

PROFILE

- a) Name : Dr. P.K. Srividhya
b) Designation : Professor and Dean Academic
c) Department : Mechanical Engineering
d) Date of Birth : 15.07.1972
e) Area of Specialization : Production, Energy Engineering
f) Mail-ID : srividya.aravazhi@gmail.com
g) Phone No : +91 9442346158



A) Academic Qualifications

Degree	Specialization	Institution / University
B.E.	Mechanical Engineering	Madurai Kamaraj University, Madurai
PGDPM	Personal Management	Annamalai University, Chidambaram
M.Tech.	Advanced Manufacturing	SASTRA University, Thanjavur
MBA	Marketing	Madurai Kamaraj University, Madurai
M.S.	Software systems	BITS, PILANI
Ph. D.	Energy Engineering	National Institute of Technology (NIT), Calicut

B) Experience

Teaching Experience : 25 Years

a) Under-graduate : 23 Years

b) Post-graduate : 17 Years

Industrial Experience : 2 Years

C) Major Responsibilities in current Institution:

Member – Board of Management

Member – Planning and Monitoring Board

Member – Academic Council (April 2011 to till date)

Dean Academic – January 2016 to till date (*Implemented Outcome Based Education*)

NACC Visit Cycle II 2015 – Steering Committee Coordinator

Director Admissions – 2015 to 2018 (4 Years)

Asst. Dean – School of Engineering, Architecture & Technology (May 2014 to December 2016)

HOD / Mechanical Engineering, (April 2011 to April 2014)

D) Awards:

1. Best ISTE Secretary Tamil Nadu and Pondicherry State award 2002.
2. Periyar award – Periyar Muthamil Mandram, Chennai 2002.
3. Best Faculty award for the Year 2011 in the School of Architecture Engg. and Technology
4. Annual cash award (Rs 20,000/-) for research publication in a journal with high impact factor for the year 2016

E) Member Ship in Professional Bodies

1. Fellow of Institution of Engineers (India)
2. ISTE – Life member
3. SESI
4. NSSW
5. Computer Society of India
6. Reviewer of “Indian Journal of Chemical Technology”

F) Patent Applied:

1. Intelligent Post box
2. Performance analysis of biomass gasifier using Image processing

G) Projects Implemented / Completed

1. Implemented 20000 LPD solar water heater in the entire campus
2. Implemented LED systems in the campus for the energy conservation.
3. Coordinator for implementing 5 captive power generation using bio gas worth of 240 lakhs funded by MNRE

S. No.	Project Name	Funding from State / Centre / Abroad	Amount Received Rs.
1.	Periyar Renewable Energy Park	MNES Lr.No:49/495 /2001/SAOP/GOI, dt:27.09.2001	8.10 Lakhs
2.	Periyar Renewable Energy Training Institute under Women and Renewable Energy Development Scheme	MNES Lr.No:603/4/2002-WRED	15.10 Lakhs
3.	Periyar R&D Bio Power Project 200kW Bio-mass Gasifier	MNES No:203/05/39/2002/04 Dt: 26.03.2003	30.70 Lakhs
4.	Integrated Rural Energy Programme – District Level Technical Back up Unit	TEDA No:4200/WE/IREP/2005 Dated:19.12.2006	3.62 Lakhs
5.	Bio Gas Based Distributed / Grid Power Generation Programme sanction of five bio gas power generation projects, Nodal agency	MNRE Lr No:25-32/2008/BE Dt:29.03.2010	87.78 Lakhs
6.	4.05 kW Solar Power Plant	MNES	9.11 Lakhs
7.	Distributed / Grid Power Generation Programme 500 cum – 60 kW	MNRE Lr No:25-32/2008/BE Dt:29.03.2010	21 Lakhs
8.	Thermo Chemical Characterization of non edible seed cake for gasification	DST No: DST/TSG/AF/2010/01-(A) Dated:26.08.2011,09.09.2011	44.67 Lakhs
9.	Characterization and gasification of non edible seed cake - Principal investigator	DST, MHRD, Govt. of India	Rs.44 Lakhs
10.	Summer Internship for Students from University of Prince Edward Island, Canada on “Catalytic effect of nano-NiO particles in Pyrolysing of Biomass materials”	Mitacs Globalink Research Award – Abroad, Canada	USD 6000

H) Ph.D. Guidance:

Two Scholars awarded Ph.D.

