



SAI RAM INSTITUTE OF TECHNOLOGY

An Autonomous Institution | Affiliated to Anna University & Approved by AICTE, New Delhi
Accredited by NBA and NAAC 'A+' | An ISO 9001:2015 Certified and MHRD NIRF ranked institution
Sai Leo Nagar, West Tambaram, Chennai - 600 044. www.sairamit.edu.in



DEPARTMENT OF MECHANICAL ENGINEERING PERSONAL ATTENTION PARENTAL CARE

Name : Dr.K.VELAVAN
 Designation : ASSOCIATE PROFESSOR
 DOB : 27/01/1969
 Unique ID (College ID) : IT12ME01
 Email : velavan.mech@sairamit.edu.in
 Qualification : B.E., M.E., Ph.D



Area of Specialization : Manufacturing
 Research Interest : Composite Materials

Experience in years : Teaching UG PG Industry

No. of Workshop/Conferences/
 FDP / Webinar attended : Workshop & Webinar Conferences FDP

No. of Workshop/Conferences/
 FDP/ Webinar Organized : Workshop & Webinar Conferences FDP

Professional Membership	ISTE Life Member, IEEE Member, IWS Member
Publications	National :03
	International: 06
	Book : ---
Research Funded Projects	-----
Consultancy	-----
Patents	01 20214102116901(Design Patent)
Academic Achievements	Subjects Handled – Received 100% Result in the following subjects 1. Engineering Graphics 2. Basic Civil & Mechanical Engineering 3. Computer Integrated Manufacturing 4. Production Planning and Control 5. Unconventional Machining Processes 6. Power Plant Engineering

Recognitions & Honors	Certificate of Appreciation for Mentor service
Any Other Information	<ol style="list-style-type: none"> 1. NSS Co-ordinator at Sri Sai ram Institute Of Technology. 2. Manufacturing Technology Lab In- charge. 3. Automobile Club Member 4. Department NIRF Coordinator 5. Department Guest lecture Coordinator 6. Department NBA Criteria 5 In-charge 7. Department Industrial Visit Coordinator

List of Publications :

International

1. K.PalaniKumar, K.Velavan, N. Elango, N.Senthilkumar, M.Kanesan, **Drilling Parameters Analysis on In- Situ Al/B₄C/Mica Hybrid Composite and an Integrated Optimization Approach Using Fuzzy Model and Non-Dominated Sorting Genetic Algorithm**, Journal of Metals December2021, MDPI Publishers(**Web of Science Indexed Journal**)

2.K.Velavan, K.PalaniKumar, N.Senthilkumar. **Experimental investigation of sliding wear behaviour of boron Carbide and mica reinforced aluminium alloy hybrid metal matrix composites using Box-Bhnken design**, Materials Today: Proceedings,2021 Elsevier Publications. (**Scopus Indexed Journal**)

3.K.Velavan, K.PalaniKumar, Elango Natarajan,Wei Hong Lim. **Implications on the influence of Mica on the Mechanical Properties of Cast Hybrid (Al+10%B₄C+Mica)Metal Matrix Composite**, Journal of Materials Research and Technology, Vol10/ pp 99-109/2020 , Elsevier Publications. (**Web of Science Indexed Journal**)

4.K.Velavan, K.PalaniKumar. **Analysis on sliding wear behavior of Al+B₄c+mica hybrid metal matrix composites**, Material Express, Vol 10/pp986-997/Number 7 / 2020. American Scientific Publishers. (**Web of Science Indexed Journal**)

5.K.Velavan, K.PalaniKumar. **Effect of Silicon Carbide (SiC) on Stir Cast Aluminium Metal Matrix Hybrid Composites– A Review**, Applied Mechanics and Materials, Vol 766-767/ pp 293-300/2015 Trans Tech publications.

