

National Institute of Technology, Tiruchirappalli:  
Performa for CV of Faculty/ Staff Members

---



## Curriculum Vitae

Dr S. Suresh, is one of the earliest pioneers in developing hybrid Nanofluids and energy storage systems. High-citation research papers on nanofluids have driven the establishment and development of the Nanotechnology Research Laboratory at the National Institute of Technology, Tiruchirappalli. Being an investigator, successfully completed several projects funded by different agencies such as ISRO, DST, SERB, SERI, DST UKIERI, BHEL and CSIR. Have won several awards from the institute for the number of sponsored projects, publications and citations in the institute. With research publications of more than 150 research papers in peer-reviewed journals. At present, leading a large team of scholars working in phase change materials and thermal energy storage systems.

1. *Name:* Dr. S. SURESH
2. *Designation:* *Professor*
3. *Office Address:* Department of Mechanical Engineering, NITT
4. *Telephone (Direct) (Optional):*  
Telephone: + 91-431-2503422                      Extn (Optional):  
Mobile (Optional):: + 91-9842483638
5. *Email (Primary):* [ssuresh@nitt.edu](mailto:ssuresh@nitt.edu)      *Email (Secondary):*  
[sureshsiva31@yahoo.com](mailto:sureshsiva31@yahoo.com)
6. *Field(s) of Specialization:* Heat transfer, Two phase heat transfer, Nanofluids, Solar thermal energy conversion, Phase Change Materials.
7.      *Employment Profile*

Job Title	Employer	From	To
-----------	----------	------	----

## National Institute of Technology, Tiruchirappalli: Performa for CV of Faculty/ Staff Members

---

Professor, Department of Mechanical Engineering	National Institute of Technology, Tiruchirappalli	September 2022	Present
Associate Professor, Department of Mechanical Engineering	National Institute of Technology, Tiruchirappalli	March 2018	September 2022
Assistant Professor, Department of Mechanical Engineering	National Institute of Technology, Tiruchirappalli	April 2007	March 2018
Assistant Professor, Department of Mechanical Engineering	Syed Ammal Engineering College, Ramanathapuram.	June 2005	April 2007
Lecturer	Mohamed Sathak Engineering College, Kilakakrai.	Feb. 2000	Aug. 2004

### 8. Academic Qualifications (From Highest Degree to High School):

Examination	Board / University	Year	Division / Grade	Subjects
Matric/10 <sup>th</sup>	Syed Ammal Hss Ramanathapuram	1990	I Class	
Pre-Univ./12 <sup>t</sup>	Syed Ammal Hss Ramanathapuram	1992	I Class	
B.E.	Madurai Kamaraj University, Madurai, India	1997	I Class	Mechanical Engineering
M.Tech.	Regional Engineering College, Tiruchirappalli, India	1999	I Class	Energy Engineering
Ph.D	National Institute Of Technology, Tiruchirappalli, India	2007		Mechanical Engineering

### 9. Academic/Administrative Responsibilities within the University

Position	Faculty/Department/Centre/Institution	From	To

**National Institute of Technology, Tiruchirappalli:  
Performa for CV of Faculty/ Staff Members**

Associate Dean(R&C)	Institution	2012	2015
DST PAC meeting Coordinator	Institution	2015	2015
Class Committee Chairman	NIT TRICHY	Jan 2021	Till date
Advisory committee for Sophisticated Instrumentation Facility	NIT TRICHY	April 2021	Till date
Hostel Convener	NIT TRICHY	2019	2021
Lab in Charge, Nanotechnology Lab	NIT TRICHY	Aug 2009	Till date
Lab in Charge, Fluid Mechanics Laboratory	NIT TRICHY	Aug 2013	Till date
PAC Chairman	NIT TRICHY	July 2017	Nov 2017
Convener of Hostels and Associate Dean (S&W)	Hostel Administration Committee, NIT TRICHY	2019	2021
Hostel Warden	Garnet A,B,C NIT TRICHY	2015	2019
Convocation committee member	Institution	2009,2010,2011	2015
Air conditioning committee member	NIT TRICHY	2007	2012

**10. Academic/Administrative Responsibilities outside the University**

Position	Institution	From	To
NA			

**11. Awards, Associateships etc.**

Year of Award	Name of the Award	Awarding Organization
2022,2021,2020,2019	Best Performer Award	National Institute Of Technology, Tiruchirappalli
2021	Top 10 Researcher in India	Research.com

## National Institute of Technology, Tiruchirappalli: Performa for CV of Faculty/ Staff Members

---

2020,2021	Top 2 % Scientist in the world (Mechanical)	Stanford University
2020	Best Project (RESPOND)	SAC-ISRO, Ahmedabad
2019	Sir CV Raman Award	St. Peter's Institute of Higher Education and Research
2018	Shastri mobility program Award	Shastri Indo-Canadian institute

### 12. Fellowships

Year of Award	Name of the Fellowship	Awarding Organization	From (Month/Year)	To (Month/Year)
NA				

### 13. Details of Academic Work

#### (i) Curriculum Development

- Established Nano Technology Research Lab for UG, PG and Ph. D students in the academic year 2009-2010.
- Established Fluid Mechanics Laboratory for UG students in the academic year 2013-2014.
- Established Centre of Excellence -Energy Harvesting and Storage Technology in the academic year 2019-2020 for Research and Consultancy.

#### (ii) Courses taught at Postgraduate and Undergraduate levels

Heat And Mass Transfer  
 Energy Conversion Systems  
 Energy Storage Technology  
 Fluid Mechanics  
 Fluid Mechanics Laboratory  
 Thermal Engineering  
 Advanced Heat Transfer  
 Heat transfer Equipment Design  
 Renewable energy

#### (iii) Projects guided at Postgraduate level

National Institute of Technology, Tiruchirappalli:  
Performa for CV of Faculty/ Staff Members

---

Title	Student Name	Year
Experimental Investigation of Solar Still with Vent Holes and Nano Hybrid PCM and Bypassing the air below the Basin	Mr. Tapas Kumar Satpathy	2022
Numerical study of Spherical Capsule Based Cold Thermal Energy Storage System	Mr. Atharva Vilas Relkar	2022
Investigations on a Phase Change Material Based Heat Sink With Joined Heat Pipe	Mr. Tobin Mohan	2022
Numerical Study of Heat Transfer Enhancement in Heat Pipe Using a Self-Rewetting Fluid	Mr. Abhisek Pati	2021
A Facile Approach to Enhance the Energy Storage Performance of Water With 1-Decanol Using Aluminum Honeycomb Core for Sustainable Cold Storage System	Mr. Mohammad Arshad Raza	2021
Simulation Study of Charging Characteristics of Water as a PCM Encapsulated in Spherical Enclosure for Cold Energy Storage System	Mr. Mohammad Arshad Raza	2020
Numerical Study of Heat Transfer Enhancement in Heat Pipe Using a Self-Rewetting Fluid	Mr. Abhisek Pati	2020
Numerical Investigation of Heat Treatment With Flue Gas Recirculation to Reduce NO <sub>x</sub> Emission	Mr. Kotalkara Abdul Saleem	2020
Experimental Investigation on Eliminating the Supercooling Phenomenon of Water for Cold Storage Application	Mr. Shaik Naveed Ahmed	2020
Experimental Investigation of Heat Transfer and Pressure Drop Characterization of Microencapsulated Phase Change Materials/graphene	Mr. Shiju R S	2020

National Institute of Technology, Tiruchirappalli:  
Performa for CV of Faculty/ Staff Members

---

Nanoplatelets/water-Ethylene Glycol Slurry in a Circular Tube		
Numerical Analysis of Building Wall Integrated With SSPCM Based VIP for Energy Efficient Buildings	Mr. Ajay Kumar	2020
Enhancement of Heat Transfer in Paraffin Wax as PCM Using TiO <sub>2</sub> Nano Graphene Composite for Solar Application	Mr. E. Kathirvel	2020
Prediction Model for Blast Induced Ground Vibration in Open Pit Mines Blasting Operation	Mr. Ankit Kumar	2020
Experimental Investigation on Freezing and Melting Characteristics of Shape Stabilized 1-DECANOL PCM for Air Conditioning Application	Mr. Shaik Naveed Ahmed	2019
Characterization Study and Heat Transfer Performance Analysis of Solid-Solid-PCM Integrated With Vacuum Insulation Panel for Energy Efficient Buildings	Mr. Ajay Kumar	2019
Risk Analysis of Indurating Furnace at Pellet Plant-II Using Quantitative Hazop	Mr.S.Srijin	2019
Condensation Heat Transfer on Laser Processed Copper with Hydrophobic Coatings	Mr. D. Venkata Krishnan	2019

National Institute of Technology, Tiruchirappalli:  
Performa for CV of Faculty/ Staff Members

---

Numerical Modelling of Flim Cooling of Gas Turbine Blades	Mr.Dheeraj Narsian	2018
Melting and Solidification of Phase Change Material With Internal Plate Type Fin	Mr.Kapil Kumar	2018
Synthesis and Characterisaton of Low Temperature Phase Transiton Solid-Solid PCM	Mr.S.Ganesh Raja	2018
A Dempster Shafer Theory Based Approach to the Failure Mode, Efects and Criticality Analysis Under Epistemic Uncertainty	Mr.Srijin S	2018
Experimental Study on Efect of Thermal Conductivity Enhancer (Nano Additves and Fins) in PCM Based Heat Sink With Constant and Pulsatung Heat Flux	Mr. Anvesh Pavada	2018
Experimental Study on Pool Boiling Characteristcs of Laser Textured Surfaces	Mr. DeepakKumar Halpat	2018
Experimental Study of Condensation Heat Transfer at Different Surface Subcooling Temperatures	Mr. Madda Sudheekar Reddy	2017
Integrated Solar Desalination Plant With Semi Transparent Solar Panel	Mr. Chandrakant Lohani	2017

National Institute of Technology, Tiruchirappalli:  
Performa for CV of Faculty/ Staff Members

---

Experimental Investigation and Thermal Stability of Low Melt Alloy as Thermal Energy Storage Material	Mr. Babu M Pranav	2017
Investigation on Bubble Dynamics in Copper Nanowire Coated Surface	Mr. Chamanagiri Ravi Teja	2017
Heat Transfer Enhancement Using Al <sub>2</sub> O <sub>3</sub> /water Nanofluid With Twisted Tape Insert in Evaporator	Mr. T Siva Prasad	2017
Experimental Investigation on the Effect of Structured Surfaces in Pool Boiling Heat Transfer Using FC 72	Mr. Madda Sudheekar Reddy	2016
Experimental Study on Thermal Performance of D Mannitol with Addition of Copper Oxide and Carbon Nanotube Nanoparticles	Mr. Babu M Pranav	2016
Analysis of Bubble Dynamics in Pool Boiling	Mr. Chamanagiri Ravi Teja	2016
Heat Transfer Enhancement Through Twisted Tape Insert in Evaporator	Mr. T Siva Prasad	2016
Integrated Solar Desalination Plant With Direct Absorbing Nanofluid and Phase Change Material	Mr. Chandrakant Lohani	2016



National Institute of Technology, Tiruchirappalli:  
Performa for CV of Faculty/ Staff Members

---

Recovery of Copper and Lead From Waste Electronic Printed Circuit Board by Acid Leaching	Mr. Vineet Kumar Tiwari	2016
Experimental Investigation on Active Solar Still System Using Alumina Therminol Nanofluid	Mr. L Renugambal	2015
Preparation of Erythritol-Alumina Phase Composite With Enhanced Thermal Conductivity for Thermal Energy Storage System	Mr. ChangeKhobragade Sandip Digambar	2015
Experimental Investigation of Carbon Dioxide Sequestration Using Polyol Based Nanofluids	Mr. Gaurav Singh	2015
Effect of Graphene Coating on the Pool Boiling Characteristics of Micro-Patterned Surface	Mr. Kuldeep Kumar	2015
Recovery of Copper and Lead From Waste Electronic Printed Circuit Board by Acid Leaching	Mr. Vineet Kumar Tiwari	2015
Study on Heat Transfer Enhancement in Spray Cooling Using Fe-Doped Hydrophilic Titanium Oxide Coating	Mr. Visakh Gopi	2015
Characterization and Thermal Performance of Myo Inositol Incorporated With Nanoparticles for High Temperature Applications	Mr. Sathish Kumar J	2015

