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Specialization

 Mechanical Engineering, Energy Engineering, Nano-fluids, Latant Heat Energy Storage Systems

Subjects of Interest

- Heat and Mass Transfer
- Thermal Power Cycles
- Thermal Energy Storage systems
- Nano-fluids
- Pool boiling heat transfer
- Flow boiling heat transfer
- Surface coating
- Solar thermal energy and desalination of water
- Vacuum Insulation Pannels
- Thermal management of electronics packaging
- · Mist cooling in gas turbine blades.

RESEARCH PAPERS PUBLISHED IN JOURNALS

Sl. No.	Details of Papers Published in International/National Journals
1.	M. ShahulHameed, S. Suresh (Accepted for publish) Convective Heat Transfer and Pressure drop characteristics of Al2O3-CNT/Water Hybrid Nanofluid in Straight Circular Tube Under Turbulent Flow. Journal of Nanofluids
2.	D.K. Singh, S. Suresh and H. Singh (In Press) Graphenenanoplatelets enhanced myo-inositol for solar thermal energy storage. Thermal Science and Engineering Progress

Sl. No.	Details of Papers Published in International/National Journals
3.	B.A.J. Rose, H. Singh, N. Verma, S. Tassou, S. Suresh, N. Anantharaman, D. Mariotti; P. Maguire (2017) Investigations into nanofluids as direct solar radiation collectors. Solar Energy, volume 147, page 426-431
4.	DurgeshSingh,H. Singh,S. Suresh, B.A.J Rose, S. Tassou, N. Anantharaman (2017) Myolnositiol based nano PCM for solar thermal energy storage. Applied Thermal Engineering, volume 110, page 564-572
5.	R. Ajith Krishnan, K.R. Balasubramanian, S. Suresh (2017) The effect of heating area orientation on flow boiling performance in microchannels heat sink under subcooled condition. International Journal of Heat and Mass Transfer, volume 110, page 276-293
6.	ManoopMuraleedharan, H. Singh, S. Suresh, M. Udayakumar (2016) Directly absorbing Therminol-Al ₂ O ₃ Nano heat transfer fluid for linear solar concentrating collectors. Solar Energy, volume 137, page 134-142
7.	A Dominic, J Sarangan, S Suresh, VS Devahdhanush (2016) An experimental study of heat transfer and pressure drop characteristics of divergent wavy minichannels using nanofluids. Heat and Mass Transfer Springer, volume 53, page 959-971
8.	SR Chitra, S Sendhilnathan, S Suresh (2016) <u>Investigation of heat transfer characteristics of MgMnNi/DIW-based nanofluids</u> <u>for quenching in industrial applications</u> . Journal of Enhanced Heat Transfer, volume 22, page 1-8
9.	M Arulprakasajothi, K Elangovan, KHC Reddy, S Suresh (Proceedings) <u>Heat Transfer Study of Water-based Nanofluids Containing Titanium Oxide Nanoparticles</u> . Materials Today, volume 2(4), page 3648-3655
10.	M Arulprakasajothi, K Elangovan, KHC Reddy, S Suresh (2016) Experimental investigation on heat transfer effect of conical strip inserts in a circular tube under laminar flow. Frontiers in Energy, page 1-7
11.	Dharmendra M, Sivan Suresh, Sujith Kumar C.S., Qiaoqin Yang, Pool boiling heat transfer enhancement using vertically aligned CNT coating on a copper substrate. Applied Thermal Engineering, volume 99, page 61-71
12.	AS Praveen, J Sarangan, S Suresh, BH Channabasappa (2016) Optimization and erosion wear response of NiCrSiB/WC-Co HVOF coating using Taguchi method. Ceramics International, volume 42(1), page 1094-1104
13.	CSS Kumar, S Suresh, AS Praveen, MCS Kumar, V Gopi (2016) Effect of surfactant addition on hydrophilicity of ZnO–Al2O3 composite and enhancement of flow boiling heat transfer. Experimental Thermal and Fluid Science, volume 70, page 325-334
14.	AyyappanSusila Praveen, J Sarangan, S Suresh, J Siva Subramanian (2015) <u>Erosion wear behaviour of plasma sprayed NiCrSiB/Al₂O₃ composite coating. International Journal of Refractory Metals and Hard Materials, volume 52, page 209-218</u>
15.	A Dominic, J Sarangan, S Suresh, VS DevahDhanush (2015) An Experimental Investigation of Wavy and Straight Minichannel Heat Sinks Using Water and Nanofluids. Journal of Thermal Science and Engineering Applications, volume 7(3), page 031012
