Somaiya Vidyavihar University

Name: Dr. Shailesh			E-mail:shailesh.n@somaiya.edu			
Contact No: 91-664	49502			·		
Department/Section:	Department/Section: Mechanical Engineering					
College: K J Somaiy	of Engineering					
DOJ Somaiya: 8 th	Career	Experience: 26	Industry	Experience: 0	Teaching	
January 2013	Yrs		Yrs		Experience: 26 Yrs	
Present Academic Designation: Associate			Present Administrative Designation:			
Professor, Mechanical Engineering			(Principal/Vice-Principal/ Associate Dean/ HOD			
			etc)			

Area of research/specialization and Courses Delivered				
Research domain/interests/are as				
1.	Thermal and Fluid Science			
2.	Jet and wake flow control			
3.	Jet Acoustics			
4.	Cardiovascular flow			
5.	Solar Thermal system			
Cours	es Delivered			
1.	Thermodynamics			
2.	Heat and Mass Transfer			
3.	Energy Conversion			
4.	Refrigeration and Air Conditioning			
5.	Thermal Management of Electronic System			
6.	Solar Energy			
7.	Heat Exchanger Design			
8.	Introduction to Flight			
9.	Aircraft Propulsion			
10.	Flight Mechanics			
11.	Aerodynamics			

Recognition as a teacher by any University	UG: Yes	PG: Yes	Ph.D : Yes
Details of Recognitions			

Recognitions
Recognized UG, PG and PhD Teacher by Mumbai University
Recognized UG, PG and PhD Teacher by Somaiya Vidyavihar University (SVU)

Education								
Examination	Name of the	University/Board	Institute/College	Year	CPI/SPI/			
	Degree				%Marks			
Ph.D	Ph.D	IIT Bombay,	IIT Bombay, Mumbai	2016	7.88			
		Mumbai						
PG	M.E.	Mumbai University	S. P. C. O. E. Andheri,	2005	72.44			
			Mumbai					
UG	B.E.	Nagpur University	B. D. C. O. E.	1998	70.37			
			Sewagram, Wardha					

Notable Experience Details							
Sr. No	Name of the	Designation	Date of	Date of Leaving	Experience		
	organization		Joining		(Years)		
1	K. J. Somaiya College	Associate	18th	Till date	07		
	of Engineering, Vidyavihar, Mumbai	Professor	December 2017				
2	K. J. Somaiya College of Engineering, Vidyavihar, Mumbai	Assistant Professor (Designation as per VI th Pay commission)	January 2013	December 2017	05		
3	Parshvanath College of Engineering, Thane	Assistant Professor (Designation as per V th Pay commission)	September 2006	December 2012	06		
4	Parshvanath College of Engineering, Thane	Lecture (As per Vth Pay commission) Uni.: CONCOL/SA/5235 of 2004 dated 15 th September 2004	August 1998	August 2006	08		

Details of Publications:

JOURNAL

- Nachiket Methekar, Shreyas Kotian, Nishant Jain, Shailesh R Nikam, "Influence of wavy artery and its geometric parameters on Hemodynamic Characteristics" Critical Reviews in Biomedical Engineering DOI: 10.1615/CritRevBiomedEng.2023050535. (Scopus Indexed).
- 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, Vol 10, Issue 1 (September 2023) PP-40-52. DOI: 10.3808/jeil.202300109 (Scopus Indexed).
- Nachiket Methekar, Shreyas Kotian, Nishant Jain, Pranit Vartak, Pritish Naik, Shailesh Nikam, & Siddappa Bhusnoor, "NUMERICAL INVESTIGATION OF THERMOHYDRAULIC CHARACTERISTICS OF A GASKETED PLATE HEAT EXCHANGER", Computational Thermal Sciences, 14(1):61–102 (2022) DOI: <u>https://doi.org/10.1615/ComputThermalScien.2021039019</u> (IF = 1.917).
- 4. **S. R. Nikam** and S. D. Sharma "Correlation in the Near and Far Field of Compressible Jet to Identify Noise Source Characteristics" Flow, Turbulence and

Combust **108**, 739–773 (2022) DOI: <u>https://doi.org/10.1007/s10494-021-00299-2</u> (IF:2.566 Scopus Indexed)

- S. S. Bhusnoor, S. R. Nikam, A. T. Saraf, "Impact of Alternative Fuels on Socio Economic Concern: Experiments, Experiences and Inferences" Journal of Engineering Education Transformations, Volume 33, January 2020, Special issue, eISSN 2394- DOI: <u>https://doi.org/10.16920/jeet/2020/v33i0/150153</u> (SJR = 0.21 Scopus indexed)
- S. R. Nikam, S. S. Bhusnoor, V. B. Bhosle, A. T. Saraf, "Impact of Experiential Learning on Performance of Students and attainment of Course and Program outcome", Journal of Engineering Education Transformations, Volume 33, January 2020, Specialissue,eISSN2394-1707 DOI: <u>https://doi.org/10.16920/jeet/2020/v33i0/150145</u> (SJR = 0.21 Scopus indexed)
- S. R. Nikam and S. D. Sharma, "Effect of a Chevron Nozzle on Noise radiation from a Compressible Jet" AIAA Journal, Vol. 56, No. 11 (2018), pp. 4361-4378, DOI: <u>https://doi.org/10.2514/1.J056931</u> (IF: 2.624 Scopus Indexed)
- S. R. Nikam and S. D. Sharma, "Effect of Chevron Nozzle Penetration on Aero-Acoustic Characteristics of Jet at M = 0.8," Fluid Dyn. Res. Journal, 49 (2017) 065506 (33pp). DOI: <u>https://doi.org/10.1088/1873-7005/aa8501</u> (IF=1.5 <u>Scopus Indexed</u>)
- Nikhil Lokhande, S. R. Nikam, K.N. Patil, "Comparative Analysis Of Spiral Heat Exchanger And Gasketed Plate Type Heat Exchanger" Journal of Emerging Technologies and Innovative Research, Volume 4, Issue 10,pp. 67-75, October 2017 (<u>https://www.jetir.org/papers/JETIR1710010.pdf</u>): UGC Approved Journal 63975_ISSN: 2349-5162 (google scholar indexed)
- S. R. Nikam and S. D. Sharma, "Aero-acoustic Characteristics of Compressible Jet from Chevron Nozzle," *AIAA Paper*-2014-2623, DOI: <u>https://10.2514/6.2014-2623 (scopus Indexed)</u>

