CURRICULUM VITAE





Part I: PERSONAL INFORMATION

Name	Dr. Siddappa Sharanappa Bhusnoor
Date of Birth	June 1, 1972
Language Known	English, Hindi, Kannada, Marathi
Present Post	Professor, Department of Mechanical Engineering
	K. J. Somaiya College of Engineering, Mumbai- 400 077
Address for	Dr. Siddappa S Bhusnoor
Correspondence	B/11, Mangal Deep Co-operative Housing Society,
	P & T Colony, Gandhinagar, Dombivili- East,
	District Thane, Mumbai, Pin: 421201
	Phone: 9920534514; Email:sbhusnoor@gmail.com; sbhusnoor@yahoo.com

Academic Record starting with graduation

Degree	University/Board /Institute	Year of Passing	% of marks /CGPA
B.E.	Gulbarga University, Karnataka, India, (P.D.A.	Aug,	76.46
(Mechanical)	College of Engineering, Gulbarga)	1995	
M.Tech. (Energy Studies)	Indian Institute of Technology Delhi, Hauz Khas, New Delhi		8.684
Ph. D.	Indian Institute of Technology Bombay, Powai,	Feb,	(8.25)
	Mumbai	2016	Awarded

Thesis Details

Ph. D.	Modelling and Experimental Studies for Particle Transport by Thermophoresis. (IIT Bombay)
	Production and Utilization of Biodiesel (Linseed Oil Methyl Ester) in a Compression Ignition Engines. (IIT Delhi)

Professional Experience

Employer	Position held	From	То
	Professor (CONCOL/ICC/04 of 2012 and	July 2016	Till date
	CONCOL/09/2015-16, December 14, 2015)		
	Professor and Head of the Department	July 2016	Aug 12,
	(CONCOL / ICC/04 of 2012 and		2018
K. J. Somaiya College of	CONCOL/09/2015-16, December 14, 2015)		
Engineering, Vidyanagar,	Associate Professor and Head of the	July 2015	July 2016
Vidyavihar- East, Mumbai	Department		
- 400077.	Associate Professor (VI th Pay)	Aug 2008	July 2016
	(CONCOL/SA/730/2011)		
	Senior Lecturer	June 2006	Aug 2008
	Lecturer	Feb 1999	June 2006
	(CONCOL/SA/6600/2001)		
S.S.Jondhale College of	Lecturer	June 1997	Feb 1999
Engineering Dombivili -			
East, Mumbai - 421201			
Rajaram Shindhe College	Lecturer	Nov 1995	June 1997
of Engineering, Pedambe,			
Chiplune (MH)			

(Total Experience in Teaching: ~26 years 7 Months, from November 1995 - till date)

PG and PhD Guide ship Approval's

Sr.	Name of the university	Date of recognition as	Date of recognition as Ph.D.
No	Name of the university	M.Tech., Research Guide	Research Guide
1.	Mumbai University ,	PG/I.C.D/2014-15/670, Dtd:	PG/2/I.C.D/2016-17/20621,
	Maharashtra, India	June 25, 2014	Dtd: March 31, 2017
2.	Somaiya Vidyavihar		GA/Mech/03, Dtd:
	University, Maharashtra, India		

PhD Thesis Guided

Sr. No	Name of Student	Proposed Title of Research work	Year of Admitted	Status of Thesis
1.	Yogita Umesh Yerne	Modelling and Experimental studies of Heat Pipe Heat Exchanger for Recovery of Heat Energy from Engine Exhaust.	July 2016	PhD Degree Awarded on September 17, 2021
2.	Bronin Cyriac	Experimental and Modelling studies for Heat Transfer Enhancement of Air Heater using Flow Obstructions	February 2019	PhD Degree Awarded on April 26, 2024

3.	Akash Bidwaik	NumericalandExperientialInvestigationsonThermalandHydraulicPerformanceofMicrochannnelHeatExchanger	April 2021	Under Progress, in SVU
4.	Akshay P Save	Thermal and Fluids Engineering	February 2022	Under Progress, in SVU
5.	Mr. Iqbal Muzawar	Tentative topic on "Modelling and experimental studies on Optimization of heat exchanger maintenance to improve the performance using digital twin technology"	July 2023	Under Progress, in SVU
6.	Mr. Yunus Dalal	Tentative topic on "Modelling and experimental studies on performance analysis of an Optimized Air filter for control Air Pollution"	July 2023	Under Progress, in SVU
7.	Mrs. Madhavi Pawar	Tentative topic on "Design, Implementation and Analysis of water robots for all different types of water bodies"	July 2023	Under Progress, in SVU

Sponsored Projects Completed

Category	Project title	Funding Agency	Budget (Rs)
Project Completed	Design and Development of Air Cooled Heat	University of	25,000/-
	Exchanger	Mumbai , 2013-14	
Project Completed	Experimental Studies for Control of	Mumbai University,	30,000/-
	Nanoparticle from engine exhaust using	2016-17	
	Alternative Fuels		
Project Completed	Experimental Studies on Recovery of Heat	Mumbai University,	50,000/-
	Energy from Engine Exhaust gas using Heat	2018-19	
	Pipe Heat Exchanger		
Project Completed	Performance Analysis of Vapor Absorption	Mumbai University,	50,000/-
	Refrigeration System using Engine Exhaust as a	2018-19	
	Hot Fluid for Regenerator		

Sponsored Project under Process

Catego	ory	Project title	Funding Agency	Budget (Rs)
Project Process	under	Development of Polymer electrolyte membrane (PEM) electrolyzer for green hydrogen production		500000/-
Project Process	Under	Design and development of Microchannel Heat Exchanger to use in battery thermal management system of an Electric Vehicle	University, Mumbai -	300000/-