National Institute of Technology, Tiruchirappalli:  
Performa for CV of Faculty/ Staff Members

---

Experimental Investigation of Heat Transfer Characteristics Using Dynamic Mixer Field in Electronic Heat Sink	Mr. Sathish Kumar J	2014
Experimental Investigation on Pool Boiling Heat Transfer Enhancement Using Carbon Nanotubes	Mr. V Bhargavi	2014
Experimental Investigation on Recovery of Hydrocarbon Liquid From E-Waste by Thermal Pyrolysis Using a Fixed Bed Batch Reactor	Mr.Shamin Muthu KK	2014
Experimental Investigation of Carbon Dioxide Sequestration Using Amine Based Nanofluids and Microfluids	Mr.A Chilambarasan	2014
CFD Simulation of Heat Transfer Characteristics in Thermal Spray Coated Super Heater Tubes	Mr.Vishnu S	2014
Experimental Investigation on Flow Boiling Heat Transfer Enhancement in Minichannel Using Spray Pyrolyzed Alumina Coating	Mr.Aneesh Chandran R	2014
Experimental Investigation of Velocity Variation in Al <sub>2</sub> O <sub>3</sub> -Cu/water Hybrid Nanofluid Using Digital Computer Microscope	Mr.Naren Dhass S	2013

National Institute of Technology, Tiruchirappalli:  
Performa for CV of Faculty/ Staff Members

---

CFD Analysis of the Dispersion of Pollutants in Workplace	Mr. Bhawan Kumar Mandal	2013
Heat Transfer and Pressure Drop Studies Using AL <sub>2</sub> O <sub>3</sub> -Cu/water Hybrid Nanofluid With and Without Wire Coil Inserts	Mr. Rajiv K	2012
CFD Study of the Thermal Comfort of Human Body in Indoor Industrial Environment	Mr. Bhawan Kumar Mandal	2012
Design and Development of Automatic Tripping Device for Electric Overhead Travelling Crane	Mr. K Manusha	2011
Experimental Investigation of Heat Transfer and Friction Characteristics of Al <sub>2</sub> O <sub>3</sub> /water Nanofluid Using Helical Screw Tape Inserts	Mr.K P Venkitraj	2010
Experimental Studies on Heat Transfer and Friction Factor Characteristics of Al <sub>2</sub> O <sub>3</sub> /water Nanofluid Under Laminar and Turbulent Flow With Spiraled Rod	Mr. S Chandra Sekhar	2009
Finite Element Crash Simulations for Vehicle Using LS-Dyna	Mr. Badri Hariprasad Babu	2008
Thermal Analysis of Pyrotechnic Mixtures by Using DSC	Mr. Narasimha Murthy CH	2008

**National Institute of Technology, Tiruchirappalli:  
Performa for CV of Faculty/ Staff Members**

---

Analysis of Structural Behaviour of a Steel Concrete Composite Frame at Elevated Temperature	Mr. Lanka Praveen Kumar	2007
--	-------------------------	------

(iv) Other contribution(s)

NA

14. Details of Major R&D Projects

Title of Project	Funding Agency	Duration		Status
		From	To	Ongoing/ Completed
Collaborative Research for Accelerated Development of Energy Harvesting Materials and Devices	DST	2022	2025	Ongoing
Development of Ammonia Based Flexible Heat-Pipe for space applications	ISRO-STIC	2022	2024	Ongoing
Study on Heat Transfer Characteristics of Low Melt Alloy Encapsulated PCM for Satellite Thermal Management	ISRO RESPOND	2017	2020	Completed
MoU for Setup of DAE Technologies Display and Dissemination Facility	(DTDDF) Bhabha Atomic Research Center	2016	2021	Completed
Concentrating Solar-Thermophilic Anaerobic Reactor for Municipal Solid Waste (COSTARMSW)	DST UKIERI	2019	2021	Completed

National Institute of Technology, Tiruchirappalli:  
Performa for CV of Faculty/ Staff Members

Experimental Investigation on Heat Transfer Characteristics of Hybrid PCM in Thermal Storage System	DST SERI	2015	2018	Completed
Experimental Heat Sink Coated With Vertically Aligned CNT and Metal Nanowires	DST SERB	2015	2018	Completed
Miniaturized Compact Solar Concentrators for Water Desalination/purification	DST UKIERI	2015	2018	Completed
Sonochemical Preparation of Metal Nanoparticles and Application of Fuel Cell Catalysts	DST and CII	2013	2016	Completed
Flow Visualization, Heat Transfer and Pressure Drop Characteristics of Hybrid Nanofluids	DST <b>SERB</b> FAST TRACK SCHEME	2010	2013	Completed
Use of Nanofluids in Liquid Block With Rotating Twist Insert for Electronic Cooling System	CSIR	2009	2012	Completed

15. Number of PhDs guided

Name of the PhD Scholar	Title of PhD Thesis	Role(Supervisor/ Co-Supervisor)	Year of Award
M Dharmendra	Pool Boiling Heat Transfer Enhancement by Surface Modification	Supervisor	2022
Cyril Reuben Raj	Exploration of Nano Enhanced Layered Perovskite and	Supervisor	2021

**National Institute of Technology, Tiruchirappalli:  
Performa for CV of Faculty/ Staff Members**

---

	Polyurethane Solid-Solid PCM for Satellite Avionics Thermal Management		
Praveen B	Studies on the Heat Transfer Performance of Micro Encapsulated PCM With GnP and LMA as Enhancer in Heat Sink	Supervisor	2020
R.Elangovan	Mathematical And CFD Analysis Of Thermoelectric Power Generation System Through Waste Heat Recovery From Boiler And Other Heat Sources	Supervisor	2020
P. Vigneshwaran	Synthesis and thermal characterization study on encapsulated phase change materials for thermal energy storage system	Supervisor	2020
Srikanth Salyan	Experimental investigation on sugar alcohol based phase change material for solar thermal energy storage laden with liquid metal and low melt alloys	Supervisor	2020
M. Shahul Hameed	Experimental investigation on the effects of hybrid nano fluids on heat transfer and pressure drop	Supervisor	2020

National Institute of Technology, Tiruchirappalli:  
Performa for CV of Faculty/ Staff Members

---

	characteristics in laminar and turbulent flows		
K. Karthick	Experimental optimization of thermal interface and storage materials for solar reversible thermoelectric power generation.	Supervisor	2020
Udaya Kumar G	Experimental Investigation On Pool Boiling Heat Transfer Enhancement Of Surfaces Coated With Graphene/Cnt Heterostructures And Metal (Cu & Ag) Nanowires	Supervisor	2019
K. P. Venkataraj	Experimental Investigation on Thermal Energy Storage Performance of Pentaerythritol Blended With Nano and Low Melting Materials	Supervisor	2019
D Thiyagarajan	Experimental Studies in HVOF Sprayed Nanostructured and Conventional NiCrSiBFe Coatings for Boiler Tubes	Co-Supervisor	2017
C S Sujith Kumar	Experimental Investigation on Flow Boiling Heat Transfer Enhancement in Minichannels Using Surface Coating	Supervisor	2015
Dr. P. Selvakumar	Experimental Investigation on Heat Transfer and Pressure	Supervisor	2014

**National Institute of Technology, Tiruchirappalli:  
Performa for CV of Faculty/ Staff Members**

---

	Drop Characteristics of Nanofluids in Electronic Heat Sink		
Dr. T. A. Daniel Sagayaraj	Experimental Study and CFD Analysis of Erosion on Carbon Steel Economizer Tubes of Power Boilers by Fly Ash Particles	Supervisor	2010
Dr. M. chandrasekar	Heat Transfer and Pressure Drop Studies Using Al <sub>2</sub> O <sub>3</sub> /H <sub>2</sub> O Nanofluids With Wire Coil Inserts	Supervisor	2010

16. Participation in Workshops/ Symposia/ Conferences/ Colloquia /Seminars/ Schools etc. (mentioning the role)

Date (s)	Title of Activity	Level of Event (International/ National/ Local)	Role (Participant/ Speaker/ Chairperson, Paper presenter, Any other)	Event Organized by	Venue
2-5-2016 to 10-7-2016	Use of ICT in education for online and blended learning	National	Remote centre coordinator & Participant	IIT Bombay	NIT, Tiruchirappalli
26 <sup>th</sup> Nov -06 <sup>th</sup> Dec 2013	Two- week ISTE workshop on Engineering Mechanics	National	Participant	IIT Bombay	IIT Bombay, Mumbai
27 <sup>th</sup> May	NRB funded National Workshop	National	Participant	Dept. of Metallurgical and Materials	NIT, Tiruchirappalli



**National Institute of Technology, Tiruchirappalli:  
Perfoma for CV of Faculty/ Staff Members**

---

28 <sup>th</sup> May 2 013	on Surface modifications of structural material			Engineering, NIT, Tiruchirappalli	
11 <sup>th</sup> Dec- 21 <sup>st</sup> Dec 2012	Two- week ISTE workshop on Engineering Thermodynamics in Mechanical Engineering	National	Particip ant	IIT Bombay, Mumbai	IIT Bombay, Mumbai
12 Dec 22, Dec20 1	Two weeks ISTE MHRD sponsored Solar Photovoltaics: Fun damental, Technologies and Applications	National	Particip ant	IIT Bombay, Mumbai	IIT Bombay, Mumbai
29 <sup>th</sup> Nov -10 <sup>th</sup> Dec 2011	Two- week ISTE workshop on Heat transfer	National	Particip ant	IIT Bombay, Mumbai	IIT Bombay, Mumbai
14 <sup>th</sup> - - 24 <sup>th</sup> June 2011	Two- week ISTE workshop on Thermodynamics in Mechanical Engineering	National	Particip ant	IIT Bombay, Mumbai	IIT Bombay, Mumbai
20 <sup>th</sup> Ja n 21 Januar y 2011	Theory and Practice Advanced Techniques for the Characterization of Nanomaterials	National	Particip ant	PSG Institute of Advanced Studies	GE
21 <sup>st</sup> August 2010	One day Workshop on Nanomaterials	National	Particip ant	Dept of Mechanical Engineering, SVCE	SVCE
29 Dec -31 <sup>st</sup> 2009	International	National	Particip ant	Dept of Mechanical	NIT, Tiruchirappalli

**National Institute of Technology, Tiruchirappalli:  
Performa for CV of Faculty/ Staff Members**

---

	Workshop on recent trends in flow visualization			Engineering, IIT Roorkee	
13rd Dec 2008	One day workshop on sustainable Technologies for future	National	Participant	Dept of Chemical Engineering, NIT, Tiruchirappalli	NIT, Tiruchirappalli
18 May 22 May 2008	AICTE sponsored course on Recent trends in advanced Manufacturing	National	Participant	Dept of Production Engineering, NIT Tiruchirappalli	NIT, Tiruchirappalli
23 <sup>rd</sup> Feb 2008	Workshop on Nanostructures and devices	National	Participant	Dept of Physics, NIT, Tiruchirappalli	NIT, Tiruchirappalli
25 <sup>th</sup> - 29 <sup>th</sup> , 2008	Short term course Advanced Tools and technologies for research in engineering problem	National	Participant	Dept. of Metallurgical and Materials Engineering, NIT, Tiruchirappalli	NIT, Tiruchirappalli
Dec 10-14- Dec, 2007	Energy conservation for Manufacturing and process industries	National	Participant	Dept of Mechanical Engineering, NIT Tiruchirappalli	NIT, Tiruchirappalli
16 <sup>th</sup> 17 <sup>th</sup> Nov 2007	National workshop on burner design for Clean and Efficient combustion	National	Participant	Dept of Mechanical Engineering, IIT Madras	NIT, Tiruchirappalli
12 <sup>th</sup> 13 <sup>th</sup> Oct 2007	All India workshop on recent trends in energy management	National	Participant	Dept of Mechanical Engineering, NIT Tiruchirappalli	NIT, Tiruchirappalli

