

Research and Development (R& D) Centre

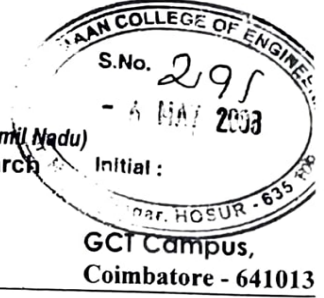
1. Year of establishment of Research Centre (Approved by Anna University)

**ANNA UNIVERSITY
COIMBATORE**

(Established under Act No.42 of 2006 by the Government of Tamil Nadu)
Excellence in Technical Education and Research

CENTRE FOR RESEARCH

**Dr.T.KANNADASAN, M.Tech.,Ph.D.,
DIRECTOR-RESEARCH**



Letter No: 001 / AU- CBE-R/Research / 2007-08

Dated: 22-04-2008.

✓ The Principal
Adhiyamaan College of Engineering
Dr.M.G.R. Nagar
Hosur
Krishnagiri -Dist-635 109.

ofm / very Imp / Copy to / Concern Hosur / @ 6/5/08

Sir,

Sub : Anna University - Ph.D. Programme -Collaborative Research Programme with Anna University - Recognition of Research Departments - Orders -Communicated-Reg.

Ref: Syndicate Resolution No 3.I.6.2, dated: 29-03-2008.
Board of Research Resolution No. 1.3. dated: 19-04-2008.

I am by direction pleased to inform you that the Departments of your Institution listed in the Annexure are recognized as research centres to have interaction with Anna University, Coimbatore for collaborative research programmes for a period of one year from April 2008.

As per the regulations for Ph.D of this University, the regular staff members of the departments of your Institution mentioned in the annexure can carryout Ph.D level research with this University under part time mode as per the norms.

Yours faithfully

Director - Research

Copy to :

1. The Registrar, Anna University-Coimbatore.
2. PS to VC
3. File.



2. Recognised Supervisors

S. No.	Name of the Supervisor	Designation	Specialization	Supervisor ID	Contact Details
1	Dr. G Ranganath	Principal	Machine Design, Material Science	9920558	Mail id : principal@adhiyamaan.ac.in Phone : 04344-261020
2	Dr. K Senthil Kumar	Professor	Heat Transfer	2820075	Mail id : senthilace@gmail.com Mobile : 9894333716
3	Dr. M Sakthivel	Associate Professor	Composite Materials	3320010	Mail id : metalsakthi@gmail.com Mobile : 7904802056
4	Dr. D Anin Vincely	Associate Professor	Heat Transfer	3520008	Mail id : vincely.benzy2008@gmail.com Mobile : 9445115278

3. Number of Candidates completed like topic, year, guide:

S.No	Department of Supervisor	Name of the Supervisor	Scholar Register Number	Name of Research Scholar	Title of Thesis	Viva Date
1.	Mechanical Engineering	Dr. G. Ranganath	0703PH1543	S.V.Suresh Babu	Optimization of Redundancy Allocation for Series Parallel Systems with Multiple Constraints and Sensitivity Analysis	29.07.2013
2.	Mechanical Engineering	Dr. G. Ranganath	7075032174	Channankaiah	Study of Densification and Mechanical Properties of HSLA P/M Steels	7.08.2013
3.	Mechanical Engineering	Dr. G. Ranganath	7075032173	Arivudainambi J	Some Studies on Densification and Mechanical Properties of HSLA Steels Produced through Powder Metallurgy	14.02.2014
4.	Mechanical Engineering	Dr. G. Ranganath	10950321031	Karthigeyan R	Characterization of Mechanical Properties of AS-Cast Al7075/Basalt Short-Fiber Metal Matrix Composites and their Effects Under Single –and-Double Stage Forged-Conditions	20.03.2015
5.	Mechanical Engineering	Dr. G. Ranganath	4080033106	Ramisetty Bala Sundar Rao	Determination of Heat Transfer and Flow Friction Characteristics of Compact Heat Exchanger Surfaces by CFD Analysis	28.04.2015
6.	Mechanical Engineering	Dr. G. Ranganath	71150331013	Ganesh Kumar A G	Segregation And Recycling of Valuable Materials from Electronics Waste	11.09.2017
7.	Mechanical Engineering	Dr. G. Ranganath	10950321019	Halesh Koti	Mathematical Modelling of Sound Field in Built Up Urban Environment	27.08.2017