Project Submitted to Funding Agencies

Category	Project title	Funding Agency	Budget (Rs)
Project submitted	Experimental Studies for Control of	Rajiv Gandhi Science	9,80,000/-
	Oxides of Nitrogen and Particulate Matter	and Technlogy	
	from Engine Exhaust	Commission	
Project submitted	Design, Development and Analysis of	Rajiv Gandhi Science	8, 50,000/-
	Heat Pipe Heat Exchanger	and Technlogy	
	(Thermosyphon) for Recovery of Heat	Commission	
	Energy at Simulated		
	Engine Exhaust Conditions		
Project submitted	Control of Fine Particles from Engine	UGC, New Delhi	~4,60,000/-
	Exhaust using Particle Transport		
	Mechanism		
Project submitted	"Biomass gasification Integrated Catalytic	Mission Innovation	
	co-pyrolysis of natural rubber and rice	(MI), collaborative	
	stubble into liquid fuels".	with MI Countries	

Research Consultancy Projects completed:

- 1. Design and development of Microchannnel heat exchanger as a cooler
- 2. Design and development of Hydraulic valves (Check valve, flow control valve, pressure relief valve)
- 3. Energy and Environment Audit and green Audit

Energy Audit and Conservation:

The power crisis in India has made headlines in the recent past. Out of the several reasons for this deficit in power can be attributed to the fact that we have not been able to strike a balance in our demand and supply. It is important here to note that we cannot go on producing more energy as our demands go on increasing because of the limitations on the natural resources. A better way of making more energy available would be to use it efficiently; in other words using less energy to perform the same tasks or by identifying different ways in which energy can be saved. Energy audit is a methodology which helps in identifying such energy-saving opportunities.

Details UG/PG and PhD Projects Guided

No of students pursuing Ph.D as on date: 3	No of students completed Ph.D as on date: TWO
No of students pursuing PG thesis work as on date: 01 (one)	No of students completed PG thesis work as on date: : 12 (Twelve)
No of students / groups pursuing UG projects as on date: : 04 as a guide and 3 as a co-guide	No of students / groups completed UG projects as on date: More than 25 (more than Twenty Five)

Area of specialization/domain area of research:

Research Specialization: Energy Studies, Thermal and Fluids Engineering, Heat and Mass Transfer, Energy Conservation and Audit; Air Pollution Control Techniques; Waste Management and Audit **Specialization/Core area:** I C Engines, Alternative fuels, Heat exchanger design, Modeling of Thermal Systems, Industrial Applications of Heat and Mass Transfer concepts. HVAC, Energy Conservation and Management, Generation and Characterization of Nano Particles, Design and Development of Renewable energy Systems (Solar, and Wind), Design and Development of Industrial Air Pollution Measuring and Control Devices.

Publications	Peer review Journal	Conference	International
<u>Total: 43</u>	papers: 16	papers: 5	publications: 22

Administrative positions held at K. J. Somaiya College of Engineering

Sr. No	Position held	From	То
1.	Member, Board of Studies,, For M.Tech., Programme in "	May 6, 2024	Till date
	Thermal and Fluids Engineering", DBATU Lonere		
2.	Convener, Sustainable Development Goal Cell , KJSCE	Jan 1, 2024	Till Now
3.	Member, Board of Studies, Mechanical Engineering,	2017	September
	University of Mumbai		2023
4.	Head, Mechanical Engineering Department	Jul, 2015	Aug 12, 2018
5.	Member, Subject board of Mechanical Engineering of KJSCE	July 2015	Aug 12, 2018
6.	Member, Board of Management, KJSCE	April 2018	May, 2018
7.	Member, Administrative Committee, KJSCE	May 2018	Till date
8.	Member, College Development Committee, KJSCE	May 2018	Till date
9.	Senior Teacher, Subject board of Mechanical Engineering of	June 2014	July 2015
	KJSCE		-
10.	Member Academic Board , KJSCE	April 2018	May, 2018
11.	Thermal and Fluids area coordinator of the Department	Jan, 2013	Jul, 2015
		Aug 2018	Till date
12.	Faculty Advisor for BAHA Red shift racing team	Jan, 2009	Till date
13.	Automobile Laboratory in charge	Feb, 2008	Till date
14.	Additional Faculty Advisor for SAE Collegiate club-	Jan, 2007	2021

	KJSCE		
15.	Internal Combustion Engine Laboratory in charge	Feb, 1999	Till date
16.	Ph. D research Centre Coordinator	Aug , 2018	April 2021
17.	PhD Coordinator of the Institute (KJSCE)	April 2021	Till Date

PART II: EXPERIENCE

<u>Teaching (Total Experience in Teaching: ~28 years 8 Months, from</u> November 1995 - till date)

Programme	Course Taught	Semester	Number of Times
B.Tech. Core Courses	Applied Thermodynamics	III	5
	Heat and Mass transfer	V	5
	Internal Combustion Engines	V/VI	16
	Automobile Engineering	VIII	6
	Refrigeration and Air Conditioning	VII/ VIII	4
	Engineering Mechanics	I and II	07
	Energy Conversion -1	V and VI	5
	Energy Conversion -II	V and VI	4
	Introduction to Environmental Pollution	V/VI	3
B.Tech. Elective	Automobile System -I	VII	6
	Automobile System - II	VIII	6
B.Tech. Laboratory	Heat and Mass Transfer	V	5
	Internal Combustion Engines	V/VI	20
	Automobile Systems	VII/VIII	8
	Refrigeration and Air Conditioning	VII/ VIII	4
M.Tech. Core Courses	Advanced Thermodynamics and Heat Transfer	Ι	4
	Foundation of Energy Engineering	I	4
	Energy Engineering for Mechanical and	Ī	6
	Electrical Systems		
M.Tech. Electives	Heat Exchanger Design	II	6
M.Tech. Laboratory	Renewable Energy laboratory	Ι	3
Ph D	Research Methodology	II	3
	Design if Heat Exchanger	Ι	4
	Computation Fluid Dynamics'	Ι	1

Project Guidance

M.Tech. Guided 12 (Completed List as shown below)

Sr. No	Title of Project	Name of Student	Project Year
1.	Experimental and modeling studies for control of nano	Siddhesh Tirodkar	2014-15
	particles under both developing and developed velocity and		
	temperature in a tube using alternative fuels.		