**National Institute of Technology, Tiruchirappalli:  
Performa for CV of Faculty/ Staff Members**

---

17-18 <sup>th</sup> Sep 2007	Two Day workshop on computational fluid dynamics	National	Participant	Under TEQIP joint activity with NIT Warangal and Dept of Mathematics, NIT Tiruchirappalli	NIT, Tiruchirappalli
------------------------------------	--	----------	-------------	---	----------------------

17. Workshops/ Symposia/ Conferences/ Colloquia/Seminars Organized (as Chairman/ Organizing Secretary/ Convenor / Co-Convenor)

Title of Activity	Level of Event (International/ National/ Local)	Date (s)	Role	Venue
Advancement in Concentrator Photovoltaic System and its Thermal Management	International Workshop (Virtual Mode)	14/03/2022-19/03/2022	Coordinator	National Institute of Technology, Tiruchirappalli
Sustainable development in Mechanical Engineering	International Conference	29/11/2019-1/12/2019	Chairperson	National Institute of Technology, Tiruchirappalli
Frontiers in Engineering	International Conference	31/03/2017-01/04/2017	Co-Convenor	National Institute of Technology, Tiruchirappalli
Applications of Nanotechnology in Solar Systems	National	26/11/2018-08/12/2018	Coordinator	National Institute of Technology, Tiruchirappalli
Environmental Studies	National	02/06/2015-12/06/2015	Coordinator	National Institute of Technology, Tiruchirappalli
Fluid Mechanics	National	20/05/2014-30/05/2014	Coordinator	National Institute of Technology, Tiruchirappalli
Engineering Thermodynamics	National	11/12/2012-21/12/2012	Coordinator	National Institute of Technology, Tiruchirappalli

**National Institute of Technology, Tiruchirappalli:**  
**Performa for CV of Faculty/ Staff Members**

---

Computational Fluid Dynamics	National	12/06/2012-22/06/2012	Coordinator	National Institute of Technology, Tiruchirappalli
Solar Photovoltaics: Fundamentals, Technologies and Applications	National	12/12/2011-22/12/2011	Coordinator	National Institute of Technology, Tiruchirappalli
Heat Transfer	National	29/11/2011-10/12/2011	Coordinator	National Institute of Technology, Tiruchirappalli

18. Invited Talks delivered

Topic	Date	Inviting Organization
Energy Conservation Through Nanofluids and PCM 2021	2021	GCE, Salem
Training Programme Deliver Lecture on Heat Transfer and Heat Exchange	2013	NTPC Ramagundam
Lecture on Innovative Materials for Thermal Management	2016	College of Engineering, Adoor

19. Membership of Learned Societies

Type of Membership (Ordinary Member/ Honorary Member / Life Member )	Organization	Membership No. with date
Life Member	ISHMT	1317
Member	Institution of engineer	2018

20. Academic Foreign Visits

Country	Duration of Visit	Programme
Singapore	Five Days	Research and collaboration meeting (February 19-23, 2019) in NUS
Canada	Two weeks	Energy and sustainability 2018 Symposium and Industry Summit, University of Windsor on June 2018.

National Institute of Technology, Tiruchirappalli:  
Performa for CV of Faculty/ Staff Members

---

UK	One week	Vacuum insulation panel Symposium, Brunel University
----	----------	--

21. Publications

(A) Refereed Research Journals:

S No	Authors	Title	Publication	Volume	Number	Pages	Year	Impact Factor (Optional)
1.	Sathyarayana n, S; Suresh, S; Sridharan, M;	Application of CFD and ANN in predicting the flow nature of flue gas in the catalytic converter	Journal of Scientific and Industrial Research (JSIR)	81	1	51-59	2022	
2.	Domini c, A; Devahdhanush, VS; Suresh, S;	An experimental investigation on the effect of relative waviness on performance of minichannel heat sinks using water and nanofluids	Heat and Mass Transfer	58	2	247-262	2022	
3.	Rakkapan, Solaimalai Raja; Sivan, Suresh; Raza, Moham	A facile and reliable approach to enhance the energy storage performance of 1-Decanol for	Journal of Energy Storage	52		104933	2022	

National Institute of Technology, Tiruchirappalli:  
Performa for CV of Faculty/ Staff Members

---

	med Arshad; Relkar, Atharva ; Mittal, Harshit; Adak, Mainak ;	sustainable and energy-efficient cold storage system						
4.	Midhun , VC; Suresh, S; SR, Akhil Krishna n;	Effect of vacuum insulation panel integration in phase change material-based passive thermal management system for electronics package exposed to hot air environment	Journal of Energy Storage	53		105180	2022	
5.	Rakkapan, Solaimalai Raja; Sivan, Suresh; Praveen , B; Naarendharan, M; Sudhir, P Sai;	Thermal property, charging and discharging characteristics study on tetra-n-butyl ammonium bromide semi-clathrate hydrates for air-conditioning cold	The Journal of Chemical Thermodynamics	153		106275	2021	

National Institute of Technology, Tiruchirappalli:  
Performa for CV of Faculty/ Staff Members

---

		storage and secondary refrigerant applications						
6.	Rakkapan, Solaimalai Raja; Sivan, Suresh; Ahmed, Shaik Naveed ; Naarendharan, M; Sudhir, P Sai;	Preparation, characterisation and energy storage performance study on 1-Decanol-Expanded graphite composite PCM for air-conditioning cold storage system	International Journal of Refrigeration	123		91-101	2021	
7.	Krishnaswamy, Karthik ; Sivan, Suresh;	Improvement in Thermal Hydraulic Performance by using Continuous V and W-Shaped Rib Turbulators in Gas Turbine Blade Cooling Application	Case Studies in Thermal Engineering			100857	2021	
8.	Rakkapan, Solaimalai Raja; Sivan, Suresh; Pethurajan,	Preparation and Thermal Properties of Encapsulated 1-Decanol for Low-	Colloids and Surfaces A: Physicochemical and Engineering			126167	2021	

National Institute of Technology, Tiruchirappalli:  
Performa for CV of Faculty/ Staff Members

---

	Vignesh; Aditya, A; Mittal, Harshit;	Temperature Heat Transfer Fluid Application	ing Aspects					
9.	Raj, Cyril Reuben ; Suresh, S; Singh, Vivek Kumar; Bhavsar , RR; Chandrasekar, M; Archita, V;	Life cycle assessment of nanoalloy enhanced layered perovskite solid-solid phase change material till 10000 thermal cycles for energy storage applications	Journal of Energy Storage	35		102220	2021	
10.	Sathyamurthy, Vikesh; Gopalan, Sankar; Suresh, Sivan; Karuppudayar Ramaraj, Balasubramanian; Deenadayalan, Santhosh Kumar;	COMPARATIVE STUDY OF VARIOUS APPROACHES IN ANALYSES OF TGA DATA OF DEVOLATIZATION OF HIGH ASH INDIAN COAL	Energy Sources, Part A: Recovery, Utilization, and Environmental Effects			1-15	2021	
11.	Rakkapan,	Facile approach to	Sustainable	45		101076	2021	



National Institute of Technology, Tiruchirappalli:  
Performa for CV of Faculty/ Staff Members

---

	Solaimalai Raja; Sivan, Suresh; Preetham, Devarasetty Sasi; Sudhir, Pinjala Sai; Naarendharan, M;	Prevention of the supercooling phenomenon of water in a spherical enclosure for energy-efficient and sustainable cold thermal energy storage system	Energy Technologies and Assessments					
12.	Midhun, VC; Suresh, S; Praveen, B; Neethikumar, R; Rajesh, KS;	Preparation, characterization and thermal property study of micro/nano cellulose crystals for vacuum insulation panel application	Thermal Science and Engineering Progress			101045	2021	
13.	Kumar, R Ram; Suresh, S; Suthakar, T;	Thermal management of polymer electrolyte membrane fuel cell with stearyl alcohol and fans combined	Journal of Energy Storage	41		102847	2021	
14.	Rakkapan, Solaimalai	Experimental Investigation on	Journal of Energy Storage	41		102941	2021	

National Institute of Technology, Tiruchirappalli:  
Performa for CV of Faculty/ Staff Members

---

	Raja; Sivan, Suresh; Naaren dharan, M; Sudhir, Pinjala Sai; Preetha m, Devaras etty Sasi;	Enhanced Energy Storage Characterist ics of Spherically Encapsulate d 1- Decanol/Ex panded Graphite Composite for Cold Storage System						
15.	Raj, Cyril Reuben ; Suresh, S; Singh, Vivek Kumar; Bhavsar , RR; Vasude van, Sudhars han; Archita, V;	Experiment al investigatio n on nanoalloy enhanced layered perovskite PCM tamped in a tapered triangular heat sink for satellite avionics thermal managemen t	Internati onal Journal of Thermal Sciences	167		10700 7	2021	
16.	Raj, Cyril Reuben ; Suresh, S; Singh, Vivek Kumar; Bhavsar , RR;	Experiment al Investigatio n on CNT- Enhanced Neopentyl glycol Solid–Solid PCM for Application s of Thermal	Journal of the Indian Society of Remote Sensing			01-12	2021	

National Institute of Technology, Tiruchirappalli:  
Performa for CV of Faculty/ Staff Members

---

	Panda, Anmol;	Control in Spatial Remote Sensing Instruments						
17.	Karthick, Krishna dass; Suresh, S;	Effect of adding alumina nanoparticle in D-Mannitol for reversible solar thermoelectric power generation: An experimental study	Solar Energy Materials and Solar Cells	219		110781	2021	
18.	Midhun, VC; Suresh, S; Praveen, B; Raj, Cyril Reuben ;	Effect of vacuum insulation panel on active thermal management for electronics system exposed to thermal radiation	Thermal Science and Engineering Progress			101117	2021	
19.	VC, Midhun ; Suresh, S;	Thermal protection by integration of vacuum insulation panel in liquid-cooled active thermal management	Journal of Thermal Science and Engineering Applications			Jan-34	2021	

National Institute of Technology, Tiruchirappalli:  
Performa for CV of Faculty/ Staff Members

---

		t for electronics package exposed to thermal radiation						
20.	Sathyarayanan, S; Suresh, S; Sridharan, M;	Effect of sucrose catalyst in the catalytic converter on performance and emission of spark ignition engine	Journal of Thermal Science and Engineering Applications			Jan-25	2021	
21.	Sundaravel, Anand; Sivan, Suresh; Deenadayalan, Santhosh Kumar;	A new heat transfer correlation for supercritical water flowing in a vertical tube-an hitherto approach	International Communications in Heat and Mass Transfer	125		105314	2021	
22.	Narayanamy, Manikanda Prabu; Gurusamy, Sureshannan; Sivan, Suresh; Senthilkumar, AP;	Heat transfer analysis of looped micro heat pipes with graphene oxide nanofluid for Li-ion battery	Thermal Science	25	1 Part A	395-405	2021	

National Institute of Technology, Tiruchirappalli:  
Performa for CV of Faculty/ Staff Members

---

23.	Krishna swamy, Karthik ; Sivan, Suresh; Ali, Hafiz Muhammad;	Influence of Narrow Rectangular Channel () on Heat Transfer and Friction for V-and W-Shaped Ribs in Turbine Blade Applications	International Journal of Photoenergy	2021			2021	
24.	Pethurajan, Vignesh; Suresh, Sivan; Mojiri, Ahmad; Konatt, Alan Johnny;	Microencapsulation of nitrate salt for solar thermal energy storage-synthesis, characterisation and heat transfer study	Solar Energy Materials and Solar Cells	206		110308	2020	
25.	Salyan, Srikanth; Praveen, B; Singh, Harjit; Suresh, S; Reddy, A Sarath;	Liquid Metal Gallium in Metal Inserts for Solar Thermal Energy Storage: A Novel Heat Transfer Enhancement Technique	Solar Energy Materials and Solar Cells	208		110365	2020	
26.	Cyril Reuben Raj, Suresh	Influence of fin configurations in the	Journal of Energy Storage				2020	

