

Name: Dr. M. BALACHANDAR				
Designation:	ASSOCIATE PROFESSOR			
Qualification:	M. tech., Ph.D			
Area of specialization:	Energy Engineering , Composite			
Experience:	Industrial Experience		Teaching Experience	
	1		17	
Number of workshops / FDP attended:	Number of Workshops		Number of FDPs	
	10		30	
Publications:	Conference		Journal	
	National	International	National	International
	1		16	-
Books / Book Chapters	1			
Patents:	National		International	
	1		-	
Professional Body Membership	INDIAN SOCIETY FOR TECHNICAL EDUCATION, SOCIETY OF AUTOMOTIVE ENGINEERS			

Staff Achievements	
	Achieved 100% results in Following Subjects <ol style="list-style-type: none">1. Mechatronics2. Gas Dynamics and Jet Propulsion3. Advanced IC Engines4. Thermal Engineering

Educational Qualifications:

Category	Name of the Degree	Specialization	Year of Passing	Name of the College	Name of the University	% of Marks/ Grades obtained	Class obtained
UG	B.E	MECHANICAL	2005	I.F.E.T COLLEGE OF ENGINEERING	ANNA UNIVERSITY	76.2	First class with Distinction
PG	M.Tech	ENERGY TECHNOLOGY	2007	PONDICHERRY ENGINEERING COLLEGE	PONDICHERRY	8.32	First class
PhD	Ph.D	MATERIALS	2021	COLLEGE OF ENGINEERING, GUINDY	ANNA UNIVERSITY	-	-

Academic Experience:

Name of the College	Designation	Joining Date	Relieving Date	Experience		
				Years	Months	Days
Sri SaiRam Institute of Technology	Associate professor	22.01.2014	till date	12	1	6
Sree Satha Institute of Technology	Assistant professor	23.06.2009	26.12.2013	4	6	3
I.F.E.T College of Engineering	Lecturer	01.08.2007	30.04.2008	0	8	29
				17	2	8

Workshops/Seminars attended:

Sl.No.	Name of the Workshop	Organizers	Mode of Program	Month & Year
1	Heat Transfer	Indian Institute of Technology Bombay	Off line	Nov 2011
2	Recent Trends in Product Design and Development	Anna University, Chennai	Off line	May 2012
3	Design of Experiments	Sri SaiRam Institute of Technology, Chennai	Off line	July 2015
4	Green Composites	Sri SaiRam Institute of Technology, Chennai	Off line	August 2014
5	Fuzzy logic and Neural Network approaches for Engineering Solutions	Journal of advanced Engineering Research and powered hexacube	On line	May 2020
6	Design of Experiments on Engineering Perspective	Journal of advanced Engineering Research	On line	April 2020

		and powered hexacube		
7	Emerging Simulation Trends In Automotive Industry	SRM Institute of Science and Technology, Ramapuram Campus, Chennai	On line	July 2020

FDP/STTP Attended:

S.No.	Name of the FDP	Organized by (Institution Name)	Mode of Program	Month & Year
1	Recent trends on Automotive New Product Development	Sathyabama Institute of Science and Technology, OMR Chennai.	On line	July 2020
2	Engineering Thermodynamics Essentials	Sri Venkateswara College of Engineering, Chennai.	On line	May 2020
3	Smart manufacturing – Opportunities & Challenges	St Josephs College of Engineering, OMR Chennai.	On line	August 2020
4	Recent trends in Aerodynamics	SRM Institute of Science and Technology, Chennai.	On line	December 2020
5	Computational Fluid Dynamics	AICTE Training and Learning (ATAL) Academy	On line	September 2020
6	Green technology & Sustainability Engineering	AICTE Training and Learning (ATAL) Academy	On line	October 2020
7	Emerging research areas in Aerodynamics	Bannari Amman Institute of technology, Sathiyamangalam.	On line	August 2020
8	Advanced Energy Conversion Technologies	SRM Institute of Science and Technology, Chennai.	On line	May 2020.
9	Modern Materials and Industrial Automation	Sri SaiRam Institute of Technology, Chennai.	On line	June 2020
10	Introduction to Finite Element analysis	Panimalar Institute of Technology, Chennai.	On line	May 2020
11	Advancements in Mechanical, production & civil engineering and ICT in	Sri SaiRam Engineering College, Chennai.	On line	May2020

