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

Curriculum Vitae

1.	Name	: Dr. S. VENKATACHALAPATHY		
2.	Designation	: Associate Professor		
3.	Office Address	: Department of Mechanical Engineering		
4.	Telephone (Direct) (Optional)	: 0431 - 2503415		
	Telephone :	Extn (Optional): 3415		
	Mobile (Optional)	: 9443514038		
5.	Email (Primary): svc@nitt.edu	Email (Secondary) : svcpathy1235@gmail.com		

- 6. Field(s) of Specialization: Heat Transfer and Computational Fluid Dynamics
- 7. Employment Profile

Job Title	Employer	From	То
Lecturer	Lecturer Crescent Engineering College, Chennai		31-08-1990
Engineer (R&D)	Bharat Earth Movers Limited, KGF, Karnataka	04-10-1990	15-09-1993
Lecturer	Sathyabama Engineering College, Chennai	08-06-1994	13-10-1997
Lecturer	NIT, Trichy	15-10-1997	15-10-2002
Lecturer (Sr)		15-10-2002	01-07-2008
Lecturer (SG)		01-07-2008	01-07-2011
Associate Professor		01-07-2011	Till date

8 . Academic/Administrative Responsibilities within the University

Position	Faculty/Department/Centre/Institution	From	То
Lab In-Charge - Thermal Engg. Lab	Mechanical Engg. (Thermal Engg. Lab)	1998	2004
Staff Advisor - Mechanical Engg.	Mechanical Engg.	1998	2002
Association		2015	2016
Chairman, Class Committee	Mechanical Engg.	2002	2008
		2009	2012
Lab In-Charge - Heat Transfer Lab	Mechanical Engg. (Heat Transfer Lab)	2005	Till date
Faculty advisor - Jaycees club	Institution	2008	2009
Member, Purchase Review Committee	Institution	2013	2014
Chairman, Transport Department	Institution	Nov. 2016	Till date

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

Position	Institution	From	То
Ph.D. Degree	NIT, Trichy		January, 2012
Master's Degree	College of Engineering, Anna University	1987	1989
Bachelor's Degree	College of Engineering, Anna University	1983	1987
Higher Secondary	Sengunthar Mahajana Higher Secondary School		1983

10. Awards, Associateships, etc.

Year of Award	Name of the Award	Awarding Organization

11. Fellowships

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

12. Details of Academic Work

(i) Curriculum Development

Member of Board of Studies

Member Syllabus Committee for Heat Transfer, Thermodynamics and Heat Transfer Equipment Design

 (ii) Courses taught at Postgraduate and Undergraduate levels Thermodynamics Heat Transfer
 Advanced Heat Transfer
 Heat Transfer Equipment Design
 Fluid Mechanics
 Advanced IC Engines
 Basic Mechanical Engineering

- (iii) Projects guided at Postgraduate level22 Projects Guided3 Projects ongoing
- (iv) Other contribution(s)
 Chairman for Doctoral Committees, Member for Doctoral Committees, Member for Project
 Evaluation Committee
 Thesis Examiner, Viva-voce Examiner in various Universities / Institutions
- 13. Details of Major R&D Projects

Title of Project	Funding Agency	Duration		Status	
		From	То	Ongoing/ Completed	

14. Number of Ph.Ds guided

Name of the PhD Scholar	Title of PhD Thesis	Role(Supervisor/ Co-Supervisor)	Year of Award
G. Kumaresan	Heat Transfer Performance Studies on Heat Pipes Using Cuo Nanofluids	Supervisor	2015
R. Kamatchi	Synthesis and characterization of reduced graphene oxide/water nanofluids for the enhancement of critical heat flux in pool boiling	Supervisor	2016

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

Date (s)	Title of Activity	Level of	Role	Event	Venue
		Event	(Participant/	Organized	
		(Internation	Speaker/	by	
		al/National/	Chairperson,		
		Local)	Paper		
			presenter, Any		
			other)		
June 30 – July	Advanced Steam	National	Participant	M/s Forbes	Pune
03, 1998	Engineering Programme			Marshall	
				Ltd.	
December 16-	National Conference on	National	Participant	M.I.T., Anna	Chennai