-			
2.	Influence of engine operating parameters on performance and	Rajesh Chauhan	2014-15
	emission characteristic s of compressed ignition engine		
	fuelled with diesel and diesel-biodiesel blend.		
3.	Experimental studies on transport of heat and mass transfer on	Pratik Priya Singh	2015-17
	convective drying of food materials.	T Tatik T Hya Shigh	
4.	Thermal analysis and experimental studies of heat pipe heat	Prasad Shivram	2015-17
	exchanger for transport and control of high heat rates.	Shinde	
5.	Experimental studies and modeling for control of NOR	Siddesh	2015-17
	Experimental studies and modeling for control of NOx	Chandrasen	
	emissions from B-6 engine	Karanje	
6.	Modeling and analysis of thermo denuder to control vapour		2015-17
	emission from engine exhaust.	Garvajit Singh	
7.	Experimental and Modeling studies for Heat transfer analysis	Sarang Uday	2015-17
	of a compact heat exchanger	Chavan	
8.	Optimization of a method for improving the performance of a	Shivani Borthakur	2016-18
	Solar Panel.		
9.	Experimental and Theoretical Studies on Drying of Food	Kalyani S.Tayde	2016-18
	Stuff Material Using Solar Evacuated Tube		
10.	Performance analysis of solar assisted vapour absorption	Rohan Raut	2016-18
	refrigeration system using Flat Plate Collector.		
11.	Experimental Studies on Evaluation of Performance	Rajat Patle	2016-18
	parameter of Heat Pipe Heat Exchanger for Recovery of Heat		
	from Engine Exhaust		
12.	Experimental Studies on Heat Recovery from Engine Exhaust	Viraj M. Dabhade	2017-19
	using Finned-Tube Heat Exchanger		
13.	Theoretical Design, Development and Experimental Analysis	Akshay P Save	2019-21
	of Diffusion Battery for Air Pollution Measurement and		
	Control"		

M.Tech.: Mini projects guided

Sr. no	Title of mini project	Name of student	Project year
1905101	Analysis of COP of vapour absorption refrigeration	Chandan J.	2020
	system running on engine exhaust gas	Hatkar	
1905102	Measurement and analysis of Air Pollution level in	Akshay P.	2020
	"Somaiya Vidyavihar Campus " and suggesting	Save	
	Remedies for control or Improvement of air quality		
1905103	Thermal structure cooling system by ansys	Yudhishthir	2020
		Shukla	

B.Tech. Partial List (8 out of total 35)

Sr. No	Title of Project	Name of Student	Year
1.	Experimental and Modelling Studies for Control of	1. Nevil Mehta,	17-18

	Nano-Particles from Diesel engine exhaust in a developing flow	2.	Ashish Suryawanshi	
2.	Influence Of EGR On Improvement Of Engine Emissions Fuelled By Diesel- Biodiesel Blends	1. 2.	Chintan Leuva, Krutika Chinchpure	17-18
3.	Control Of Vapour Emission From Engine Exhaust Using A Thermodenuder	1. 2.	Nikita Sankhe Mahendra Parmar	17-18
4.	Design & analysis of air cooled heat exchanger for improvement in engine performance & emissions	1. 2. 3.	Advait V. Gokhale Amit A. Lonkar Aniruddha J. Badbade	2013-14
5.	Study of fine particle size distribution from compression ignition engine exhaust at various operating conditions.	1. 2.	Nilkanth Kohali Shakti Kothari	2013-14
6.	Effect of hydrogen on performance characteristics of an internal combustion engine	1. 2.	Pratik Panchal Mihir Lakhani	2011-12
7.	Effect of diesel biodiesel blends on C.I.Engine performance & Emissions at different engine operating conditions.	1. 2.	Ganesh Ronadmath Harsh Modi	2010-11
8.	Influence of exhaust gas recirculation (EGR)on performance and emission of C.I.Engine with diesel & bio diesel as fuel	1. 2.	Dhruv Gami Jayesh Patel	2010-11

Student Internship completed (Totally 15 students are completed)

Sr. No	Name of the	Title of the Internship	Duration	Nature of	
SI. NO		The of the internship	Duration		
	student/Year			work/Laboratory	
1.	Nevil Mehta	Experimental Study of Heat	June 1-July 10, 2017	Experimental	
	(L.Y.B.Tech.)	Exchanger		/ICE	
2.	Shreyas Kotian	Theoretical analysis of shell	October 15-	Experimental,	
	(T.Y. B.Tech.)	and tube heat exchanger	December 15, 2019	Theoretical/HMT	
		0		and ICE	
3.	Nishant Jain	Theoretical analysis of shell	October 15-	Experimental,	
	(T.Y. B.Tech.)	and tube heat exchanger	December 15,	Theoretical/HMT	
		C	2019	and ICE	
4.	Pritish Naik	Validation of Performance	October 15-	Experimental,	
	(T.Y. B.Tech.)	Parameters of Shell and	December 15,	CFD/HMT and	
		tube heat Exchanger Using	2019	ICE	
		CFD			
5.	Nachiket	Validation of Performance	October 15-	Experimental,	
	Methekar	Parameters of Shell and	December 15,	CFD/HMT and	
	(T.Y. B.Tech.)	tube heat Exchanger Using	2019	ICE	
	` '	CFD			

Sr. No	Title of ProjectName of institute		Project Year
1.	Numerical and experimental analysis of industrial water filter,	COEP, Pune	July, 2016
2.	Optimization of insulation thickness of thermal storage vessel	COEP, Pune	July, 2016
3.	Experimental Investigation and performance analysis of solar steam generation system for rice cooking	SPCOE, Andheri, Mumbai	August, 2016
4.	Emissions and efficiency improvements in two stroke GDI engine by varying fuel injection parameters	COE, Pune	July 2017
5.	Prediction of Final Temperature Rise at the Beginning of Temperature Rise Test Using Time Constant and CFD	VJTI, Mumbai	July 2019
6.	Acoustical Analysis of Pressurized Heavy Water Reactor Coolant Channel Assembly	VJTI, Mumbai	July 2019
7.	Numerical and Experimental Analysis of Flow over Multiple Cylinders	VJTI, Mumbai	July 2019