6.N.SenthilKumar,C.K.Dhinakarraj,**K.Velavan**“ Finite Element Analysis And

Optimization Of Machining Parameters and Cutting Insert Shape in Machining AISI 1045 Steel” International Journal of Business Review and Manufacturing Management, volume 01, Number 01, Issue 01 2012

List of Patents: 01

Workshop / Webinars Attended:

S.No.	Name of the Workshop	Organizers	Mode of Program	Month & Year
1	Cloud Computing for everyone (Webinar)	Sri venkateswara College of Engineering	Online	July2020
2	Linear Regression Model in Machine Learning (Webinar)	Sri Eshwar College of Engineering	Online	July2020
3	New Approaches in Composite Deposition (Webinar)	SCAD College of Engineering and Technology	Online	July2020
4	What’s Instore and how COVID19 can alter the mechanical engineering workforce (Webinar)	Sathyabama Institute of Science and Technology	Online	June2020
5	How to publish research articles in reputed journals (Webinar)	Sathyabama Institute of Science and Technology	Online	June2020
6	Hand Sanitation Awareness Quiz (Webinar)	Dharmamurthi Rao Bahadur Calava Cunnan Cheety’s Hindu college	Online	June2020
7	Shape Memory alloys for micro Mechatronics and soft robotic systems (Webinar)	Sathyabama Institute of Science and Technology	Online	June2020
8	Human values of Professional Ethic Part-II (Webinar)	JSPM’s Rajarshi Sahu College of Engineering	Online	June2020
9	Solar Thermal Energy Utilization Technologies for Sustainable development (Webinar)	Sathyabama Institute of Science and Technology	Online	June2020
10	Quiz on Manufacturing Technology (Webinar)	Sri Sairam Engineering College	Online	June2020
11	Quality & Six Sigma (Webinar)	Sathyabama Institute of Science and Technology	Online	June2020
12	Basics of IPR and Patents & Setting-up an innovative business (Webinar)	Sathyabama Institute of Science and Technology	Online	May2020

13	Research Thrust areas in Composites (Webinar)	Arasu Engineering College	Online	May2020
14	3D Printing Applications in fighting with COVID 19 (Webinar)	Sri Sairam Institute of Technology	Online	May2020
15	Transformation expected in Mechanical Industries Post Covid 19 (Webinar)	Sathyabama Institute of Science and Technology	Online	May2020
16	Production and Machine Tools Quiz 2K20 (Webinar)	Holy Mary Institute of Technology	Online	May2020
17	Applications of Codes and Standards (Webinar)	A.V.C. College of Engineering	Online	May2020
18	Advanced manufacturing Practices- Robot Automation & industry-4.0 (Webinar)	Sri Sairam Institute of Technology	Online	May2020
19	Process simulation , optimization and additive manufacturing for reengineering of medical devices (Webinar)	NAFEMS India	Online	May2020
20	Engineering simulations and additive manufacturing (Webinar)	NAFEMS India	Online	May2020
21	COVID 19 Awareness quiz (Webinar)	ST.JOSEPH Arts & Science College	Online	May2020
22	Research Methodology (Webinar)	Agurchand Manmull Jain college	Online	May2020
23	COVID 19 Awareness quiz (Webinar)	Jamal Mohamed College	Online	May2020
24	Artificial Intelligence (Webinar)	Mahendra Institute of Technology	Online	May2020
25	Fine Tuning Research Skills for Effective writing (Webinar)	Vivekananda College for Arts and Science	Online	May2020
26	Solar Panel System for your home (Webinar)	Tagore Engineering College	Online	May2020
27	How to get published in scientific journal (Webinar)	Sri Sairam Institute of Technology	Online	April2020
28	Engineering Graphics (webinar)	Bharath University	Online	April2020
29	FUZZY LOGIC (Workshop)	JAER	Online	April2020
30	DOE(Workshop)	JAER	Online	April2020
31	Design of Experiments (workshop)	Sri Sairam Institute of Technology,	Offline	July2015