16.	M Satheeshkumar, MR Thansekhar, C Anbumeenakshi, S Suresh (2015) Effect of Geometrical Parameters on Flow Mal-Distribution in a Wavy Microchannel. Applied Mechanics and Materials, volume 813, page 674-678
17.	S Venkatachalapathy, G Kumaresan, S Suresh (2015) Performance analysis of cylindrical heat pipe using nanofluids—An experimental study. International Journal of Multiphase Flow, volume 72, page 188-197
18.	Sujith Kumar, S Suresh, CR Aneesh, Santhosh Kumar, AS Praveen, K Raji (2015) Flow boiling heat transfer enhancement on copper surface using Fe doped Al ₂ O ₃ –TiO ₂ composite coatings. Applied Surface Science, volume 334, page 102-109
19.	M Arulprakasajothi, S Suresh, K Elangovan, K Hemachandra (2015) Experimental Study of Preparation, Characterization and Thermal Behavior of Water-based Nanofluids. Applied Mechanics & Materials, volume 766-767, page 348-354
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22.	SP Jesumathy, M Udayakumar, S Suresh, S Jegadheeswaran (2014) An experimental study on heat transfer characteristics of paraffin wax in horizontal double pipe heat latent heat storage unit. Journal of the Taiwan Institute of Chemical Engineers, volume 45, page 1298-1304
23.	S. Selvam, P. Thiyagarajan, S. Suresh (2014) <u>Experimental studies on effect of bonding the twisted tape with pins to the inner surface of the circular tube</u> . Thermal Science, volume 18(4), page 1273-1283
24.	A Dominic, J Sarangan, S Suresh, VS DevahDhanush (2014) An Experimental Study of Forced Convective Fluid Flow in Divergent Minichannels Using Nanofluids. Applied Mechanics and Materials, volume 592, page 1418-1422
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26.	A Dominic, J Sarangan, S Suresh, M Sai (2014) Heat Transfer Performance of Al2O3/Water Nanofluids in a Mini Channel Heat Sink. J NanosciNanotechnol, volume 14, page 2368-2376
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28.	P Selvakumar, S Suresh (2014) <u>Thermal Performance of Ethylene Glycol Based Nanofluids in an Electronic Heat Sink.</u> J NanosciNanotechnol, volume 14(3), page 2325-2333
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30.	PCM Kumar, J Kumar, S Suresh (2014) Experimental investigation on convective heat transfer and pressure drop in a helically coiled tube with Al2O3/water nanofluid. Journal of Mechanical Science and Technology, volume 28(5), page 1841-1847
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32.	S Selvam, PR Thiyagarajan, S Suresh (2013) <u>Experimental Studies on Wire Coiled Coil Matrix Turbulators with and Without Centre Core Rod</u> . Arabian Journal for Science and Engineering, volume 38, page 2557-2568
33.	M Chandrasekar, S Suresh, T Senthilkumar (2013) Passive cooling of standalone flat PV module with cotton wick structures. Energy Conversion and Management, volume 71, page 43-50
34.	DRS Raghuraman, PK Nagarajan, S Suresh (2013) <u>Thermal Performance of Higher Aspect Ratio Microchannels Using TiO2-Water Nanofluids</u> . Journal of Nanoscience and Nanotechnology, volume 13(4), page 2842-2846
35.	P Selvaraj, J Sarangan, S Suresh (2013) <u>CFD analysis on heat transfer and friction factor characteristics of a turbulent flow for internally grooved tubes</u> . Thermal Science, volume 17(4), page1125-1137
36.	P Rathnakumar, K Mayilsamy, S Suresh, P Murugesan (2013) 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, volume 2(4), page 274-282
37.	M Chandrasekar, S Suresh, T Senthilkumar (2013) Passive cooling of standalone flat PV module with cotton wick structures. Energy Conversion and Management, volume 71, page 43-50
38.	P Rathnakumar, K Mayilsamy, S Suresh, P Murugesan (2013) Experiments On Turbulent Heat Transfer And Friction Factor In Reaction With Carbon Nanotube Based Nanofluids. International Journal of Mechanical and Materials Engineering, volume 8(2), page 116-126

