

Name	Dr. P. MURUGESAN			
Department	Mechanical Engineering			
Qualification	B.E. M.E., PhD.			
Area of Specialization	HEAT TRANSFER ENHANCEMENT			
Date of Joining (KSR IET)	01.08.2011			
Experience (as on 18.06.2020)	Teaching: 23 Years 7 Months	Industry: NIL	Others: NIL	
Number of Papers Published	National Journals : 01		International Journals : 17	
Number of Papers Presented	National Conferences : 23		International Conferences : 11	
Books Published	National Publisher : 02		International publisher : NIL	
Contact Details	E Mail: hod_mech@ksriet.ac.in Mobile: 9944777862			

Publications (International Journals)

1. Murugesan, P., Mayilsamy, K. and Suresh, S. "Heat Transfer and Pressure Drop Characteristics of Laminar Flow in a Tube Fitted with Trapezoidal-Cut Twisted tape insert", **International Journal of Emerging Technologies and applications in Engineering, Technology and Sciences**, Vol. 2, No. 2, pp. 780-784, 2009.
2. Murugesan P , Mayilsamy K., and Suresh S. "Heat Transfer and Friction Factor Studies in a Circular Tube Fitted with Twisted Tape Consisting of Wire-Nails, "Chinese Journal of Chemical Engineering" Vol. 18, No. 6, pp. 1038-1042, 2010. (Elsevier)
3. Murugesan, P. Mayilsamy, K, and S.Suresh., "Turbulent Heat Transfer and Pressure Drop in a Tube Fitted with Square-Cut Twisted Tape", **Chinese Journal of Chemical Engineering**, Vol.18, No.4, pp. 609-617, 2010. (Elsevier)

4. Murugesan, P., Mayilsamy, K., Suresh, S. and Srinivasan, P.S.S. “Heat Transfer and Pressure Drop Characteristics in a Circular Tube Fitted with and Without V-Cut Twisted Tape Insert”, **International Communications in Heat and Mass Transfer**, Vol. 38, No. 3, pp. 329-334, 2011. (Elsevier)
5. Murugesan, P., Mayilsamy, K. and Suresh, S. “Heat Transfer in Tubes Fitted with Trapezoidal-cut and Plain Twisted Tape Inserts”, **Chemical Engineering Communications**, Vol. 198, No. 7, pp. 886-904, 2011. (Taylor and Francis)
6. Murugesan, P., Mayilsamy, K. and Suresh, S., “Heat Transfer and Friction Factor in a Tube Equipped with U-Cut Twisted Tape Insert”, **Jordan Journal of Mechanical and Industrial Engineering**, Vol. 5, No. 6, pp. 559-565, 2011.
7. Murugesan, P., Mayilsamy, K. and Suresh, S. “Heat Transfer in a Tube Fitted with Vertical and Horizontal Wing-Cut Twisted Tapes”, **Experimental Heat Transfer**, Vol. 25, No.1, pp. 1-18, 2012. (Taylor and Francis)
8. Murugesan, P., Mayilsamy, K. and Suresh, S. “Heat transfer and pressure drop characteristics of laminar flow in a tube fitted with trapezoidal-cut twisted tape insert”, **International Journal of Emerging Technologies and applications in Engineering, Technology and Sciences**, Vol. 2, No. 2, pp. 780-784, 2009.
9. Murugesan, P. and Nithiyesh Kumar, C. “Review on Twisted Tape Heat Transfer Enhancement”, **International Journal of Scientific and Engineering Research**, Vol. 3, No. 4, pp. 780-784, 2012.
10. Murugesan, P., Mayilsamy, K., Rathanakumar,P., and Suresh,S. “Laminar Heat Transfer and Friction factor Characteristics of CNT/Water Nano Fluids”, **Journal of Nano Science and Nano Technology**, 2013
11. Murugesan, P., Mayilsamy, K., Rathanakumar,P., and Suresh,S “Experiments on Turbulent Heat Transfer and friction Factor in Reaction with Carbon Nano Tube Based Nano Fluids”, **Journal of Mechanical and Materials Engineering**,Vol.8, No-2,2013
12. Murugesan, P., Mayilsamy, K., Rathanakumar,P., and Suresh,S “ “Comparison of Heat Transfer and Friction Factor Characteristics of Carbon Nanotubes Based Nanofluids in a Circular Tube Fitted With Helical Screw inserts With Spacers”, **Journal of Nanofluids**”,Vol.2,No-274-282,2013
13. Murugesan, P., Mayilsamy, K., Rathanakumar,P., and Suresh,S “ Laminar Heat transfer and pressure drop in Tube Fitted With Helical Louvered Rod Inserts Using CNT/water Nanofluids”, **Journal of Bio Nanoscience**, , Vol. 8, No. 1-11,2014.