8.	Mechanical Engineering	Dr. G. Ranganath	10970331027	Joshua Gnana Sekaran J	Investigation of Effects on the Properties of High Strength Low Alloy Steel for Various Percent Nickel Content and Powder Metallurgy Parameters	28.02.2018
9.	Mechanical Engineering	Dr. G. Ranganath	1415269818	Madhu B	Characterization of Functionally Gradient SiC / B ₄ C / Rubber Ash Reinforced with Aluminium Alloy 6061	12.09.2022
10.	Mechanical Engineering	Dr. G. Ranganath	1415269782	Sateesh Kumar Reddy K	Material Characterization and Optimization of Wire Electrical Discharge Machining Parameters of AISI A ₂ Tool Steel Machining in Various Conductive Systems and Mediums	6.01.2023
11.	Mechanical Engineering	Dr. M. Sakthivel	1512279232	Anand T	Optimization Study on Customer Based Supply Chain Network in Process Industry	05.05.2021
12.	Mechanical Engineering	Dr. M. Sakthivel	1512279264	Ganapathi Iyyappan S	Studies on Electrical Discharge Machining of AA7075 Hybrid Composites	24.03.2023

4. Number of students on going:

S.No	Department of Supervisor	Name of the Supervisor	Scholar Register Number	Name of Research Scholar	Title of Thesis	Status
1.	Mechanical Engineering	Dr.K. Senthil Kumar	1915267211	M.Rajnikanth	Analysis of Oxygen Enrichment for Design, Development and Application of Oxygen Separating Device in Engine	Pursuing
2.	Mechanical Engineering	Dr.K. Senthil Kumar	19142691129	N.Shyaam Sundhar	Performance, Combustion and Emission Characteristics of Bio Diesel with Different Blends	Pursuing
3.	Mechanical Engineering	Dr.K. Senthil Kumar	23122691166	M.Suresh	Analysis of Solar Air Dryer using Forced Convection Mode	Pursuing
4.	Mechanical Engineering	Dr. M. Sakthivel	21152697326	Rajesh S Jangaler	Optimization of Machining Parameter for Machining Multi-Material Structure by using Artificial Intelligence	Pursuing

5. Outcome like publication, product, patent.

List of Publications:

INTERNATIONAL JOURNALS:

1. R. Karthigeyan and G. Ranganath (2010), "Influence of Single and Double Stage Forging on Cutting Forces of AI 7075/BSF Metal Matrix Composites. International Journal of Engineering and Technology. Vol.6 (2), PP. 1094 – 1099.
2. J. Arivudainambi, G. Ranganath, K. S Pandey, M. Rajendran and S. Paul Vizhian (2011), "Assessment of Mechanical Properties of Hot forged AISI 4340 p/m Steel" International Journal of Engineering and Technology, Vol. 252 (1) PP. 751-758
3. J. Arivudainambi, G. Ranganath and R. Mariappan (2011), "Some Studies on the Densification and Mechanical Properties of Sintered and Hot Forged AISI 4340 P/M Steel", European Journal of Scientific Research Vol. 52(1), PP. 75-81.
4. J. Arivudainambi, G. Ranganath and R. Mariappan (2011), "Densification And Mechanical Properties of Sintered Powder Metallurgy AISI 4340 Steel Preforms", International Journal of Engineering Applied Research, Vol. 6 (5), PP. 61-63
5. Channankaiah and G. Ranganath (2011), "Some Investigation on Mechanical Properties of Hot Forged AISI 4140 P/M Steel", European Journal of Scientific Research, Vol. 61(2), PP. 184-193.
6. S. V. Suresh Babu, D. Maheswar and G. Ranganath (2012), "Optimization of System Reliability for Redundant Systems with Multiple Constraints" International Journal of Advanced Engineering Sciences and Technologies", Vol. 9(2), PP. 199-202.
7. S. V. Suresh Babu, D. Maheswar, G. Ranganath and Y. Vijaya Kumar (2012), "Integrated Reliability Model for Redundant Systems with Multiple Constraints", International Journal of Current Research (IJCR), Vol. 4(2), PP. 196-199.
8. S. V. SureshBabu, Dr. D. Maheswar and Dr. G. Ranganath (2012), "Redundancy Allocation for Series-Parallel Systems with Multiple Constraints and Sensitivity Analysis", International Journal of Scientific Research, Vol. 2, PP. 424-428.
9. S. V. SureshBabu, D. Maheswar and G. Ranganath (2012), "Reliability Optimization Model for Redundant Systems with Multiple Constraints", Procedia Engineering, 38, PP. 7-14.
10. R. Karthigeyan, G. Ranganath and S. Sankarnarayanan (2012), "Mechanical Properties and Microstructure Studies of Aluminium (7075) Alloy Matrix Composite Reinforced