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40.	N Kannadasan, K Ramanathan, S Suresh (2012) Comparison of heat transfer and pressure drop in horizontal and vertical helically coiled heat exchanger with CuO/water based nano fluids. Experimental Thermal and Fluid Science, volume 42, page 64-70
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42.	K Karunamurthy, K. M. Mohankumar, S Suresh (2012) Use of CuOnano-material for the improvement of thermal conductivity and performance of low temperature energy. Digest Journal of Nanomaterials&Biostructures, volume 7(4), page 1833-1841
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46.	S Suresh, KP Venkitaraj, P Selvakumar, M Chandrasekar (2012) A comparison of thermal characteristics of Al2 O3/water and CuO/water nanofluids in transition flow through a straight circular duct fitted with helical screw tape inserts. Experimental Thermal and Fluid Science, volume 39, page 37-44
47.	S Suresh, KP Venkitaraj, P Selvakumar, M Chandrasekar (2012) Effect of Al2O3-Cu/water hybrid nanofluid in heat transfer. Experimental Thermal and Fluid Science, volume 38, page 54-60
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49.	S Suresh, P Selvakumar, M Chandrasekar, VS Raman (2012) Experimental studies on heat transfer and friction factor characteristics of Al2O3/water nanofluid under turbulent flow. Chemical Engineering and Processing, volume 53, page 24-30
50.	SP Jesumathy, M Udayakumar, S Suresh (2012) <u>Heat transfer characteristics in latent heat storage system using paraffin wax</u> . Journal of mechanical science and technology, volume 26(3), page 959-965
51.	PCM Kumar, J Kumar, S Suresh, KP Babu (2012) <u>Heat Transfer Enhancement in a Helically Coiled Tube with Al2O3/WATER Nanofluid Under Laminar Flow Condition</u> . International Journal of Nanoscience, volume 11(05)
52.	M Raja, RM Arunachalam, S Suresh (2012) Experimental studies on heat transfer of alumina/water nanofluid in a shell and tube heat exchanger with wire coil insert. International Journal of Mechanical and Materials Engineering, volume 7(1), page 16-23
53.	P Murugesan, K Mayilsamy, S Suresh (2012) <u>Heat Transfer in a Tube Fitted with Vertical and Horizontal Wing-Cut Twisted Tapes</u> . Experimental Heat Transfer, volume 25(1), page 30-47
54.	S Selvam, P Thiyagarajan, S Suresh (2012) Effect of wire coiled coil matrix turbulators with and without bonding on the wall of the test section of concentric tube heat exchanger. Thermal Science, volume 16(5), page 1151-1164

