1.	Name	:	Dr. Hemantkumar B. Mehta
	Correspondence	:	Associate Professor
	Address		Department of Mechanical Engineering,
			S. V. National Institute of Technology,
			(An Institute of National Importance of Govt. of India),
			Surat-7, Gujarat, India.
2.	Emails	:	hbm@med.svnit.ac.in;
			hemantbmehta@gmail.com;
	Contact Numbers	:	(M): +91-8849931589
			(O): +91-261-2201784
3.	Date of Birth	:	07/01/1977
4.	Gender	:	Male
5.	Research Area	:	Battery Thermal Management System (BTMS), Heat pipe,
			Pulsating Heat Pipe, Loop Heat Pipe, Thermosyphon, flow
			boiling in Microchannel Heat Sink (MCHS), Cryogenics,
			Nanofluids, NE/ME PCM slurry, CFD

6. Academic Qualification (Undergraduate onwards)

Degree	Year	Subject	University/Institution	% of Marks
DE	1009	Mechanical	SVDCET Sumot	69.33%
B.E.	1998	Engineering	SVRCET, Surat	(Distinction)
M.Tech.	2006	Mechanical	SVNIT, Surat	9.33/10 CGPA
IVI. I CCII.	2000	Engineering	Svinii, Sulat	9.55/10 COFA
	2015	Mechanical		Course Work
PhD	2013	Engineering	SVNIT, Surat	9.67/10 CGPA

7. PhD Thesis Title : Experimental Investigations on Air-Water Two-Phase Flow through a Minichannel

M.Tech. Dissertation : Coupled Conduction-Radiation Heat Transfer in Absorbing,
Title Emitting and Scattering Participating Media using Finite Volume and Discrete Ordinates Methods.

8. Professional Experience:

- **1.** Industrial: 02 years and 10 months
- 2. Academic: More than 20 years (Continue)

Nama of			Period						
Name of Employer & Place	Designation of post held	Nature of work	From	То	Years- Months- Days				
INDUSTRIAL EXPERIENCE (02 Years and 10 Months)									
Airon Corporation, Vadodara	Maintenance Incharge	Operation and maintenance	July-19 Febru 199	ary-	00-07-00				
GSFC, Kosamba	G.E.T.	Training of different utilities	to Ma	March-1999 to March- 2000					
Airon Corporation, Vadodara	Maintenance Incharge	Operation and maintenance	April-2000 to July-2001		01-03-00				
TEACHING EXPI	ERIENCE (More than	15 years)							
C. K. Pithawala College of Engg. & Tech., Surat	Adhoc Lecturer	Technical Teaching	August- to June-		01-10-00				
C. K. Pithawala College of Engg. & Tech., Surat	Permanent Lecturer	Technical Teaching	09-07-2 to 04-2 200	10	04-02-25				
S. V. National Institute of Technology, Surat	Assistant Professor	Technical Teaching and Research	05-10-2 27-01-2		11-03-22				
S. V. National Institute of Technology, Surat	Associate Professor	Technical Teaching and Research	28-01	28-01-2019 to					

9. Professional Recognition/ Award/ Prize/ Certificate, Fellowship received by the applicant.

Sr.	Name of award	Awarding agency	Number	Year				
No.								
1.	I am appointed as a <i>fiend supervisor</i> for Ahmad Faudji, Universiti Tenaga Nasio Malaysia for the period of 3 years (2017	onal (UNITEN), The Natio						
2.	Awarded IASTEM <i>Excellent Paper Award</i> for the category Best Presentation/ Best Content at the IASTEM International Conference held in Cape Town, South Africa during 24 th to 25 th December, 2018.							
3.		<u>Graduate Aptitude Test for Engineering</u> (GATE) exam qualified in Mechanical Engineering with 88.72 percentile and obtained All India Rank (AIR) 2740 in 2004.						
4.	Reviewer for the following journals: 1. International Journal of Heat and Mathematical Sector	ass Transfer (IJHMT)						
	2. International Journal of Thermal Sci	ence (IJTS)						
	3. International Journal of Multiphase	Flow (IJMF)						
	4. International journal of Experimenta	d Thermal and Fluid Science	e (ETFS)					
	5. International journal of Sadhana - A	cademy Proceedings in Eng	gineering Sci	ence				
	6. International Journal of Mechanical Science and Technology (JMST)							
	Reviewer for the following Referred International Conferences:							
	1. 44 th National Conference on Fluid Mechanics and Fluid Power (FMFP-2017)							
	2. 6 th International and 43 th National ((FMFP-2016)	Conference on Fluid Mech	anics and Fl	uid Power				
	3. 4 th joint US-European Fluids Er International Conference on Nanoch	6 6	e					
	4. International Conference on Applied	l Energy (ICAE2015)						
	Reviewer for the following Sponsored H	Research Project:						
	1. Two project proposals under Early	Career Research Award sc	heme and E	xtra Mural				
	Research Funding scheme (SERB-D	Research Funding scheme (SERB-DST-2015)						
	Session Chair for International Conference on Mechanical Engineering (ICME2009),							
	London, UK duing 1-3 July, 2009							