- with Short Basalt Fibre”, European Journal of Scientific Research, Vol. 68(4), PP. 606-615.
11. Channankaiah and G. Ranganath (2012), “Experimental Approach on Densification and Mechanical Properties of Sintered Powder Metallurgy AISI 4140 Steel Preforms” ARPN Journal of Engineering and Applied Sciences Vol. 7(3), PP. 298-303.
 12. J. Joshua Gnana Sekaran, G. Ranganath, J. Arivudainambi and R. Mariappan (2012), “Evaluation of Densification and Mechanical Properties of Hot Forged and Sintered AISI 4340 P/M Steel”, International Journal of Engineering Research & Technology, Vol. 1(4), PP 1-7.
 13. R. Bala Sunda Rao, G. Ranganath and C. Ranganayakulu (2013), “Development of Colburn ‘j’ Factor and Fanning Friction Factor ‘f’ Correlations for Compact Heat Exchanger Plain Fins by using CFD”, Heat and Mass Transfer, Vol. 49(7) PP. 991-1000.
 14. R. Karthigeyan, G. Ranganath, S. Ezhilvannan, S. Paul Vizhian and K. Annamalai (2013), “Review of Al Metal Matrix Composite and Basalt Fiber as a new Reinforcement for MMC”, Life Science Journal, Vol 10(7), PP. 522-527.
 15. R. Karthigeyan and G. Ranganath (2013), “Effect of Forging Parameters on Low Cycle Fatigue Behavior of Al/Basalt Short Fiber Metal Matrix Composites”, The Scientific World, Vol.13, pp. 1-6.
 16. R. Karthigeyan, S. Ezhilvannan, G. Ranganath, S. Paul Vizhian and K. Annamalai (2013), “Effect of Coating Parameters on Coating Morphology of Basalt Short Fiber for Reinforcement Preparation of Al/Basalt Metal Matrix Composites”, International Journal of Electrochemical Science. Vol.8, PP.10138 – 10148.
 17. Halesh Koti, Ranganath. G and Rajakumar H. N (2014), “A Modeling for Predicting Road Traffic Noise Under Free Flow Condition”, Indian Journal of Environmental Protection, Vol. 34(2), PP.120-125.
 18. A. G. Ganesh Kumar, G. Ranganath, Channankaiah and Y. Libinv (2014), “Experimental Analysis of Exhaust Fan Blade by using E-glass Fiber Reinforced E-Waste Polycarbonate”, EM International Pollution Research, Vol.33(2), PP.353– 358.
 19. A. G. Ganeshkumar, G. Ranganath, B. Pounraj, S. Shylin H Jose and M. Sakthivel (2014), “Experimental Analysis of E-Glass Fiber and Fly Ash Reinforced to E-Waste Aluminium”, Journal of Chemical and Pharmaceutical Sciences, Special Issue 4. PP. 138-140.
 20. K. Sateesh Kumar Reddy, G. Ranganath, G.V. Anish Bhaskar and Channankaiah (2015), “Parametric Investigations on the Surface Roughness in Wire Electrical Discharge

