



SAI RAM INSTITUTE OF TECHNOLOGY

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DEPARTMENT OF MECHANICAL ENGINEERING *PERSONAL ATTENTION PARENTAL CARE*

Name : A.PONSHANMUGAKUMAR
 Designation : ASSOCIATE PROFESSOR
 Email : ponshanmugakumar.mech@sairamit.edu.in
 Qualification : B.E., M.E., (Ph.D)
 Specialization : Thermal Engineering
 Research Interest : Thermal Storage System
 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	<ul style="list-style-type: none"> ❖ INDIAN SOCIETY FOR TECHNICAL EDUCATION (ISTE) ❖ INDIAN WELDING SOCIETY (IWS) ❖ FELLOW-INSTITUTION OF ENGINEERS (INDIA)-FIE
Publications	National: NIL
	International: 32
	Book: 04
Research Funded Projects	DST-IEDC Funded Rs.100000/- for Automatic Tank cleaner project
Consultancy	NIL
Patents	Published: 03
Academic Achievements	Achieved 100% result

Recognitions & Honors	Reviewer for Renewable & Sustainable Energy Reviews Journal
Any Other Information	

List of Publications:

1. Boppana, Satish Babu; Palani Kumar, K; **Ponshanmugakumar, A**; Dayanand, Samuel; ,Different Natural Fiber Reinforced Composites and Its Potential Industrial and Domestic Applications: A Review,Bio-Fiber Reinforced Composite Materials,()51-73,2022(Springer, Singapore)
2. Sailesh, Ashwin; Palanikumar, K; Mani, N; **Ponshanmugakumar, A**; ,A Review on the Sustainability Prospects of Bio Fibre Reinforced Composite Materials,Bio-Fiber Reinforced Composite Materials,()361-374,2022(Springer, Singapore)
3. Sivakumar, K; Prasad, A Rajendra; Jagadesh, T; Kumar, S Dinesh; **Ponshanmugakumar, A**; Thamilarasan, K; ,Experimental investigation on emissivity of 75Ni-25Cr alloy coated Aluminium surface for the purpose of solar applications,Materials Today: Proceedings,37()1320-1323,2021(Elsevier)
4. Balachandar, M; Selvan, E Vetre; **Ponshanmugakumar, A**; Magesh, S; Ramanan, N; ,Sustainable development of natural fiber composite material,Materials Today: Proceedings,46()3363-3366,2021(Elsevier)
5. Selvan, E Vetre; **Ponshanmugakumar, A**; Ramanan, N; Naveen, E; ,Determination and investigation of mechanical behaviour on kenaf-sisal hybrid composite,Materials Today: Proceedings,46()3358-3362,2021(Elsevier)
6. Sivakumar, K; Kumar, T Sampath; Sivasankar, S; Ranjithkumar, V; **Ponshanmugakumar, A**; ,Effect of rib arrangements on the flow pattern and heat transfer in internally ribbed rectangular divergent channels,Materials Today: Proceedings,46()3379-3385,2021(Elsevier)
7. Raj, V Ravi; VijayaramnathB, B; Ramanan, N; **Ponshanmugakumar, A**; ,Mechanical and corrosion resistant properties of nitrided low carbon steel,Materials Today: Proceedings,46()3288-3291,2021(Elsevier)
8. Jayakanth, JJ; Mamidi, Vamsi Krishna; Pugazhenth, R; Anbuezhayan, G; **Ponshanmugakumar, A**; ,An investigation on wear properties of SiC/WC strengthened aluminium alloy hybrid composites,Materials Today: Proceedings,46()3542-3545,2021(Elsevier)
9. Thiyagaraj, J; Rahamathullah, I; Bharathiraja, R; Anbuezhayan, G; **Ponshanmugakumar, A**; ,Influence of various augmentation devices on the performance characteristics of modified four bladed fixed flip type savonius hydrokinetic turbine,Materials Today: Proceedings,46()3665-3669,2021(Elsevier)
10. Thiyagaraj, J; Rahamathullah, I; Anbuezhayan, G; Barathiraja, R; **Ponshanmugakumar, A**; ,Influence of blade numbers, overlap ratio and modified blades on performance characteristics of the savonius hydro-kinetic turbine,Materials Today: Proceedings,46()4047-4053,2021(Elsevier)
11. Subbulakshmi, M; **Ponshanmugakumar, A**; ,ICT material development processes for e-learning,Materials Today: Proceedings,46()4180-4182,2021(Elsevier)
12. Thamilarasan, K; Chidambaram, PK; **Ponshanmugakumar, A**; Bharani, V; ,Design and Automation of degreasing of oil from strained materials,Materials Today: Proceedings,(),2021(Elsevier)

