENGINE DISSECTION PROCEDURES, 5th & 6th SEPTEMBER 2019 with ATALON Pvt Ltd., Chennai.
25. Two-day Fundamentals of Vibration Measurement and analysis with experimental approach conducted on 8/03/2019 and 09/03/2019.
26. One day Design Thinking workshop on 11/01/2019.
27. ISTE Sponsored One Day National Level Workshop on “Mechanical Vibration, Mitigation Approaches and Measurement Techniques for Structural Applications”, 30th March 2017.
28. Anna University sponsored FDTP on ME2303 - Design of Machine elements, 13 -20 June 2014.
29. Two-day workshop on Failure Analysis and Design, SVCE, 26-09-2014 to 27-09-2014.
30. DRDO and CSIR sponsored Two-day Workshop on Recent trends in Natural Composites and its hybrids for structural applications, 25-09-2013 to 26-09-2013.
31. Recent trends in Engineering Tribology and Surface Characterization on 29th September 2012

32. Two-day workshop on Mechanical Behaviour of Composites 2012 on 30-31 March 2012.
33. Automotive Exhaust systems & NVH in association with Ashok Leyland, 23rd to 30th Nov,2011.
34. Noise Vibration and Harshness Workshop in association with Ashok Leyland, 05/06/2010 TO 12/06/2010
35. Two-day workshop on Recent Advances and Challenges in Design Engineering, 4/09/2009 AND 05/09/2009 (RACDE 2009)

Special Mention : **Workshop - Institute Industry Interaction (III Activity)**

- ✓ A special course on Noise Vibration and Harshness workshops on two occasions as follows: NVH June 2010 & NVH June 2011 in association with Ashok Leyland, Chennai.
- ✓ Vehicle Architecture and Diagnosis workshop, with ATALON and Techx India Pvt Ltd, in the month of Feb 2020.
- ✓ Electric vehicle technology with live testing and analysis with ATALON and Techx India Pvt Ltd, in the month of March 2020.
- ✓ Hackathon at Brakes India Limited on 7th February 2020.
- ✓ Industry Orientation training by Technip India Ltd.,04/05/2009 to 08/05/2009.
- ✓ Industrial training at India Piston Rings (Pvt) Ltd., 20/6/2016 to 24/6/2016

IX. Consultancy Activities- Institute Industry Interaction (III Activity)

In Vibration Laboratory, Consultancy work was carried out for the project "Forced vibration study on Thermostat" for Western Thomson India Ltd., Chennai during the month of April 2015.

Consultancy work in "Identification of natural frequency for different type of materials and structures" were continuously going on. Some of the clients are Velammal Engineering College, Chennai, St Joseph College of Engg, Chennai, SASTRA University, Thanjavur, and Panimalar Engineering College,

X. Development of laboratory:

Designed and developed the following Experimental setup:

i. Modernisation of Dynamics lab with Micro controllers and MATLAB software so as to leverage the mechanical lab into IOT based Dynamics lab.
ii. Damped Torsional vibration setup was developed through Design and fabrication project for V Sem Mechanical Engineering Students and included in laboratory classes
iii. Improvement was made in Free Vibration setup for measuring amplitude and no. of cycles through design and fabrication project for the cost of Rs 8,000/-
iv. Kinematic models like Double slider mechanism, Oldhams coupling, Chebyshev mechanism were developed for better understanding of the kinematic subject and the same was displayed in Dynamics lab.