M.Tech. Projects Evaluated from outside Institute

Teaching Laboratory Development

- 1. Development of Internal Combustion Engine Laboratory, which includes Various types of engines (Two stroke and Four stroke, SI and CI) coupled with different dynamometers and measuring instruments for performance Ice
- Development of Automobile system laboratory, which includes various subsystems of automotive vehicle, such as steering, suspension, vehicle lifting machine and braking system etc... Heat Exchangers, , Convection Coefficient analysis, Fins and Heat Transfer by Radiation Phenomena
- 3. Development of Heat and mass transfer laboratory, which includes basic experimental setups covering conduction, convection and Radiation Phenomena along with heat exchangers

Research Laboratory Development

- 1. Design and development of biodiesel reactor and its characterization
- 2. Design and development of Nano particle generation and charecterisasation system
- 3. Design and development of Engine exhaust fine particle measurement and control system
- 4. Design and Development of Engine performance and emission analysis system fuelled by diesel and alternative fuels
- 5. Design and development of EGR system for improved emissions

- 6. Design and Development of EGR cooler for cooling exhaust gas
- 7. Design and Development of Finned tube Heat Exchanger for Heat recovery from engine exhaust
- 8. Design and Development of Heat Pipe Heat Exchanger for Heat recovery from engine exhaust
- 9. Design and Development of Vapor Absorption Refrigeration system running on engine exhaust using Shell and tube and Heat pipe heat exchanger as Generator

Publications

Sr. No	Published in	Number of Publications	
1.	Book:	01	
2.	Refereed journals:	17	
3.	International conferences:	26	
4.	National conferences:	5	
5.	Refereed journals (under process)	3	

Refereed Journals

- 1. Bhusnoor, S.S., Babu, M.K.G and Subrahmanyam, J.P., (2006) "Optimization of Transesterification Process for Biodiesel Production from Linseed Oil", *SAE*, 2006-28-0046
- 2. Bhusnoor, S.S., Babu, M.K.G and Subrahmanyam, J.P., (2007), "Studies on Performance and Exhaust Emissions of a CI Engine operating on Diesel and Diesel Biodiesel blends at different Injection Pressures and Injection Timings", *SAE*, 2007-01-0613
- Bhusnoor, S.S., Babu, M.K.G and Subrahmanyam, J.P., (2008), "Characterization and Lubricity Testing (SRV Wear Tester) of Diesel and Diesel Biodiesel (LOME) Blends", SAE, 2008-28-0042
- 4. Siddhesh Tirodkar, Bhusnoor, S. S., (2016), "Application of CFD analysis in fully developed velocity and temperature flow field through pipe", *International Journal on Global Technology Initiative (IJGTI)*, Volume 5, Issue 1, March 2016
- 5. Bhusnoor, S. S., Bhandarkar, U. V., Sethi, V., and Parikh, P. P., (2017), "Experimental studies and modeling of thermophoretic deposition of diesel engine exhaust in pipe flow", *Journal of Aerosol Science*, Vol.105, pp. 84–93
- 6. Yogita U Yerne, and Siddappa S. Bhusnoor. (2019) "Theoretical thermal analysis of heat recovery by two phase closed thermosyphon from engine exhaust", Heat and Mass Transfer, Springer, 2019, 1-11.
- 7. Bhusnoor, S. S., Nikam S. R., Saraf A.S. (2020) "Impact of Alternative Fuels on Socio Economic Concern: Experiments, Experiences and Inferences" Journal of Engineering Ediucation Transformations, Volume 33, Special Issue, ICTIEE 2020, January 2020

- 8. S. R. Nikam^{*}, S. S. Bhusnoor, V. B. Bhosle, A. S. Saraf (2020) "Impact of Experiential Learning on Performance of Students and Attainment of Course and Program Outcome" Journal of Engineering Ediucation Transformations, Volume 33, Special Issue, ICTIEE 2020, January 2020
- 9. Yogita U Yerne, and Siddappa S. Bhusnoor. (2021) "Performance Analysis of Wickless Heat Pipe Heat Exchanger using Water based Copper Nanofluid", Grenze International Journal of Engineering and Technology, Jan 2021 Issue, pp. 125-132
- Sumedh Soman , and Siddappa S. Bhusnoor. (2021) "Studies on Performance and Emission Characteristics of Compression Ignition Engine using MATLAB® and Simulink® Simulation", Grenze International Journal of Engineering and Technology, Jan 2021 Issue, pp. 133-140
- 11. Akshay P. Save, Siddappa S. Bhusnoor, (2021), "Theoretical Analysis and optimization of Thermophoretic and Diffusion Deposition Model in turbulent and Laminar Pipe Flow for Air Pollution Measurement and Control of Diesel Engine Exhaust", International Research Journal of Engineering and Technology (IRJET)- June 2021, Vol-8, Issue-6, pp. 2862-2870.
- 12. Nachiket Methekar, Shreyas Kotian, Nishant Jain, Pranit Vartak, Pritish Naik, Shailesh Nikam, and Siddappa Bhusnoor., (2022), "Numerical Investigation of Thermo-hydraulic Characteristics of a Gasketed Plate Heat Exchanger", *Computational Thermal Sciences*, 14(1):61–102; by Begell House, Inc.
- Cyriac, B., Bhusnoor, S.S. (2023). Performance Optimization of an Air Heater with Delta Flow Obstructions: A Taguchi Approach. In: Vasudevan, H., Kottur, V.K.N., Raina, A.A. (eds) Proceedings of International Conference on Intelligent Manufacturing and Automation. March 2023 Lecture Notes in Mechanical Engineering. Springer, Singapore. <u>https://doi.org/10.1007/978-981-19-7971-2_61</u>
- Bronin Cyriac, Siddappa S. Bhusnoor, "Numerical investigation of heat transfer performance of an air heater with delta flow obstruction", Materials Today: Proceedings, Volume 72, Part 3, 2023, Pages 1246-1252, ISSN 2214-7853, DOI: 10.1016/j.matpr.2022.09.295.
- 15. Cyriac Bronin and S. S. Bhusnoor, "Thermal and Hydraulic characteristics of an Air Heater with Modified Delta Flow Obstructions," e-Prime-Advances in Electrical Engineering, Electronics and Energy. 2023 Mar 22:100147, <u>10.1007/978-981-19-7971-2_61</u>.
- 16. M. S. Bhusnoor, S. Nandurkar, V. Gurunathan, J. Mehta, S. R. Nikam, I. Siddavatam, and S. S. Bhusnoor, "Assessment of Performance and Emission Characteristics of Compression Ignition Engine Using Diesel and Diesel Biodiesel Blends: Experimental and Simulation Studies with Data Analysis Techniques" Journal of Environmental Informatics Letters, Volume 10, Part 1, 2023, Pages 40-52
- Cyriac, B., Bhusnoor, S. S., 2024. Numerical Studies on the Effect of Different Obstruction Geometries on Performance of Rectangular Channel Air Heaters. Journal of Heat and Mass Transfer Research, 11(1), pp. 1402-1425, <u>https://doi.org/10.22075/JHMTR.2023.39315.2050</u>