National Institute of Technology, Tiruchirappalli:  
Performa for CV of Faculty/ Staff Members

---

	S. Bhavsar, R. R. Singh, Vivek Kumar Govind, K. Akash;	heat transfer effectiveness of Solid solid PCM based thermal control module for satellite avionics: Numerical simulations						
27.	Mani, Dharmendra; Sivan, Suresh; Ali, Hafiz Muhammad; Ganesan, Udaya Kumar;	Investigation to improve the pool boiling heat transfer characteristics using laser-textured copper-grooved surfaces	International Journal of Photoenergy	2020			2020	
28.	Venkata, Krishnan; Suresh, S;	Wettability Control of Copper Surface Using Picosecond Laser for Enhancing Condensation Heat Transfer	Materials Science Forum	978		505-513	2020	
29.	Kumar, G Udaya; Suresh, Sivan; Kumar, CS Sujith;	A review on the role of laser textured surfaces on boiling heat transfer	Applied Thermal Engineering	174		115274	2020	

National Institute of Technology, Tiruchirappalli:  
Performa for CV of Faculty/ Staff Members

---

	Back, Seunghyun; Kang, Bongchul; Lee, Hee Joon;							
30.	Kumar, R Ram; Suresh, S; Suthakar, T; Singh, Vivek Kumar;	Experimental investigation on PEM fuel cell using serpentine with tapered flow channels	International Journal of Hydrogen Energy	45	31	15642 - 15649	2020	
31.	Raj, Cyril Reuben ; Suresh, S; Bhavsar, RR; Singh, Vivek Kumar; Govind, K Akash;	Influence of fin configurations in the heat transfer effectiveness of Solid solid PCM based thermal control module for satellite avionics: Numerical simulations	Journal of Energy Storage	29		101332	2020	
32.	Raj, Cyril Reuben ; Suresh, S; Vasudevan, Sudhars	Thermal performance of nano-enriched form-stable PCM implanted in a pin finned wall-	Energy Conversion and Management	226		113466	2020	

National Institute of Technology, Tiruchirappalli:  
Performa for CV of Faculty/ Staff Members

---

	han; Chandr asekar, M; Singh, Vivek Kumar; Bhavsar , RR;	less heat sink for thermal managemen t application						
33.	Raj, Cyril Reuben ; Suresh, S; Upadhy ay, Arijit; Govind, K Akash; Nivetha a, R;	Binary Mixture of Solid-Solid Phase Change Material: Synthesis, Characteriz ation and Experiment al Study	Materials Science Forum	978		407- 420	2020	
34.	NH, Moham ed Ibrahim ; Udayak umar, M; Suresh, Sivan; Bhattac haryya, Suvanja n; Sharifp ur, Mohsen ;	Coupling LES with soot model for the study of soot volume fraction in a turbulent diffusion jet flames at various Reynolds number configuratio ns	Internati onal Journal of Numeric al Methods for Heat & Fluid Flow				2020	
35.	Midhun , VC; Suresh, S;	Experiment al study on phase transition	Journal of Energy Storage	32		10182 5	2020	



National Institute of Technology, Tiruchirappalli:  
Performa for CV of Faculty/ Staff Members

---

	Praveen , B; Shiju, RS;	behaviour of shape stable phase change material for application in vacuum insulation panel						
36.	Kalidos s, P; Venkat achalap athy, S; Suresh, S;	Optical and Thermal Properties of Therminol 55-TiO <sub>2</sub> Nanofluids for Solar Energy Storage	Internati onal Journal of Photoene rgy	2020			2020	
37.	Sarguna nathan, S; Ramana than, K; Mohide en, S Tharves ; Suresh, S;	Enhancing the Performanc e of the Standalone Rooftop SPV Module during Peak Solar Irradiance and Ambient Temperatur e by the Active Cooling of the Rear Surface with Spraying Water and the Front Surface with	Internati onal Journal of Photoene rgy	2020			2020	

National Institute of Technology, Tiruchirappalli:  
Performa for CV of Faculty/ Staff Members

---

		Overflowing Water						
38.	Gandhi, Nishant ; Suresh, S;	Effect of mist concentration on the cooling effectiveness of a diffused hole mist cooling system	Journal of Thermal Analysis and Calorimetry	141	6	2231-2238	2020	
39.	Balijepalli, Ramakrishna; Chandramohan, VP; Kirankumar, K; Suresh, S;	Numerical analysis on flow and performance characteristics of a small-scale solar updraft tower (SUT) with horizontal absorber plate and collector glass	Journal of Thermal Analysis and Calorimetry	141	6	2463-2474	2020	
40.	Lingayat, Abhay; Chandramohan, VP; Raju, VRK; Suresh, S;	Drying kinetics of tomato (Solanum lycopersicum) and Brinjal (Solanum melongena) using an indirect type solar dryer and performance	Heat and Mass Transfer			Jan-20	2020	

National Institute of Technology, Tiruchirappalli:  
Performa for CV of Faculty/ Staff Members

---

		parameters of dryer						
41.	Gandhi, Nishant ; Sivan, Suresh;	A Study on the Effect of Angle in Diffused Hole Film Cooling Effectiveness at Different Blowing Ratios	International Journal of Turbo & Jet-Engines	1	ahead-of-print		2020	
42.	Iqbalshajahan, Mohamed; Michael, Jee Joe; Prakasajothi, Marul; Suresh, Sivan; Nasr, Emad Abouel; Hussein, HMA;	Effect of Conical Strip Inserts and ZrO <sub>2</sub> /DI-Water Nanofluid on Heat Transfer Augmentation: An Experimental Study	Energies	13	17	4554	2020	
43.	Venkataraj, KP; Suresh, S; Bibin, BS; Abraham, Jisa;	DSC Analysis of Nano-enhanced Monobasic and Binary Solid-Solid Phase Change Materials for Thermal Storage	Recent Asian Research on Thermal and Fluid Sciences			47-57	2020	
44.	Anish, R; Mariap	Experimental investigation	Sustainable Cities	44		253-264	2019	

National Institute of Technology, Tiruchirappalli:  
Performa for CV of Faculty/ Staff Members

---

	pan, V; Suresh, S;	n on melting and solidificatio n behaviour of erythritol in a vertical double spiral coil thermal energy storage system	and Society					
45.	Karthic k, K., Suresh, S., Joy, G.C., Dhanus kodi, R.;	Experiment al investigatio n of solar reversible power generation in Thermoelec tric Generator (TEG) using thermal energy storage	Energy for Sustaina ble Develop ment	48		107- 114	2019	
46.	Venkita raj, KP; Suresh, S;	Effects of Al <sub>2</sub> O <sub>3</sub> , CuO and TiO <sub>2</sub> nanoparticl es son thermal, phase transition and crystallizati on properties of solid- solid phase change material	Mechani cs of Materials	128		64-88	2019	

National Institute of Technology, Tiruchirappalli:  
Performa for CV of Faculty/ Staff Members

---

47.	Kumar, G Udaya; Krishna n, D Venkata; Suresh, S; Thanse khar, MR; Prasanna, R Varun; Jubal, M;	Investigating the combined effect of square microgrooves and CNT coating on condensation heat transfer	Applied Surface Science	469		50-60	2019	
48.	Murale edharan , M; Singh, H; Udayak umar, M; Suresh, S;	Modified active solar distillation system employing directly absorbing Therminol 55–Al <sub>2</sub> O <sub>3</sub> nano heat transfer fluid and Fresnel lens concentrator	Desalination	457		32-38	2019	
49.	Praveen , B; Suresh, S;	Thermal performance of micro-encapsulated PCM with LMA thermal percolation in TES based heat sink application	Energy Conversion and Management	185		75-86	2019	

National Institute of Technology, Tiruchirappalli:  
Performa for CV of Faculty/ Staff Members

---

50.	Karthik, Krishna dass; Suresh, S; Singh, Harjit; Joy, Grashin C; Dhanus kodi, R;	Theoretical and experimental evaluation of thermal interface materials and other influencing parameters for thermoelect ric generator system	Renewab le Energy	134		25-43	2019	
51.	Venkita raj, KP; Suresh, S;	Experiment al thermal degradation analysis of pentaerythri tol with alumina nano additives for thermal energy storage application	Journal of Energy Storage	22		Aug- 16	2019	
52.	Hamee d, M Shahul; Suresh, S; Singh, Rajive Kumar;	Comparativ e study of heat transfer and friction characteristi cs of water- based Alumina- copper and Alumina- CNT hybrid nanofluids in laminar flow	Journal of Thermal Analysis and Calorime try	136	1	243- 253	2019	

National Institute of Technology, Tiruchirappalli:  
Performa for CV of Faculty/ Staff Members

---

		through pipes						
53.	Jaygopal, J; Palappan, K Ganesh; Lakshminarashimhan, M; Rajavel, M; Suresh, S;	Experimental investigations of vanadium and nickel distribution while firing petcoke in a circulating fluidised bed test facility	International Journal of Oil, Gas and Coal Technology	20	1	81-96	2019	
54.	Anbu, S; Venkatachalapathy, S; Suresh, S;	Convective heat transfer studies on helically corrugated tubes with spiraled rod inserts using TiO <sub>2</sub> /DI water nanofluids	Journal of Thermal Analysis and Calorimetry	137	3	849-864	2019	
55.	Praveen, B; Suresh, S; Pethurajan, Vignesh;	Heat transfer performance of graphene nanoplatelets laden micro-encapsulated PCM with polymer shell for thermal energy storage based heat sink	Applied Thermal Engineering	156		237-249	2019	

National Institute of Technology, Tiruchirappalli:  
Performa for CV of Faculty/ Staff Members

---

56.	Kalidos s, P; Venkat achalap athy, S; Suresh, S;	Phototherm al energy conversion enhanceme nt studies using low concentrati on nanofluids	Journal of Solar Energy Engineer ing	141	6		2019	
57.	Karthic k, Krishna dass; Suresh, S; Hussain , Moham med Muaaz MD; Ali, Hafiz Muham mad; Kumar, CS Sujith;	Evaluation of solar thermal system configuratio ns for thermoelect ric generator applications : a critical review	Solar Energy	188		111- 142	2019	
58.	Elanko van, R; Suresh, S; Karthic k, Krishna dass; Hussain , Moham med Muaaz MD; Chandr amohan , VP;	Evaluation of thermoelect ric power generated through waste heat recovery from long ducts and different thermal system configuratio ns	Energy	185		477- 491	2019	



National Institute of Technology, Tiruchirappalli:  
Performa for CV of Faculty/ Staff Members

---

59.	Raj, Cyril Reuben ; Suresh, S; Bhavsar, RR; Singh, Vivek Kumar; Reddy, Sarath;	Effect of nano-gallium capsules on thermal energy storage characteristics of manganese organometallic SS-PCM	Thermochimica Acta	680		178341	2019	
60.	Venkataraj, KP; Suresh, S; Praveen, B;	Energy storage performance of pentaerythritol blended with indium in exhaust heat recovery application	Thermochimica Acta	680		178343	2019	
61.	Raj, Cyril Reuben ; Suresh, S; Bhavsar, RR; Singh, Vivek Kumar; Reddy, A Sarath; Upadhyay, Arijit;	Manganese-based layered perovskite solid-solid phase change material: Synthesis, characterization and thermal stability study	Mechanics of Materials	135		88-97	2019	
62.	Venkataraj, KP; Suresh, S;	Experimental charging and discharging	Sustainable Cities and Society	51		101767	2019	

National Institute of Technology, Tiruchirappalli:  
Performa for CV of Faculty/ Staff Members