XI. Expert Lecture delivered details

- Delivered keynote address in the title " Modern Vending Machine" Symbiosis University of Applied Sciences, Indore is hosting **Symbiclave 2023: India's First Ever Skill-Based Patent Conclav**
- Delivered expert talk on Design of Spring s and Flywheel on 30th October 2022, as Chief Guest speaker in Mailam Engineering College in the event FDP on Design of Machine Elements.
- Guest Lecture on Free and Damped Vibration in the Six days Faculty Development Programme' on "ME 8594-Dynamics of Machines" from 26.07.2021 to 31,07,2021 Conducted by Sai Ram Engineering College.
- Guest lecture on Vibration to Marine engineering Student on 24th May 2022
- Guest lecture on 17.02.2021 in the topic of "2D Element - Axi-symmetric Condition and its Applications" in AICTE sponsored Short Term Training Program on "Fundamentals of Finite Element Analysis and its Applications in Engineering" organized by Department of Mechanical Engineering, Panimalar Institute of Technology, Chennai during 15.02.2021 to 20.02.2021
- Guest lecture on 19.01.2021 in the topic of "Finite Element Analysis of Structural Beam - Case Study" in AICTE sponsored Short Term Training Program on "Fundamentals of Finite Element Analysis and its Applications in Engineering" organized by Department of Mechanical Engineering, Panimalar Institute of Technology, Chennai during 18.01.2021 to 23.01.2021
- Vibration Analysis and Control, Five-day FDP on Concept of Thermodynamics, Fluid mechanics and Dynamics for Mechanical Engineers, SRM Valliammai Engg College, during 11-15th May 2020.
- Design of Cotter and Knuckle Joints, AU Approved FDP on ME6503 Design of Machine Elements, Kings Engineering College, 02/06/18
- Five-day FDP on Design of transmission Systems, Deign of Chain Drives, Sri Venkateswara College of Engineering, 14/12/2016 to 19/12/2016
- AICTE Sponsored two-week Faculty development program on Theory and performance evaluation of Automotive vehicle subsystems using Modern Tools and Equipment, 16/11/2017, Hands on training on Vibration behaviour of Automotive structures

XII. Online Certificate Training Program(MOOCs) Attended

Coursera Program

1. Introduction to Engineering Mechanics from Georgia Institute of Technology
2. Excel Skills for Business: Essentials from Macquarie University.
3. Identity verified Certificate for "Boosting Creativity for Innovation" from HEC, Parris
4. Materials Science: 10 Things Every Engineer Should Know, from University of California, Davis
5. AI For Everyone from deeplearning.ai
6. Advanced Manufacturing Process Analysis from University at Buffalo
7. The 3D Printing Revolution from University of Illinois at Urbana-Champaign

8. Programming for Everybody (Getting Started with Python) from University of Michigan
9. ACAD certified professional from Autodesk
10. Introduction to Self-Driving Cars -University of Torronto
11. Python Data Structures - University of Michigan
12. Digital Manufacturing and Design State University of Newyork Mathworks
13. MATLAB from Mathworks
14. DEEP LEARNING from Mathworks
15. Machine learning from Mathworks

NPTEL & Elsevier

16. Peer Reviewer Course from Elsevier Research Academy
17. Principles of Vibration Control from NPTEL-Topper
18. Basics of Finite Element Analysis from NPTEL -Topper

XIII. Participated in Faculty Development Programs.

1. Two-day hands-on Training Programme in IoT and Automation, PSG iTech, Coimbatore, May 12th & 13th 2023.
2. GIAN on Programmable Controllers with Machine Learning, National Institute of Technology, Tiruchirappalli, Tamil Nadu, July 25TH 2022 TO JULY 29TH 2022 (PHYSICAL MODE).
3. AICTE Training and Learning (ATAL) Academy Online Elementary FDP on Nanostructured Materials and Their Applications", National Institute of Technology Manipur, from 07-02-2022 to 11-02-2022
4. AICTE Training and Learning (ATAL) Academy Online Elementary FDP on "Leadership & Excellence" IES's Management College and Research Centre., from 21-02-2022 to 25-02-2022
5. AICTE Training and Learning (ATAL) Academy Online Elementary FDP on "multi-objective optimization and product innovation through TRIZ (Theory to resolve inventive problems)" from 2021-07-12 to 2021-07-16 at Sri Shanmugha College of Engineering and Technology.
6. AICTE Training And Learning (ATAL) Academy Online Elementary FDP on "3D Printing and Design" from 2021-07-06 to 2021-07-10 at Dr.Mahalingam College of Engineering and Technology.
7. “Implementation of 5S and Quality Circles in HEI, Conducted by IQAC, SVCE on 28-04-2022
8. Teaching numerical methods through MATLAB, SVCE on 14-07-2021.
9. Six days FDTP on “Recent Advancement in AI & Robotics, organised by Dr D Y Patil School of Engineering” and Technology, Pune, 25-04-2021 to 29-04-2021.
10. AICTE Training and Learning (ATAL) Academy Online FDP on “Blended Learning and Flipped Classroom” from 2021-1-18 to 2021-1-22 at Vellore Institute of Technology.
11. AICTE Training and Learning (ATAL) Academy Online FDP on “Design Thinking” from from 2020-12-21 to 2020-12-25 at Amity Center for Entrepreneurship Development.
12. AICTE Training and Learning (ATAL) Academy Online FDP on “3D Printing & Deisgn” from 2020-12-7 to 2020-12-11 at National Institute of Technology Patna.
13. AICTE Training and Learning (ATAL) Academy Online FDP on "Artificial Intelligence" from 2020-9-14 to 2020-9-18 at Srinivasa Ramanujan Centre, SASTRA Deemed to be University.