- Machining of HSS”, International Journal of Applied Engineering Research, Vol. 10(9), pp. 7916 – 7920.
21. B. Madhu, G. Ranganath, Jithin Ponnappan and Channankaiah (2015), “Al (6061) / SiC / B₄C/Mullite Functionally Graded Metal Matrix Composite – A Review”, International Journal of Applied Engineering Research. Vol. 10(9), PP. 7957 – 7959.
 22. R. Karthigeyan and G. Ranganath (2015), “The Effect of Forging on Corrosion Studies of AI 7075 Metal Matrix Composites”, International Journal of Applied Engineering Research, Vol. 10(50), PP .1297 – 1298.
 23. G. Ganesh Kumar, G. Ranganath, S. N. ManiVarmaa, S. Shylin H Jose and M. Sakthivel (2015), “Design and Fabrication of Riot Shield from E-Waste Printed Circuit Board”, Applied Mechanics and Materials, Vol.787, PP.18–21.
 24. G. Ganesh Kumar, G. Ranganath and Jibin Jee Vargis (2015), “Design of Pulverizer for Discarded Compact Disc”, International Journal of Applied Engineering Research Vol.10(9), PP.7848 – 7851.
 25. R. Bala Sundar Rao, G. Ranganath and C. Ranganayakulu, (2015), "Colburn ‘j’ Factor and Fanning Friction Factor ‘f’ Correlations of Triangular Plain Fin Surface of a Compact Heat Exchanger using CFD", Applied Mechanics and Materials Vol.787, PP.207-211.
 26. Halesh Koti, Ranganath, G and Deekshith N. G. (2015), “Redesign of an Existing Two wheeler Muffler to reduce the Noise”, International Journal of Applied Engineering Research”, Vol 10(9), PP. 7886-7891.
 27. G. Ganesh Kumar, G. Ranganath, S. Shylin H Jose, M. Sakthivel and B. Pounraj (2016), “Experimentation of E-Glass Fiber and Fly Ash Reinforced with Recycled E-Waste Aluminium Alloy Hybrid Metal Matrix Composites”, International Journal of Advanced Engineering Technology”, Vol. 7(1), PP. 410–412.
 28. Halesh Koti, G. Ranganath and H. N. Rajakumara (2016), “Study of Traffic Noise in Urban Street Canyons of Bangaluru City”, Current Science, Vol. 110(6), pp. 1072-1078.
 29. Ramishetty Bala Sundar Rao, Gurappa Ranganath and Chennu Ranganayakulu (2016), "Development of Colburn ‘j’ Factor and Fanning Friction Factor Correlations for Compact Surfaces of the Triangular Perforated Fins using CFD", Heat Transfer Engineering, Vol. 37(2), PP. 150-161.
 30. J. Joshua Gnana Sekaran, G. Ranganath (2016), “Investigations on Effect on Nickel Content and Powder Metallurgy Parameters in high Strength Low Alloy Steel Properties” Asian Journal of Research in Social Sciences and Humanities, Vol. 6(1), PP. 2220-2231

31. J. Joshua Gnana Sekaran and G. Ranganath (2016), "Evaluation of Densification and Mechanical Properties of Hot Forged and Sintered AISI 4340 P/M Steel by Altering Nickel Content", *International Journal of Transylvanian Review*, Vol. 24(9), PP 1-7.
32. G. Ganesh kumar, G. Ranganath and M. Sakthivel (2016), 'Fabrication of Industrial Safety Helmet from E-Waste'. *Asian Journal of Research in Social Sciences and Humanities*, Vol 6(8), PP. 1964-1973.
33. Madhu B, Ranganath,G & Ajay kumar Konga, (2020), 'Effect of rubber ash on mechanical properties of Al6061 based hybrid FGMMC', *Materials Research Express*, vol. 7, no. 9, Doi: 10.1088/2053-1591/abb8a1
34. Madhu B & Ranganath, G (2020), 'Multi-Objective Optimization and Modeling in Centrifugal Casting Using Al 6061 -SiC Function Grade Material through Taguchi-Grey Relational Analysis', *Tierärztliche Praxis*, vol. 40, pp. 83-98.
35. S Ganapathi Iyyappan, R. Sudhakarapandian and M Sakthivel (2021), "Influence of silicon carbide mixed used engine oil dielectric fluid on EDM characteristics of AA7075/SiCp/B₄Cp hybrid composites" *Material Research Express*.

