

CURRICULAM VITAE

Name **Dr. Suresh. P. R.**

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sureshpr101@gmail.com

Date of birth 25-05-1968.

Date of joining 20-06-1991

Area of interest Energy Systems-Conventional & Renewable, Alternate fuels, flow and heat transfer, Instrumentation, Thermal sciences

Experience- 31 years of teaching and research experience at NSS College of Engineering Palakkad

Academic Qualifications

Sl No	Qualification	Institution and Specialisation	Year
1	B.Tech	Govt Engg College, Trichur- Mechanical Engg	1989
2	M.E	College of Engineering, Guindy, Anna University, Chennai- Energy Engineering , Dept of Mechanical Engg	1993
3	PGDRD	IGNOU-PG diploma in rural development	2000
4	Ph.D	IIT Madras-Heat transfer and Thermal Power Laboratory, Dept of Mechanical Engg	2007

Service Details at NSS College of Engineering Palakkad

Num	Position	Duration
1	Lecturer	20-6-91- 31-10-96
2.	Lecturer (Senior scale)	1-11-97 to 31-10-02
3	Lecturer (Selection grade)	1-11-02 to 31-12-06
4	Associate Professor	1.1.2006 to 31.12.2008
5	Professor	1.1.2009 onwards
6	Dean Research	1-06-2019 to 31-5-2021
7	Principal	1-06-2021 onwards

Member ship in professional bodies

1. Member in Combustion Institute (Indian Section)
2. Member in Indian society for Technical Education.
3. Member in Indian society of Heat and Mass Transfer
4. Fellow Institution of Engineers (India)
5. Life member, Solar energy Society of India (SESI)

List of publications

List of International Journal Papers

1). **Suresh. P.R**, Sarit K Das, Sundararajan T, “The influence of Reynolds number on the evolution of a plane jet issued from a slit”, **ASME Journal of fluids engineering**, Vol. 129(10), 2007, pp.1288-1295-SCI

2). **Suresh. P.R**, Sarit K Das, Sundararajan T, , “Experimental Investigation of influence of momentum thickness on the development of a slightly heated jet”, **International Communications in heat and mass transfer**. 35 (2008) PP 282–288-SCI

3). **P. R. Suresh**, T. Sundararajan,Sarit K. Das, *Reynolds Number Dependence of Plane Jet Development in the Transitional Regime*, **Physics of Fluids**, Vol. 20 (4),2008 , pp. 044105 1-12-SCI

- 4) B. Susanta, **P.R. Suresh**, K. Srinivasan, and S.K. Das, "Effect of upstream developing length on the flow field of twin pipe-jets," **Proceedings of the Institution of Mechanical Engineers (UK), Part-G: Journal of Aerospace Engineering**, vol.222, No.6, pp.773-782, 2008.-**SCOPUS**
- 5).Balachandran.A, **P.R. Suresh**, Shriram K.Vasudevan and Kaushik Velusamy "Enhancement of Total Technical Life of Aero planes" **.Journal of Computer Science**, (2013),10(3), pp 403-410-**SCOPUS**
- 6) V.K.Shahir, C.P.Jawahar, **P.R.Suresh** "Comparative study of Diesel and Biodiesel on CI engine with emphasis to emissions –A Review" *International journal of Renewable & Sustainable Energy Reviews* ", Vol 45 May (2015), pp686-697-**SCI**
- 7). VK Shahir,CP Jawahjar, **PR Suresh**, V.Vinod, Experimental investigation on performance and emission characteristics of a CRDI engine using tyre pyrolytic oil, *Journal of King Saud University-Engineering sciences*, May 2018 (**SCOPUS**)
- 8) Balachandran, Sriram Vasudevan, **P.R.Suresh**, "A study of Total Technical Life (TTL) for an Aircraft with implementation and suggestions for improvisation." *International Journal of Advanced Intelligence Paradigms*(2020),Vol17, No.3/4,PP-238-266 (**SCOPUS**)
- 9) Senthil Kumar, Suyambazhahan S, **Suresh P R and Velraj R**, "Enhancement of Heat transfer Performance of an Aluminum heat sink using different nano coatings", *Journal of Enhanced Heat transfer*(2020) Dec 2020-(**SCIE**)
- 10) **Suresh. P.R**, Sarit K Das, Sundararajan T, Vol. 129(10), 2007, pp.1288-1295, Srinivasan K, "The influence of aspect ratio on the development of a plane jet", 2007, **International journal of dynamics of fluids**, Vol.2, No.2, 2006, pp213-228
- 11)Balachandran. A, **P R Suresh**, Shriram K Vasudevan,"Influence Of External And Internal Security Of An Aircraft Towards Enriching TTL (Total Technical Life)" **International Journal of Applied Engineering Research** Volume 10, Number 5 (2015) pp. 13073-13085
- 12) G.D.Shinde and **Dr.P.R.Suresh**, "Influence of Fins on Solidification of Phase Change Material in Rectangular Capsule", **International journal of modern trends in engineering and research**, (2015) Vol.2 351-360.
- 13) Santhosh Sancheti & **Dr.Suresh.P.R**, "A Comparative CFD analysis of helically coiled heat exchanger (HCHE) with Double pipe heat exchanger (DPHE)" **International Journal of Modern Trends in Engineering and Research (IJMTER)** ISSN No. July 2015.
- 14)Abhilash V Nair, Abhijith Vijay V, Ajay.K, Nimya Manoharan.T, **Dr.Suresh.P.R** "Influence of Radial Fins and Turbulence Promoters on the Enhancement of Charging and Discharging of Phase Change Heat Transfer in Triplex-Tube" **International Journal of Emerging Technology and Advanced Engineering**.(2016)Vol6,Issue 9,pp224-230.
- 15) Balachandran, **PR Suresh**, Shriram K Vasudevan, Akshay Balachandran, "An Innovative Solution for effective enhancement of Total Technical Life (TTL) of an Aircraft", **Advances in Intelligent Systems and Computing Series (Springer)**, Scopus Indexed. Volume 530 ,ISSN: 2194-5357. pp 879-890.