---

	Praveen, B;	performance of alumina enhanced pentaerythritol using a shell and tube TES system						
63.	Elankovan, R; Suresh, S; Karthick, K;	Modelling and Optimization of Heat Transfer Coefficients for Hot and Cold Sides of Thermoelectric Generator (TEG) system					2019	
64.	Manickam, R; Kalidos, P; Suresh, S; Venkatachalapathy, S;	Erythritol based Nano-PCM for Solar Thermal Energy Storage	International Research Journal of Engineering and Technology (IRJET)	6		1631-1636	2019	
65.	Ajith Krishna R, Balasubramanian K., R Suresh, S;	An experimental investigation on the effect of gravitational orientation on flow boiling performance in	Heat and Mass Transfer			Jan-30	2019	

National Institute of Technology, Tiruchirappalli:  
Performa for CV of Faculty/ Staff Members

---

		different channel sizes ranges from minichannels to microchannels						
66.	Goud, Mallikarjuna; Reddy, Mugi Vishnu Vardhan; Chandramohan, VP; Suresh, S;	A novel indirect solar dryer with inlet fans powered by solar PV panels: drying kinetics of Capsicum Annum and Abelmoschus esculentus with dryer performance	Solar Energy	194		871-885	2019	
67.	Cyril Reuben Raj, S Suresh, RR Bhavsar, Vivek Kumar Singh;	Recent developments in thermo-physical property enhancement and applications of solid solid phase change materials	Journal of Thermal Analysis and Calorimetry			Jan-27	2019	
68.	Krishnan, D Venkata; Kumar, G	Wetting transition in laser-fabricated hierarchical surface	International Journal of Heat and Mass Transfer	140		886-896	2019	

National Institute of Technology, Tiruchirappalli:  
Performa for CV of Faculty/ Staff Members

---

	Udaya; Suresh, S; Jubal, M; Thanse khar, MR; Ramesh , Ravi;	structures and its impact on condensatio n heat transfer characteristi cs						
69.	Balasub ramania n, Andi; Jayara man, Venkat esan; Sivan, Suresh; Vairava n, Mariap pan;	Experiment al analysis of triple fluid vapour absorption refrigeratio n system driven by electrical energy and engine waste heat	Thermal Science	23	5 Part B	2995- 3001	2019	
70.	Pethura jan, Vignes h; Sivan, Suresh; Konatt, Alan Johny; Reddy, A Sarath;	Facile approach to improve solar thermal energy storage efficiency using encapsulate d sugar alcohol based phase change material	Solar Energy Materials and Solar Cells	185		524- 535	2018	
71.	Anbu, S., Venkat achalap athy, S., Suresh, S.	Heat transfer and pressure drop studies of TiO <sub>2</sub> /DI water nanofluids	Heat and Mass Transfer/ Waerme- und Stoffueb ertragung	54		1301 -1311		

National Institute of Technology, Tiruchirappalli:  
Performa for CV of Faculty/ Staff Members

---

		in helically corrugated tubes using spiraled rod inserts						
72.	Venkita raj, K.P., Suresh, S., Alwin Mathew, T., Bibin, B.S., Abraham, J.	An experimental investigation on heat transfer enhancement in the laminar flow of water/TiO <sub>2</sub> nanofluid through a tube heat exchanger fitted with modified butterfly inserts	Heat and Mass Transfer/ Waerme- und Stoffuebertragung	54		813-829		
73.	Arulprakasajothi, M., Elango van, K., Chandrasekhar, U., Suresh, S.	Experimental study of a water-based titanium oxide nanofluid in a circular pipe with transition flow and conical strip inserts	Heat Transfer Research	49		439-456		
74.	Pethurajan, Vignesh; Sivan,	Issues, comparison, turbine selections and	Energy Conversion and Management	166		474-488	2018	

National Institute of Technology, Tiruchirappalli:  
Performa for CV of Faculty/ Staff Members

---

	Suresh; Joy, Grashin C;	applications –An overview in organic Rankine cycle						
75.	Salyan, Srikant h; Suresh, S;	Liquid metal gallium laden organic phase change material for energy storage: an experimental study	International Journal of Hydrogen Energy	43	4	2469-2483	2018	
76.	Venkita raj, KP; Suresh, S; Praveen , B; Nair, Sreeju C;	Experimental heat transfer analysis of macro packed neopentylglycol with CuO nano additives for building cooling applications Study on performance enhancement factors in turbulent flow of CNT/water nanofluid through a tube fitted with helical screw	Journal of Energy Storage	17		01-Oct	2018	

National Institute of Technology, Tiruchirappalli:  
Performa for CV of Faculty/ Staff Members

---

		louvered rod inserts						
77.	Venkita raj, KP; Suresh, S;	Experimental study on the thermal storage performance and non-isothermal crystallization kinetics of pentaerythritol blended with low melting metal	Thermochimica Acta	662		75-89	2018	
78.	Praveen, B; Suresh, S;	Experimental study on heat transfer performance of neopentyl glycol/CuO composite solid-solid PCM in TES based heat sink	Engineering science and technology, an international journal	21	5	1086-1094	2018	
79.	Kumar, G Udaya; Suresh, S; Thansekhari, MR; Halpati, Deepkumar;	Role of inter-nanowire distance in metal nanowires on pool boiling heat transfer characteristics Multi-walled carbon nanotube	Journal of colloid and interface science	532		218-230	2018	

National Institute of Technology, Tiruchirappalli:  
Performa for CV of Faculty/ Staff Members

---

		laden with D-Mannitol as phase change material: Characterization and experimental investigation						
80.	Pethurajan, Vignesh; Sivan, Suresh;	Fabrication, characterization and heat transfer study on microencapsulation of nano-enhanced phase change material	Chemical Engineering and Processing- Process Intensification	133		Dec-23	2018	
81.	Salyan, Srikant h; Suresh, S;	Multi-walled carbon nanotube laden with D-Mannitol as phase change material: characterization and experimental investigation	Advanced Powder Technology	29	12	3183-3191	2018	
82.	Salyan, Srikant h; Suresh, S;	Study of thermo-physical properties and cycling stability of	Journal of Energy Storage	15		245-255	2018	



National Institute of Technology, Tiruchirappalli:  
Performa for CV of Faculty/ Staff Members

---

		D- Mannitol-copper oxide nanocomposites as phase change materials						
83.	Pethurajan, Vignesh; Sivan, Suresh;	Experimental study of an organic rankine cycle using n-hexane as the working fluid and a radial turbine expander	Inventions	3	2	31	2018	
84.	Venkataraj, KP; Suresh, S; Venugopal, Arjun;	Experimental study on the thermal performance of nano enhanced pentaerythritol in IC engine exhaust heat recovery application	Applied Thermal Engineering	137		461-474	2018	
85.	Krishnan, D Venkata; Kumar, G Udaya; Suresh, S; Thansekhar, MR;	Evaluating the scale effects of metal nanowire coatings on the thermal performance of miniature loop heat pipe	Applied Thermal Engineering	133		727-738	2018	

National Institute of Technology, Tiruchirappalli:  
Performa for CV of Faculty/ Staff Members

---

	Iqbal, Uzair;							
86.	Arulprakasajothi, Mahalingam; Elangovan, Kariappan; Chandrasekhar, Udayagiri; Suresh, Sivan;	Performance study of conical strip inserts in tube heat exchanger using water based titanium oxide nanofluid	Thermal Science	22	1 Part B	477-485	2018	
87.	Karthick, Krishnadass; Joy, Grashin C; Suresh, S; Dhanuskodi, R;	Impact of thermal interface materials for thermoelectric generator systems	Journal of Electronic Materials	47	10	5763-5772	2018	
88.	Arulprakasajothi, M; Elangovan, K; Chandrasekhar, U; Suresh, S;	Experimental studies of water-based titanium oxide nanofluid in a circular pipe under transition flow with conical strip inserts	Heat Transfer Research	49	5		2018	
89.	Krishnan, R Ajith; Balasubramania	Experimental investigation of the effect of	International Journal of Heat	120		1341-1357	2018	

National Institute of Technology, Tiruchirappalli:  
Performa for CV of Faculty/ Staff Members

---

	n, KR; Suresh, S;	heat sink orientation on subcooled flow boiling performanc e in a rectangular microgap channel	and Mass Transfer					
90.	Kumar, Ganesa n Udaya; Soni, Khushb oo; Suresh, Sivan; Ghosh, Kaushi k; Thanse khar, MR; Babu, P Dinesh;	Modified surfaces using seamless graphene/ca rbon nanotubes based nanostructu res for enhancing pool boiling heat transfer	Experim ental thermal and fluid science	96		493- 506	2018	
91.	Salyan, Srikant h; Suresh, S; Reddy, A Sarath;	Low melt alloy enhanced solid-liquid phase change organic sugar alcohol for solar thermal energy storage	Journal of Molecula r Liquids	266		29-42	2018	
92.	Balasu bramania n, KR; Krishna	Transient flow boiling performanc	Journal of Nanoflui ds	7	6	1035- 1044	2018	

National Institute of Technology, Tiruchirappalli:  
Performa for CV of Faculty/ Staff Members

---

	n, R Ajith; Suresh, S;	e and critical heat flux evaluation of Al <sub>2</sub> O <sub>3</sub> - water nanofluid in parallel microchann els						
93.	Anbu, S; Venkat achalap athy, S; Suresh, S;	Heat transfer and pressure drop studies of TiO <sub>2</sub> /DI water nanofluids in helically corrugated tubes using spiraled rod inserts	Heat and Mass Transfer	54	5	1301- 1311	2018	
94.	Balasu bramania n, KR; Krishna n, R Ajith; Suresh, S;	Spatial orientation effects on flow boiling performanc es in open microchann els heat sink configuratio n under a wide range of mass fluxes	Experim ental Thermal and Fluid Science	99		392- 406	2018	
95.	Rathna kumar, P; Iqbal, S Moham ed; Michael , Jee	Study on performanc e enhanceme nt factors in turbulent flow of CNT/water	Chemical Engineer ing and Processin g- Process Intensific ation	127		103- 110	2018	

National Institute of Technology, Tiruchirappalli:  
Performa for CV of Faculty/ Staff Members

---

	Joe; Suresh, S;	nanofluid through a tube fitted with helical screw louvered rod inserts						
96.	Suresh, S; Salyan, Srikant h;	Solar Thermal Energy Storage Using Graphene Nanoplatelets-Added Phase Change Materials	Applications of Solar Energy			187-205	2018	
97.	Venkataraj, KP; Suresh, S; Mathew, T Alwin; Bibin, BS; Abraham, Jisa;	An experimental investigation on heat transfer enhancement in the laminar flow of water/TiO <sub>2</sub> nanofluid through a tube heat exchanger fitted with modified butterfly inserts	Heat and Mass Transfer	54	3	813-829	2018	
98.	Kumar, CS Sujith; Kumar, G Udaya; Arenales,	Elucidating the mechanisms behind the boiling heat transfer enhancement using	Applied Thermal Engineering	137		868-891	2018	

National Institute of Technology, Tiruchirappalli:  
Performa for CV of Faculty/ Staff Members

---

	Mario R Mata; Hsu, Chin-Chi; Suresh, S; Chen, Ping-Hei;	nano-structured surface coatings						
99.	Domini c, A; Sarangan, J; Suresh, S; Devahdhanush, VS;	An experimental study of heat transfer and pressure drop characteristics of divergent wavy minichannels using nanofluids	Heat and Mass Transfer	53	3	959-971	2017	
100.	Hameed, M Shahul; Suresh, S;	Convective Heat Transfer and Pressure Drop Characteristics of Al <sub>2</sub> O <sub>3</sub> -CNT/Water Hybrid Nanofluid in Straight Circular Tube Under Turbulent Flow	Journal of Nanofluids	6	4	743-750	2017	
101.	Kumar, Udaya; Suresh, S;	Effect of diameter of metal nanowires	Applied Surface Science	423		509-520	2017	

National Institute of Technology, Tiruchirappalli:  
Performa for CV of Faculty/ Staff Members