14. Murugesan, P., Sasidaran, R., Vasanthakumar, R., “Study of Airflow Through Modified HVAC Ducts in a Multi Utility Vehicle using CFD software” **International Journal for Research in Mechanical Engineering- ISSN-2349-3860 Vol-3: issue 04 2016.**
15. Murugesan,P., “CFD Studies on Heat Transfer and Friction Factor Characteristics of a Double Pipe Heat Exchanger”, **International Journal of Science and Engineering,Vol.1, Issue 1, ISSN-2454-2016, 2017**
16. Murugesan,P., “Numerical Analysis of Fluid Flow and Heat Transfer in Single Tube Fin Arrangement of an Automotive Radiator”, **International Journal of Thermal Technologies, Vol.9 ,No.1, ISSN-2277-4114, 2019**
17. Murugesan, P., Mayilsamy, K., and Siva Subramaniam, A.P,“ Heat transfer and Friction Factor Characteristics of a Double Pipe Heat Exchanger fitted with Variant Plain Tape Insert”, **Thermal Science, ISSN-2334-7163, Vol. 24, No. 1-pp 623-633, 2019.**

Publications (National Journals)

1. Murugesan, P., Mayilsamy, K., Suresh, S. and Srinivasan, P.S.S “Experimental and CFD Studies on Heat Transfer Characteristics of a Double Pipe Heat Exchanger”, **Journal of Technological World, Vol.11, No.3, pp.59-63, 2009.**

Publications (International Conferences)

- 1.P.Murugesan, K. Mayilsamy and S. Suresh, “Heat Transfer Characteristics in the Horizontal Double Pipes with and without Twisted Tape Insert”, in; S.Vijayrangan, I. Rajendran[Ed,], Proceedings of the International Conference on Materials and Mechanical Engineering Recent Trends, Narosa publishing [2009], pp 554-559**
- 2.P.Murugesan, K.Mayilsamy and S.Suresh, “Heat Transfer and Pressure Drop Characteristics of Laminar Flow in a Double Pipe Heat Exchanger Fitted with and Without Full Length Twisted Tape Insert” Advances in Mechanical and Building Sciences in the 3rd Millennium,VIT University, Vellore, December 14&16th [2009], pp 25**
- 3.P.Murugesan, K.Mayilsamy and S.Suresh, “Turbulent Heat Transfer and Friction Characteristic in a Tube Fitted With Plain Twisted Tape”, International Conference on Emerging Trends in Science, Engineering and Management ,K.S.Rangasamy College of Technology, December 22&24 [2010]**
- 4. P.Murugesan, C.Nithiyesh Kumar, K.Mayilsamy and S.Suresh, “CFD Studies on Heat Transfer and Friction Factor Characteristic of a Tube With Horizontal Wing-Cut Twisted Tape Insert”, Proceedings of the International Conference on Advanced Mechanical and Building science, [2012], pp 554-559.**
- 5. P. Murugesan, “CFD Simulation of Horizontal Wing Twisted Tape Fixed in the Circular Tube”, Proceedings of the International Conference on Adaptive Technologies for Sustainable Growth, [2015].**
- 6. P.Murugesan, “Review of Simulation Studies of Heat Transfer Augmentation Techniques”, Proceedings of the International Conference on Modelling, Simulation and Control, [2015].**
- 7. P.Murugesan, “CFD Simulation of Heat Transfer Enhancement in Circular Tube with Twisted Tape Insert by using Nano Fluid”, Proceedings of the International Conference on Adaptive Technologies for Sustainable Growth, [2016].**
- 8. P.Murugesan, R Sasidaran, R.Vasanthakumar, “Computational Study of Airflow Through Modified HVAC Ducts in a Multi Utility Vehicle”, Proceedings of the International Conference on Air Quality Management, [2016]. (IIT MADRAS)**
- 9. P.Murugesan, “Heat Transfer in a Tube Fitted with Trapezoidal Cut Twisted Tape”, Proceedings of the International Conference On Innovations in Science, Engineering and Technology For Sustainable Development - (DST-SERB Sponsored), [2018].**

10.P.Murugesan, ,“CFD Analysis of Fluid Flow and Heat Transfer In Single Tube Fin Arrangement of an Automotive Radiator”, **Proceedings of the International Conference on Sustainable Materials**, [2019].