1. Friction Welding of AISI 904L Super Austenitic Stainless Steel and Evaluation of Processed Joints
2. Some Critical Studies in Maintenance Engineering – Modeling and Analysis

Three Scholars under guidance

I) M.Tech. Thesis Guidance:

1. A study on biogas production using jatropha deoil seeded cakes
2. Feasibility analysis of biomethanation of multifeed stock biomass waste
3. A study on photo voltaic performance of photo electrochemical cell sensitized with organic dyes to generate electricity from light
4. Study on Periyar knowledge centre building for energy conservation techniques
5. Design and development of domestic wind turbine through CFD
6. Experimental study of biomass multifunction cook stove
7. Performance study on IC engines on non edible oils
8. Modeling and simulation of downdraft gasifier - Effect of temperature and moisture in production of product gas
9. Performance study on solar dryer
10. Catalytic effect of nanoparticles in Pyrolysing of Biomass materials using lab-scale portable biomass reactor

J) Publication: Referred Journal / National Conference/Seminar/FDP / International Conference / Books Published

S.No.	Refereed Journals
1.	Optimization of milling operations using memetic algorithm - Periyar R&D Journal.
2.	Profitability of power generation in 200 kWe biomass gasifier power plant – An analysis, Periyar R&D Journal, Vol.4, pp.12-14;2007.
3.	Characterization and empirical correlation analysis of woody biomass, International Journal of Applied Engineering Research, Vol.3, No.8, pp.1029-1038; 2008.
4.	Fuel characteristics and gasification of woody biomasses in a down draft gasifiers, International Review of Mechanical Engineering, Vol.3.No.1. pp. 126-132; 2009.
5.	Modeling and prediction of tool Life and Specific Energy in Turning – PMU Journal. Vol 1 No: 1 June 2010, ISSN: 0976 – 4119.
6.	Utilization of Wind - solar Hybrid System - A case study for drying of Loco-motive Motor Coils, PMU Journal, Vol No: 1 June 2010, ISSN: 0976 – 4119.
7.	Solar Energy Based Oil Moisture Removal System – PMU Journal. Vol 1 No: 2 Dec'2010, ISSN: 0976 – 4119.
8.	Performance Study of IC Engine using Edible oils – PMU Journal .Vol 2 No: 1 June

	2011, ISSN: 0976 – 4119.
9.	Modeling of Down Draft Gasifier – Effect of Temperature in product Concentration – PMU Journal, Vol 2 No: 1 June 2011, ISSN: 0976 – 4119.
10.	CFD Simulation of 20KW Down Draft Gasifier - International Journal of Current Engineering and Technology Vol:3, No:1 march 2013, ISSN 2277 – 4106.
11.	Review on Non-Edible Seedcake for Thermo-chemical Energy Conversion Process International Journal of Energy and Bio Science Vol 4.2013
12.	Mean waiting time assessment and analysis to address hidden failures using reversed hazard rate“, Dhawalikar M.N, Dessai G, Srividhya P.K, Sakhardande M.J, Mariappan V. and Surlakar A. International Journal of Elixir Mech. Engg. 65 (2013) 19990-19996.
13.	Optimal Replacement Policy for a Concrete Pump: A Case Study”, Dhawalikar M.N, Srividhya P.K, Sakhardande M. J, Mariappan V, KhaunteGaurav and Usgaonkar Ashish. International Journal of Elixir, Elixir Mech. Engg. 65 (2013) 19919-19923.
14.	Power quality Improvements in Hybrid Systems –A review IJATER, ISSN2250-3536
15.	Hybrid Tool for Optimal Preventive Maintenance Schedule for Deteriorating Systems, Mahesh N. Dhawalikar, P. K. Srividhya, V. Mariappan, A.Surlakar M. J. Sakhardande and N. PaiBhale
16.	Electrochemical Studies on Corncob Derived Activated Porous Carbon for Super capacitors Application in Aqueous and Non-aqueous Electrolytes Manickavasakam Karnan, Subramani, Srividhya Aravazhi, Marappan Sathish Jan 2017, Electrochimica Acta
17.	Process Improvement of Fiber Glass Industry, Niraj G. PaiBhale, Srividhya Aravazhi, Amol N. Patil, M. Prabhakara, Jan 2017, International Journal of Performability Engineering
18.	Technologies involved in biomass to energy conversion and its utilization in India, Siripurapu Sriram, Srividhya Aravazhi, IRJET, 2017
19.	Six Sigma in Service: Insights From Hospitality Industry, N. Pai Bhale , P. K. Srividhya , V. Mariappan , M. Sony , V. Belokar, International Journal of Advance Research in Science and Engineering, Vol. No. 6, Issue No. 2, February 2017
20.	Maintenance Modeling and Analysis: On A Glass-Fibre Industry, Niraj G. Pai Bhalea, P. K. Srividhya , V. Mariappan and Saish N. Rivankar, Indian J.Sci. Res. 14 (1): 301-307, 2017
21.	Experimental Studies on Thermal Behavior of Alkali Treated Groundnut Shell Particle Reinforced Polymer Composites, Prasanna C. Kattimania, Niraj G. Pai Bhalea, P. K. Srividhya and Saish N. Rivankar, Indian J.Sci.Res. 14 (1): 267-276, 2017
22.	Multi-state failure phenomenon and analysis using semi-Markov model, Mahesh Narayan Dhawalikar, V. Mariappan, P.K. Srividhya, Vishal Kurtikar, International Journal of Quality & Reliability Management, (2018) Vol. 35 Issue: 9, pp.2080-2091
23.	Thermal behavior and pyrolytic kinetics of palm kernel shells and Indian lignite coal at various blending ratios, J. Thiagarajana, P.K. Srividhya, P. Balasubramanian, Bioresource Technology Reports 4 (2018) 88-95.
24.	Effect of Nano-Nickel Oxide Coating on Solar Flat Plate Collector, Srividhya P. K., A. Pugazhenthii, A. Aravindhana, N. Shivakumar, B. Vadivel, International Journal of Innovative Technology and Exploring Engineering (IJITEE) ISSN: 2278-3075, Volume-8, Issue-11, September 2019