	teaching - learning Process			
12	Cyber-Physical Manufacturing Systems for further Industries (CPMS)	IFET College of Engineering, Villupuram.	On line	August 2020.
13	Advances in Computational Fluid dynamics	Vel Tech High Tech, Avadi	Off line	June 2019
14	Recent Developments In Engineering Materials and Nano Technology	Tagore Engineering College, Rathinamangalam, Chennai.	Off line	December 2018
15	Kinematics of Machinery	Sri Sairam Engineering College, Chennai.	Off line	December 2017
16	Thermal Engineering	Kings Engineering College, Chennai	Off line	November 2017
17	Bio-De Gradable, Green and Nano Composites for Industrial Application Manufacturing Methodologies and Properties	Sri Sairam Institute of Technology, Chennai.	Off line	November 2017
18	Autodesk Inventor	Panimalar Institute of Technology. Chennai.	Off line	May 2016
19	Recent Developments in Non-Destructive Testing and Materials	Tagore Engineering College, Chennai	Off line	December 2016
20	Processing and Characterization of Composites Materials Including Natural Fiber Reinforced Composites” organized by Department of Mechanical Engineering	Sairam Institute of Technology, Chennai.	Off line	March 2015
21	Composite materials and including natural fiber Reinforced Composites.	at Sri Sairam Institute of Technology, Chennai.	Off line	
22	Dynamics of Machinery	Saveetha Engineering College, Chennai	Off line	June 2012
23	Soft Skills and Class Room Dynamics	I.F.E.T College of Engineering, Villupuram	Off line	December 2007

24	Motivation For Creativity	I.F.E.T College of Engineering, Villupuram	Off line	June 2007
25	Funded Projects	I.F.E.T College of Engineering, Villupuram	Off line	April 2007
26	Recent trends in AI empowered 3D Bio Printing technologies towards fabrication of smarter Bio medical implants	S.A.ENGINEERING COLLEGE, Chennai	On line	Feb 2026
27	Advancements in Automobile Engineering for Sustainable Development	VNR Vignana Jyothi Institute of Engineering and Technology, Hyderabad	On line	June 2024
28	Energy storage systems	Anna University, Chennai	Off line	Feb 2024
29	Autodesk Inventor	ICT Academy	Off line	Feb 2025
30	Project Management with Primavera (Online Live FDP)	ICT Academy	Off line	March 2021

Symposium Attended:

Conference Attended:

S.No.	Name of the Conference	Organizer	Month & Year
1	International conference on Science, Engineering & Management Research.	Vel Tech High Tech Avadi	March 2018
2	Cooling System Suitable for Application in Remote Areas	I.F.E.T College of Engineering, Villupuram.	August 2018
3	Cooling System Suitable for Remote Areas	Easwari College of Engineering, Ramapuram, Chennai.	March 2013

Completed / Ongoing Projects:

Patent:

Journal Publications:

1. **M Balachandar**, EV Selvan, A Ponshanmugakumar, S Magesh, "Sustainable development of natural fiber composite material" *Materials Today: Proceedings* (2020).
2. P Periyasamy, M Kamaraj, **M Balachandar**, N Ramanan," Friction welding of dissimilar aluminium 6061 and SS 430F steel and its characterizations".IOP Conference Series: Materials Science and Engineering 912 (3), 032014 (2020).
3. **Balachandar M**, Vijaya Ramnath B, Barath R, Bharath Sankar S Mechanical Characterization of Natural Fiber Polymer Composites, *Materials today proceedings* 16, 1006-1012 (2019).
4. **Balachandar M**, Vijaya Ramnath B, Jagadeeshwar P, Yokesh R, Mechanical behaviour of Natural and Glass fiber reinforced with polymer matrix composite, *Materials today proceedings*, 16, 1297-1303 (2019).
5. **Balachandar M**, Vijaya Ramnath B, Ashok Kumar S, Siva Sankar G "Experimental evaluation on Mechanical Properties of Natural Fiber Polymer Composites with Human Hair", *Materials today proceedings*, 16, 1304-1311 (2019).
6. **Balachandar Munisamy**, Vijaya Ramnath Bindu Madhavan, Elanchezhian Chinnadurai and Jeykrishnan Janardhanan. "Prediction of mechanical properties of Al6061 metal matrix composites reinforced with zircon sand and boron carbide" *Materials Testing* 61 (6), 537-542 (2019).
7. **M Balachandar**, M.A. Venkatasubramanian, A. Balaji Raja, R.Arunkumar," Investigation of Mechanical Properties on Woven Glass – Sisal Fibre Hybrid Composites" *SSRG International Journal of Mechanical Engineering (SSRG-IJME)* 6 (11), 8-14 (2019).
8. **M Balachandar**, M RamKaushik, R Barath, N Ramanan, "Experimental characterization of laminates for tensile and impact properties" *International Journal of Mechanical Engineering and Technology (IJMET)* Volume 9, Issue 9, September 2018, pp. 214–219.
9. **M. Balachandar**. M, Naveen. S, Nagendra Kumar.N, Nandhu surya N," Polymer matrix composite material using in audio chasis application". *International Journal of Mechanical Engineering and Technology* 9 (12), 778-785 (2018).
10. Sankar D , **Balachandar M**, AnbuvananT, Rajagopal S, Thankarathi T and Deepa N, Condenser cooling system & effluent disposal system for steam-electric power plants: Improved techniques, *Membrane Water Treatment, Vol. 8, No. 4 (2017)*.
11. M. Rajmohan , **M. Balachandar** and D. Kasinathan, Analysis of Lap Joints in Composite Materials, *Indian Journal of Science and technology*, Vol 9(48), DOI: 10.17485/ijst/2016/v9i48/108468, December 2016.
12. D.Kasinathan, **M.Balachandar** ,Performance Analysis of A Domestic Refrigerator By Using Various Refrigerants, 4th National Conference on Refrigeration and Air Conditioning (NCRAC-2015) Rajalakshmi Engineering College, Chennai, 28th to 30th October 2015.