International Conferences

1. Bhusnoor, S.S, Kasookar, I.S., Pandey, A.A. and Pradhan, B.M., (2012), "Influence of Diesel – Biodiesel blends on Engine Performance and Emissions", International Conference on Recent Advances in Engineering Technology and Management, SPICON, 2012, May 31-June 2, 2012

- 2. Vasudeva, M., Bhusnoor, S. S., Bhandarkar, U.V., and Sethi, V., (2012), "Hot gas clean up studies in small scale low temperature down draft gasifier", 5th International Freiberg Conference on IGCC and XtL Technologies, May 21-24, 2012.
- 3. Bhusnoor S. S., Pradhan B.M., Ajitendra Sharma, Abbas Udaypurwala and Deep Bunker, (2013), "Study on performance and emission characteristics of a Compression ignition engine fuelled with diesel and Diesel Ethyl Acetate blends operating at different loads", International conference on Advances and Innovations in Mechanical engineering (AIME 2013), SPSU Udaipur, India, October 5-6, 2013,
- 4. Bhusnoor, S. S., Bhandarkar, U.V., and Sethi, V., (2013) "Study of Thermophoretic Deposition of Engine Emissions in a Pipe flow", 24th International Symposium on Transport Phenomena, Tokyo University of Science, November 1-5, 2013, Japan.
- 5. Pratik Priya, S.S.Bhusnoor, (2017) "Study on Influence of Sample Thickness and Thermophysical Properties on Convective drying of Vegetables", International Conference on emanations in modern technologies and engineering (ICEMTE,2017), Volume 5,Issue3,March 2017,India
- 6. Siddhesh.C.Karanje,Bhusnoor.S.S.,(2017) "Design,Modelling and CFD analysis of EGR Cooler for future norms of Diesel Engine". International Conference on emanations in modern technologies and engineering (ICEMTE,2017), Volume 5,Issue3,March 2017,India
- 7. Shinde Prasad, Bhusnoor.S.S.,(2017) "Theoretical Analysis of Heat Pipe Exchanger for waste heat recovery from Diesel Engine Exhaust". International Conference on emanations in modern technologies and engineering (ICEMTE,2017), Volume 5, Issue3, March 2017, India
- 8. Sarang Chavan,Bhusnoor.S.S.,(2017) "Theoretical Study on Influence of Exhaust Gas and Cooler flow rate on heat recovery of engine exhaust using fin and tube heat exchanger". International Conference on emanations in modern technologies and engineering (ICEMTE,2017), Volume 5,Issue3,March 2017,India
- 9. Garvajit Singh,Bhusnoor.S.S.,(2017) "Study on Performance Characteristic of Thermodenuder to control vapor emissions from Engine Exhaust "International Conference on emanations in modern technologies and engineering (ICEMTE,2017), Volume 5,Issue3,March 2017,India
- Siddappa Bhusnoor, Siddhesh Tirodkar (2017), "Experimental and Modeling Studies on Thermophoretic Transport of Nanoparticles in Turbulent Tube flow" 3rd VGOPAD, Volunteer Group on Peace and Development International Conference & Expo 2017, London E16 1GB United Kingdom, December 18-22, 2017.
- 11. Shivani Borthakur, S.S. Bhusnoor, "Optimization of a method to improve the Performance of Solar Panel", International Conference on Advances in Science, Technology & Engineering ICASTe-2018, pp. 124-138.
- 12. Kalyani Tayde, S.S. Bhusnoor, "Experimental studies on transport of heat and mass during convective drying of food materials", International Conference on Advances in Science, Technology & Engineering ICASTe-2018, pp. 134-138.