---

	Thanse khar, MR; Babu, Dinesh;	on pool boiling heat transfer with FC-72						
102.	Venkita raj, KP; Suresh, S;	Experiment al study on thermal and chemical stability of pentaerythri tol blended with low melting alloy as possible PCM for latent heat storage	Experim ental Thermal and Fluid Science	88		73-87	2017	
103.	Singh, DK; Suresh, S; Singh, H;	Graphene nanoplatelet s enhanced myo- inositol for solar thermal energy storage	Thermal Science and Engineer ing Progress	2		01-07	2017	
104.	Rose, BAJ; Singh, H; Verma, N; Tassou, S; Suresh, S; Ananth araman, N; Mariotti , D; Maguir e, P;	Investigatio ns into nanofluids as direct solar radiation collectors	Solar Energy	147		426- 431	2017	

National Institute of Technology, Tiruchirappalli:  
Performa for CV of Faculty/ Staff Members

---

105.	Singh, DK; Suresh, S; Singh, H; Rose, BAJ; Tassou, S; Anantharaman, N;	Myo- inositol based nano- PCM for solar thermal energy storage	Applied Thermal Engineer ing	110		564- 572	2017	
106.	Krishna n, R Ajith; Balasub ramania n, KR; Suresh, S;	The effect of heating area orientation on flow boiling performanc e in microchann els heat sink under subcooled condition	Internati onal Journal of Heat and Mass Transfer	110		276- 293	2017	
107.	Venkita raj, KP; Suresh, S; Praveen , B; Venugo pal, Arjun; Nair, Sreeju C;	Pentaerythri tol with alumina nano additives for thermal energy storage applications	Journal of Energy Storage	13		359- 377	2017	
108.	Thiyaga rajan, B; Senthil kumar, V;	Synthesis and Characteriz ation of Nanostructu red NiCrFeSiB	Transacti ons of the Indian Institute of Metals	70	10	2555- 2561	2017	



National Institute of Technology, Tiruchirappalli:  
Performa for CV of Faculty/ Staff Members

---

	Suresh, S;	HVOF Coating						
109.	Alam, Mahmood; Singh, Harjit; Suresh, S; Redpath, DAG;	Energy and economic analysis of Vacuum Insulation Panels (VIPs) used in non-domestic buildings	Applied Energy	188		01-08	2017	
110.	Kumar, CS Sujith; Suresh, S; Praveen, AS; Kumar, MC Santhosh; Gopi, Vishakh;	Effect of surfactant addition on hydrophilicity of ZnO–Al <sub>2</sub> O <sub>3</sub> composite and enhancement of flow boiling heat transfer	Experimental Thermal and Fluid Science	70		325-334	2016	
111.	Mala, D., Sendhilnathan, S., Suresh, S., Jaisankar, S.	Parametric optimization for heat transfer characteristics of Al <sub>2</sub> O <sub>3</sub> /water nanofluid with circular ring insert by using taguchi method	Journal of the Balkan Tribological Association	22		3791-3803		
112.	Arulprakasajothi, M; Elango van, K;	Experimental investigation on heat transfer	Frontiers in Energy	10	2	136-142	2016	

National Institute of Technology, Tiruchirappalli:  
Performa for CV of Faculty/ Staff Members

---

	Reddy, K Hema Chandr a; Suresh, S;	effect of conical strip inserts in a circular tube under laminar flow						
113.	Dharmendra, M; Suresh, S; Kumar, CS Sujith; Yang, Qiaqin;	Pool boiling heat transfer enhancement using vertically aligned carbon nanotube coatings on a copper substrate	Applied Thermal Engineering	99		61-71	2016	
114.	Sujith Kumar, C.S., Suresh, S., Praveen, A.S., Santhosh Kumar, M.C., Gopi, V.	Effect of surfactant addition on hydrophilicity of ZnO-Al <sub>2</sub> O <sub>3</sub> composite and enhancement of flow boiling heat transfer	Experimental Thermal and Fluid Science	70		325-334	2016	
115.	Muraleedharan, M; Singh, H; Suresh, S; Udayakumar, M;	Directly absorbing Terminol-Al <sub>2</sub> O <sub>3</sub> nano heat transfer fluid for linear solar concentrating collectors	Solar Energy	137		134-142	2016	

National Institute of Technology, Tiruchirappalli:  
Performa for CV of Faculty/ Staff Members

---

116.	Mala, Dharma lingam; Sechassalom, Sendhil nathan; Sivan, Suresh;	Heat transfer characteristics of Al <sub>2</sub> O <sub>3</sub> /water nanofluid in laminar flow conditions with circular ring insert	Thermal Science	20	suppl. 4	1159-1168	2016	
117.	Ponnusamy, Selvaraj ; Shanmugam, Rajasekaran; Sivan, Suresh; Jagannathan, Sarangan;	Experimental studies on heat transfer and friction factor characteristics of a turbulent flow for internally grooved tubes	Thermal Science	20	suppl. 4	1005-1015	2016	
118.	Kumar, Sujith; Suresh, S; Aneesh, CR; Kumar, Santhosh; Praveen, AS; Raji, K;	Flow boiling heat transfer enhancement on copper surface using Fe doped Al <sub>2</sub> O <sub>3</sub> -TiO <sub>2</sub> composite coatings	Applied Surface Science	334		102-109	2015	
119.	Kumar, Periyasamy Mukesh ; Kumar,	Review on nanofluids theoretical thermal conductivity models	Engineering Journal	19	1	67-83	2015	

National Institute of Technology, Tiruchirappalli:  
Performa for CV of Faculty/ Staff Members

---

	Jegadeesan; Tamilarasan, Rengasamy; Sendhilnathan, Seshachalam; Suresh, Sivan;							
120.	Venkatachalapaty, S., Kumaresan, G., Suresh, S.	Performance analysis of cylindrical heat pipe using nanofluids - An experimental study	International Journal of Multiphase Flow	72		188-197	2015	
121.	Sujith Kumar, C.S., Suresh, S., Aneesh, C.R., Santhosh Kumar, M.C., Praveen, A.S., Raji, K.	Flow boiling heat transfer enhancement on copper surface using Fe doped Al <sub>2</sub> O <sub>3</sub> -TiO <sub>2</sub> composite coatings	Applied Surface Science	334		102-109	2015	
122.	Arulprakasajothi, M; Elango van, K; Hemachandra	Experimental study of preparation, characterisation and thermal behaviour	Applied Mechanics and Materials	766		348-354	2015	

National Institute of Technology, Tiruchirappalli:  
Performa for CV of Faculty/ Staff Members

---

	Reddy, K; Suresh, S;	of water-based nanofluids containing titanium oxide nanoparticles						
123.	Chitra, Subbiah Rammo han; Sendhil nathan, Sechasa lom; Suresh, Sivan;	Investigation of heat transfer characteristics of mgmnni/diw-based nanofluids for quenching in industrial applications	Journal of Enhanced Heat Transfer	22	1		2015	
124.	Satheeskumar, M; Thansekhar, MR; Anbumeenakshi, C; Suresh, S;	Effect of Geometrical Parameters on Flow Mal-Distribution in a Wavy Microchannel	Applied Mechanics and Materials	813		674-678	2015	
125.	Ali, A Akbar; Kumara gurubaran, B; Suresh, S; Babu, K Lakshmana;	Heat transfer enhancement in vertical helical coiled heat exchanger by using nano fluid-TiO <sub>2</sub> /water	Int Res J Eng Technol	2	9	2480-2484	2015	
126.	Mala, D; Sendhil	THERMAL PERFORMANCE OF	JOURNAL OF THE	21	4	1055-1071	2015	

National Institute of Technology, Tiruchirappalli:  
Performa for CV of Faculty/ Staff Members

---

	nathan, S; Suresh, S;	AL <sub>2</sub> O <sub>3</sub> NANOFLU ID WITH CIRCULA RRING INSERT IN PLAIN TUBE	BALKA N TRIBOL OGICAL ASSOCI ATION					
127.	Domini c, A; Saranga n, J; Suresh, S; Devah Dhanus h, VS;	An experiment al investigatio n of wavy and straight minichanne l heat sinks using water and nanofluids	Journal of Thermal Science and Engineer ing Applicati ons	7	3	31012	2015	
128.	Rathna kumar, P; Mayilsa my, K; Suresh, S; Muruge san, P;	Laminar heat transfer and friction factor characteristi cs of carbon nano tube/water nanofluids	Journal of nanoscie nce and nanotech nology	14	3	2400- 2407	2014	
129.	Kumar, CS Sujith; Suresh, S; Yang, Lezhi; Yang, Qiaqin; Aravind , S;	Flow boiling heat transfer enhanceme nt using carbon nanotube coatings	Applied Thermal Engineer ing	65	1	166- 175	2014	
130.	Suresh, S., Venkita raj, K.P.,	Turbulent heat transfer and pressure drop	Journal of Nanoscie nce and	14	3	2563 -2572	2014	

National Institute of Technology, Tiruchirappalli:  
Performa for CV of Faculty/ Staff Members

---

	Hameed, M.S., Sarangan, J.	characteristics of dilute water based Al <sub>2</sub> O <sub>3</sub> -Cu hybrid nanofluids	Nanotechnology					
131.	Chandraprabu, V., Sankaranarayanan, G., Iniyan, S., Suresh, S.	Heat transfer enhancement characteristics of Al <sub>2</sub> O <sub>3</sub> /water and Cu/water nanofluids in a tube in tube condenser fitted with an air conditioning system-an experimental comparison	Journal of Thermal Science and Engineering Applications	6	4		2014	
132.	Kumar, P.C.M., Kumar, J., Sendhilnathan, S., Tamilarasan, R., Suresh, S.	Heat transfer and pressure drop of Al <sub>2</sub> O <sub>3</sub> nanofluid as coolant in shell and helically coiled tube heat exchanger	Bulgarian Chemical Communications	46	4	743-749	2014	
133.	Selvam, Swaminathan; Thiyaga	Experimental studies on effect of bonding the	Thermal Science	18	4	1273-1283	2014	

National Institute of Technology, Tiruchirappalli:  
Performa for CV of Faculty/ Staff Members

---

	rajan, PR; Suresh, Sivan;	twisted tape with pins to the inner surface of the circular tube						
134.	Kumar, Sujith; Suresh, S; Yang, Q; Aneesh, CR;	An experiment al investigatio n on flow boiling heat transfer enhanceme nt using spray pyrolysed alumina porous coatings	Applied thermal engineeri ng	71	1	508- 518	2014	
135.	Subram anian, J Siva; Praveen , AS; Saranga n, J; Suresh, S; Raghur aman, S;	Microstruct ure and Characteriz ation of Thermal sprayed Ni- Cr/Al <sub>2</sub> O <sub>3</sub> coating	Internati onal Journal of ChemTe ch Research	6	3	1948- 1951	2014	
136.	Selvaku mar, P; Suresh, S;	Thermal performanc e of ethylene glycol based nanofluids in an electronic heat sink	Journal of nanoscie nce and nanotech nology	14	3	2325- 2333	2014	
137.	Suresh, S; Venkita	Turbulent heat transfer and	Journal of nanoscie	14	3	2563- 2572	2014	



National Institute of Technology, Tiruchirappalli:  
Performa for CV of Faculty/ Staff Members

---

	raj, KP; Hameed, M Shahul; Sarangan, J;	pressure drop characteristics of dilute water based Al <sub>2</sub> O <sub>3</sub> -Cu hybrid nanofluids	ence and nanotechnology					
138.	Domini c, A; Sarangan, J; Suresh, S; Sai, Monica ;	Heat transfer performance of Al <sub>2</sub> O <sub>3</sub> /water nanofluids in a mini channel heat sink	Journal of nanoscience and nanotechnology	14	3	2368-2376	2014	
139.	Jesumathy, SP; Udayakumar, M; Suresh, S; Jegadheswaran, S;	Microstructure and characterization of thermal sprayed Ni-Cr/Al <sub>2</sub> O <sub>3</sub> coating	Journal of the Taiwan Institute of Chemical Engineers	45	4	1298-1306	2014	
140.	Domini c, A; Sarangan, J; Suresh, S; Devah Dhanush, VS;	An experimental study of forced convective fluid flow in divergent minichannels using nanofluids	Applied Mechanics and Materials	592		1418-1422	2014	
141.	K Karunamurthy, K Murugumohankumar, S Suresh;	Performance analysis of an in-pond heat exchanger of a salt gradient solar pond	Applied Solar Energy	50	2	84-89	2014	