18, 1998	"Advances in Automobile Engineering"			University,	
Oct.29 to Nov.8, 2001	AICTE / ISTE Short Term Training Program on "Design of Turbo Machines using CFD with Special Emphasis on Pump and Blower Design"	National	Participant	Amrita Institute of Technology and Science	Coimbatore
June 10 – 21, 2002	AICTE / ISTE Short Term Training Program on "Low Polluting Fuels for Automobiles"	National	Participant	Annamalai University,	Chidambaram
Dec. 09 – 20, 2002	ISTE Short Term Course on "Recent Advances in Multi- Mode Heat Transfer"	National	Participant	IIT Madras	Chennai
March 08 – 19, 2004	AICTE / ISTE Short Term Training Program on "Recent Advances in Numerical Techniques to Solve Engineering Problems	National	Participant	NIT, Calicut	Calicut
January 10-11, 2006	International Workshop on "Thermal Design and Management in Electronics"	International	Participant	IISC & SAMEER	Bangalore
June 19 – 23, 2006	Introductory FLUENT & GAMBIT Training"	National	Participant	Fluent India Pvt. Ltd.,	Pune
Feb. 9 – 14, 2007	Training Program on "Recent Trends in IC Engine Testing and Analysis"	Local	Participant	NIT	Trichy
May 7 – 11, 2007	Short Term Course on "Computational Fluid Dynamics and its Applications",	National	Participant	NIT	Rourkela
Nov.29 – Dec. 10, 2011	ISTE workshop on "Heat Transfer" under the National Mission on Education through ICT	Local	Participant	IIT, Bombay	Trichy
Feb. 03 - 04, 2012	National Workshop on "Supercritical Technology for Power Sector"	National	Participant	Engineering Staff College of India,	Hyderabad
Dec. 11 - 21, 2012	ISTE workshop on "Engg. Thermodynamics" under the National Mission on	Local	Participant	IIT, Bombay	Trichy

	Education through ICT				
Nov. 26 – Dec. 07, 2012.	Managing Innovation and Technology Competitiveness"	National	Participant	Administrati ve Staff College of India	Hyderabad
Oct. 18 - 20, 2016	Workshop on Temp. Sensors & Calibratio	National	Participant	Tempsens Instruments (P) Ltd.	Bangalore

16. 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
Workshop on "Electronic Packaging"	National	November 25-26, 2011	Coordinator	NIT, Trichy
ShortTermCourseon"ApplicationsofNanotechnology in MechanicalEngineering" under TEQIP	National	December 18-21, 2013	Coordinator	NIT, Trichy
International Workshop on "Applications of CFD in Heat Transfer and Fluid Flow" under TEQIP	International	January 09-10, 2014	Coordinator	NIT, Trichy
Short Term Course on "Applications of CFD in Mechanical Engineering" under Self-financed Category.	National	October 08-09, 2014	Coordinator	NIT, Trichy
ShortTermCourseon"ApplicationsofNanotechnology"underSelf-financedCategory.	National	Oct. 31 – Nov. 01, 2014	Coordinator	NIT, Trichy

17. Invited Talks delivered

Торіс	Date	Inviting Organization
Lecture on "Heat Exchanger Design" organized by the ISTE chapter	Feb. 16, 2002	Bharathiar College of Engineering, Karaikal
Lecture on "Engine Heat Transfer Analysis", in	Feb. 12, 2007	Mech. Engg. Dept., NIT, Trichy

STTP, sponsored by Q.I.P. (for Engg. College Teachers)				
Lecture on "Radiation Heat Transfer" under the Faculty Development Programme on Heat and Mass Transfer	Dec. 21, 2012.	University College of Engineering, Anna University, Trichy		
Training on Heat Transfer and Heat Exchanger for NTPC Executives.	Feb. 18 – 21, 2013	NTPC, Ramagundam		
Chief Guest for the Mechanical Engineering Symposium	Sept. 19, 2014.	Mahendra Institute of Engineering & Technology, Namakkal.		
Lecture on on "Green nanotechnology in Materials Engineering and Energy Application"	Dec. 15-19, 2015	College of Engineering Adoor, Pathanamthitta District		
Lecture on "Heat Transfer Applications in Electronic Cooling" under Faculty Development Program	Sept. 30, 2016	Vellore Institute of Tecnology, Vellore		
Lecture on "Gas Power Cycles" under Faculty Development Program	Dec. 01, 2016	Anjalai Ammal-Mahalingam Engg. College, Thiruvarur		