Publications (List of papers published in SCI Journals, in year wise descending order).

International Journals: 24

Sr. No.	Author(s)	Title	Name of Journal	Volume	Page	Year
1.	H.B. Mehta, Kalpak R. Sagar, H.B. Naik	Novel condenser based cryogenic pulsating heat Pipe: Investigations on influence of geometrical parameters	Cryogenics	126	103543	2022
2.	H.B. Mehta, Kalpak R. Sagar, H.B. Naik	Experimental investigations on two- turn cryogenic pulsating heat pipe with cylindrical shell-type condenser	Applied Thermal Engineering	196	117240	2021
3.	H.B. Mehta, Kalpak R. Sagar, H.B. Naik,	Numerical study of liquid nitrogen based pulsating heat pipe for cooling superconductors	International Journal of Refrigeration	122	33-46	2021
4.	H. B. Mehta, Nirav Patel	Experimental Investigations on VWc DL-MCHS	International Journal of Heat and Mass Transfer	165	120633	2021
5.	H. B. Mehta, Nirav Patel	Investigations on a Variable Channel Width Double Layered Minichannel Heat Sink using advanced coolants	Journal of Thermal Analysis and Calorimetry	145	3359– 3379	2021
6.	H. B. Mehta, Kalpak Sagar, H.B. Naik	CFD Analysis of Cryogenic Pulsating Heat Pipe with Near Critical Diameter under Varying Gravity Conditions	Theoretical Foundations of Chemical Engineering	54	64-76	2020
7.	H. B. Mehta, Kalpak Sagar, Chirag N Chaudhari	Iinfluence of Direct and Co-Flow Pre-Injection of a Gas Phase on Gas– Liquid Two-Phase Flow through a Vertical Minichannel	Theoretical Foundations of Chemical Engineering	54	116- 131	2020
8.	H.B. Mehta, M. Zufar, and K.C. Ng,	Numerical and experimental investigations of hybrid nanofluids on pulsating heat pipe performance,	IntJ.Heat and Mass Transf	146		2020
9.	H. B. Mehta, Vipul Patel	Channel wise displacement-velocity- frequency analysis in acetone charged multi- turn Closed Loop Pulsating Heat Pipe	Energy Conversion and Management	195	367- 383	2019

10.

