

Faculty Vitae

Name of the Faculty				
Dr.M.Senthil Kumar				
Education				
	Degree	Discipline	Institution	Year
UG	A.M.I.E	Mechanical	The Institution of Engineers (India)	1989
PG	M.E.	Automobile Engg.	Anna University, Chennai	1992
PhD	Ph.D	Automobile Engg.	Anna University, Chennai	1999
Academic experience				
Institution	Title	From	To	FT/PT
Bharath Inst. of Sci. & Tech., Chennai	Lecturer	08-12-94	18-07-95	FT
Crescent Engineering College, Chennai	Sr. Lecturer	20-07-95	18-07-99	FT
Rajalakshmi Engineering College, Chennai.	Asst. Professor	19-07-99	04-03-03	FT
Tagore Engineering College, Chennai.	Prof. & Head	05-03-03	07-10-06	FT
Anand Institute of Higher Technology, Chennai	Dean (R&D)	09-10-06	28-11-07	FT
P.B. College of Engineering, Chennai	Principal	29-11-07	20-5-08	FT
SKR Engineering College, Chennai	Principal	23-5-08	7-8-18	FT
Bharath Institute of Higher Education & Research, Chennai	Dean - Incubation	27-8-18	Till Date	FT
Certifications or professional registrations				
(a) Underwent in- plant training in TAFE Ltd. Systems Ltd., Chennai. (b) Attended in the AICTE sponsored Short Term Training Programme on “CAD-CAM & Product Development” at Crescent Engineering College, Chennai. (c) Underwent a Training Programme on “Renewable Energy Recourses” organized by the Anna University, Chennai.				
Membership in professional organizations				
(a) Member – The Institution of Engineers (India) (b) Life Member – Indian Society for Technical Education (c) Life Member – Indian Society of Mechanical Engineers, Delhi. (d) Life Member – Computer Society of India				
Honors and awards				
(a) “Vijayasri Award” in July 2009 by International Institute of Education, New Delhi. (b) “Best Academic Administrator Award” in July 2011, by SKR Engineering Colege, Chennai. (c) “Best Teacher Award – 1998” conferred Crescent Engineering College, Chennai. (d) Best Paper Award in in the International Conference on Modeling and Simulation held on 3 – 5 Apr, 2006 at University of Malaysia,. (d) Conducted Training programs in AutoCAD & SolidWorks for the Mechanical Engineering students of various colleges. (e) Designed Innovative Engineering Templates which are useful for drawing pro circles, triangles, squares, pentagons, hexagons, etc... Two designs have been registered in the Patent Office of The Government of India. (f) Involved in NBA Accreditation process for CSE, ECE & IT depts. in 2008				

(g) Gone for NBA Re-Accreditation for CSE, ECE, IT, EEE & Mech. depts. in 2014

(h) Involved in & Got NAAC in 2015

Service activities (within and outside of the institution)

(a) Member in Examination Board Anna University Zone-2 in 2009.

(b) Academic Council Member in Anna University in 2010.

(c) E-Learning Kiosk for a subject (e-content for Engineering Graphics subject is ready now & the same is available on YouTube)

(d) authored book on “ENGINEERING GRAPHICS” and has developed software modules for it, which are first of its kind in India.

(e) identified as the expert for this subject and has given live lectures in ANNA UNIVERSITY’S ANNA - EDUSAT Satellite program

List of Publications

INTERNATIONAL JOURNALS

1. Senthil Kumar M. and hari Prasad K., “Studies on Effect of Change in Dynamic Behavior of Crack using FEM”, International Journal of Recent Trends in Engineering, ACEEE, 2009, PP. 137-141.

2. Senthil Kumar M. and hari Prasad K., “Studies on Effect of Change in Dynamic Behaviour of Crack using FEM” International Journal in Recent Trends in Mechanical Engineering, ISSN 1797-9617, Vol. 1, No. 5, Page no: 137-141. ACEEE Publication, Finland, 2009.

3. Senthil kumar .M, Sendilvelan . S, . S, Muthaiah . PL.S, “Experimental analysis of catalytic converter using supported copper catalyst to reduce NOx and PM from diesel engine ” – paper accepted for publication in International journal on Mechanical and Automobile Engineering.

4. Senthil Kumar M. and hari Prasad K., “Thermal Characterization of PP/Na⁺-MMT Composite materials”, to be Published in the International Journal in Journal of material Science and Engineering, Vol. 3, Dated on December 2010, David Publication, USA

5. Krishna Sastry K.V., Seshagiri Rao V., Senthil Kumar M and Velayudham A, “Experimental Evaluation of Thrust Force, Torque, Ovality and surface roughness in drilling of CFRC composites”, International Journal of Advanced Research in Mechanical and Production Engineering and Development, Vol.1, pp.107-116, Impact factor 1.398 – ISSN: 2320-7256, (April, 2014).