14. AICTE sponsored Short Term Training Programme (STTP) on “Smart Materials for Intelligent Future: Industrial and Defence Perspective” organized by Department of Mechanical Engineering K.S.Rangasamy College of Technology, Tiruchengode during August 17-22, 2020 (Slot-I)
15. AICTE Sponsored Online Short-Term Training Programme (STTP) on “Innovative Techniques for Sustainable Energy Development through Modeling of Mechanical Processes – (SERIES-I)”, from 03.08.2020 (Monday) to 08.08.2020 (Saturday) organized by the Mechanical Engineering Department of K.L.N. College of Engineering, Pottapalayam, Sivgangai District, Tamilnadu.
16. AICTE Sponsored Short Term Training Programme (STTP) (Virtual Mode – Phase 1) on "Composite Materials: Micro to Nano - Fabrication, Characterization and Modelling Including Additive Manufacturing" organized by Department of Mechanical Engineering, Rajalakshmi Engineering College (Autonomous), Chennai, from 13th July 2020 to 18th July 2020.
17. Online Faculty Development Program (FDP) on "Emerging Trends in Energy, Environment and Nanomaterials (EEN 2020)" organised by Department of Applied Chemistry, Sri Venkateswara College of Engineering held from 24 July 2020 to 30 July 2020.
18. Six Days FDP on “A Vision towards Materials and Manufacturing" KPR Institute of Engineering and Technology from 20.07.2020 to 25.07.2020
19. Faculty Development Programme (FDP) on “Nanomaterial Synthesis, Process, Characterization and its Functional Applications” Organized by the Department of Automobile Engineering, Hindustan College of Engineering and Technology, 06/07/2020 to 11/07/2020
20. Five Day FDP on Composite Materials and Structures, Rajeev Gandhi Memorial College of Engineering and Technology, Nandiyal, 15/06/2020 to 19/06/2020
21. Five-day FDP on Manufacturing, Machining and Testing of Composites”, Conducted by Sri Sai Ram Institute of Technology, from 15/06/2020 to 19/06/2020.
22. Seven Day FDP on Ethical Practices in Engineering, Conducted by Sri Sairam Engineering College, from 28/05/2020 to 03/06/2020
23. Five Day FDP on Composite Materials and Structures, Conducted by Rajeev Gandhi Memorial College of Engineering and Technology, Nandyal from 15/06/2020 to19/06/2020
24. Seven Day FDP on ICT based tools and its applications in teaching learning process, Conducted by Beldar Samaj Vikas Samiti’s Educational Learning Centre, Nagpur, from 27/05/2020 to 02/06/2020
25. Five-day FDP on Manufacturing and Analysis of Advanced Materials and Engineering Structure, Conducted by MLR Institute of Technology, Hyderabad, from 26/05/2020 to 30/05/2020
26. Five Day FDP on Technological Advances in Power Switching Converters for Renewable Energy Sources and Fuel Cell Technology for E-vehicles, Conducted by Bapatla Engineering College, Bapatla from 01/06/2020 to 05/06/2020
27. Seven Day FDP on Groundbreaking Technologies Conducted by Panimalar Institute of Technology, Chennai from 01/06/2020 to 07/06/2020
28. AICTE sponsored Two weeks faculty Development Programme (FDP) on "Materials - Processing, Characterization and Applications" to be conducted during 25th November 2019 to 8th December 2019, Sri Ramakrishna Engineering College, Coimbatore