25.	Designing and Modeling of Solar Panel with Dish Reflector for Productive Improvement by Optimum Utilisation of Plant Area, Antony J, Srividhya P K, A. Pugazhenthii, International Journal of Recent Technology and Engineering (IJRTE) ISSN: 2277-3878, Volume-8 Issue-3, September 2019
26.	Effect of Feeding Technique in Mechanical Behaviour of Sic/Tio2 Reinforced AA 6082 Composites, I. Karthic Subramaniyan, P.K. Srividhya, D. Jeyasimman, International Journal of Recent Technology and Engineering (IJRTE) ISSN: 2277-3878, Volume-8 Issue-3, September 2019

S.No.	National Conference/Seminar/FDP Attended / Presented
1.	“Optimization of milling operations using Particle Swarm algorithm”- Proceedings of the National Conference on Modeling and Analysis of Productions Systems, 2004, PP 322-326, National Institute of Technology, Trichy dated 22 nd & 23 rd January 2004.
2.	“Optimization of milling operations Via Genetic algorithm” –Proceedings of the National Conference on Advances in Materials and Manufacturing Technology (CAMMT-2004), 2004, P.P-25. India Institute of Technology, Madras 2 nd April 2004.
3.	2 nd July 2003 Presented paper on Renewable Energy in National Integration Camp at S.S.N. Engineering College, Namakkal.
4.	20 th August 2003 Renewable Energy Applications : Case study of PMCTW Presented at National Seminar at Arunai Engineering College, Tiruvannamalai.
5.	19 th August 2003, Presented a paper on Effective utilization of non – conventional energy sources – A case study in the ISE Annual Convention at CSI Polytechnic, Salam.
6.	A Paper presented on 31 st December 2001 ISTE National Convention Role of Teachers in 21 st Century.
7.	Human Resource Management in Project Management Presented Paper on 10 th November 2000 State Level workshop on “Transfer of Technology” at Periyar Centenary Girls Polytechnic Vallam.
8.	4 th September 1999 Case study PMCTW presented at Women in Higher Education National Seminar at Alagappa University, Karaidudi.
9.	A paper presented on “quality System in Project Management “ at HRDC,SHEL, Trichy on 3 rd and 4 th September 1998.
10.	A paper presented on “ Industry Institue Linkage Ways of Effective Implementation “Organized by ISTE Chapter from 17 th November to 22 nd Noember-1997.
11.	A paper presented on Cycle of product Innovation and Innovation Cycle “ organized by ISTE Annual Convention 19 th December 2004 at NSIT, Delhi.
12.	Paper presented 5 th Annual Convention ISTE 12 October 2005 at PMCTW, E-Governance
13.	Participated one-day training programme on instrumental methods of thermal analysis and data interpretation 25 th November 06 organized by CEESAT, NIT, Trichy
14.	4-day workshop on teaching Learning process July 12-15,2004 organized by PMCTW and Raj Consultant, Singapore.