NATIONAL JOURNALS:

1. G. Ranganath, J. Arivudainambi and V. Valasamudram (1999), "A New Material for Automobile Industries", *Engineering Today*, Vol.1(6), PP. 1-6.
2. G. Ranganath, S. N. Kulkarni and J. Arivudainambi (1999), "A Potential Surface Modification Technique for Automobile and Hydraulic Components", *Engineering Today*, Vol. 1(10), PP. 12-16.
3. G. Ranganath, J. Arivudainambi and R. Baskar (1999), "Cooling Behavior of Various Steels with Respect to Iron-Carbide Equilibrium Diagram", *Engineering Today*, Vol. 1(10), PP. 20-24.
4. G. Ranganath, Y. Vijayakumar and J. Arivudainambi (2002), "Six Sigma - An Effective Tool for Achieving Competitive Excellence", *HRD News Letter*, Vol.18(1), pp 10-24.
5. G. Ranganath, Y. Vijayakumar and J. Arivudainambi (2002), "Achieving Competitive Excellence through HRM", *Engineering Today*, Vol. 4(3), PP.43-48.
6. G. Ranganath, Y. Vijayakumar and J. Arivudainambi (2002), "Evaluation of the Mechanical Properties of Hot Forge FG 51 PIM Steel", *Engineering Today*, Vol. 4(3), PP53-57

7. G. Ranganath and J. Arivudainambi (2002), "Role of Powder Metallurgical Techniques in High-tech Manufacturing and Assessment of Mechanical Properties of Hot Forged WSTE 500 PIM Steel", Process and Plant Engineering, Vol. XIV(4), PP 88-90.

INTERNATIONAL CONFERENCES:

1. G. Ranganath, Y. Vijayakumar and J. Arivudainambi, "Evaluation of the Mechanical Properties of Hot Forged Nickel P/M Steel by using Design of Experiments", International Conference on Quality, Reliability and Information Technology, held at New Delhi, during 21-23 December 2000.
2. G. Ranganath, Y. Vijayakumar and J. Arivudainambi, "Achieving Desired Mechanical Properties by using Design of Experiments", International Conference on Optimization Techniques and its Application in Engineering and Technology, held at Agra, during 21-23 September 2001.
3. G. Ranganath, S. N. Kulkarni and J. Arivudainambi, "Improvement of Economy by Effective Utilisation of Energy", International Workshop on Environmental and Energy, held at Periyar Maniammai College of Technology for Women, Thanjavur, during 1-3 November 2001.
4. G. Ranganath, Y. Vijayakumar and J. Arivudainambi, "Effective Role of E-purchasing in Manufacturing", International Conference on E-Manufacturing organised by the Institution of Engineers, Bhopal, during 17-19 November 2002.
5. D. Shivalingappa, Halesh Koti, G. Ranganath and S. Ray, "Intermetallic and Ceramic Reinforced Hybrid Light-Metal Matrix Composite", International Conference on Smart Technologies for Materials, Communication, Controls, Computing and Energy, organized by Vel Tech Dr. R R & Dr. S R Technical University, Chennai, during 5-7 January 2011.
6. G. Ranganath, Y. Vijayakumar and J. Arivudainambi, "Role of Rapid Typing in Manufacturing Industries", International Conference on Role of Rapid E-Manufacturing, organised by the Institution of Engineers, Bhopal, 17-19 November 2012.
7. G. Ranganath, S. C. Sharma, M. Krishana and J. Arivudainambi, "A Study on Tribological behavior of ZA-27/Garnet Composites", International Conference on ISTAM (The Indian Society of Theoretical and Applied Mechanics)", held at Indian Institute of Technology, Guwahati, during 23-27 December 2012.
8. Bala Sundar Rao, G. Ranganath and C. Ranganayakulu, "Heat Transfer and Pressure Drop Correlation of Rectangular Perforated Fin Surface of a Compact Heat Exchanger".

International conference on Advanced in Design and Manufacturing (ICADM'14), NIT-Trichy, during December 5 -7, Vol.3, PP.1388 – 1393.