National Institute of Technology, Tiruchirappalli:  
Performa for CV of Faculty/ Staff Members

---

142.	Kumar, PC Mukesh ; Kumar, J; Tamilarasan, R; Nathan, S Sendhil ; Suresh, S;	Heat transfer enhancement and pressure drop analysis in a helically coiled tube using Al <sub>2</sub> O <sub>3</sub> /water nanofluid	Journal of Mechanical Science and Technology	28	5	1841-1847	2014	
143.	Chandraprabu, V; Sankaranarayanan, G; Iniyan, S; Suresh, S;	Heat transfer enhancement characteristics of Al <sub>2</sub> O <sub>3</sub> /water and CuO/water nanofluids in a tube in tube condenser fitted with an air conditioning system— an experimental comparison	Journal of Thermal Science and Engineering Applications	6	4		2014	
144.	Chandrasekar, M; Suresh, S; Senthil Kumar, T;	Passive cooling of standalone flat PV module with cotton wick structures	Energy Conversion and Management	71		43-50	2013	
145.	Kumar, PC	Experimental	Journal of	27	1	239-245	2013	

National Institute of Technology, Tiruchirappalli:  
Performa for CV of Faculty/ Staff Members

---

	Mukesh ; Kumar, J; Suresh, S;	investigation on convective heat transfer and friction factor in a helically coiled tube with Al <sub>2</sub> O <sub>3</sub> /water nanofluid	Mechanical Science and Technology					
146.	Selvaraj , Ponnusamy; Saranga n, Jaganna than; Suresh, Sivan;	Computational fluid dynamics analysis on heat transfer and friction factor characteristics of a turbulent flow for internally grooved tubes	Thermal Science	17	4	1125-1137	2013	
147.	Selvam, S; Thiyagarajan, PR; Suresh, S;	Experimental studies on wire coiled coil matrix turbulators with and without centre core rod	Arabian Journal for Science and Engineering	38	9	2557-2568	2013	
148.	Raghuraman, DRS; Nagarajan, PK; Suresh, S;	Thermal performance of higher aspect ratio microchannels using TiO <sub>2</sub> -water nanofluids	Journal of nanoscience and nanotechnology	13	4	2842-2846	2013	

National Institute of Technology, Tiruchirappalli:  
Performa for CV of Faculty/ Staff Members

---

149.	Rathna kumar, P; Mayilsamy, K; Suresh, S; Murugesan, P;	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	2	4	274-282	2013	
150.	Selvakumar, P; Suresh, S; Salyan, Srikant h;	Investigations of effect of radial flow impeller type swirl generator fitted in an electronic heat sink and Al <sub>2</sub> O <sub>3</sub> /water nanofluid on heat transfer enhancement	Chemical Engineering and Processing: Process Intensification	72		103-112	2013	
151.	Chandraprabu, V; Sankaranarayanan, G; Iniyan, S; Suresh,	Heat Transfer Enhancement Performance of Al <sub>2</sub> O <sub>3</sub> /Water Nanofluid	International Journal on			210	2013	

National Institute of Technology, Tiruchirappalli:  
Performa for CV of Faculty/ Staff Members

---

	S; Siva, V;	in Condensing Unit of Air Conditioner : Experiment al Study						
152.	Chandr aprabu, V; Sankara narayan an, G; Iniyan, S; Suresh, S;	Performanc e of CuO/water nanofluid as outer fluid in the tube in tube condensing unit of air conditioner: experiment al Study	Journal of Nanofluid s	2	3	213- 220	2013	
153.	Suresh, S; Venkita raj, KP; Selvaku mar, P; Chandr asekar, M;	Effect of Al <sub>2</sub> O <sub>3</sub> - Cu/water hybrid nanofluid in heat transfer	Experim ental Thermal and Fluid Science	38		54-60	2012	
154.	Selvaku mar, P; Suresh, S;	Convective performanc e of CuO/water nanofluid in an electronic heat sink	Experim ental Thermal and Fluid Science	40		57-63	2012	
155.	Suresh, S; Venkita raj, KP; Selvaku mar, P; Chandr asekar, M;	A comparison of thermal characteristi cs of Al <sub>2</sub> O <sub>3</sub> /wate r and CuO/water nanofluids	Experim ental Thermal and Fluid Science	39		37-44	2012	

National Institute of Technology, Tiruchirappalli:  
Performa for CV of Faculty/ Staff Members

---

		in transition flow through a straight circular duct fitted with helical screw tape inserts						
156.	Chandrasekar, M; Suresh, S; Senthil Kumar, T;	Mechanisms proposed through experimental investigations on thermophysical properties and forced convective heat transfer characteristics of various nanofluids– A review	Renewable and Sustainable Energy Reviews	16	6	3917-3938	2012	
157.	Kannadasan, N; Ramana than, K; Suresh, S;	Comparison of heat transfer and pressure drop in horizontal and vertical helically coiled heat exchanger with CuO/water based nanofluids	Experimental Thermal and Fluid Science	42		64-70	2012	
158.	Suresh, S; Selvaku	Experimental studies on heat	Chemical Engineering and	53		24-30	2012	

National Institute of Technology, Tiruchirappalli:  
Performa for CV of Faculty/ Staff Members

---

	mar, P; Chandra sekar, M; Raman, V Srinivas a;	transfer and friction factor characteristi cs of Al <sub>2</sub> O <sub>3</sub> /wate r nanofluid under turbulent flow with spiraled rod inserts	Processin g: Process Intensific ation					
159.	Raja, M; Arunac halam, RM; Suresh, S;	Experiment al studies on heat transfer of alumina/wa ter nanofluid in a shell and tube heat exchanger with wire coil insert	Internati onal Journal of Mechani cal and Materials Engineer ing	7	1	16-23	2012	
160.	Jesumat hy, Stella P; Udayak umar, M; Suresh, S;	Heat transfer characteristi cs in latent heat storage system using paraffin wax	Journal of mechanic al science and technolo gy	26	3	959- 965	2012	
161.	Mukesh Kumar, PC; Kumar, J; Suresh, S;	Heat transfer and friction factor studies in helically coiled tube using Al <sub>2</sub> O <sub>3</sub> /wate r Nanofluid	European Journal of Scientific Research	82		161- 172	2012	

National Institute of Technology, Tiruchirappalli:  
Performa for CV of Faculty/ Staff Members

---

162.	Suresh, S; Chandrasekar, M; Selvakumar, P;	Experimental studies on heat transfer and friction factor characteristics of CuO/water nanofluid under laminar flow in a helically dimpled tube	Heat and Mass Transfer	48	4	683-694	2012	
163.	Karunamurthy, K; Murugumohankumar, K; Suresh, S;	Use of CuO nano-material for the improvement of thermal conductivity and performance of low temperature energy storage system of solar pond	Digest Journal of Nanomaterials and Biostructures	7	4	1833-1841	2012	
164.	Jesumathy, Stella; Udayakumar, M; Suresh, S;	Experimental study of enhanced heat transfer by addition of CuO nanoparticle	Heat and Mass Transfer	48	6	965-978	2012	
165.	Murugesan, P; Mayilsamy, K;	Heat transfer in a tube fitted with	Experimental Heat Transfer	25	1	30-47	2012	



National Institute of Technology, Tiruchirappalli:  
Performa for CV of Faculty/ Staff Members

---

	Suresh, S;	vertical and horizontal wing-cut twisted tapes						
166.	Mariappan, V; Udayakumar, M; Shrestha, Pratisthit Lal; Suresh, S;	Thermodynamic analysis of R134a–DMAC vapor absorption refrigeration (VAR) system	International Journal Of Computational Engineering Research /ISSN	2250		3005	2012	
167.	Selvakumar, Ponnusamy; Suresh, Sivan; Udayakumar, Ganeshan;	Enhancing performance of a radiator of electronic cooling system using Carbon Nanotube based nanofluids	2012 International Conference on Emerging Electronics			01-Apr	2012	
168.	Jesumathy, Stella P; Udayakumar, M; Suresh, S;	Thermal characteristics in latent heat energy storage system using paraffin wax	International journal of energy technology and policy	8	1	50-64	2012	
169.	Suresh, S; Chandrasekar, M; Selvakumar, P;	Experimental studies on heat transfer and friction factor characteristics of	International Journal of Nanoparticles	5	1	37-55	2012	

National Institute of Technology, Tiruchirappalli:  
Performa for CV of Faculty/ Staff Members

---

	Page, Tom;	Al <sub>2</sub> O <sub>3</sub> /water nanofluid under laminar flow with spiralled rod inserts						
170.	Selvam, Swaminathan; Thiyagarajan, Pr; Suresh, Sivan;	Experimental studies on 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	16	4	1151-1164	2012	
171.	Suresh, S; Chandrasekar, M; Sekhar, S Chandr a;	Experimental studies on heat transfer and friction factor characteristics of CuO/water nanofluid under turbulent flow in a helically dimpled tube	Experimental Thermal and Fluid Science	35	3	542-549	2011	
172.	Murugesan, P; Mayilsamy, K; Suresh, S; Srinivas	Heat transfer and pressure drop characteristics in a circular	International Communications in Heat and Mass Transfer	38	3	329-334	2011	

National Institute of Technology, Tiruchirappalli:  
Performa for CV of Faculty/ Staff Members

---

	an, PSS;	tube fitted with and without V-cut twisted tape insert						
173.	Suresh, S; Venkita raj, KP; Selvakumar, P;	Comparative study on thermal performance of helical screw tape inserts in laminar flow using Al <sub>2</sub> O <sub>3</sub> /water and CuO/water nanofluids	Superlattices and Microstructures	49	6	608-622	2011	
174.	Chandrasekar, M; Suresh, S; Bose, A Chandra;	Experimental studies on heat transfer and friction factor characteristics of Al <sub>2</sub> O <sub>3</sub> /water nanofluid in a circular pipe under transition flow with wire coil inserts	Heat Transfer Engineering	32	6	485-496	2011	
175.	Murugesan, P; Mayilsamy, K; Suresh, S;	Heat transfer in tubes fitted with trapezoidal-cut and plain twisted tape inserts	Chemical Engineering Communications	198	7	886-904	2011	
176.	Chandrasekar,	Experiments to explore	Experimental	24	3	234-256	2011	

National Institute of Technology, Tiruchirappalli:  
Performa for CV of Faculty/ Staff Members

---

	M; Suresh, S;	the mechanism s of heat transfer in nanocrystall ine alumina/wa ter nanofluid under laminar and turbulent flow conditions	Heat Transfer					
177.	Murugesan, P; Mayilsamy, K; Sures, S;	Heat transfer and friction factor in a tube equipped with U-cut twisted tape insert	JJMIE	5	6	559-565	2011	
178.	Suresh, S; Venkataraj, KP; Selvakumar, P;	Synthesis, Characterisation of Al <sub>2</sub> O <sub>3</sub> -Cu Nano composite powder and water based nanofluids	Advanced Materials Research	328		1560-1567	2011	
179.	Chandrasekar, M; Suresh, S; Bose, A Chandra;	Experimental investigations and theoretical determination of thermal conductivity and viscosity of Al <sub>2</sub> O <sub>3</sub> /water nanofluid	Experimental Thermal and Fluid Science	34	2	210-216	2010	

National Institute of Technology, Tiruchirappalli:  
Performa for CV of Faculty/ Staff Members