13. Balakrishnan.E, Meganathan.S, **Balachander.M**, Ponshanmugakumar.A, Elemental analysis of brake pad using natural fibres Materials today: proceedings 16, 1067-10742019.
14. Gananasekaran.K, **Balachandar.M**, Kumar.M Vinoth, Sathish. S, Balaji, D "Synthesis and evaluation of polyurethane foam composites for enhanced sound absorption at low frequency. International Journal of Recent Technology and Engineering 8,3,6815-6818, 2019.
15. Padmavathy.R, Saravanan.T, Kasim,SAMohammed, **Balachandar.M**, Experimental investigation on melting/freezing characteristics of nano composite PCMs, Materials Today: Proceedings, 2023.
16. Ponshanmugakumar. A, Saravanan.G, **Balachandar.M**, Muhilan.S, Anju. MI, Experimental study on bio fiber reinforced composites Materials Today: Proceedings,2023.
17. Manikandan, KP; Nanthakumar, P; **Balachandar, M**; Shankar, D Gowri; Vijayakumari, G; "Partial replacement of aggregate with ceramic tile in concrete Materials Today: Proceedings 2023.
18. Jothiprakash. VM, Gurijala. C, Sathish.K, **Balachandar.M**, Sakthi Sadhasivam. RM, "Mechanical and tribological behavior of pineapple leaf and kenaf fiber reinforced vinyl ester hybrid composites, "Proceedings of the Institution of Mechanical Engineers, Part E: Journal of Process Mechanical Engineering" 9.54409E+152024 "SAGE Publications Sage UK: London, England"
19. Arputhabalan,JJeswin, **Balachandar.M**, Asaithambi.T, Balakrishnan.E, Ponshanmugakumar. A, Gunaseelan.B, "Microcontroller-Based Auto Lock Ignition System for Vehicle Overload Prevention."2024 International Conference on Communication, Computing and Internet of Things (IC3IoT)"4-Jan2024IEEE.
20. Vasudev. KL, Hariram. V, Gajalakshmi. B, Paul. R Christu, Prajith, G Sai; Kumar, M Vinoth; **Balachandar, M**; Sangeethkumar, E; "Fluid Flow and Heat Transfer Studies around Impermeable and Porous Cylinders at Low Reynolds Number using Computational Fluid Dynamics.International Journal of Vehicle Structures & Systems (IJVSS) 15, 4,2023
21. Sri,KarthikeyanS, Balakrishnan. E, Meganathan.S, **Balachander.M**, Ponshanmugakumar.A, "Elemental analysis of brake pad using natural fibres,Materials Today: Proceedings 162,1067,2019.
22. ilt-07-2025-0324.R1 - Microstructural and Tribological Characterization of Ni–P Coatings Reinforced with Functionalized ZnO Nanoparticles. **Accepted in Industrial Lubrication and Tribology journal.**
23. Mechanical, tribological and water absorption behaviour for non-structural applications (PRT-02-2026-0028) has been submitted in Pigment & Resin Technology Journal. **Submitted**

Books / Book Chapters:

Awards : NIL

Startup: NIL

Webinar: NIL

Resource Person:

1. Mailam Engineering College – ENGINEERING THERMODYNAMICS - 2021
2. JCT college of Engineering and Technology – HEAT TREATMENT – August 2024
3. JCT college of Engineering and Technology – ENGG MECHANICS – August 2024

Online Courses:

Workshops/Seminars:

FDP/STTP:

Conferences:

Projects Applied

Patent filed:

International:

Journals :

Awards:

Webinar:

ON - LINE COURSES : Coursera, Nptel

NITTTR Courses: Completed

Professional Membership: ISTE, SAE