29. Internal Quality Assurance Cell (IQAC), SVCE and Dept. of Mechanical Engineering is organized, Three Day National Workshop on Industry 4.0 on 29-31st, August 2019.
30. Internal Quality Assurance Cell (IQAC), SVCE and Dept. of Mechanical Engineering is organized One day Workshop on Implementation of 5s and TPM, 14th August 2019.
31. Design and Analysis of Mechanical Systems, NIT, Trichy, Tamilnadu, 10/6/2019 and 15/06/2019
32. GIAN course on Artificial intelligence techniques and their applications in design and manufacturing, NIT, Jalandhar, 11/11/2018 to 16/11/2018
33. Material testing and characterization, NIT, Trichy, Tamilnadu,14/12/2018 to 15/12/2018.
34. Faculty Knowledge Sharing Program, IBS, ICFAI Business School, 27th July 2018, Chennai,
35. Anna University Sponsored ME6007 Composite Materials and Mechanics, University College of Engineering, Villupuram, 24/05/2017 to 30/05/2017.
36. AICTE Sponsored Two-day National Level Seminar on Vibration and Noise Engg, Dr.Mahalingam College of Engineering and Technology, Coimbatore, 10/11/2017 and 11/11/2017.
37. Engineering Metallurgy, Mepco Schlenk Engg College, Sivakasi, 27/11/2017 to 29/11/2017.
38. AICTE Sponsored seminar on Challenges and Recent Developments in Welding of Non-Ferrous Alloys, Sri Venkateswara College of Engineering, Sriperumbudur, 24/11/2017 & 25/11/2017
39. DST-SERB Sponsored Workshop on "Processing and Mechanical Behaviour of Nano Composite Materials for Aerospace Structures, SNS College of Technology, Coimbatore, 15/12/2016 & 16/12/2016
40. Advanced Mechanics of Materials, TKM College of Engineering, Kerala, 22/06/2015 to 26/06/2015.
41. Author workshop conducted by Springer and EDANZ along with Anna University, Chennai-25 on 29th January 2013.
42. Advances and Analysis of Composites, VIT-Chennai,31st May 2013.
43. Winter internship program on Nanotechnology organized by the department of Nanotechnology, Sri Ramakrishna Engineering College, Coimbatore, 9th to 13th December 2013
44. Machine learning for Mechanical Engineers, VIT University, 25th Feb 2012.
45. Latest Advancement in Automotive testing, Atalon testing and Consulting Engineers, 12th March 2012.
46. Recent Trends in Product design and Development, CEG, Anna University, Chennai25 ON 18TH May 2012.
47. Processing and Mechanical Behaviour of Structural Nanomaterials, KPR institute of Engineering and technology, Coimbatore, 5th & 6th October 2012
48. Recent trends in Composite Materials and its Processing, KPR institute of Engineering and technology, Coimbatore, 7th & 8th October 2011
49. Structural Analysis using ANSYS, Kongu Engineering College, 3th & 4th December 2010.

50. Participated and presented paper in the International Conference on Advances in Mechanical Engineering ICAM2010, NIT, Surat held on 4-6, January 2010
51. International conference on advances in mechanical engineering, SVNIT, Gujarat,4-6 jan2010
52. AICTE sponsored National seminar on Composite Materials Design Challenges and Opportunities conducted by Dept. of Mech Engg., K.S. Rangasamy college of Technology, Tiruchengode , held on 25-26 June2009
53. Finite Element Analysis: Concepts & Applications, VIT University, 26-30 May 2008.
54. Workshop on CAD and Modeling Using SolidWorks, SSN Engg College, 23-24, October, 2008.
55. Seminar on Vibration Theory and Dynamic Balancing, ABRO Technologies Pvt Ltd, India, 9th March 2009.
56. Noise and Vibration Control Course, Institute of Sound and Vibration Research, University of Southampton, 24th & 25th September 2010.
57. Nondestructive testing, in collaboration with ISNT, Chennai Chapter, Centre for faculty development, CEG, Anna University, Chennai-25, 15th & 16th November 2003.
58. Virtual Manufacturing System by UGS PLM and Empower Consultancy on 27th August 2004
59. Reengineering Teaching Skills, Centre for faculty development, CEG, Anna University, Chennai-25, 3rd & 4th March 2004.