6. Krishna Sastry K.V, Seshagiri Rao V, Senthil Kumar M and A Velayudham, “Experimental Analysis of Hole Ovality in drilling of Carbon-Carbon composites”, Applied Mechanics and Materials, 592-594, pp. 294-301, Impact factor 0.13 –ISSN: 1660-9336, (July, 2014).

7. Krishna Sastry K.V., Seshagiri Rao V., Senthil Kumar M, Velayudham A and Palanikumar K, “Application of Taguchi and GSA for Drilling of CFRC Composite Material”, Artificial intelligence and Machine systems, Vol. 7, pp. 267-273, Impact factor 0.763 – ISSN:0974-9543(O), 0974-9667(P), (August,2014).

8. Krishna Sastry K.V., Seshagiri Rao V., Senthil Kumar M, Velayudham A. and Palanikumar K, “Determination of influence of Thrust Force on The Drilling Parameters of RCC Composite Material”, International Journal on Recent Researches in Science, Engineering and Technology, Vol.2, pp.1-11, Impact factor 1.46 – ISSN:2348-3105(O),2347-6729(P), (October,2014).

9. Krishna Sastry K.V., Seshagiri Rao V., Senthil Kumar M and Velayudham A., “Delamination Analysis of Reinforced Carbon - Carbon Composite Materials”, Manufacturing Technology and Research, Vol.10, No.2, pp.40-45, ISSN: 0973-0281, (July-Dec, 2014).

10. Chandran, V, Manvel Raj, T, Lakshmanan, T & Senthil Kumar, M 2014 ‘Application of

Ground Tire Particle (GTP)-Silica (Si) in Partial Natural Rubber Compounds for Solving Environmental Problems', International Journal of Applied environmental science, vol. 9, pp. 1959-1967. (Annexure - II)

11. Chandran, V, Manvel Raj, T, Lakshmanan, T & Senthil Kumar, M 2015, 'Evaluation of performance of natural rubber composites with different sizes of waste tyre rubber (WTR) and precipitated silica on C-M-M', The Arabian Journal for Science and Engineering, vol. 40, pp. 1187–1196. (Annexure - I)

12. Chandran, V, Manvel Raj, T, Lakshmanan, T & Senthil Kumar, M 2015 'Influence of natural rubber composites on different fillers to assess mechanical performance', International Journal of Engineering Transactions C, vol. 28, pp. 881–893 (Annexure - II).

13. Madhivanan, K, Senthil Kumar, M & Ramesh, R, 2016, 'Analysis of vibration signal responses in friction stir welding using Empirical mode decomposition', International Journal of Printing, Packaging and allied sciences, (Accepted for publication) (Annexure-I)

14. Madhivanan, K, Senthil Kumar, M & Ramesh, R, 2017, 'Vibration Signal Responses Classification in AA 6063 Aluminum Alloy Friction Stir Welded joint Using Optimal Neural Network', International Journal of Business Intelligence and Data Mining, Vol.12, No.4, pp 358 - 382. (Annexure-I)

NATIONAL JOURNALS

1. Senthil Kumar M. and hari Prasad K., "Mechanical Characterization of Polypropylene/Na+MMT Composite", in Journal of National Advance in Building Sciences and Mechanics, Vol. 1, No. 1, Pg 14-16, 2008, Sathyabama University, Chennai, India.

2. Krishna Sastry K.V, Seshagiri Rao V, Senthil Kumar M, A Velayudham and Palanikumar K, "Determination and Analysis of Optimal Drilling conditions of Carbon-Carbon composites using Deng's Grey Theory", Indian Journal of Engineering, Vol. 10, pp. 92-100, ISSN: 2319-7765(O), 2319-7757(P), (April, 2014).

3. Senthil kumar .M, Manoharan . N, . S, Muthaiah . P.L.S, "Catalyst based low cost Emission Control to reduce NOx in Diesel Engine Exhaust " in National Journal Engineering Today in March 2007.

4. Senthil kumar .M, Sendilvelan . S, . S, Muthaiah . P.L.S, "CFD analysis of catalytic converter to reduce PM and achieve limited back pressure in diesel engine" – paper accepted for publication in Global journal of Researches in Engineering.

5. Senthil kumar .M, Sendilvelan . S, . S, Muthaiah . P.L.S, "CFD Analysis of Catalytic Converter to reduce PM and achieve limited back pressure in Diesel Engine" – paper accepted for publication in Global journal of Researches in Engineering.