- 13. Rajat Patle, S.S. Bhusnoor, "Experimental studies on evaluation of performance parameters on heat pipe heat exchanger for recovery of heat from engine exhaust", International Conference on Advances in Science, Technology & Engineering ICASTe-2018, pp. 134-138.
- 14. Rohan Raut, S.S. Bhusnoor, "Performance analysis of solar assisted vapour absorption refrigeration system using flat plate collector", International Conference on Advances in Science, Technology & Engineering ICASTe-2018, pp. 135-138.
- 15. Viraj Dabhade, Yogita U Yerne, Siddappa .S. Bhusnoor,"Experimental Studies On Performance Parameters Of Finned Tube Heat Exchanger For Waste Heat Recovery", International Conference on Clean Technologies for Future Cities(CTFC-2019), 8-9th January 2019, India
- 16. Yogita U Yerne, Viraj M. Dabhade, Siddappa S. Bhusnoor,"Experimental Studies On Thermal And Hydraulic Parameters Of Finned Tube Heat Exchanger", 1st International Conference on Advances and Challenges in Energy Research (ICACER-2019) March 15-17, 2019, RCOEM, Nagpur (India)
- 17. Mohan, A., Dutta, S., Madav, V., Bhusnoor S S., Fernandez-Garcia, J., and Williams, PT., "Co-Pyrolysis of Scrap Tire and Plastic using Coal derived Fly Ash", 27 European Conference and Exhibition, May 27-30, 2019, Lisbon, Portugal. Pg. No: 1501-1506
- 18. Mohan, A, Dutta, S., Bhusnoor S S, and Madav, V., (2019), "Novel upgrading of crude tire pyrolysis oil to Diesel-range fuels: Process scale-up and study of fuel properties" "National Conference on Energy and Chemicals from Biomass", 10-11, October 2019, Pondicherry Engineering college, Chennai.
- Sumedh Soman , and Siddappa S. Bhusnoor. (2021) "Analysis of Compression Ignition Engine Performance and Emission Parameters using Simulink at Different Engine Operating Conditions", Proceedings of the 26th National and 4th International ISHMT-ASTFE Heat and Mass Transfer Conference December 17-20, 2021, IIT Madras, Chennai-600036, Tamil Nadu, India, IHMTC2021–162
- 20. Shreyas Kotian, Nachiket Methekar, Nishant Jain, Pranit Vartak, Pritish Naikand Siddappa S. Bhusnoor, "Theoretical Investigation of Thermo-hydraulic characteristics of Shell and Tube Heat Exchanger", Proceedings of the 26th National and 4th International ISHMT-ASTFE Heat and Mass Transfer Conference December 17-20, 2021, IIT Madras, Chennai-600036, Tamil Nadu, India, IHMTC2021–144
- 21. Yogita Umesh Yerne, and Siddappa. S. Bhusnoor, (2021)., "Thermal Performance Analysis of Wickless Heat Pipe Heat Exchanger using De-Ionized (DI) Water as Working Fluid", Proceedings of the 26th National and 4th International ISHMT-ASTFE Heat and Mass Transfer Conference December 17-20, 2021, IIT Madras, Chennai-600036, Tamil Nadu, India, IHMTC2021–163
- 22. Bronin Cyriac, and Siddappa S. Bhusnoor, (2022)., "Numerical Investigation of Heat Transfer Performance of an Air Heater with Delta Flow Obstruction", Proceedings of the 2nd International Conference & Exposition on Advances In Mechanical Engineering (ICAME-2022), June 23-25, 2022, College of Engineering Pune-411005, Maharashtra, India.

- Cyriac, B., Bhusnoor, S. S., 2024. Numerical Studies on the Effect of Different Obstruction Geometries on Performance of Rectangular Channel Air Heaters. Journal of Heat and Mass Transfer Research, 11(1), pp. 1402-1425, <u>https://doi.org/10.22075/JHMTR.2023.39315.2050</u>
- 24. Bronin Cyriac, Akash Bidwaik, & Siddappa S. Bhusnoor. (2024). Numerical Investigation on the Effect of Inclined Delta Flow Obstructions on the Thermo-Hydraulic Performance of an Air Heater. In International Conference on Technologies for Energy Agriculture and Healthcare (ICTEAH 2024).
- 25. Keshav Anand Kabra, Somrick Das Biswas, Siddappa S. Bhusnoor. (2024). "Check Valve Simulation through Resource-Efficient FEA-CFD Coupled Analysis". In International Conference on Technologies for Energy Agriculture and Healthcare (ICTEAH 2024).
- 26. Bidwaik A S, Muzawar I, Cyriac B, Nikam S R & Bhusnoor S S (2024), "Modelling and Experimental studies on performance evaluation of energy efficient mini channel shell and tube heat exchanger", In International Conference on Technologies for Energy Agriculture and Healthcare (ICTEAH 2024).

National Conferences

- 1. Bhusnoor, S.S.," Biodiesel as an Alternative Fuel for I.C. Engine" (2007), "Energy Management in Marine and Engineering Applications", National conference on "EMMEA 2007", Organised by Tolani Maritime, Pune (Maharasthra)
- 2. Bhusnoor, S.S. and Chandrasekhar, N. S., (2006), "Study on Evaluation of Convective Heat Transfer Coefficient During Drying of Potato under Natural Convection", National conference on "ETA-2006" organized by Computer Dept. Saurastra University, Gujarat and Amoghasidhi Education Society Sangli (MH). October 1-2, 2006
- 3. Bhusnoor S.S. and Ganesh. R.M., (2011), "Review: Effect of Diesel- Biodiesel Blends on C.I. Engine Performance and Emissions" Proceeding of National Conference on "Advances in Thermal and Fluid Sciences" organized by Sinhgad Institute of Technology, Lonavala February 25-26, 2011.
- 4. Rajesh Chauhan, Bhusnoor, S. S., (2016), "A literature review on engine exhaust fine particles and engine performance from diesel engine fuelled with diesel and bio-diesel blends", National conference on "Nano-manufacturing", March 5-6, 2016. Sponsored by DST, New Delhi
- 5. Siddhesh Tirodkar, Rajesh Chauhan, Bhusnoor, S. S., (2016), "Theoretical study on deposition of fine particles under different flow conditions in a pipe" National conference on "Nano-manufacturing", March 5-6, 2016. Sponsored by DST, New Delhi

Awards Received For Publication

1. **Best Paper Award:** Yogita U Yerne, Viraj M. Dabhade, Siddappa S. Bhusnoor,"Experimental Studies On Thermal And Hydraulic Parameters Of Finned Tube Heat Exchanger", 1st International Conference on Advances and Challenges in Energy Research (ICACER-2019) March 15-17, 2019, RCOEM, Nagpur (India)

2. **Best Paper Award:** Mohan, A, Dutta, s., Bhushnoor S S, and Madav, V., (2019), "Novel upgrading of crude tire pyrolysis oil to Diesel-range fuels: Process scale-up and study of fuel properties" "National Conference on Energy and Chemicals from Biomass", 10-11, October 2019, Pondichery Enginnerring college, Chennai.