9. Bala Sundar Rao, G. Ranganath and C. Ranganayakulu, “Colburn ‘j’ Factor and Fanning Friction Factor ‘f’ Correlation of Triangular Plain Fin Surface of a Compact Heat Exchanger using CFD”, International Conference on Sustainable Energy Resource, Materials and Technologies, held at SSN College of Engineering, Chennai.

NATIONAL CONFERENCES:

1. G. Ranganath, Y. Vijayakumar and J. Arivudainambi, "Statistical Design of Experiments for Predicting Optimum Blending of Powders to Attain Desired Mechanical Properties", National Conference on Quality Control in Metallurgical Industries, held at PSG College of Technology, Coimbatore, during 29 – 30 September 1999.
2. G. Ranganath, J. Arivudainambi and V. Valasamudram, “An Effective Manufacturing Process for Non-Ferrous Alloy Production”, National Conference on Technology Management beyond 2000, held at Gramin Polytechnic, Nanded, Maharashtra, during January 2000.
3. G. Ranganath, Y. Vijayakumar and J. Arivudainambi, “Assessment of Mechanical Properties of Hot Forged AISI 316 P/M Stainless Steel”, presented in Poster Session of National Conference, held at Sardar Patel University, Vallabhai Vidyanagar, Gujarat, during January 2000.
4. G. Ranganath, Y. Vijayakumar and J. Arivudainambi, “Evaluation of Mechanical Properties of Hot Forged AISI 316 P/M Stainless Steel by using Design of Experiments”, National Conference on METFORM 2000, held at Anna University, Chennai, during February 2000.
5. G. Ranganath, Y. Vijayakumar and J. Arivudainambi, “Assessment of Mechanical Properties of Hot Forged Nickel P/M Steel”, National Conference on METFORM 2000, held at Anna University, Chennai, during February 2000.
6. G. Ranganath, Y. Vijayakumar and J. Arivudainambi, “HRM Role in Achieving Competitive Excellence”, National Seminar on Contemporary Issues in Management, held at Mangalore University, Mangalore, during 12-13 October 2000.
7. G. Ranganath, Y. Vijayakumar and J. Arivudainambi, “Achieving Competitive Excellence in Education – A Case Study”, National Seminar on Contemporary Issues in Management, held at Mangalore University, Mangalore, during 12-13 October 2000.

8. G. Ranganath, Y. Vijayakumar and J. Arivudainambi, "Role of Powder Metallurgical Techniques in High Tech Manufacturing and Assessment of the Mechanical Properties of Hot Forged AISI 316 L P/M Stainless Steel", National Conference on Effective and Quality Production, held at Gramin Polytechnic, Nanded, during 10-11 Feb 2001.
9. G. Ranganath, Y. Vijayakumar and J. Arivudainambi, "Evaluating Quality of Service by using Design of Experiments", National Conference on Emerging Issues in Service Sector Developments, Challenges and Strategies" held at School of Management Studies, CBIT, Hyderabad, during 23-24 March 2001.
10. G. Ranganath, Y. Vijayakumar and J. Arivudainambi, "Achieving Competitive Excellence by using Six Sigma Techniques", National Conference on Emerging Issues in Service Sector Developments, Challenges and Strategies", held at School of Management Studies, CBIT, Hyderabad, during 23-24 March 2001.
11. G. Ranganath, J. Arivudainambi and R. Goldwater, "Assessment of Mechanical Properties of BS 4360 P/M Steel", National Conference on Materials Processing, held at PSG College of Technology, Coimbatore, during 31 January to 1 February 2002.
12. G. Ranganath, Y. Vijayakumar, J. Arivudainambi and M. K. Nalini, "Role of Internet in Technical Education", Convention of ISTE on E-Governance, held at Periyar Maniammai College of Technology for Women, Thanjavur, during 5 October 2002.
13. G. Ranganath, Y. Vijayakumar, J. Arivudainambi and M.K.Nalini, "Academic Autonomy - A Positive Approach for the Excellence in the Technical Education", presented in the XXXII Annual Convention of ISTE and National Seminar on Role of Technical Education for Sustainable Development, held at NITTE Mahalinga Adyanthaya Memorial Institute of Technology, Karnataka, during 27-29 December 2002.
14. G. Ranganath, Channankaiah, J. Arivudainambi and K. Shanmugavel, "Evaluation of Mechanical Properties of Hot Forged WSTE 500 P/M Steel", National Conference on Failure Analysis Materials Processing, held at REC, Tiruchirappalli, during 19-20 June 2003.
15. G. Ranganath, Channankaiah, J. Arivudainambi and K. Shanmugavel, "Achieving Desired Mechanical Properties by using Design of Experiment (DOE)", National Conference on Failure Analysis and Materials Processing, held at REC, Tiruchirappalli, during 19-20 June 2003.
16. G. Ranganath, Y. Vijayakumar and J. Arivudainambi, "Lean Manufacturing", National Convention of Institution of Engineers (Mechanical), held at National Institute of Technology, Rourkela, during 12-14 November 2003.