13. Meganathan, S; Arunkumar, R; **Ponshanmugakumar, A**; ,Numerical analysis of passive heat sink for different shapes,Materials Today: Proceedings,46()3749-3755,2021(Elsevier)
14. Pugazhenthii, R; Anbuhezhiyan, G; Muthuraman, RK; Vignesh, M; **Ponshanmugakumar, A**; ,Optimization of fatigue life and fractography analysis of knuckle joint,Materials Today: Proceedings,46()4344-4348,2021(Elsevier)
15. **Ponshanmugakumar, A**; Rajavel, R; ,Design and Analysis of Steam Turbine Blade,,(),2020(ICACSE)
16. M.SUBBULAKSHMI, **A.PONSHANMUGAKUMAR**; ,USAGE OF MODERN TOOLS AND SOFTWARE IN TEACHING METHODOLOGY -A CASE STUDY,International Journal of Psychosocial Rehabilitation,24(8)15430-15437,2020(Hampstead Psychological Associates)
17. Rajeshwaran, M; Ramasamy, S; Parthasarathi, R; **Ponshanmugakumar, A**; ,A critical evaluation of oil extraction and fatty acid composition of Prosopis Julifera,Materials Today: Proceedings,33()4630-4634,2020(Elsevier)
18. Rajeshwaran, M; Parthasarathi, R; Ganeshkumar, J; **Ponshanmugakumar, A**; ,A multi-variant approach to optimize process parameters for oil extraction from non edible feedstock: Acacia nilotica,Materials Today: Proceedings,33()4671-4676,2020(Elsevier)
19. **Ponshanmugakumar, A**; Rajavel, R; ,Experimental analysis of vapour absorption generator integrated with thermal energy storage system,Materials Today: Proceedings,16()1158-1167,2019(Elsevier)
20. Balakrishnan, E; Meganathan, S; Balachander, M; **Ponshanmugakumar, A**; ,Elemental analysis of brake pad using natural fibres,Materials Today: Proceedings,16()1067-1074,2019(Elsevier)
21. **Ponshanmugakumar, A**; Rajavel, R; ,Enhancement of heat transfer in double pipe heat exchanger,Materials Today: Proceedings,16()706-713,2019(Elsevier)
22. Anbusagar, NRR; Palanikumar, K; **Ponshanmugakumar, A**; ,Preparation and properties of nanopolymer advanced composites: A review,Polymer-based Nanocomposites for Energy and Environmental Applications,()27-73,2018(Woodhead Publishing)
23. **A.Ponshanmugakumar**,B.Karthikeyan ,Mohiadeen V S, S.Logesh; ,Fuel Efficiency Enhancement using Water Injection System in Single Cylinder Petrol Engine,International Journal of Pure and Applied Mathematics,118(24)44573,2018(Academic Publications Ltd)
24. Anbusagar, NRR; Palanikumar, K; **Ponshanmugakumar, A**; ,Abbreviations and acronyms,Polymer-based Nanocomposites for Energy and Environmental Applications,()27,2018(Woodhead Publishing)
25. Rajasekar, D; **Ponshanmugakumar, A**; Rajavel, R; ,Design and Performance Validation of Vapour Absorption Solar Air Conditioning System,Int. J. Future Revolut. Comput. Sci. Commun. Eng,3()115-119,2017()
26. **Ponshanmugakumar, A**; Scholar, R; Madhan, R; Narayanan, AL; Rajavel, R; ,Thermal Energy analysis using TRNSYS in PCM Storage Tank,Int J Futur Revolut Comput Sci Commun Eng nd,1(5),2017()
27. Thanigaivel, S; Jaisanthosh, K; Saideepak, CH; Ponvell, P Santhosh; **Ponshanmugakumar, A**; ,Synthetic Optimal System Algorithm-Gear Design,Indian Journal of Science and Technology,9()S1,2016()
28. **Ponshanmugakumar, A**; Badrinarayanan, Sridharan; Deepak, P; Sivaraman, H; Vignesh Kumar, R; ,Numerical investigation on vertical generator integrated with phase change materials in vapour absorption refrigeration system,Applied Mechanics and Materials,766()468-473,2015(Trans Tech Publications Ltd)

29. **Ponshanmugakumar, A;** Vigneswaran, R; Rajmohan, M; ,Different aspects of Phase Change Material Encapsulation for Sub cool Thermal Storage-A Review,Applied Mechanics and Materials,766(0)480-485,2015(Trans Tech Publications Ltd)
30. **Ponshanmugakumar, A;** Vincent, A Aldrich; ,Simulation of solar intensity in performance of flat plate collector,International Journal of Research in Engineering and Technology,3(6),2014()
31. **Ponshanmugakumar, A;** Sivashanmugam, M; Jayakumar, S Stephen; ,Solar driven air conditioning system integrated with latent heat thermal energy storage,Indian Journal of Science and Technology,7(11)1798,2014(Indian Society for Education and Environment)

List of Patents:

1. Published a patent on the topic “A ROBOTIC DEVICE TO CLEAN TANKS/DRUMS”
2. Published a patent on the topic “A HEIGHT ADJUSTING MECHANISM FOR TWO WHEELERS”
3. Published a patent on the topic “OPTIMIZATION OF NEW PRODUCT DEVELOPMENT CYCLE THROUGH FUZZY LOGIC”

Workshop / Webinars Attended:

S.No.	Name of the Workshop	Organizers	Mode of Program	Month & Year
1	Webinar on <i>How to Publish Research Articles in Reputed Journals</i>	Sathyabama Institute of Science and Technology	Online	June 2020
2	Workshop on <i>Additive Manufacturing</i>	S.A.Engineering College	Online	May 2020
3	<i>MECH 4.0 Technical Webinar Series</i>	Sathyabama Institute of Science and Technology	Online	May 2020
4	Webinar on <i>Hangout with Successful Start Ups</i>	Chennai Institute of Technology	Online	May 2020
5	Webinar on <i>Challenges in Integrating Nano Sensors to IoT Platform</i>	Chennai Institute of Technology	Online	May 2020
6	Webinar on <i>Fuzzy Logic and Neural Network Approaches for Engineering Solutions</i>	Journal of Advanced Engineering Research & Powered by Hexacube	Online	May 2020
7	Webinar on <i>Electric Vehicles - Opportunities</i>	Karpaga Vinayaga College of Engineering and Technology (in association with CADD Centre)	Online	April 2020
8	Workshop on <i>Advanced Materials and Manufacturing Methods (A3M)</i>	National Institute of Technology, Trichy	Offline	June 2016

FDP Attended:

S.No.	Name of the FDP	Organized by (Institution Name)	Mode of Program	Month & Year
1	AICTE sponsored 2 weeks online FDP on <i>“Delivering Outcome Based Education (OBE) in Management Education: Objectives, Best Practices and Measurement of Outcomes”</i>	SAINTGITS College of Engineering (Autonomous)	Online	November 2020
2	Faculty Development Program on <i>“Ethical Practices in Engineering”</i>	Dept. of Mechanical Engineering, Sri Sairam Engineering College	Online	May 2020
3	AICTE Sponsored, <i>“Bio Degradable, Green and Nano Composites for Industrial Applications: Manufacturing Methodologies and Properties”</i>	Sri Sai Ram Institute of Technology	Offline	October 2017
4	19th Annual Convention for Faculty Members of Engineering Colleges – 2016 (Theme: <i>“Internationalization of Engineering Education – Empowering the Future”</i>)	Dr.N.G.P.Institute of Technology, Coimbatore	Offline	December 2016
5	AICTE Sponsored, <i>“Processing and Characterization of Composite Materials including Natural Fiber Reinforced Composites”</i>	Sri Sai Ram Institute of Technology	Offline	March 2015

Conferences Attended:

S.No.	Name of the Conference	Organizer	Month & Year
1	International Symposium on Materials of the Millennium: Emerging Trends and Future Prospects (MMETFP-2021)	Pandit Deendayal Energy University	November 2021

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

S.No.	Name of the Program	Responsibility Held	Month & Year
1	International Conference on <i>Materials, Manufacturing and Mechanical Engineering for Sustainable Developments</i>	Co-coordinator	November 2020
2	AICTE Sponsored STTP on <i>Energy Storage Characteristics, Surface treatment, Durability , Sustainability and Micro Structural Evaluation of Smart and Phase Change Materials and Its Applications.</i>	Organizing Secretary	September 2020
3	Webinar on “ <i>Placements at SAE Events</i> ”	Program Coordinator	June 2020
4	Webinar on “ <i>Automotive Mechatronics – Global Trends and Opportunities</i> ”	Program Coordinator	May 2020
5	Five Days Short Term Webinar cum Online Training Program on “ <i>Intelligent Robotics and Machine Vision Technology (IRMVT)</i> ” – In Association with Indian Society for Technical Education (ISTE)	Program Coordinator	May 2020
6	Webinar on “ <i>Advanced Manufacturing Practices – Robot Automation and Industry 4.0</i> ”	Program Coordinator	May 2020
7	Webinar on “ <i>Applications on Artificial Intelligence in Manufacturing Industry</i> ”	Program Coordinator	May 2020
8	Webinar on “ <i>Use of MathCAD for Engineering Mathematics Subjects (UM4EM)</i> ”	Program Coordinator	May 2020
9	One Week Faculty Development Program on “ <i>Engineering and Management Teaching Pedagogy – An Industry Perspective</i> ”	Program Coordinator	May 2020

10	Webinar on “ <i>3D Printing Applications in Fighting with COVID 19</i> ”	Program Coordinator	May 2020
11	International Conference on <i>Advances in Materials Manufacturing and Applied Sciences 2017</i> .	Organizing Co-Secretary	March 2017