- 16) **Suresh.P.R.**, Jyothisankar PR, Varun Krishnan, Sanish PC, Nimya Manoharan, "Experimental investigation of a solar still modified with fins" *Journal of Mechanical Engineering and Applied mechanics* Vol 1 Issue 3, pp1-5
- 17) Premnath, **P.R Suresh** and G. Madhu, "Studies on Effect of Pitch on the Merging Characteristics of Isothermal Two Dimensional Twin Jets Using CFD" *International journal of dynamics of fluids* Vol 7, Number 1, 2011, pp 17-23.
- 19). Sancheti.S, **Suresh.P.R.**, Experimental and CFD estimation of heat transfer in helically coiled heat exchangers, *Special Issue of International Journal of electronics, Communication & Soft Computing Science & Engineering*, ISSN: 2277-9477, March 2012
- 20) Hari.R, Viswanathan.E, **Dr.Suresh.P.R.**, "Enhancement of thermal conductivity of PCM based energy storage system", *International journal on emerging technology and applied Engineering*, Vol3(10), (2013) pp657-662
- 21). G.D.Shinde And **P.R.Suresh**, "A Review on Influence of Geometry and Other Initial Conditions on the Performance of a PCM Based Energy Storage System" *International Journal of Thermal Technologies*/Vol.4, No.3 (2014) E-ISSN 2277 – 4114, pp214-222.
- 22). Jose ,**Suresh.PR** Sajeesh P and Jithu J "Inherent configuration characteristics altering the distillate enhancement of passive stepped solar still: A review" , *Journal of king saud university-Engineering sciences*, May 2022 (SCOPUS).
- 23). Sudeep U Sudheesh Vinod V and **Suresh.PR.**, "Investigations on the influence of surface textures On MC silicone Crystal surfaces-Simulations and experiments"(2022)-*International journal of Renewable energy development* 11(2)pp-375-383(SCOPUS).
- 24). **P. R. Suresh**, T. Sundararajan, K. Srinivasan & Sarit K. Das, Experimental investigation of the influence of Reynolds number and buoyancy on the flow development of a plane jet in the transitional regime, *Journal of Turbulence*, 22(1), pp. 26-47 (2021)-SCIE.
- 25). R.Senthilkumar, Suyambazhakan, **P.R.Suresh**, R.Velraj, ENHANCEMENT OF HEAT TRANSFER PERFORMANCE IN AN ALUMINUM HEAT SINK USING DIFFERENT NANOCOATINGS, *Journal of Enhanced Heat transfer*, Volume 28, Issue 3, 2021, pp. 41-61(SCI)