15.	Attended 3-day workshop Total Quality Management 6-8 June 2005 organized by PMCTW
16.	4 day Intensive In house programme on Renewable Energy technology organized by PRETI and MNES, Chennai on 23-26 February 2004.
17.	Attended one Year programme on Basic and Advanced Pedagogy, Guidance and Counseling conducted by TTTI, Chennai and PMCTW 1998-1999.
18.	Participated in the First ISTE State Annual Convention on 01.08.98 at Kongu Engineering College, Perundurai
19.	Participated 3-day Internal Auditor Course in 27-29 March 2000 at PMCTW organized by Germanicher Lloyd, Chennai
20.	Participated ISO 9000:2000 Transition Course Organized by Germanicher Lloyd, Chennai and PCGP, Thanjavur on 23-25 May 2001.
21.	Presented paper on Basic Management Skill Development 25-27 November 1999 organized by ISTE chapter PMCTW
22.	Presented paper on Basic Management Skill Development 28 December 2000 organized by ISTE Chapter PMCTW.
23.	Participated and presented paper on Biomass Gasification STTP organized by Department of EEE-PMCTW and AICTE May 15-25 th 2006
24.	Participated national seminar on energy efficiency organized by dept of Mechanical Engg NIT Calicut.
25.	Paper presented on rural electricity using biomass gasifiers in the Regional seminar Organized by Gandhigram Rural University on 18 November 2006.
26.	Paper presenter on power generations as kannore college of engineering college 1 st February 2007.
27.	Sustainable power generation lesson man gasifier presents at KLN college Madras.
28.	Biomass gasification - A substitute to LPG for thermal applications, National Conference on Evolving Challenges in Renewable Energy Sources, organized by Adhiprasakthi Engineering College, Chennai, April 2009.
29.	Biomass gasifier systems for thermal applications, National Conference Energy Economy and Environment, NIT Calicut, January 2008.
30.	Simulation of Biomass gasifier, National Conference on Energy Conversion and Energy Conservation Management, PMCTW Vallam, February 2007.
31.	Captive power generation using biomass gasifier, seminar on Energy organized by ENCON Club, NIT Calicut, March 2007.
32.	Thermo-chemical characteristics of biomass AICTE-STTP Programme on Experiences and Expertise in Renewable energy, PMCTW Vallam, July 2007.
33.	Thermo chemical characterization analysis on Jatropha Seed Cake for gasification, FDP on Optimum Energy utilization in Thermal Systems, NIT Calicut, May 2009.
34.	Paper presented on -“ Energy Scenario organized by Dept of CSE ,National Level

	Technical Fest 22.03.2012
35.	Attended and delivered guest lecture One day district level seminar on “Reducing the Prevalence of HIV/AIDS increasing consciousness about Adolescent and mental Health Issues for Youth” on 29.03.2012
36.	Delivered guest lecture on Bio-mass an alternative fuel on 27.03.2012.Institute of Engineers Trichirapalli Local Chapter.
37.	Paper presented “Modeling of Gasifier”in the National Conference on Discrete Mathematics and its Applications 27 th July 2012 at PMU.
38.	Attended ISTE Workshop on “Computational Fluid dynamics” 12 th to 22 nd June 2012.
39.	Attended ISTE Workshop on “Thermodynamics” 11 th Dec to 21 st Dec 2012.
40.	Non edible seed Cake for Bio-methanation paper presented in the Two day workshop on Municipal solid Waste for Renewable Energy Production organized by Centre for Climate Change & Ministry of New Renewable Energy, PMU on 19 th and 20 th Nov 2012
41.	Attended NSSW2 shock waves symposium organized by Shockwave society PMU Chapter on 27 th and 28 th Feb 2012.
42.	Paper presented “Indian Energy Scenario and Renewable Energy Source” in the MNRE Sponsored one day seminar Department of Architecture, PMU on 15.02.2012
43.	Paper Presented on “Alternate Energy Source” one week Entrepreneurship Development Programme on Building materials organized by MSME and TBI on 18.02.2013.
44.	Paper presented on “Carbon Reduction Initiatives Indian and Global Context” in the Two day National Seminar on Carbon Reduction by Sustained use of Renewable Energy Source organized by department of Mechanical Engineering ,PMU on 22 nd and 23 rd Feb 2013.
45.	Non edible seed cake for gasification guest lecture delivered at Bharathidasan Institute of Technology, Trichy, on 28.08.2013