10.	H. B. Mehta, Vipul Patel	Experimental Investigations on the Effect of Influencing Parameters on Operating Regime of a Closed Loop Pulsating Heat Pipe	Journal of Enhanced Heat Transfer	36(4)	333- 344	2019
11.	H. B. Mehta, Nirav Patel	Investigations on a Variable Channel Width Double Layered Minichannel Heat Sink	IEEE Transactions on Components, Packaging and Manufacturing Technology	10(9)	2036- 2045	2019
12.	H. B. Mehta, Vipul Patel	Thermal Performance Prediction Models for a Pulsating Heat Pipe using Artificial Neural Network (ANN) and Regression/Correlation Analysis (RCA)	Sadhana	43 (11)		2018
13.	H. B. Mehta and Sagar Kalpak	Experimental Investigations on Heat Transfer Characteristics of Pulsating Single Phase Liquid Flow and Two- Phase Taylor Bubble Flow through a Minichannel	Sadhana	42 (47)		2018
14.	H. B. Mehta, Vipul Patel and Gaurav	Influence of Working Fluids on Startup mechanism and Thermal Performance of a Closed Loop Pulsating Heat Pipe	Applied Thermal Engineering	110	1568- 1577	2017
15.	H. B. Mehta and Sourabh Yadav	Experimental Investigations on Air- Water Two-Phase Flow through a Minichannel U- bend	Experimental Thermal and Fluid Science	78	182- 198	2016
16.	H. B. Mehta Vipul Patel	Artificial Neural Network Modeling of a Closed Loop Pulsating Heat Pipe	International Journal of Mechanical, Aerospace, Industrial, Mechatronic and Manufacturing Engineering	10(10)	1754- 1757	2016
17.	H. B. Mehta Vipul Patel, and J. Banerjee	Prediction of Two-Phase frictional pressure drop using ANN	International Journal of Mechanical, Aerospace, Industrial, Mechatronic and Manufacturing Engineering	10(1)	210- 213	2016

18.	H. B. Mehta and Vipul Patel	Influence of Gravity on the Performance of Closed Loop Pulsating Heat Pipe	International Journal of Mechanical, Aerospace, Industrial, Mechatronic and Manufacturing Engineering	10(1)	219- 223	2016
19.	H. B. Mehta and J. Banerjee	Experimental Investigations on Thermo-Hydrodynamics of Continuous Taylor Bubble Train Flow through Minichannel	International Journal of Heat and Mass Transfer	94	119- 137	2015
20.	H. B. Mehta, Harshal Gamit, Vinayak More, Bade Mukund	Experimental investigations on pulsating heat pipe	Energy Procedia	75	3186 - 3191	2015
21.	H. B. Mehta and J. Banerjee	Influence Of Inlet Premixing On Two-Phase Flow Patterns in Horizontal Minichannel	Heat Transfer Engineering	36(6)	1-11	2014
22.	H. B. Mehta and J. Banerjee	Air-Water Two-Phase Flow in Minichannel: Effect of Flow Orientation	Heat and Mass Transfer	50(10)	1353- 1364	2014
23.	H. B. Mehta and J. Banerjee	Empirical Modelling and Experimental Investigations on Isothermal Air-Water Two-Phase Flow through Circular Minichannel	Journal of Applied Fluid Mechanics (JAFM)	7(2)	227- 237	2014
24.	H. B. Mehta and J. Banerjee	Isothermal Air-Water Two-Phase Flow through Vertical Minichannel	International Journal of Engineering Sciences	2(1)	16-19	2013

International Conferences: 34

Sr. No.	Name of Conference	Month/Year	Venue	Title
1.	Heat and Mass Transfer Conference (IHMTC-2019)	December 28-31, 2019	IIT Roorkee, India	CFD Analysis of Liquid Nitrogen based Cryogenic Pulsating Heat Pipe at Low Gravity Condition
2.	Heat and Mass Transfer Conference (IHMTC-2019)	December 28-31, 2019	IIT Roorkee, India	Investigations on a Variable Channel Width Minichannel Heat Sink using NEPCM Slurry
3.	12 th International Conference on Thermal Engineering: Theory and Applications	February 23-26, 2019,	PDPU, Gandhinagar , India	Relative Significance of an Individual Parameter for Pulsating Heat Pipe Performance
4.	12 th International Conference on Thermal Engineering: Theory and Applications	February 23-26, 2019,	PDPU, Gandhinagar , India	Investigations on Oscillating Motion of Ethanol Charged Pulsating Heat Pipe Using Single Slug- Plug Approach
5.	12 th International Conference on Thermal Engineering: Theory and Applications	February 23-26, 2019,	PDPU, Gandhinagar , India	CFD Analysis of a Liquid Cooled Variable Channel Width Single Layered Minichannel Heat Sink
6.	157 th IASTEM International Conference	(IASTEM2018) December 24-25, 2018	Cape Town, South Africa	Thermal Modelling and Numerical Investigations on a Double Layered Microchannel Heatsink
7.	7 th International and 45 th National Fluid Mechanics and Fluid Power Conference	(FMFP 2018) December 10-12, 2018	IIT Bombay, India	Insight of a Pulsating Heat Pipe at Steady High Heat Flux
8.	19 th International Heat Pipe Conference and 13 th International Heat Pipe Symposium	(Joint IHPC- IHPS 2018) June 10-14, 2018	Pisa (Italy)	Effect of Water-Based CuO nanofluid on Startup Mechanism and Thermal Performance of a Closed Loop Pulsating Heat Pipe
9.	24th National and 2nd International ISHMT-ASTFE Heat and Mass Transfer Conference	(IHMTC-2017) December 27-30, 2017	BITS Pilani, Hyderabad campus, India	Experimental Investigations on the Effect of Influencing Parameters on Operating Regime of Closed Loop Pulsating Heat Pipe