XIV. **Participated in Webinars.**

1. Applications of Finite Volume Method in Heat Transfer Problems, SVCE 25-06-2021
2. VEDIC MATHS-An Ancient Calculation Technique SVCE 06-06-2021
3. Digital Twin Driven Smart Manufacturing SVCE 17.06.2021
4. Vacuum Thermoform Mold Tool Design SVCE 24.06.2021
5. International Webinar "Engineering a Passionate Journey Towards Success, Mohamed Sathak AJ College of Engineering,22/07/2020.
6. Webinar on Innovation and Design Thinking, Sri Ramakrishna Institute of Technology, 11/07/2020
7. "Hydrogen Embrittlement Degradation of Engineering Metals" SVCE10-07-2020
8. Expert Webinar on "CFD application in bluff body flow analysis" , SVCE, 01-08-2020
9. Expert Webinar on "Art of Publishing Review and Research Articles" ,SVCE, 08-08-2020
10. Webinar on Opportunities and Challenges In Metal Additive Manufacturing Conducted by Sri Venkateswara College of Engineering, 17/06/2020 Webinar on Large-Scale Additive Manufacturing Process (lamp) For Biochip Conducted by Francis Xavier Engineering College ,17/06/2020
11. Webinar on Leadership talk Conducted by MHRD Innovation Cell, Govt. of India, 13/06/2020
12. Research skills key to success, Francis Xavier Engineering College, 13/6/2020
13. Webinar on Design of Experiments for Parameter Optimisation, Rajalakshmi Engg College, 08/06/2020.

14. Webinar on 3d Printing and Mass Customisation Conducted by Sri Venkateswara College of Engineering, 08/06/2020
15. Webinar on Additive Manufacturing Conducted by Francis Xavier Engineering College, 03/06/2020
16. Webinar on Patent Filing, Publications & Commercialization Conducted by Francis Xavier Engineering College, 02/06/2020
17. Webinar on Composite Mfg. and Tooling Conducted by Francis Xavier Engineering College, 04/06/2020
18. Webinar on Issues & Challenges in Medium and High-Temperature Concentrating Solar Power Technologies Conducted by Francis Xavier Engineering College, 16/05/2020
19. Webinar on Robotic Process Automation (RPA) and its allied Machine Learning Techniques Elektroniklab India Pvt Ltd 23/05/2020
20. Webinar on Insights to INDUSTRY 4.0, Conducted by S A Engg College, 29/05/2020
21. Webinar on Additive Manufacturing, Conducted By S.A Engg College 15/05/2020
22. Webinar on Awareness on Industry Safety during COVID 19 Conducted by S A Engg College, 23/05/2020
23. Webinar on Data-Driven Optimization in Engineering Conducted by Karpaga Vinayaga College of Engineering and Technology, 25/05/2020
24. Webinar on Machine Learning -The Future of Business Culture Conducted by Tamilnadu College of Engineering, 07/05/2020
25. Webinar on Future Automotive Industry and Challenges Conducted by Vel Tech High tech, 27/05/2020
26. Webinar on Online Teaching learning Assessment Conducted by Inpods 24/04/2020
27. Webinar on NAAC Accreditation and System demo Conducted by Inpods 20/05/2020
28. Webinar on Webcast on Advanced OBE - Identifying weaker students and remedial actions Conducted by Inpods 21/05/2020
29. Webinar on Indian Civilization & History Conducted by MHRD Innovation Cell, Govt. of India, 30/05/2020
30. Webinar on Roles of IOT on Industrial Application Conducted by Sethu Institute of Technology, 21/05/2020
31. Webinar on Renewable Energy Using MATLAB Conducted by Government College of Engineering, Thanjavur,16/05/2020
32. Webinar on Electric Vehicle Design Hindustan Institute of Science and Technology Conducted by 15/05/2020
33. Webinar on How ML Works for Open CV application Conducted by PANTech E learning, 18/05/2020
34. Webinar on How the Agri And IOT Get Connected Conducted by Mohamed Sathak College of Eng., 19/05/2020
35. Webinar on Deep Vision for Autonomous Self Driving Car Conducted by University College For Women, Koti,16/05/2020

XV. MEMBERSHIP IN PROFESSIONAL BODIES

1. Indian Society of Technical Education, Membership No:58799, Life Member

2. Tribology Society of India, Membership No:4084, Life Member
3. Scientific and Technical Research Association, Membership No:19542, Life Member
4. International Association of Engineers (IAENG), Membership No:259891, Life Member