18. Membership of Learned Societies

Type of Membership (Ordinary Member/	Organization	Membership No. with
Honorary Member / Life Member)		date
Life Member	Indian Society for Technical	LM 20549
	Education	July 1995
Life Member	Indian Society for Heat and	ISHMT NO: 389
	Mass Transfer	May 2003

19. Academic Foreign Visits

Country	Duration of Visit	Programme
China	November 18-20, 2011	International Conference on Mechatronics and Materials Processing (ICMMP 2011)
USA	June 18-21, 2012	TechConnect World 2012 Conference and Trade Show
Italy	July 29–Aug.4, 2013	Study and Network tour under TEQIP (for Networking of Institutions)
Thailand	Sept. 07-08, 2013	IISRO International Multi-Conferences 2013

UAE	April 5-8, 2016	International Conference on Energy, Material &	
		Nanotechnology Meeting on Microfluidics and	
		Nanofluidics-2016	

20. Publications

(A) <u>Refereed Research Journals</u>:

Author(s)	Title of Paper	Journal	Volume (No.)	Page numbers	Year	Impact Factor of the Journal (Optional)
ANNEXURE - A						

<u>ANNEXURE - A</u>

- R. Kamatchi, S. Venkatachalapathy, and C. Nithya, "Experimental Investigation and Mechanism of Critical Heat Flux Enhancement in Pool Boiling with Nanofluids", *Heat and Mass Transfer*, (2015) DOI 10.1007/s00231-015-1749-2.
- 2. R. Kamatchi, S. Venkatachalapathy, and Bhasuru Abhinaya Srinivas, "Synthesis, Stability, Transport Properties, and Surface Wettability of Reduced Graphene Oxide/Water Nanofluids", *International Journal of Thermal Sciences*, 97 (2015), 19-26.
- S. Venkatachalapathy, G. Kumaresan and S. Suresh, "Performance Analysis of Cylindrical Heat Pipe using Nanofluids - An Experimental Study", *International Journal of Multiphase Flow*, 72 (2015), 188-197.
- 4. R. Kamatchi and S. Venkatachalapathy, "Parametric study of pool boiling heat transfer with nanofluids for the enhancement of critical heat flux: A review", *International Journal of Thermal Sciences*, 87 (2015) 228-240
- G. Kumaresan, S. Venkatachalapathy and Lazarus Godson Asirvatham, "Comparative Study on Heat Transfer Characteristics of Sintered and Mesh Wick Heat Pipes using CuO Nanofluids", *International Communications in Heat and Mass Transfer*, 57 (2014) 208 – 215.
- 6. Punit Singh, S.Venkatachalapathy and G.Kumaresan, "Heat Transfer Studies on Condensation using Heat Pipes", *Applied Mechanics and Materials*, Vols. 592-594 (2014) 1617-162.
- G.Kumaresan, S.Venkatachalapathy and Indraneel C. Naik, "An Experimental Study on Improvement in Thermal Efficiency of Mesh Wick Heat Pipe", *Applied Mechanics and Materials*, Vols. 592-594 (2014) 1423-1427.

- 8. G. Kumaresan, S. Venkatachalapathy and Lazarus Godson Asirvatham, "Experimental Investigation on Enhancement in Thermal Characteristics of Sintered Wick Heat Pipe using CuO Nanofluids", *International Journal of Heat and Mass Transfer*, 72 (2014) 507-516.
- 9. P.J. Saji, S. Suresh, S. Venkatachalapathy and P. Mallikarjuna Rao, "Numerical Study of Heat Transfer Characteristics of Supercritical Water Flow Through a Vertical Tube and the Effect of Heat Flux", *International Journal of Mechanical Engineering & Research*, Vol.3, No.3 (2013).
- 10. G. Kumaresan and S. Venkatachalapathy, "A Review on Heat Transfer Enhancement Studies of Heat Pipes using Nanofluids", *Frontiers in Heat Pipes*, No.3, 043001, (2012).
- 11. S. Venkatachalapathy and M. Udayakumar, "Experimental and Numerical Investigation of Mixed-Convection Heat Transfer from Protruding Heat Sources in an Enclosure", *Experimental Heat Transfer*, 25:92-110, 2012.
- 12. S. Venkatachalapathy and M. Udayakumar, "Numerical Investigation of Natural Convection Heat Transfer from Multiple Heat Sources in a Square Enclosure", *Journal of Engineering and Applied Sciences*, Vol., No.1, January 2010.
- 13. S. Venkatachalapathy and M. Udayakumar, "Experimental Investigation of Natural Convection Heat Transfer from an Array of Protruding Heat Sources in a Square Enclosure", *International Journal of Applied Engineering Research*, Vol. 4, No.12, (2009).