10.	18 th International Conference on Fluid Mechanics and Thermodynamics	(ICFMT2016) October 10-11, 2016	New York, USA	Artificial Neural Network Modeling of a Closed Loop Pulsating Heat Pipe
11.	18 th International Conference on Fluid Mechanics and Thermal Engineering	(ICFMTE2016) January 12-13, 2016	Zurich, Switzerland	Influence of gravity on the performance of the closed loop pulsating heat pipe
12.	18 th International Conference on Experimental Fluid Science	(ICEFS2016) January 12-13, 2016	Paris, France	Prediction of Air-Water Two Phase Frictional Pressure Drop Using Artificial Neural Network
13.	7 th International Conference on Applied Energy	(ICAE2015) March 28-31, 2015	Abu Dhabi, United Arab Emirates	Experimental investigations on pulsating heat pipe
14.	19th Annual cum 4th International Conference Gwalior Academy of Mathematical Sciences (GAMS) on "Advances in Mathematical Modeling to Real World Problems"	October 3-6, 2014	SVNIT, Surat	Pressure Driven Slip Flow between Parallel Plates
15.	5 th International and 41 st National Conference on Fluid Mechanics and Fluid Power	(FMFP2014) December 12-14, 2014	Indian Institute of Technology (IIT), Kanpur	Experimental Investigation on Two- Phase Flow through Minichannel
16.	ASME 2014 12th International Conference on Nanochannels, Microchannels, and Minichannels	(ICNMM2014) August 03–07, 2014	Chicago, Illinois	Experimental Investigation Of Degree Of Premixing On Isothermal Air-Water Two-Phase Flow Through Minichannel
17.	ASME 2014 12th International Conference on Nanochannels, Microchannels, and Minichannels	(ICNMM2014) August 03–07, 2014	Chicago, Illinois	Investigation on Air- Water Two-Phase Flow in Downward Minichannel
18.	ASME 2014 12th International Conference on Nanochannels, Microchannels, and Minichannels	(ICNMM2014) August 03–07, 2014	Chicago, Illinois	Review on Two-Phase Frictional Pressure Drop in Microscale Channels
19.	International Conference on Advances in Engineering and Technology	(ICAET2013) May 15-17, 2013	Lonavala, Pune, India	Isothermal Air-Water Two-Phase Flow through Vertical Minichannel