List of papers in National Conferences

1. **Suresh.PR**, Hari.R, Sanish.PC, Suryan, Vidhun.VR, Varun Krishnan, "Experimental investigation of a solar still modified with Fins and PCM" **National conference in Reseach innovation in thermal and Mechanical Engineering, College of Engg Adoor, (2017)** pp14-19
2. Goba Shinde, **P.R.Suresh** , "Experimental investigation on PCM based thermal energy storage system with channel geometry", **National conference on ENERGY 2016, NIT Calicut**, Dec 2016, pp293-296
3. Ramesh.M.R, Rahul.N.P, Rohith.P.R, Renjith.R, Nimya Manoharan.T, **P.R.Suresh**, Jyothisankar.P.R, "Analytical and Experimental Study of Performance on a Fuel Cell Stack", (2016) **4th National conference on emerging trends in Engineering NET-2016, GEC-Calicut**
4. Jhon Abraham, Ramesh Saravanakumar & **Suresh.PR**, Bio-Fuel Production from Broiler Waste; a Technology to Mitigate Pollution and Energy Crisis, **4th National Technological Congress Kerala (NATCON 2014)**, Govt Engineering College, Wayanad (2014) pp45-49

5. A.Balachandran & **Dr.P.R.Suresh**, SHAM-A deep dive (Software aeroplane health monitoring), NCLTME(2014), pp 119-124
6. **Dr.Suresh.P.R**, G.Nandakumar, Allwin albert, Ananthan.M, "Design considerations and methods for simulation of an IC engine", NCLTME(2014), pp302-309
7. **Dr.Suresh.P.R**, A.R.Peter, Allwin albert, Amesh Unnikrishnan, Ananthan.M, Anoopkumar.M, "simulation of proton exchange membrane fuel cell for optimum operation" NCLTME(2014), pp310-315
8. V.K.Shahir, C.P.Jawahar, **P.R.Suresh**, "Emission Characteristics of biofueled diesel engine" NCLTME(2014) pp327-330
9. Hari.R, Viswanathan.E, **Dr.Suresh.P.R**, "Experimental Investigation of a PCM based storage system" **National Conference on Energy Efficiency and Management in Electrical Systems** 7th & 8th September, N.S.S.College of Engineering Palakkad, Paper No. *NCEEMES013*, (2013) pp1-5
10. Vimesh Nair.K, Viswanathan.E, **Dr.Suresh.P.R**, "A Passive cooling System for Solar Power Generation " **National Conference on Energy Efficiency and Management in Electrical Systems** 7th & 8th September, N.S.S.College of Engineering Palakkad, Paper No. *NCEEMES016*, (2013) pp1-5
11. Vishnu.S.Pillai, Vineet.T, Vishnu Prasad.C and **Dr.Suresh.P.R**, Experimental investigation on the use of turbulent promoters in a heat exchanger with non Newtonian fluids. **National conference on energy and environmental management**, NSS College of Engineering, Palakkad, Jan 20-21, (2012) pp11-1 to 11-10
12. Dr.Vinod V., **Dr.Suresh P.R.**, Properties and performance analysis of rubber seed oil blend as an alternative fuel in CRDI engine, **National conference on energy conservation and management (ECM-2010)**, N.S.S. College of Engineering, Palakkad, August 6-, 2010
13. Dr.Vinod V., **Dr.Suresh P.R.**, Performance analysis of CRDI engine using derivatives of Jetropa, **National conference on energy conservation and management (ECM-2010)**, N.S.S. College of Engineering, Palakkad, August 6-7, 2010
14. Dr.Vinod V., **Dr.Suresh P.R.**, Viscosity analysis of sunflower oil extract-an alternative fuel for CI engines, **National Conference on TEAMS-2009**, March 24-25, 2009.
15. **Suresh.P.R**, Study of energy use pattern in Kongappadam village of Kerala with special emphasis to gender issues and formulation of an alternate model" Presented in the national seminar on non conventional energy sources in community development, Annamalai university, February 2001
16. **P R Suresh**, Hari.R, Energy generation from wastes by incineration" Proceedings of the all india seminar on solid waste management for towns, The institution of Engineers (India) Palakkad chapter (2000) ppIV-1 to IV-6
17. Dr.V.Beena, **Dr.P.R.Suresh**, Anish.MN," Organisational learning and environmental issues –an Indian perspective" Leo
18. **Suresh. P.R**, Shanavas Elachola, "Distribution loss of electricity and influence of energy flows- A case study in Kerala" Discussion paper No 23, ISBN NO-81-87621-24- 9. Published by Centre for development studies, Trivandrum, September 2000

19. Shanavas E, Jayaprakash.P, **P.R.Suresh**, "a detailed investigation into the distribution losses of a typical electrical major section in Kerala and the influence of lower subtransmission voltage on the energy flows within the major section, Proceedings of the 4th national seminar on Modern trends in power engineering & Development" (1999) pp 158-165
20. **Suresh. P.R**, Shanavas Elachola, "An investigation into the distribution losses in a typical electrical major section in Kerala, presented in 10th Science congress Jan 1998, Kozhikode
21. **Suresh.P.R**, Viswanathan. K.G, "A biomass gasifier system for power generation" presented in the national seminar in power Engg and development, KSEB PG Engineers association, Trivandrum, 1993..