11.P.Murugesan, “CFD Analysis of Fluid Flow and Heat Transfer In Single Tube Fin Arrangement of an Automotive Radiator”, **Proceedings of the International Conference on Innovative Engineering Initiatives**, [2019].

Publications (National Conferences)

1. P.Murugesan, “Optimization of Flue Gas Temperature in Industrial Boiler”, **Proceedings of the National Conference on Advances in Mechanical and Production Engineering in the era of globalization (AMPEEG-2005)** [2005], pp 554-559
2. P.Murugesan, “Analysis of Flue Gas Duct Erosion Between AH and ESP using CFD”, **Proceedings of the National Conference on Emerging Trends in Design and Manufacturing -ETDM** [2006], pp 554-559
3. P. Murugesan, S.Jagadeeswaran, E.Jayabalaji, V.Prasanna Kumar, M.Vimal, “Analysis of Flue Gas Duct Erosion Between AH and ESP using CFD”, **Proceedings of the National Conference on Emerging Technologies in Mechanical Engineering** [2006], pp 105-108
4. P. Murugesan, K.Mayilsamy, R.Elangovan, A.Boobalan, M.Shanmugam,A.M.Suresh, P.T.Vinoth kumar, “Analysis of Heat Transfer Coefficient Of Nano-Fluids by using Fluent”, **Proceedings of the National Conference on Emerging Trends in Mechanical Engineering** [2007] pp 33-38
5. P. Murugesan, K.Mayilsamy, K.A.Ibrahim Sheriff, J.Narasimhaan, C.Karthikeyan, D.Karthik Ragma Vender, M.Madhan Kumar, “Analysis of Heat Transfer Rate of Water with and without Twisted Tape Insert in Double Pipe Heat Exchanger”, **Proceedings of the National Conference on Advances and Contemporaries in Mechanical Engineering (ACME)** [2008] pp 59
6. P. Murugesan, K.Mayilsamy, K.A.Ibrahim Sheriff, “CFD Analysis on Double Pipe Heat Exchanger With Twisted Tape Insert”, **Proceedings of the National Conference on Application of Emerging Technologies** [2008] pp 12.
7. P. Murugesan, K.Mayilsamy, J.Dhanasekeren, “Simulation Study of Heat Transfer and Pressure Drop Characteristics using Passive Techniques in Tube Heat Exchanger”, **Proceedings of the National Conference on Recent Advances in Mechanical Engineering**, [2009] pp 46.

8. P. Murugesan, K.Mayilsamy, J. Dhanasekeren, “Experimental and CFD Analysis on Thermal Performance of a Double Pipe Heat Exchanger, **Proceedings of the National Conference on Application of Emerging Technologies**, [2009] pp 23.
9. P. Murugesan, K.Mayilsamy, Sanal Rajendran, K.P.Ponnar, A.M.Santhosh, “Development of Correlation for Heat Transfer and Friction Factor in a Tube Fitted with Twisted Tape Insert for Turbulent Flow”, **Proceedings of the National Conference on Recent Trends in Mechanical Engineering**, [2009] pp 6.
10. P. Murugesan, K.Mayilsamy, J.Dhanasekeren, “Simulation Study of Heat Transfer and Pressure Drop Characteristics using Passive Techniques in Tube in Tube Heat Exchanger”, **Proceedings of the National conference on Optimization Techniques in Engineering Sciences and Technologies**, [2009] pp 43.
11. P. Murugesan, R. Surendiran, “Review of Passive Heat Transfer Augmentation Techniques”, **Proceedings of the National Conference on Recent Advances in Mechanical Engineering**, [2010] pp 8
12. P. Murugesan “Heat Transfer and Friction Factor Prediction For Twisted Tape under Laminar Flow”, **First National Level Conference on Trends and Developments in Aeronautics And Avionics**, [2011], pp.68-71
13. P. Murugesan, C.Nithiyesh Kumar, K.Mayilsamy, S.Suresh, “Review on Twisted Tape Heat Transfer Enhancement, **Proceedings of the National Conference Trends and Developments in Aeronautics And Avionics**, [2011] pp 18
14. P. Murugesan, C.Nithiyesh Kumar, “Numerical analysis on Horizontal Wing-Cut Twisted Tape for Laminar And Turbulent Flow, **Proceedings of the National Conference on Recent Advances in Mechanical Engineering**, [2012]
15. P. Murugesan, C.Nithiyesh Kumar, “Numerical analysis on Horizontal Wing-Cut Twisted Tape for Laminar and Turbulent Flow”, **Proceedings of the National Conference on Chemical Engineering Processes in Environmental Applications**, Anna University, Chennai, [2012]
16. P. Murugesan, C.Nithiyesh Kumar, “CFD Studies on Horizontal Wing-Cut Twisted Tape in a Tube for Laminar Flow, **Proceedings of the National Conference on Recent Advances in Mechanical Engineering** at Anna University, Chennai, [2012] pp 18
17. P. Murugesan, “Fabrication and Mechanical Properties of Cu-Coated Woven Carbon Fibers Reinforced Aluminium Alloy Composite, **Proceedings of the National Conference on Modern Trends in Mechanical Engineering**, [2014]