20.	39th National Conference on Fluid Mechanics and Fluid Power	(NCFMFP2012) December 13-15, 2012	S. V. National Institute of Technology, Surat	Numerical Simulation of Taylor Flow in Inverted Y-Junction Minichannel
21.	ASME 2011 9th International Conference on Nanochannels, Microchannels, and Minichannels	(ICNMM2011) June 19–22, 2011	Edmonton, Alberta, Canada	CFD Analysis on Taylor Slug Flow Through 3D Vertical Mini-Channel
22.	37th National and 4th International conference on Fluid Mechanics and Fluid Power TF-06, ISBN: 978- 81-910571-1-9	(FMFP2010) December 16-18, 2010	Indian Institute of Technology, Madras, Chennai,	CFD Analysis Of The Taylor Slug Flow In A Microchannel Under Microgravity Condition Using VOF Method
23.	37th National and 4th International conference on Fluid Mechanics and Fluid Power TF-06, ISBN: 978- 81-910571-1-9	(FMFP2010) December 16-18, 2010	Indian Institute of Technology, Madras, Chennai,	A Numerical Investigation on Premixed Micro-combustion of CH ₄ -Air Mixture
24	The 11th Asian International Conference on Fluid Machinery and The 3rd Fluid Power Technology Exhibition	November 21-23, 2011	Indian Institute of Technology, Madras, Chennai,	Numerical Simulation Of Taylor Slug Flow In Horizontal Mini-Channel
25.	20 th National and 9 th International ISHMT-ASME Heat and Mass Transfer Conference	4-6 January, 2010	Indian Institute of Technology (IIT), Bombay	Investigation of Bulk Radiation on Natural Convection and Heat Transfer in a Partially Heated Side wall
26.	20 th National and 9 th International ISHMT-ASME Heat and Mass Transfer Conference	4-6 January, 2010	Indian Institute of Technology (IIT), Bombay	Power, efficiency, entropy generation rate and ecological optimization of an irreversible Otto cycle
27.	20 th National and 9 th International ISHMT-ASME Heat and Mass Transfer Conference	4-6 January, 2010	Indian Institute of Technology (IIT), Bombay	Analysis of the Irreversible Reciprocating Heat Engines using Finite Time Thermodynamics
28.	International Conference on Advances in Mechanical Engineering	(ICAME-2009) 3-5 August, 2009	SVNIT, Surat, Gujarat	Effect of Heat Transfer on the Performance of an Air-Standard Diesel Cycle
29.	International Conference on	(ICME-2009) 1-3 July, 2009	IAENG Conferences –	Performance Analysis of an Irreversible Otto Cycle

	Mechanical		WCE 2009,	using Finite Time
	Engineering		London, U. K.	Thermodynamics
	International		London, C. K.	Transient Conduction and
	Conference on	(ICAME-2008)		Radiation Heat Transfer
30.	Advances in	(ICAME-2008) 15-17	SVNIT,	Analysis in Participating
50.	Mechanical	December, 2008	Surat, Gujarat	Media using Discrete
	Engineering	December, 2000		Ordinates Method
	International		G.S.Raisoni	Investigation of Boundary
	Conference on		College of	Conditions on the
31.	Emerging Trends in	(ICETET-2008)	Engineering and	Conduction Radiation
51.	Engineering &	16-18 July, 2008	Technology,	Heat Transfer Analysis in
	Technology		Nagpur, M.S.	Participating Media
	IISc Centenary		1 ugpu1, 11.0.	Numerical Simulation of
	International		Indian Institute	Conduction-Radiation
	Conference on	(IC-ICAME-	of Science	Heat Transfer
32.	Advances in	2008)	(IISc),	Analysis in Participating
	Mechanical	2-4 July, 2008	Bangalore	Media with Linearly
	Engineering		Dunguloie	Heated Walls
				Effect of Temperature
				Dependant Thermal
	International		National	Conductivity on 2-D
	Conference on	(INCAST) 26-28 June, 2008	Aerospace Laboratories	Transient Coupled
33.	Aerospace Science			Conduction-Radiation
	and Technology		(CSIR),	Heat Transfer
	and reennoisegy		Bangalore	using Non-uniform
				Heating
	International			0
	Conference on			
	Emerging	(ICETAETS-		Coupled Conduction-
	Technologies and	2008)	Saurastra	Radiation Heat Transfer
34.	Applications in	13-14 January,	University,	Analysis in Participating
	Engineering,	2008	Rajkot, Gujarat	Media using Discrete
	Technology and			Ordinates Method
	Science			
L	Serence	1		1