(B) Conferences/Workshops/Symposia Proceedings

Author(s)	Title of Abstract/ Paper	Title of the Proceedings	Page numbers	Conference Theme	Venue	Year
ANNEXURE - B						

ANNEXURE - B

- 1. S. Venkatachalapathy, "Effect of Surface Modifications on Nucleate Boiling of Ethylene Glycol/Water Mixture", *International Conference on Energy, Material & Nanotechnology Meeting on Microfluidics and Nanofluidics-2016*, Dubai-United Arab Emirates, April 5-8, 2016.
- 2. N. Sudarssan, S. Venkatachalapathy, and R. Elankovan, "Thermal and fluid dynamic design of gas runners for heat recovery steam generators", *International Conference on Materials, Design and Manufacturing Process* (ICMDM 2016), Anna University, Chennai, February 17-19, 2016

- 3. G. Kumaresan and S. Venkatachalapathy, "Heat Transfer Studies on Circular heat pipes using CuO nanofluids", *IRF International Conference*, Bangkok, Thailand, August 17, 2014.
- 4. S. Venkatachalapathy, R. Kamatchi and Y.S. Kannan, "Effect of Surface Modifications on the Enhancement of Critical Heat Flux in Saturated Pool Boiling", *IISRO International Multi-Conferences 2013*, Pattaya, Thailand, 07 September, 2013.
- P. Mallikarjuna Rao, S. Venkatachalapathy, R. Dhanuskodi, P. Saji, S. Suresh and D. Santhosh Kumar, "Numerical Study on Heat Transfer Characteristics of Supercritical Water Flow Through a Vertical Tube with Various Diameters", *Chemference'12*, IIT Bombay and Institute of Chemical Technology, Mumbai, December 10-11, 2012.
- 6. S. Venkatachalapathy, S. Suresh, P. Selvakuma and G. Vijay, "Laminar Convective Heat Transfer of Al₂O₃/Therminol Oil nanofluid in a Plain Tube", *TechConnect World 2012 Conference and Trade Show*, Santa Clara, California, USA, June 18-21, 2012.
- 7. S. Venkatachalapathy and Cheerla Praveen Kumar, "Heat Transfer and Fluid Friction Study of a Circular Tube with Wall Inserts", *The 2011International Conference on Mechatronics and Materials Processing (ICMMP 2011),* Guangzhou University, Guangzhou, China, November 18-20, 2011.
- 8. Kathik K and S. Venkatachalapathy, "Numerical Study of Forced Convection Heat Transfer from Multiple Heat Sources in a Rectangular Duct", *Golden Jubilee National Conference on Modelling and Simulation in Heat Transfer and Fluid Flow*, NIT, Jamshedpur, June 11-12, 2010.
- 9. S. Venkatachalapathy, M. Udayakumar and P.K. Nomesh, "Investigation of Natural Convection Heat Transfer from an Array of Heat Sources in a Rectangular Enclosure", *Proc. of theInternational Conference on Advances in Mechanical Engineering*, S.V. NIT, Surat, August 3-5, 2009.
- 10. S. Venkatachalapathy, M. Udayakumar and P. Dhananjaya, "Experimental Investigation on Cooling of Multiple Heat Sources in a Rectangular Enclosure by Forced Convection", *International Conference on Fascinating Advances in Mechanical Engineering (FAME 2008),* MEPCO, Sivakasi, December 11-13, 2008.
- 11. M. Udayakumar and S.Venkatachalapathy, "Coal Fueled Diesel Engines a Status Report", XVI National Conference on I.C. Engines and Combustion, Jadavpur University, Calcutta, 2000.
- Seeniraj, R.V., Arunachalam, M., Venkatachalapathy, S., Premkumar, S, "Some Heat Transfer Studies in Ceramic Coated I.C. Engine Components and the Performance Test on a Ceramic Coated Diesel Engine", XI National Conference on I.C. Engines and Combustion, IIT Madras, Chennai, December 11 – 15, 1989.

(C) Books & Monographs

Author(s)	Title of Book/Monograph	Name of	Year of	ISSN/ISBN Number
		Publishers	Publication	