32	Green Composites (Workshop)	Sri Sairam Institute of Technology,	Offline	August2014
33	Recent Advances in Composite Materials (Seminar)	Sri Ramanujar Enginerring College	Offline	April 2014
34	Research Methodology (workshop)	Sri Venkateswara College of Engineering,	Offline	March2011
35	Eco- friendly Welding Process organized by Centre for Materials Joining and Research (CEMAJOR) (workshop)	Annamalai University, Annamalai Nagar,	Offline	March2011
36	Electromagnetic Forming Technology(EMFT 2010)” (workshop)	CEG campus, Anna University Chennai-25	Offline	Nov2010
37	Nano materials and its Applications(NANOMAT 2010) (workshop)	CEG campus, Anna University Chennai-25	Offline	Sep2010
38	The Art of Teaching Engineering Graphics by Solid works (workshop)	SKR Engineering College	Offline	Dec 2008
39	Emerging Strategies in Energy and Environment (workshop)	Sri Sairam Engineering College	Offline	March2008
40	Advances in Manufacturing Technology (workshop)	MIT Campus Anna University, Chennai-600 044.	Offline	March2007
41	Total Productive Maintenance – an Industrial Approach (workshop)	Adhiparasakthi Engineering College	Offline	August 2005
42	Advances in Image Processing & Robotics(ADIPRO) (Seminar)	MIT Campus, Anna University, Chennai-600 044.	Offline	February 2005
43	Technologists vision for Engineering Practices In 2000’s With Nano-Technology (Seminar)	Adhiparasakthi Engineering College & Indian Society For Technical Education, Melmaruvathur-603 319.	Offline	February 2003

FDP Attended:

S.No.	Name of the FDP	Organized by (Institution Name)	Mode of Program	Month & Year
1	Electric Vehicles	AICTE - ATAL	Online	September 2021
2	Strategies in Teaching Learning”	Sri Sairam Institute of Technology	Online	December 2020
3	Additive Manufacturing	AICTE - ATAL	Online	November 2020
4	Finite Element Method for Engineering Applications	Sri Sairam Institute of Technology	Online	September 2020
5	Operations Management	AICTE - ATAL	Online	August 2020
6	Energy storage characteristics, Surface treatment, Durability, Sustainability, and Microstructure Evaluation of Smart and Phase change Materials and Applications”	Sri Sairam Institute of Technology	Online	July2020
7	Manufacturing, Machining and Testing of Composites	Sri Sairam Institute of Technology	Online	June2020
8	Heat Transfer and Computational Fluid Dynamics Towards Industrial Applications	Sri Sairam Institute of Technology	Online	June2020
9	Materials for Thermal and Renewable Energy Research	Sri Sairam Institute of Technology	Online	May2020
10	Evolution of Teaching Learning Process- Post COVID19	Bharath Institute of Science and Technology	Online	May2020
11	Computer Aided Design and Manufacturing (CAD/CAM)	National Institute of Technical Teachers Training and Research, Chandigarh	Online	April2020
12	Fundamentals of Manufacturing Processess	NPTEL-AICTE	Online	July- Oct2019

13	Processing and Characterization of composite materials including Natural Fibre reinforced composites	Sri Sairam Institute of Technology	Offline	March2015
14	ME 6402- Manufacturing Technology-II	CEG Campus Anna University, Chennai-600 025	Offline	December 2014
15	Innovative Teaching Methodologies	Adhiparasakthi Engineering College, Melmaruvathur-603 319.	Offline	May2011
16	Effective New Product Development Progrmme	Brakes India Limited Polambakkam	Offline	April2009

Conferences Attended:

S.No.	Name of the Conference	Organizer	Month &Year
1	AICTE Sponsored International Conference On ICAM E21	Sri Sairam Engineering College	January 2021
2	3 rd International Conference On ICMSD2020	Sri Sairam Institute of Technology	November 2020
3	3 rd International Conference on FAME2020	Sathyabama Institute of Science and Technology Ch-119	August 2020
4	2 nd International Conference On ICAMMAS 2017	Sri Sairam Institute of Technology	March2017
5	1 st international Conference on ICAMME 2014	Sri Sairam Institute of Technology	December 2014
6	International Conference on INCRAME12	Dr.M.G.R. Educational and Research Institute University	April 2020

7	1 st international Conference on ICFTME2012	Thiruvalluvar College Of Engineering and Technology	January 2012
8	National Conference on BIERP'07	Sree Sastha Institute Of Engineering and Technology	March 2007
9	National Conference onRAPMATS-06	MIT Campus, Anna University, Chennai-600 044	January 2006

Programs Organized (via Dept. /Cells/Clubs):

S.No.	Name of the Program	Responsibility Held	Month &Year
1	Five Days FDP on “ Manufacturing, Machining and Testing of Composite Materials	CONVENOR	June2020