17. Halesh Koti and Dr. G. Ranganath, “A simple Model for Predicting Road Traffic Noise Under Free Flow Condition”, National Symposium on Acoustics (NSA 2009) held at DRDO, Hyderabad, during 26-28 November 2009.
18. J. Arivudainambi, G. Ranganath and R. Mariappan, “Some Studies on the Densification and Mechanical Properties of Hot Forged AISI 4340 P/M Steel and its Applications in Aerospace Industries”, CSIR sponsored National Conference on Trends and Developments in Aeronautical and Avionics Engineering, held at Adhiyamaan College of Engineering, Hosur, during 10-11 March 2011.
19. J. Arivudainambi, G. Ranganath and R. Mariappan, “Densification and Mechanical Properties of Sintered and Hot Forged HSLA P/M Steel”, CSIR sponsored National Conference on Trends and Developments in Aeronautical and Avionics Engineering, held at Adhiyamaan College of Engineering, Hosur, during 10-11 March 2011.
20. J. Arivudainambi, G. Ranganath and R. Mariappan, “Mechanical and Wear Resistance Properties of Forged and Homogenised AISI 4340 P/M Steel”, CSIR sponsored National Conference on Trends and Developments in Aeronautical and Avionics Engineering, held at Adhiyamaan College of Engineering, Hosur, during 10-11 March 2011.
21. A. G. Ganesh Kumar, G. Ranganath, B. Pounraj, S. Shylin H Jose and M. Sakthivel, “Experimental Analysis of E-Glass fiber and Fly Ash reinforced to E-Waste aluminium” National Conference on Green Engineering and Technologies for Sustainable Feature, Oct 2014.

PATENTS:

S.No	Name of Inventors	Title of Patent	Patent Number	Patent Date	Patent Country	Status
1.	Dr. M. Sakthivel	Developing Vehicular Data Cloud Services in the IOT Environment	202241039564	15.07.2022	India	Published
2.	Dr. K. Senthil Kumar	Oxygen Enricher	202141031524	14.07.2021	India	Published

6. Activities carried on / planned through research Centre:

Research Policy Implementation Mechanism

The specific roles and functions of the research cell will be as follows:

1. Facilitate the faculty in undertaking research and will work with the Institution management to set up a research fund for providing seed money.
2. Provide research facilities in terms of laboratory equipment, research journals and research incentives etc. required by the faculty.
3. Encourage and promote a research culture (eg. teaching work load remission, opportunities for attending conferences etc.).
4. Encourage the faculty to undertake research by collaborating with other research organizations/ industry.
5. Create suitable procedures for giving due recognition for guiding research.
6. Establishment of specific research units/ centres by funding agencies.
7. Organize workshops/ training programmes/ sensitization programmes are conducted by the institution to promote a research culture on campus.
8. Prepare budgets for supporting students research projects.
9. Approach National and international organizations such as UGC, CSIR, DSTSERB, DST, DBT, NATO, DRDO and BARC to fund major and minor research projects undertaken by the faculty / students.
10. Make efforts to improve the availability of research infrastructure requirements to facilitate research.
11. Develop and implement an official Code of Ethics to check malpractices and plagiarism in research.
12. Facilitate Interdepartmental / interdisciplinary research projects.
13. Create incentives for the faculty who receive state, national and international recognition for research contributions as well as research awards and recognition from reputed professional bodies and agencies.
14. Encourage and promote the publication of research articles by the faculty in reputed/ referred journals.
15. Create and maintain a database of research work and research projects undertaken by the faculty and students as well as collect data by metrics such as Citation Index, Impact Factor, h-index, etc.
16. Publicize the research expertise and consultancy capabilities available in the Institution.