National Conferences: 15

Sr. No.	Name of Conference	Month/Year	Venue	Title
1.	Advances in Mechanical Engineering (AIME-2004)	23 rd and 24 th April 2004	JDIET, Yavatmal, Maharashtra	Development of Software for the Thermal Analysis of Aqua-ammonia Absorption Refrigeration System
2.	Recent Trends in Mechanical Engineering (RTIME-2004)	23 rd and 24 th July 2004	SRESCOE, Kopargaon	Software to Carry out Parametric Study of the Aqua-ammonia Absorption Refrigeration System
3.	Recent Trends in Mechanical Engineering (RTIME-2004)	23 rd and 24 th July 2004	SRESCOE, Kopargaon	Comparison of Methods for Predictions of Shell side Heat Transfer Co- efficient of Shell and Tube Heat Exchanger
4.	Recent Trends in Mechanical Engineering (RTIME-2004)	23 rd and 24 th July 2004	SRESCOE, Kopargaon	Design of Stiffener Plate for Radial Nozzle on Hemispherical Head of Pressure Vessel Using FEM
5.	Recent Trends in Mechanical Engineering (RTME-2006)	17 th and 18 th November 2006	SJCE, Mysore	Comparative Parametric Study of Horizontal and Tilted Evacuated Tubular Solar Collector
6.	Recent Trends in Mechanical Engineering (RTME-2006)	17 th and 18 th November 2006	SJCE, Mysore	Development of Software for the Thermal Analysis of Single Effect LiBr ₂ - H ₂ O Vapour Absorption Refrigeration System
7.	Indian Institute of Chemical Engineers (CHEMCON-2006)	27-30 December 2006	Ankleshwar, GNFC, Gujarat	Analysis of Coupled Conductive-Radiative Heat Transfer in Presence of plane parallel Participating Media
8.	Emerging Trends in Mechanical Engineering (ETME-2007)		S. V. National Institute of Technology (SVNIT), Surat, Gujarat.	Computer aided design of solar chimney to generate electricity employing a convergent nozzle
9.	Emerging Trends in Mechanical Engineering (ETME-2007)		S. V. National Institute of Technology (SVNIT), Surat, Gujarat.	Discrete ordinates solution of radiative transport equation in absorbing, emitting, and scattering participating media
10.	National Conference on Thermal Fluid Science and Tribology Applications (TFSTA- 2016)	27-28 May, 2016	S. V. National Institute of Technology (SVNIT), Surat, Gujarat.	Optimization of Liquid Cooled Minichannel Heat Sink

11.	National Conference on	27-28 May,	S. V. National	Start-up Mechanism of
	Thermal Fluid Science	2016	Institute of	Pulsating Heat Pipe
	and Tribology		Technology	
	Applications (TFSTA-		(SVNIT), Surat,	
	2016)		Gujarat.	
12.	National Conference on	27-28 May,	S. V. National	Influence of Imposed
	Thermal Fluid Science	2016	Institute of	pulsation on Axial Back
	and Tribology		Technology	Conduction for Laminar
	Applications (TFSTA-		(SVNIT), Surat,	Flow through a circular
	2016)		Gujarat.	Minichannel
13.	National Conference on	27-28 May,	S. V. National	CFD Analysis of 2D
	Thermal Fluid Science	2016	Institute of	Blade Profile of an Axial
	and Tribology		Technology	Flow Compressor using
	Applications (TFSTA-		(SVNIT), Surat,	Axstream Software
	2016)		Gujarat.	
14.	National Conference on	27-28 May,	S. V. National	Experimental
	Thermal Fluid Science	2016	Institute of	Investigations on Start-up
	and Tribology		Technology	behavior of CLPHP
1	Applications (TFSTA-		(SVNIT), Surat,	
	2016)		Gujarat.	
15.	National Conference on	December	IIT(BHU),	A Review on Dry out
1	"Critical Heat Flux and	22-23, 2018	Varanasi, India	Mechanism of Pulsating
	Multiphase Flow"			Heat Pipe

Detail of Design Patent Registrations: : **1.** Stacked Minichannel Heat Sink (303545 dated 14/03/2018). (Registered) 2. Hybrid Minichannel Heat Sink (332649-001 dated 02/09/2020) (Registered) 3. Stepped Variable Channel Width Minichannel Heat Sink (332650-001 dated 02/09/2020) (Registered) 4. Batter Stack Cooling System for Electric Vehicles (341247-001 dated 23/03/2021) (Registered) 5. Unmanned Cargo Aircraft (344532-001 dated 11/06/2021) (Registered) 6. Cryogenic Pulsating Heat Pipe with Cylindrical Shell type condenser (343124-001 dated 06/05/2021) (Registered) **Utility Patents: Filed** 1. Cryogenic Pulsating Heat Pipe (FER Reply Submitted) 2. Novel Stacked Minichannel Heat Sink (FER reply submitted) : **Details of Sponsored Research Projects** 1. The research being carried out on *Closed Loop Pulsating* Heat Pipe is sponsored under Institute Research Grants,

Completed)

11.