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55.	S Suresh, M Chandrasekar, P Selvakumar (2012) Experimental studies on heat transfer and friction factor characteristics of Al2O3/water nanofluid under laminar flow with spiraled rod inserts. International Journal of Nanoparticles, volume 5(1), page 37-55
56.	SP Jesumathy, M Udayakumar, S Suresh (2012) <u>Thermal characteristics in latent heat energy storage system using paraffin wax</u> . International Journal of EnergyTechnology and Policy, volume 8(1), page 50-64
57.	V Mariappan, M Udayakumar, PL Shrestha, S Suresh (2012) <u>Thermodynamic Analysis Of R134a–DmacVapor Absorption Refrigeration (Var) stem</u> . International Journal of Computational Engineering Research, volume 2
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61.	P. C. Mukesh Kumar, J. Kumar, S. Suresh (2012) Review on nanofluid theoretical viscosity Models. International Journal of Engineering Innovation & Research, volume 1(2), page 182-188
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63.	S Suresh, KP Venkitaraj, P Selvakumar, M Chandrasekar (2011) Synthesis of Al2O3-Cu/water hybrid nanofluids using two step method and its thermo physical properties. Colloids and Surfaces A: Physicochemical and Engineering Aspects, volume 388, page 41-48
64.	S Suresh, KP Venkitaraj, P Selvakumar (2011) <u>Comparative study on thermal performance of helical screw tape inserts in laminar flow using Al₂O₃/water and CuO/water nanofluids. Superlattices and Microstructures, volume 49(6), page 608-622</u>
65.	M Chandrasekar, S Suresh (2011) Experiments to Explore the Mechanisms of Heat Transfer in Nanocrystalline Alumina/Water Nanofluid under Laminar and Turbulent Flow Conditions. Experimental Heat Transfer, volume 24(3), page 234-256
66.	S Suresh, M Chandrasekar, S Chandra Sekhar (2011) <u>Experimental studies on heat transfer and friction factor characteristics of CuO/water nanofluid under turbulent flow in a helically dimpled tube</u> . Experimental Thermal and Fluid Science, volume 35(3), page 542-549
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68.	S Suresh, KP Venkitaraj, P Selvakumar (2011) Synthesis, Characterisation of Al2O3-Cu Nano Composite Powder and Water Based Nanofluids. Advanced Materials Research, volume 328, page 1560-1567
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70.	P Murugesan, K Mayilsamy, S Suresh, PSS Srinivasan (2011) <u>Heat transfer and pressure drop characteristics in a circular tube fitted with and without V-cut twisted tape insert</u> . International Communications in Heat and Mass Transfer, volume 38(3), page 329-334
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P Murugesan, K Mayilsamy, S Suresh, PSS Srinivasan (2009) Heat transfer and pressure drop characteristics of turbulent flow in a tube fitted with trapezoidal-cut twisted tape insert. International journal of academic research, volume 1(1), page 401-407
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91.	Mukesh Kumar .P.C., Kumar .J., Suresh .S (2009) Experimental investigation on the Overall heat transfer coefficient of a double pipe parallel flow heat Exchanger using Al ₂ O ₃ Nanofluids. Journal of Nanotechnology and its Applications, volume 7(2), page 17-23
92.	Chandrasekar. M.S. Suresh (2009) Lower and upper bounds for thermal conductivity of nanofluids. Nano trends, volume 7(1), page 12-18
93.	P. Murugesan, K. Mayilsamy, S. Suresh (2009) Heat transfer and pressure drop characteristics of laminar flow in a tube fitted with trapezoidal –cut twisted tape insert. Int. journal of Emerging Technologies and applications in Engineering, volume 3, page 780-784
94.	P Sivashanmugam, PK Nagarajan, S Suresh (2008) <u>Experimental studies on heat transfer and friction factor characteristics of turbulent flow through a circular tube fitted with right and left helical screw-tape inserts</u> . Chemical Engineering Communications, volume 195(8), page 977-987
95.	P Sivashanmugam, S Suresh (2007) Experimental studies on heat transfer and friction factor characteristics of turbulent flow through a circular tube fitted with regularly spaced helical screw-tape inserts. Applied Thermal Engineering, volume 27(8), page 1311-1319
96.	P Sivashanmugam, S Suresh (2007) Experimental studies on heat transfer and friction factor characteristics of laminar flow through a circular tube fitted with regularly spaced helical screw-tape inserts. Experimental thermal and fluid science, volume 31(4), page 301-308
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98.	P Sivashanmugam, S Suresh (2006) Experimental studies on heat transfer and friction factor characteristics of laminar flow through a circular tube fitted with helical screw-tape inserts. Applied Thermal Engineering, volume 26(16), page 1990-1997