17. Prepare Rules & Guidelines for Grant of Research related leave and other remissions.
18. Prepare Guidelines for design and evaluation of curriculum-oriented research projects.
19. Research publication leading to Patent/Patenting Research activities.

7. MoU Signed:

The department is having various MoUs with industries to improve the career opportunities of our students.

S.No.	Name of the MoU Signed	Industry/ Institute	Term of MoU	MoU Signed Date	Valid till	Purpose of MoU
1	V ACT Technologies	Academics	2 years	15.12.2021	15.12.2023	Training
2	CADD Centre, Hosur	Academics	3 years	01.08.2022	01.08.2025	Training
3	Kay Pee Eff Pvt Ltd, Hosur	Industry	3 years	26.09.2022	26.09.2025	Industrial Visit/ Guest Lecture
4	Jeeva Industries, Hosur	Industry	3 years	19.10.2022	19.10.2025	Industrial Visit
5	Gee Vee Fab, Hosur	Industry	3 years	19.10.2022	19.10.2025	Industrial Visit/Training
6	Aspire Precision Tech, Hosur	Industry	3 years	19.10.2022	19.10.2025	Webinar
7	Dhiraj Engineers, Bangalore	Industry	3 years	07.11.2022	07.11.2025	Webinar
8	Ashok Leyland Plant II, Hosur	Industry	3 years	24.04.2023	24.04.2025	Industrial Visit/Project Work/Internship

8. Flyers caring the benchmark of the Centre.

Aims of the Research Policy

The Department of Mechanical Engineering is a recognized Research Centre by Anna University, Chennai. The Department aims to create and support a research culture for developing and promoting scientific temper and research aptitudes among its teachers, staff and students. It helps to realize the vision and missions of the Institution and for contributing to national development by establishing an institutional fund and plan for facilitating their participation in research and related activities and by providing the required resources and appropriate facilities.

It also aims at ensuring that the research activities of the Institution conform to all applicable rules and regulation as well as to the established standards and norms relating to safe and ethical conduct of research.

Objectives of the Research Policy

- Strengthening the institutional capacity for strategic, technical and operational planning, budgeting and control of all research activities of the Institution.
- Creating and administer a research fund for supporting and facilitating research initiatives and projects of faculty members and students.
- Developing rules, procedures and guidelines for granting research support, instituting awards, and supporting all other related activities.
- Developing rules, procedures and guidelines for granting study leave, sabbatical leave, duty leave, reduction in workload, etc. for faculty members undertaking research activities.
- Preparing and updating the research agenda cut lining the preferred focus areas and priorities of research activities to be supported.
- Guide faculty members in the effective integration research projects with the regular curriculum implementation and curriculum enrichment activities, Identifying and informing researchers about the appropriate research opportunities announced by different academic, research, industry or government organizations.
- Promoting interdisciplinary research and establishing modalities for preparing and undertaking joint research projects covering more than one knowledge domain as well as policies for involving external agencies/experts in such projects.
- Enabling framework for researchers to obtain sponsorships for research projects and which makes the participating researchers responsible for the successful implementation of the project.
- Developing and promoting linkages with the Research Council of the University of Delhi and enable all the researchers of the University to benefit from the activities and programmes of the council.
- Identifying and establishing linkages including MoU's for long term relationships with national and international research organizations for widening the scope of research opportunities and funding options available to the teachers and students.
- Encouraging and facilitating the publication of the research work/projects in reputed academic journals.
- Encouraging and facilitating the presentation/communication of the research work/projects as well as their findings and recommendations through academic events such as workshops/seminars/guest lectures or the media.

- Compiling data on all the research work/projects undertaken by the teachers and students in to a database for easy monitoring and analysis of the progress being made by them from year to year.
- Adopting research code, which informs all researchers about the ethical and legal norms and principles to be followed in the conduct of research.