18.P.Murugesan, “Review of Heat Transfer Augmentation Techniques”, Proceedings of the National Conference on Innovations in Engineering and Technology-(ISTE Sponsored), [2017].

19.P.Murugesan, “Heat Transfer in a Tube Fitted With Vertical Wing Cut Twisted Tape Insert”, Proceedings of the National Conference on Innovative Technologies in Mechanical Engineering, [2017].

20.P.Murugesan, “Heat Transfer in a Tube Fitted With Horizontal Wing Cut Twisted Tape Insert”, Proceedings of the National Conference on Innovative Technologies in Mechanical Engineering, [2017].

21. P. Murugesan,”CFD Studies on Heat Transfer and Friction Actor Characteristics Of A Double Pipe Heat Exchanger” Second National Level Conference Recent Advancements in Mechanical Engineering, [2018].

22. P. Murugesan,” CFD analysis of fluid flow and Heat Transfer in single tube of automotive radiator” Robotics and Automation Engineering, [2019].

23. P.Murugesan, K.Mayilsamy, and A.P. Siva Subramaniam, “Experimental Investigation on Heat Transfer Enhancement in Double Pipe Heat Exchanger Using PT-SCA and PTT-SCA Twisted Insert Profile”, Proceedings of the National Conference on Fluid Mechanics and Fluid Power, [2019].

Books /Instruction materials/monograms published

S. No.	Title of the Book	Author(s)	Name & Address of the Publisher	Year of Publishing
1.	Unconventional machining processes	Dr.P.Murugesan Dr.P.Gopinath	M.G.Publications	2016
2.	Basic civil and Mechanical Engineering	Dr.P.Murugesan Dr.P.Gopinath	Anuradha Publications	2017

Funded Programmes Organized (Seminar/Conference/Workshop/FDP/STTP/Other)

S. No.	Date		Topic / Title	Funding agency and Amount Sanctioned
	From	To		
1.	8.11.2012	9.11.2012	Heat Exchangers and its Applications	CSIR &Rs 250000/-
2.	3.03.2016	04.03.2016	Recent Development in Prosthesis Materials & its Challenges in Medical Applications	ICMR & Rs40000/-
3.	18.6.2018	23.6.2018	Low cost automation for agriculture enhancement using MEMS	AICTE-ISTE& Rs 300000/-

Membership in Professional Bodies

- Member in Indian Society for Technical Education (ISTE) - Life Member (LM 42947)
- Member in Society in Mechanical Engineer (MSME) – Life Member (M/FR 091055)

Awards and Recognitions

- **Best Paper Award** for “CFD analysis on double pipe heat exchanger with twisted tape insert “in 5th National conference on Application of Emerging Technologies organized by **ISTE chapter**, Adhiyamaan College of Engineering, Hosur.
- **Best ISTE SECRETARY AWARD 2010-** from ISTE, New Delhi
- **Best ISTE SECRETARY AWARD 2019-** from ISTE, New Delhi
- **Accreditation and Outcome Based Learning, NPTEL Online Certification with Elite + Silver grade**
- **Sir M VISVESVARAYA AWARD 2020 -from Society for Aerospace And Mechanical Engineering Professionals (SAMP) 5th National Level Convention, 2020**

Subject Links

1. Unconventional Machining Process

<https://books.google.co.in/books?id=uC3rHzhogmMC&printsec=frontcover&dq=Unconventional+Machining+Process&hl=en&sa=X&ved=0ahUKEwib6syEwpPZAhWMso8KHWGDBZOO6AEILjAC#v=onepage&q=Unconventional%20Machining%20Process&f=false>