List of International Conferences.

- 1) **Suresh. P.R**, Sarit K Das, Sundararajan T, "Transition and mixing behavior of a plane jet" Presented in the international conference- HEFAT-2005, Cairo, **Egypt**
- 2) **Suresh. P.R**, Sarit K Das, Sundararajan T, "Oscillation characteristics of a free jet", Presented in the international conference- ICCES-2005, IIT Madras, **Chennai**
- 3) **Suresh. P.R**, Sarit K Das, Sundararajan T, "Influence of aspect ratio on the development of a plane jet" presented in the international conference –ICTEA-2006, UAE University, **Dubai**
- 4) **Suresh. P.R**, Sarit K Das, Sundararajan T, "The development of a plane jet issued from various inlet geometries" presented in the international conference –IHTC-2006, Sydney, **Australia**
- 5) Santhosh Sancheti & **Dr.Suresh.P.R**, "Literature Review on CFD Application for Helical Coil Heat Exchanger Design", **International Conference on Recent Trends in Engineering & Technology**" (ICRTET-2013), SNJB College, **Chandwad**, pp 210-214.
- 6) Shinde deb & **Dr.Suresh.P.R** "A review on Influence of Geometry and Other Initial Conditions on the Performance of a PCM Based Energy Storage System" **International Conference on Recent Trends in Engineering & Technology**" (ICRTET-2013), SNJB College, **Chandwad**, pp 236-240
- 7) Balachandran, A., **P.R. Suresh**, Shriram K. Vasudevan. "An analysis and study of Influence and importance of aircraft security" World security submit- of Association of Scientists, developers and faculties ASDF at **Bankok** (2014)
- 8) Santhosh Sancheti & **Dr.Suresh.P.R**, "Recent studies of flow and heat transfer characteristics in helical coil heat exchanger." **3rd International Conference on Recent Trends in engineering & Technology - 2014 (ICRTET'2014)** (Elsevier Publication) ISBN No. 978-93-5107-222-5 (2014)
- 9) Santhosh Sancheti & **Dr.Suresh.P.R**, "A Comparative CFD analysis of helically coiled heat exchanger (HCHE) with Double pipe heat exchanger (DPHE)" **4th International Conference on Recent Trends in engineering & Technology - 2015 (ICRTET'2015)** (McGraw-Hill Education Publication) ISBN No. 978-93-392-2288-8 (2015)
- 10) Arjun Ramesh, Ananthan.M, Samanyu sathyan, **P.R.Suresh**, "Experimental studies on reducing turbolag" **International conference on advances in Automotive technologies- (2016)**, Yildiz Technical University, **Turkey**

- 11) Shahir VK,**Suresh.PR**,Jawahar.CP, "Optimisation of production of biodiesel from waste tallow",International conference on recent trends in Engineering, St Peters Engg College,**Hyderabad** OCT(2016),
- 12) Shahir VK,**Suresh.PR**,Jawahar.CP, V.Vinod "Experimental Investigation on Performance and Emission Characteristics of a Common Rail Direct Injection Engine Using Animal Fat Biodiesel Blends"International Conf on Power Engineering,VIT,**Chennai** ,March 2016
- 13) Shahir VK,CP Jawahar,**P.R.Suresh** "Experimental Investigations on the Performance and Emission Characteristics of a Common Rail Direct Injection Engine Fuelled with Jatropa Biodiesel Blends"Current Reserach on Algae biology and Biomass,Ramachandra college of Engineering **Eluru**(Accepted)April 2016

List of projects Completed.

1. Distribution loss of electricity and influence of energy flows- A case study in Kerala, A project from Centre for development studies, Thiruvananthapuram 1995-1998, Budget 10 lakhs. (http://www.cds.ac.in/krpcds/publication/downloads/wp_23.pdf)
2. Performance evaluation of CRDI engines using vegetable derived fuels, Funded by KSCSTE(Kerala state council for science technology and environment) ,2008-2011, Rs 10Lakh (Council order No(T) 387/ETP/2008/KSCSTE dated 28-03-08)
3. Investigations for improving the conversion efficiency of Multi Crystalline Silicon Photovoltaic Cells by surface Texturing"(ETP/13/2017/K.SCSTE Dtd 12/01/2018) Budget- 8 Lakh-Ongoing

INTERACTIONS OUTSIDE

1. Calicut University Senate member 2014-2018
2. Academic Council Member -Kerala Technological University 2019-2021
3. Research Council Member of APJAK Technological university -from 1-6-21 onwards
4. Calicut university PG board Member 2021 onwards