S. No	International Conference Attended / Presented
1.	“Optimization Milling operations using Simulated annealing” – Proceedings of the International Conference on Responsive Supply Chain RSC-2004). Coimbatore Institute of Technology, Coimbatore dated 5-7 January 2004).
2.	Sustainable power generation through biomass gasifier, First International conference on Fuels and Combustion, JNTU, Hyderabad, December 2007.
3.	Performance Evaluation of Solar Thermal Concentrator Air Dryer – ICGET International Conference Periyar Maniammai University, 2012
4.	A study on “Bio gas production using Jatropha E – oiled seeded cakes” has been presented in 2 nd International conference on VIT – University, Vellore on 09.01.2012
5.	Inter National Conference “India – Canada Summit on Energy and the Environment” organized University college of CAPE BRETON University, Canada and presented the paper on “Bio-mass Gasification and Application”.12 th Oct 2012 to 21 st Oct 2012

6.	International Conference on Inter Solar held at Mumbai on 5 th Nov to 12 th Nov 2012
7.	Attended Inter National Seminar “Indo – Russian Workshop on “Environment & Pollution Control Technologies” organized by Centre for Climate Change (27 th September 2012).
8.	Attended International conference on Combating Abuse on Women and children: Challenges in the changing gender role and cultural contexts.4-5 th April 2013 organised by Periyar Maniammai University
9.	International Conference on Disaster Mitigation and Management towards sustainable Development 2-4 December 2013 organised by Periyar Maniammai University. Presented paper Different energy recovery from coir pith - A review
10.	International Conference on Disaster Mitigation and Management towards sustainable Development 2-4 December 2013 organised by Periyar Maniammai University. Presented paper on experimentation on energy storage by producing hydrogen from renewable sources
11.	International Conference on Recent trends in Discrete Mathematics and its applications to science and Engineering.3 rd December2013 organised by Periyar Maniammai University. Presented paper on Prediction of heating values using ANN model
12.	International conference on Renewable energy August 10-13 2015 organised Dr.Mahalingam college of Engg Pollachi ; Presented Paper on” Methodologies to improve temperature difference for power generation from Parabolic Collector using Peltier effect”

S. No	Books Published
1.	A Text Book on Engineering Drawing (2012), Periyar Maniammai University
2.	A Text Book on Basic Mechanical and civil Engineering (2012), Periyar Maniammai University

K) Administrative positions held

1997-2002

1. Institute Industry interaction Cell Director

Organised more than 20 programmes for students in career guidance and counseling and concurrent career development programs in the areas of software’s such as Autocad, VisualC++,STADD,etc

2. TNF Thukkaram Training and placement cell Director

Arranged various placement programmes and campus interviews for the students

3. Entrepreneurship management cell coordinator

Organized EDP awareness programmes to the students by inviting the resource persons from outside

4. Staff Development Coordinator

Organized periodic faculty development programmes by inviting resource persons inside and outside. Conducted more than 25 programmes.

5. ISTE Secretary For PMCTW Chapter

1. Organizing secretary for ISTE Chapter Annual Convention State level.
2. Organizing Secretary for ISTE Student Chapter level Annual Convention State level.
3. WON Best chapter award, Best Chairman Award, Best Secretary Award during the tenure of ISTE Secretary.

2003-2011

1. Coordinator Periyar Renewable energy training Institute Funded by MNRE under WRED scheme.
2. Gasifier incharge
3. Renewable energy In-charge
4. Co-ordinator for M.Tech Renewable energy
5. Part-time Course coordinator for P.G programme
6. Member in Energy Audit Team In PMU
7. Periyar Polytechnic Advisory Board Member for syllabus Revision.
8. Board of Studies Member for Mechanical and Aeronautical Engineering
9. Expert Member in Loan Disbursing Committee District Industrial Corporation (DIC) of Thanjavur District

2011-tilldate

1. Technical Expert Member of Review of TEPP Projects For TREC-STEP in DST Projects
2. Member in PMU Advisory Board.
3. Organizing Secretary for Aero festival-2013.
4. Executive secretary 16th ISTE Students Annual Convention- 2013
5. Organizing Secretary for Inter National Conference on Disaster and Mitigation Management - 2013

L) Subjects Handled

1. Solar Energy Engineering
2. BioEnergy Engineering
3. Energy Audit and Management
4. Energy project modeling cost and Economics
5. Wind Tidal and OTEC
6. Renewable Energy
7. Industrial engineering

M) Languages known:

1. English
2. Tamil And
3. Kannada

N) References

1. Dr. M. Thavamani,
Coimbatore, India
Former Pro Vice Chancellor / Periyar Maniammai Institute of Science and Technology
Email; thavamanim22@gmail.com.

2. Dr.Edwin MacLellan
Professor of Engineering
Capebreton University
Sydney, Nova Scotia, Canada
edwin_Maclellan@cbu.ca

3. Dr.S.Jayaraj
Professor, Department of Mechanical Engineering
National Institute of Technology, Calicut, India
sjayaraj@nitc.ac.in