12.

2. A research project titled *Investigations on a novel stacked microchannel heat sink using efficient coolants* from Science and Engineering Research Board (SERB), Department of Science and Technology (DST), India has been approved for funding of Rs. 24,47,500/- for the duration of three years. (Approval Letter bearing No. EMR/2017/000429 dated 07/08/2017). (2017-2020 Completed)

SVNIT, Surat vide office order no. Dean(R&C)/1503/2013-14. The research project amount is **Rs. 10 Lakh**. (2014-2017-

 A research project titled Loop Heat Pipe based Novel Battery Thermal Management System for Hybrid/Electric Vehicles from Science and Engineering Research Board (SERB), Department of Science and Technology (DST), 06

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India has been approved for funding of **Rs. 36,44,696/-** for the duration of two years. (Approval Letter bearing No. FILE NO.CRG/2021/008103). (2021-2023 Ongoing)

Books/Reports/Chapters etc.

- Editor of the "Proceedings of the First National Conference on Thermal Fluid Science and Tribology Applications (TFSTA-2016)" S.V. National Institute of Technology, Surat, May 27-28, 2016 (ISBN: 978-93-5265-440-6).
- Book of abstracts for 39th National Conference on "Fluid Mechanics and Fluid Power (FMFP-2012)", S.V. National Institute of Technology, Surat, 13-15 December 2012.
- National Conference on Advances in Mechanical Engineering (Virtual Event under Diamond Jubilee Celebration 1961-2021), 27th– 28th May, 2021, SVNIT, Surat. ISBN: 978-93-5473-914-9, Copyright©NCAME2021, MED, SVNIT, Surat
- 4. Recent Advances in Thermal Sciences and Engineering -Select Proceedings of International Conference on Advances in Fluid Flow and Thermal Science (ICAFFTS 2021), <u>Lecture Notes in Mechanical Engineering</u> (LNME) Springer Nature Singapore Pte Ltd. (Manuscript ID: 89175434) (Status: Under Review), ISSN2195-4356

13. Country visited (Outside World Interaction)

USA (New York, Washington DC, Buffalo, Chicago), UK (London), Canada (Edmonton), France (Paris), Switzerland (Zurich), Italy, South Africa (Johannesburg, Cape Town)

14. Testing and Consulting Work

 Testing of 50 mm diameter B-class (Medium) GI pipe (Make: Jindal Steel) for re-carpeting/strengthening and extension of runway 22/04 at Surat Airport Project, Airport Authority of India. The testing amount was Rs. 22,900/-. (Completed) :

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- Consultancy services for the study of heat exchangers at ESSAR Steel, Hazira, Surat. The consultancy charges are Rs. 2,87,500/- (Completed)
- **3. CFD** analysis of Aircraft-Ajinkya Vadodara, RS. 3,54,000/- (Ongoing)

15. Any other Information

- 1. Ph.D. Guided: 03 and 03 (on-going)
- 2. *M.Tech. Guided:* 45 (completed) + 03 (on-going)
- 3. Conference, Workshop and STTP organized/attended: 05/15
- 4. *Expert Lectures Delivered:* more than 30
- 5. Involved in various administrative duties such as warden and chief hostel warden for six years and member secretary of council of wardens for 06 years. Presently acts as lab in charges for Advanced Fluid Dynamics and Turbomachinery labs.
- **6.** Departmental coordinators for consultancy, testing, research projects and patents. (2014-2017)
- **7.** Departmental coordinator for expert and visiting lectures to be organized. (2014-2017)
- 8. Departmental Examination Coordinator (2017-2019).
- 9. PG In charge for Thermal Systems Design in MED (2019-2021).
- **10.** Head RTI Cell as CPIO (2019-2022)
- 11. Professor In-Charge Institute Security System (2019-2022)
- 12. Associate Dean (R&C) (2021 onwards)



Dr. Hemantkumar B. Mehta