Part III: OUTREACH

Recognition from Internal / External bodies

Sr. No.	Activity recognized	Title	Awarding body	Year
1.	Teacher of the University for	M.Tech/M.E. Teacher	University of Mumbai	2014
	M.E. Degree in Mechanical			
	Engineering			
2.	Teacher of the University for	Ph.D teacher	University of Mumbai	2017
	Ph.D. Degree in Mechanical	(letter No: PG/ 2/		
	Engineering	ICD/ 2016-17/20621,		
		Dated March 31.		
		2017)		
3.	Energy Auditor	Energy Auditor	National Productivity	2006
			Council, BEE,	
			Ministry of Power,	
			GOI	

Local Investigation Committee Member in Mumbai University

Sr. No.	Name of the College	University Letter Number	Date of College Visited
1.	G V Acharya College	Aff./ICE/19-20/116 Dated 20/04/2019	May 15, 2019
2.	Sardar Patel College of Engineering	Aff./ICE/19-20/195 Dated 17/05/2019	May 20, 2019

Local Investigation Committee Member for PhD Centre Approval

Sr. No.	Name of the College	University Letter Number	Date On College	
			Visited	
1.	D .J. Sanghvi College of Engineering	Th./ICD/2019-20/1279	July 9, 2019.	

Membership of Professional Committees / Bodies

Sr. No.	Title	Awarding body/organizing body	Year
1.	Life member (LM- 28385)	Indian Society for Technical Education (ISTE)	2000
2.	Member	The Institution of Engineers (INDIA)	2007
	(M-133446-2)		
3.	Member	Society of Automotive Engineers, India (SAE-	2007
	(No:7007510007)	India)	

Reviewer for National/International Journals

- 1. Participated as a reviewer in the peer review process for "International Journal of Research in Mechanical Engineering, (IJRME)"
- 2. Participated as a reviewer in the peer review process for International conference on "Advances in Science, Technology and Engineering, (ICASTe- 2018)", (20/04/2018), organized by A.P.Shah Institute of Technology, Mumbai
- **3.** Participated as a reviewer in the peer review process for International conference on "Conference Technologies for Future Cities", (CTFC 2019), organized by Pillai College of Engineering (PCE) from 8th 9th January, 2019,
- **4.** Participated as a reviewer in the peer review process for International Conference on Transformations in Engineering Education,", (ICTIEE 2020), organized by Anurag Group of Institutions, Ghatkesar, India, from 5th 8th January, 2020,

Expert Lectures/Seminar Delivered

- "Performance Analysis of Cogeneration Systems", (Dec, 7- 12, 2020), AICTE AQIS sponsored online one-week Short Term Training Program (STTP) – Phase III - on "Recent Trends in Energy Management and Audit", organized by MCT, Rajiv Gandhi College of Engineering, Mumbai -
- 2. "Application of Statistical tools in Research" (July 2- 6, 2019), STTP on "Relaibalaity Engineering" organized by Shivajirao S. Jondhle college of Engineering & Technology, Asangaon for Faculty Development Program
- 3. "Vehicular Pollution and Control Techniques" (December 17 to 22, 2018), Faculty Development Program on "Recent Trends in Internal Combustion Engine" at Shivajirao S. Jondhle college of Engineering & Technology, Asangaon under AICTE Margdarshan scheme in coordination with VJTI.
- "Vehicular Pollution and Emission Norms" (20th-21st October 2018), Workshop on "Internal Combustion Engine and Vehicle Dynamics", organized by Department of Mechanical Engineering and Redshift racing team, K.J.Somaiya College of Engineering Mumbai-77
- 5. "Compressible Fluid flow dynamics" (January 2, 2018), STTP on "Advances in Fluid Dynamics: Experimental and Computational Approaches", organized by KJSCE, under ISTE chapter, January 1-5, 2018.
- 6. "Refrigeration concepts in High speed Air Crafts" (December 27, 2017), QIP Programme on "Emerging Refrigerants, Trends in Refrigeration systems Design and Development " organized by COEP, PUNE, December 26-30, 2017.
- "Pollution Control and its Future Norms" (June 27, 2017), ISTE Approved STTP on "Energy Environment and water Conservation", organized by A.C. Patil College of Engineering, June 26-30, 2017.
- 8. "Engine Modification for improvement of Performance and Emissions" (June 27, 2017), ISTE Approved STTP on "Energy Environment and water Conservation", organized by A.C. Patil College of Engineering, June 26-30, 2017.

- 9. "Air Craft Refrigeration" (December 7, 2016), QIP Programme on "Energy Conservation in Air Conditioning"," organized by COE, PUNE, December 5-9, 2016.
- 10. "Esterified Fuel as a Lubricity Enhancer", (2013), QIP Programme on "Advances In Fault Diagnosis of Rotating Machines and Fluid Film Bearing" organized by VJTI, Mumbai , June 11, 2013.
- 11. "Soltron as an Eco friendly and Economy Fuel additive in I.C.Engines", (2001), 3L Programme on "Adoption of energy efficient process technologies and energy management practices in Automobile Sector and implementation of EC Act, 2001 Organized by B.E.E, Ministry of Power, Government Of India, February 28, 2001.
- 12. "Biodiesel Production and its Utilization in Diesel Engines", (2010), Intensive practical training programme on Renewable energy systems, organized by Department of Mechanical Engineering, KJSCE, May 10-22, 2010.
- 13. "Welding Design & Construction", (2008), Seventh Refresher Course, organized by The Indian Institute of Welding ANB, conducted at DBMA, Vidyavihar (West), July 16, 2008