---

180.	Chandrasekar, M; Suresh, S; Bose, A Chandra;	Experimental studies on heat transfer and friction factor characteristics of Al <sub>2</sub> O <sub>3</sub> /water nanofluid in a circular pipe under laminar flow with wire coil inserts	Experimental Thermal and Fluid Science	34	2	122-130	2010	
181.	Murugesan, P; Mayilsamy, K; Suresh, S;	Turbulent heat transfer and pressure drop in tube fitted with square-cut twisted tape	Chinese Journal of Chemical Engineering	18	4	609-617	2010	
182.	Murugesan, P; Mayilsamy, K; 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	18	6	1038-1042	2010	
183.	Murugesan, Chandrasekar; Sivan, Suresh;	Limits for thermal conductivity of nanofluids	Thermal science	14	1	65-71	2010	
184.	Chandrasekar, M;	A review on the mechanism	Heat Transfer	30	14	1136-1150	2009	

National Institute of Technology, Tiruchirappalli:  
Performa for CV of Faculty/ Staff Members

---

	Suresh, S;	s of heat transport in nanofluids	Engineering					
185.	Sagayaraj, TA Daniel; Suresh, S; Chandrasekar, M;	Experimental studies on the erosion rate of different heat treated carbon steel economiser tubes of power boilers by fly ash particles	International Journal of Minerals, Metallurgy and Materials	16	5	534-539	2009	
186.	Chandrasekar, M; Suresh, S;	Determination of Heat Transport Mechanism in Aqueous Nanofluids Using Regime Diagram	Chinese Physics Letters	26	12	124401	2009	
187.	Sivashanmugam, P; Nagarajan, PK; Suresh, SJCEC;	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	Chemical Engineering Communications	195	8	977-987	2008	
188.	Sivashanmuga	Experimental studies	Applied Thermal	27	8	1311-1319	2007	

National Institute of Technology, Tiruchirappalli:  
Performa for CV of Faculty/ Staff Members

---

	m, P; Suresh, S;	on heat transfer and friction factor characteristics of turbulent flow through a circular tube fitted with regularly spaced helical screw-tape inserts	Engineering					
189.	Sivashanmugam, P; Suresh, S;	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	31	4	301-308	2007	
190.	Sivashanmugam, P; Suresh, S;	Experimental studies on heat transfer and friction factor characteristics of laminar	Applied Thermal Engineering	26	16	1990-1997	2006	

National Institute of Technology, Tiruchirappalli:  
Performa for CV of Faculty/ Staff Members

---

		flow through a circular tube fitted with helical screw-tape inserts						
--	--	---	--	--	--	--	--	--

(B) Conferences/Workshops/Symposia Proceedings

S.No	Author(s)	Title of Abstract/ Paper	Title of the Proceedings	Page numbers	Conference Theme	Venue	Year
1.	Dr. S. Suresh	Mathematical And Computational Modelling Of The Pulsed Vacuum Drying Characteristics Of Momordica Chanrantia			International Conference on Sustainable Materials and Technologies for Bio and Energy Applications	Chennai	2021
2.	Dr. S. Suresh	Pulsed Vacuum Drying Characteristics of Momordica Charantia Slices An Experimental Study			International conference on food technology agriculture and fisheries	Kerala	2021
3.	Dr. S. Suresh	Computational Modelling of the Heat Transfer Characteristics during the Pulsed Vacuum Drying of Momordica Chanrantia			International conference on mechanical aerospace and production engineering	Kerala	
4.	Dr. S. Suresh	Experimental Investigation on CNT-Enhanced Neopentyl glycol			International conference on innovations	NIT Rourkela	2020



**National Institute of Technology, Tiruchirappalli:  
Performa for CV of Faculty/ Staff Members**

---

		Solid–Solid PCM for Applications of Thermal Control in Spatial Remote Sensing Instruments			in thermo-fluid engineering and sciences		
5.	Dr. S. Suresh	Computational modelling and grid independence test of a CFD model furnace for NOx emission study			International conference on contemporary engineering and technology	Chennai	2020
6.	Dr. S. Suresh	Investigating the effect of CNT and Silane coating on condensation heat transfer characteristics			4th International Conference on Recent Trends in Engineering and Technology		2019
7.	Dr. S. Suresh	Vertically aligned silver (AG) nano wires for enhancing pool boiling heat transfer			4th International conference on nano-science and nanotechnology		2017
8.	Dr. S. Suresh	Micro encapsulation of paraffin with alumina antiparticles for solar thermal energy storage application			Solaris	Brunel University, United Kingdom	2017
9.	Dr. S. Suresh	Nano composite sugar alcohol as phase change material for thermal energy storage application			Solaris	Brunel University, United Kingdom	2017

National Institute of Technology, Tiruchirappalli:  
Performa for CV of Faculty/ Staff Members

---

10.	Dr. S. Suresh	A comparison of the effect of aluminum and alumina nano particles on thermal stability of solid- solid phase change materials for thermal energy storage application			International Conference on Nano for Energy and Water (NEW) 2017	UPES, Dehradun	2017
11.	Dr. S. Suresh	Nano-Thermal Interface material for efficient heat transfer in electronics packagings			International Conference on Nano for Energy and Water (NEW) 2017	UPES, Dehradun	2017
12.	Dr. S. Suresh	Transient Flow Boiling Performance of Al <sub>2</sub> O <sub>3</sub> -Water Nano fluid In Parallel Micro channels			International Conference on Nano for Energy and Water (NEW) 2017	UPES, Dehradun	2017
13.	Dr. S. Suresh	Graphene as an Effective Heat Dissipating Film over the Copper Surface			6 <sup>th</sup> International and 43rd National Conference on Fluid Mechanics and Fluid Power	MNNIT A, Allahabad	2016
14.	Dr. S. Suresh	Thermo-chemical stability of nano composite myo-inositol for solar thermal energy storage			International conference on Recent Trends in Engineering and Technology (ICORTET 2016)	CUSAT, Cochin	2016
15.	Dr. S. Suresh	Effect of thermal cycling on Myo-			1st international	VIT, Vellore	2016

National Institute of Technology, Tiruchirappalli:  
Performa for CV of Faculty/ Staff Members

---

		inositol for solar thermal energy storage			conference on nano-science and nanotechnology		
16.	Dr. S. Suresh	Hybrid nano-fluid as a practical option for 3-dimensional electronic cooling system			EMN Meeting on Microfluidics and Nanofluidic	Dubai, UAE	2016
17.	Arulprakashajothi, M., Elangovan, K., HemaChandra Reddy, K., Suresh, S.	Heat Transfer Study of Water-based Nanofluids Containing Titanium Oxide Nanoparticles	Materials Today: Proceedings	3648-3655			2015
18.	Dr. S. Suresh	Experimental investigation of PCM-based heat sink with different configurations of internal fins			International Conference on Advances research in Mechanical and Aeronautical and Civil (IISRO 2013)	Pattaya, Thailand	2013
19.	Dr. S. Suresh	Thermodynamic analysis of R134A DMAC/Al <sub>2</sub> O <sub>3</sub> Vapour Absorption Refrigeration (VAR) system			International Conference on Advances research in Mechanical and Aeronautical and Civil (IISRO 2013)	Pattaya, Thailand	2013
20.	Dr. S. Suresh	Heat Transfer Enhancement using nano-fluid in a serpentine passage			International Conference on Advances research in Mechanical	Pattaya, Thailand	2013

National Institute of Technology, Tiruchirappalli:  
Performa for CV of Faculty/ Staff Members

---

					and Aeronautical and Civil (IISRO 2013)		
21.	Dr. S. Suresh	Effect of CuO/water nano-fluid in the enhancement of convective heat transfer for electronics cooling			TechConnect WORLD	Santa Clara, USA	2012
22.	Dr. S. Suresh	Experimental investigation of thermo physical properties of synthetic oil based Nano-fluids			TechConnect WORLD	Santa Clara, USA	2012
23.	Dr. S. Suresh	Experimental investigation on thermo physical properties of AL2O3/DMAC nano-fluid			TechConnect WORLD	Santa Clara, USA	2012
24.	Suresh, S., Selvakumar, P., Bharath, R.	Experimental investigation of thermo physical properties of synthetic oil based nanofluids	Technical Proceedings of the 2012 NSTI Nanotechnology Conference and Expo, NSTI-Nanotech 2012	583-586			2012

National Institute of Technology, Tiruchirappalli:  
Performa for CV of Faculty/ Staff Members

---

25.	Selvakumar, P., Suresh, S.	Effect of CuO/water nanofluid in the enhancement of convective heat transfer for electronic cooling	Technical Proceedings of the 2012 NSTI Nanotechnology Conference and Expo, NSTI-Nanotech 2012	133-136		2012
26.	Venkatachalapathy, S., Suresh, S., Selvakumar, P., Vijay, G.	Laminar convective heat transfer of Al <sub>2</sub> O <sub>3</sub> /thermic oil nanofluid in a plain tube	Technical Proceedings of the 2012 NSTI Nanotechnology Conference and Expo, NSTI-Nanotech 2012	579-582		2012
27.	Mariappan, V., Udayakumar, M., Suresh, S., Anand, R.B.,	Experimental investigations on thermo physical properties of Al <sub>2</sub> O <sub>3</sub> /DMAC nanofluid	Technical Proceedings of the 2012 NSTI	587-590		2012

National Institute of Technology, Tiruchirappalli:  
Performa for CV of Faculty/ Staff Members

---

	Shafeeq, K.P.		Nanotechnology Conference and Expo, NSTI- Nanotech 2012				
28.	Dr. S. Suresh	Laminar convective heat transfer of Al <sub>2</sub> O <sub>3</sub> /thermic oil nano-fluid in a plain tube			TechConnect WORLD	Santa Clara, USA	2012
29.	Dr. S. Suresh	Synthesis, characterisation of Al <sub>2</sub> O <sub>3</sub> Cu nano composite powder and water based Nano-fluids			International Conference on Mechatronics and Material Processing (ICMMP 2011)	China	2011
30.	Dr. S. Suresh	Synthesis, characterisation of CuO and CuO/water nano- fluid for heat transfer application			International Conference on Mechatronics and Material Processing (ICMMP 2011)	China	2011
31.	Dr. S. Suresh	Microwave assisted synthesis of Al <sub>2</sub> O <sub>3</sub> nanoparticle by chemical precipitation method			Nano- materials and Nanotechnology (NANO 2010)	Tiruchen godu, Tamil Nadu	2010
32.	Dr. S. Suresh	Experimental studies on Heat transfer			Nano- materials and Nanotechnol	Tiruchen godu,	2010

National Institute of Technology, Tiruchirappalli:  
Performa for CV of Faculty/ Staff Members

---

		characteristics of Al <sub>2</sub> O <sub>3</sub> /water nano-fluid under laminar flow			ogy (NANO 2010)	Tamil Nadu	
33.	Dr. S. Suresh	Temperature dependent models to predict the viscosity of Al <sub>2</sub> O <sub>3</sub> -water and CuO water nano-fluid			Nano-materials and Nanotechnology (NANO 2010)	Tiruchengodu, Tamil Nadu	2010

(C) Books & Monographs

Author(s)	Title of Book/Monograph	Name of Publishers	Year of Publication	ISSN/ISBN Number
Anurag Pramanik, Harjit Singh, S. Suresh, Ram Chandra & Virendra Kumar Vijay	Identifying Optimal Nanofluid Synthesis Conditions for Applications in Solar Thermal Concentrators: Sustainable Energy Development and Innovation pp 123–127	Springer	2022	978-3-030-76221-6
M Chandrasekar, Cyril Reuben Raj, and S Suresh	First Law Analysis on PCM Based Latent Heat Thermal Energy Storage System	Encyclopedia of Energy Storage	2021	978-0-12-819730-1
K. P. Venkitaraj, S. Suresh, B. S. Bibin & Jisa Abraham	DSC Analysis of Nano-enhanced Monobasic and Binary Solid-Solid Phase Change Materials for Thermal Storage	Springer	2020	978-981-15-1892-8

National Institute of Technology, Tiruchirappalli:  
Performa for CV of Faculty/ Staff Members

---

S.Suresh and Srikanth Salyan	Solar Thermal Energy Storage Using Graphene Nanoplatelets-Added Phase Change Materials: Application of Solar Energy	Springer	2018	978-981-10-7206-2
------------------------------	---	----------	------	-------------------