INTERNATIONAL CONFERENCES

1. Gupta, K.N., Mannar Jawahar, P. and Senthil Kumar, M., "Linear Modelling and Simulation of Railway Carbody with Conventional and Unconventional Wheelset", Proc. of Int. Conf. on Advances in Mech. Engg., I.I.Sc., Bangalore, pp. 1007-1014, (1995).

2. Senthil Kumar M., and Jawahar P.M., "Stability of a Railway Carbody with Conventional and Unconventional Wheelset", in the 2nd International SAEINDIA Mobility Conference on 10-12 Jan'2002 at IIT-Chennai. Paper No. 2001-28-0056.

3. Senthil kumar . M, Sendilvelan . S, Muthaiah . P.L.S, "Devolving Eco-Friendly Green Products For Sustainable Development" in International Conference INCRUIS-2006 at kongu Engineering College, India on 04-06 January 2006.

4. Senthil Kumar M., and Jawahar P.M., “Computer Simulation of the Response of a Railway Vehicle Carbody”, in the International Conference on Modeling and Simulation held on 3 – 5 Apr, 2006 at University of Malaysia,.
5. Senthil kumar .M, Manoharan . N, . S, Muthaiah . PL.S, “Design and Development of low cost Exhaust Manifold to reduce NOx and PM from Diesel Engines” in the International Conference ECHDEM – 2007 at Sathyabama University, on 28-30 Nov 2007.
6. Senthil Kumar M. and hari Prasad K., “Dynamic Mechanical Analysis of Polymer Hybrid Nanocomposites”, International Conference on advances in Mechanical and Building sciences (ICAMB), VIT, Vellore, 2009.
7. Senthil Kumar .T, Senthil Kumar .M, “Performance and Emission Analysis of C.I.Engine with Kapok Methyl Ester and Its Blends” – paper accepted for publication in the 3rd International Conference on Mechanical, Industrial, and Manufacturing Technologies - MIMT 2012 to be held at Shenzhen, China on March 24 - 25, 2012.
8. Krishna Sastry K.V., Seshagiri Rao V., Senthil Kumar M and Velayudham A, “Experimental Evaluation of Thrust Force, Torque, Ovality and Surface roughness in drilling of CFRC composites”, International Conference on Latest Trends in Mechanical and Production Engineering, Chennai, India, vol.50,(March, 2014).
9. Krishna Sastry K. V, Seshagiri Rao V, Senthil Kumar M and A Velayudham, “An Experimental Study of Drilling of Carbon-Carbon Composite Material”, International conference on Modeling Optimization and Computing, Kumaracoil, India,(April,2014).
10. KrishnaSastry K.V., SeshagiriRao V., Senthil Kumar M, Velayudham A and Palanikumar K, “Application of Taguchi and GRA for drilling of CFRC composite materials”, International conference on Architecture Software systems and Green computing, AVIT,Vinayaka Missions University, Chennai, India, pp. 467-473, (May,2014).
11. Krishna Sastry K.V., Seshagiri Rao V., Senthil Kumar M and Velayudham A, “Experimental Analysis of Hole Ovality in drilling of Carbon-Carbon composites”, International Mechanical Engineering Congress, NIT, Trichy, India,(June,2014).
12. Krishna Sastry K.V., Seshagiri Rao V., Senthil Kumar M and Velayudham A, “A Torque and Thrust Force prediction model for drilling of CFRC composites”, Proc. of ASME 2014 International Mechanical Engineering Congress and Exposition, Montreal, Canada, pp. 1-7, (November, 2014).

NATIONAL CONFERENCES

1. Garg, G.C., Vijayan, K. and Senthil Kumar, M.,”Performance study of a Four Stroke Diesel Engine with Variable Valve Timing system”, Proc. 8th ISME Conf., I.I.T. – New Delhi, pp. 22-27,(1993)
2. Mannar Jawahar,P. and Senthil Kumar, M., "Computational Simulation Techniques for Lateral Dynamics of a Railway Vehicle", Proc. 2nd Annual Conf. of ISIAM, Anna University, pp. A4-1 - A4-8.,(1994)
3. Mannar Jawahar, P. and Senthil Kumar, M., "Linear Modelling and Simulation of Railway Truck with Conventional and Unconventional Wheelset", Proc. 2nd National Conf. on CAD/CAM, PSC College of Tech., pp. M1_1-M1_5, (1994).
4. Gupta. K.N., Mannar Jawahar P. and Senthil Kumar M., “Stability Analysis of a Railway Carbody with Conventional and Unconventional Wheelset”, Proceedings of the 10th ISME Conference, held at Delhi College of Engineering, Delhi, pp. 1-13 to 1-18, 1996.