Session Chair in National and International Conferences

- Chief Guest for Valedictory function of STTP on "Reliability Engineering". July 2- 6, 2019)
 , organized by Shivajirao S. Jondhle college of Engineering & Technology, Asangaon for Faculty Development Program
- 2. International Conference on Recent Trends in Mechanical Engineering (ICRTME) which is held under the umbrella of International Conference on Advances in Science, Technology and Engineering (ICASTe-2019), January 4-5, 2019, organized by A.P.Shah Institute of Technology, Mumbai
- 3. International conference on "advances in Science, Technology and Engineering, (ICASTe-2018)", (20/04/2018), organized by A.P.Shah Institute of Technology, Mumbai
- International conference on 'Emanations in Modern Technology and Engineering' (ICEMTE, 2017), March 4 and 5, 2017, organized by Shree L. R. Tiwari College of Engineering, Mira Road, Mumbai

Sr. No.	Name of the institute	Course /Department /Event	Year	Role
1.	Sardar Patel College of Engineering, Andheri West, Mumbai – 400 057	Nuclear Energy	Aug 2016	Course Expert
2.	Sardar Patel College of Engineering, Andheri West, Mumbai – 400 057	Fuels and Combustion	Sept 2016	Course Expert
3.	K.J Somaiya College of science & commerce, Vidyavihar, Mumbai 400 077	Advanced Diploma in Waste Management Engineering and Technology	April 2018	BOS, Member and Course Expert
4.	Dwarakadas J Sanghvi College of Engineering , Vile Parle West, Mumbai 400 056	Project Competition	March 2018	Judge

Expert in various Subject boards/Events in other institutes

Short term training programs organized

Sr. No.	Title	Organizing body	Year	Role
1.	Renewable Energy Systems and	KJSCE, ISTE Chapter , ISTE	2009	Coordinator
	Technology	Approved STTP (Jun 29 - Jul 3, 2009)		
2.	Intensive Practical Training	Department of Mechanical	2010	Coordinator
	Programme on Renewable	engineering, KJSCE		
	Energy Systems (STTP)			
3.	Workshop on "Automotive I C	Expert's hub industry skill	2014	Coordinator
	Engine design"	development center and Techfest 2014,		
		IIT Bombay, May 8-9, 2014.		
4.	Workshop on "Internal	Department of Mechanical	2018	Coordinator
	Combustion Engine and Vehicle	Engineering and Redshift racing team,		
	Dynamics"	20 th -21 st October 2018		

Short term training programs attended

Sr. No	Title	Duration	Organization	
1.	Air quality monitoring and management	Jul 5 - 9, 1999	I.I.T. Kanpur	
2.	Waste utilization: Emerging Technology	Dec 14 - 26, 1999	S.G.S Institute of Technology and	
	and Business Opportunity		Science, Indore	
3.	Industrial Tribology	Oct 14, 2000	ISTE Chapter- KJSCE Dept. of	
			Mechanical Engineering KJSCE	
4.	Technologies for pollution prevention	Nov 2, 2000	ESEA, CESE, IIT Bombay	
5.	Renewable energy sources	Feb 24, 2001	ISTE Chapter - KJSCE	
6.	Fluid power Technology	Mar, 24, 2001	Department of Mechanical	
7.	Advances in Automotive Technology	Apr 20, 2002	Engineering, KJSCE	
8.	Alternative Fuels, Emissions and Latest	Dec 23-28, 2002	I.I.T.Kanpur	
	Advances in Internal Combustion Engines			
9.	Workshop on "RENET"	<u>Sep 21 - 22, 2006</u>	<u>I.I.T. Bombay</u>	
10.	Advances in vehicle emission control	May 21- 25, 2007	I.I.T. Kanpur	
	technology			
11.	Renewable energy community	<u>Sep 21-22, 2006</u>	Energy System Engineering, IIT	
	development and show case workshops		<u>Bombay, </u> Mumbai -76	
12.	Automated Air Pollution Monitoring	Jan 23-24, 2014	IIT Bombay, Mumbai – 76	
13.	BAJA SAE India 2014	Feb 21-23, 2014	Pithampur	
14.	Air quality monitoring and emission source	22/08/2017	MPCB, Mumbai, Hotel Taj	
	apportionment studies for 17 cities in state		President (Vivanta), Mumbai -	
	of Maharashtra, and Surat City, Gujarat		400005	
15.	"Workshop for Air Quality in 10 Cities of	-	,	
	Maharashtra"	2017,	at Nagpur, Neeri Guest House	

Letters of Appreciation

Sr. No.	Event / Activity	Issued by	Year	Role
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1.	Virtual Baja SAE India Competition	SAE India	Jul 2-3, 2010	Faculty Advisor
2.	Seminar & Project competition on "Make in	Principal,	Mar 31, 2015	Judge
	India, Igniting Manufacturing Renaissance"	D.J.S.COE		
3.	Examiner for Assessment of Answer books	Principal, VJTI	May 4, 2002	Assessment of
				Answer books
4.	Publication in SAE- 2007 Congress held at	Principal, KJSCE	Jun 13, 2007	Presentation of
	Detroit			paper

Referees

Name	Address with contact details		
Prof. Virendra Sethi (MPCB Chair Professor, CESE IIT Bombay)	Centre for Environmental Science and Engineering, IIT Bombay, Powai, Mumbai – 76; Email: vsethiiitb@gmail.com Phone: 022-25767809/7851. Mobile: 9820787567		
Prof. Upendra V Bhandarkar Professor, Mechanical Engineering	Department of Mechanical Engineering, IIT Bombay, Powai, Mumbai – 76. Email: <u>upendrabhandarkar@gmail.com</u> Mobile: 9819331470		

I hereby declare that the information furnished above is true to the best of my knowledge.

Thank you,

With Regards,

J'J. E

(Dr. Siddappa Sharanappa Bhusnoor) Place: Dombivili East, Thane – 421201

Date: September 10, 2024