5. Arumugham S, Senthil Kumar M and Anis, "Design of PC based Sound Level Meter", Proc. of the 10th ISME Conference, held at Delhi College of Engineering, Delhi, pp. 1-25 to 1-29, 1996.
6. Senthil Kumar M., "Design and Development of Computer controlled Multipurpose Robotic Arm", in the 11th ISME Conference on 3-5 February 1999 held at IIT Delhi, New Delhi, pp. 99-103.
7. Senthil Kumar M., "DESIGN AND DEVELOPMENT OF INNOVATIVE ENGINEERING GADGET – ITS PRODUCTION PROCESSES" in the National Conference on MAPS held on 22 & 23 Jan'2004 at National Institute of Technology, Trichy.
8. Senthil Kumar M., PL.S.Muthaiah, K. Jeyachandran, B. Rajendra Prasath "LOW COST CATALYSIS BASED EMISSION CONTROL TO REDUCE NOX IN DIESEL ENGINE EXHAUST" in the National Conference on Emerging Trends in Energy and Environment held on 18 & 19 Feb'2005 at Sri Sai Ram Engineering College, Chennai-44.
9. Senthil Kumar M., PL.S.Muthaiah, N.Manoharan "ENVIRONMENTAL IMPACT ASSESSMENT - EIA" in the National Conference on Emerging Trends in Energy and Environment held on 18 & 19 Feb'2005 at Sri Sai Ram Engineering College, Chennai-44.
10. Senthil kumar . M, Sendilvelan . S, Muthaiah . PL.S, "CONCEPTUAL AND EMBODIMENT DESIGN STAGES" – a systematic approach in the National Conference on 29-30 April 2005 at Bannary Amman Institute of Technology Erode.
11. Senthil Kumar M. and hari Prasad K., "Electrical Resistivity and Morphological Properties of Plastic Composite Material" National Conference on Recent Trends in Manufacture and Industrial Engineering (NCRTMIE-2010), Sathyabama University, Chennai, 2009.
12. Senthil Kumar M. and hari Prasad K., "Dynamic Analysis and Modal Frequency of a Beam by using Finite Element Method", National Conference on Recent Innovations in Technology (NCRIT-2009), Rajiv Gandhi Institute of Technology (Govt. Engineering College), Kottayam, Kerala.
13. Krishna Sastry K.V., Seshagiri Rao V., Senthil Kumar M, Velayudham A and Palanikumar K, "Abatement Technologies of Emissions during Manufacturing of CFRC Composite Material", National Conference on Green Technology on Environment Engineering & Ethics, AVIT, VMU, Chennai, Vol. 78, pp. 453-460, (March,2014).
14. Krishna Sastry K.V., Seshagiri Rao V., Senthil Kumar M and Velayudham A. (2014), "Delamination Analysis of Reinforced Carbon-Carbon Composite Materials", National Conference on "GLOBAL Competitiveness Through Quick Response Manufacturing" (Challenges & Opportunities for Indian Manufacturers),GLA University, Mathura, pp. 1-10, (April,2014).
15. Krishna Sastry K.V., Seshagiri Rao V., Senthil Kumar M, Velayudham A and Palanikumar K, "Experimental Investigation on Effects of Torque on Drilling Parameters of CFRC Composite material", 29th National Convention of Production Engineers and National Seminar on Green Manufacturing Strategies, IE(I), Chennai, India pp.52, (August,2014).
16. Krishna Sastry K.V., Seshagiri Rao V., Senthil Kumar M, Velayudham A and Palanikumar K, "Determination of influence of Thrust Force on The Drilling Parameters of RCC Composite Material", National conference on recent innovations and advance trends in Mechanical Engineering, Vinayaka Missions University, Chennai, (September,2014).
17. Krishna Sastry K.V., Seshagiri Rao V., Senthil Kumar M, Velayudham A and Bubesh Kumar D, "Assessment of Factors influencing Performance Characteristics on the drilling of CFRC composites by using solid carbide drill tool", Conference proceedings of NCISE2014,

AVIT, Vinayaka Missions University, Chennai, India, pp.351-356, (December, 2014).

Recent professional development activities

- (a) Established SKR-MSME Business Incubation Centre. So far I have executed 10 projects through this scheme & obtained funding of 65 Lakhs.
- (b) Executed DST-TEPP funded Project 'Digital Protractor' with a funding of 5.5 Lakhs
- (c) Introduced "3D Printing" facility for all students.
- (d) Introduced "PLC & Industrial Automation" Training Facility for Mech., EEE & ECE students.