Book Chapter:(Scopus Indexed)

 Pednekar, A., Nikam, S.R. (2024). Experimental Investigation of Chimney Plume Dispersion Characteristics. In: Singh, K.M., Dutta, S., Subudhi, S., Singh, N.K. (eds) Fluid Mechanics and Fluid Power, Volume 6. FMFP 2022. Lecture Notes in Mechanical Engineering. Springer, Singapore. <u>https://doi.org/10.1007/978-981-99-5755-2_38</u>

- Das Biswas, S., Kabra, K., Nikam, S.R., Anish, S. (2024). Computational Analysis of Serpentine Nozzles. In: Singh, K.M., Dutta, S., Subudhi, S., Singh, N.K. (eds) Fluid Mechanics and Fluid Power, Volume 3. FMFP 2022. Lecture Notes in Mechanical Engineering. Springer, Singapore. https://doi.org/10.1007/978-981-99-6343-0_56
- Kotian, S., Jain, N., Methekar, N., Nikam, S. (2023). Hemodynamic Characteristics in A Straight and Wavy Artery: A Numerical Study. In: Bhattacharyya, S., Verma, S., Harikrishnan, A.R. (eds) Fluid Mechanics and Fluid Power (Vol. 3). FMFP 2021. Lecture Notes in Mechanical Engineering. Springer, Singapore. <u>https://doi.org/10.1007/978-981-19-6270-7_62</u>
- 4. Das Biswas, S., **Nikam, S**. (2023). Passive Control of Flow Over Rectangular Cavities Using Aft Wall Geometry Modifications. In: Bhattacharyya, S., Chattopadhyay, H. (eds) Fluid Mechanics and Fluid Power (Vol. 1). FMFP 2021. Lecture Notes in Mechanical Engineering. Springer, Singapore. https://doi.org/10.1007/978-981-19-7055-9_27
- Kotian, S., Jain, N., Methekar, N., Nikam, S. (2023). Turbulent Characteristics of Compressible Jet from a Chevron Nozzle: A Numerical Study. In: Bhattacharyya, S., Chattopadhyay, H. (eds) Fluid Mechanics and Fluid Power (Vol. 1). FMFP 2021. Lecture Notes in Mechanical Engineering. Springer, Singapore. https://doi.org/10.1007/978-981-19-7055-9_14
- Dangi, N.S., Nikam, S. R. (2023). Design and CFD Analysis of Multi Rotor Wind Turbines. In: Bhattacharyya, S., Chattopadhyay, H. (eds) Fluid Mechanics and Fluid Power (Vol. 1). FMFP 2021. Lecture Notes in Mechanical Engineering. Springer, Singapore. <u>https://doi.org/10.1007/978-981-19-7055-9_1</u>
- Nikam S.R., Bhikole S., Suvagiya M. (2021) Noise Source Characteristics of Compressible Jet from Non-axisymmetric Nozzles. Proceedings of 16th Asian Congress of Fluid Mechanics. Lecture Notes in Mechanical Engineering. Springer, Singapore. <u>https://doi.org/10.1007/978-981-15-5183-3_39</u>
- Nikam S.R., Sharma S.D. (2021) Mach number Effect on Aero acoustic Characteristics of Compressible Jet Due to Chevron. Design and Development of Aerospace Vehicles and Propulsion Systems. Lecture Notes in Mechanical Engineering. Springer, Singapore. <u>https://doi.org/10.1007/978-981-15-9601-8_1</u>

INTERNATIONAL CONFERENCE ABROAD (attended and presented paper)

- S. R. Nikam and S. D. Sharma, "Aero-acoustic Characteristics of Compressible Jet from Chevron Nozzle, 20th AIAA/CEAS Aeroacoustics Conference 16-20th June 2014 Atlanta, USA
- 2. S. R. Nikam and S. D. Sharma, "Near field acoustic characteristics of notched elliptical nozzle at M = 0.6," 16th International conference on Methods of Aero-Physical Research, 2012, 18-26th August 2012, Kazan, **Russia**

INTERNATIONAL CONFERENCE/PROCEEDINGS (in India)

- 1. Ishan Upadhyay, Kashinath Patil, **Shailesh Nikam**, "Theoretical Performance Analysis of Solar Pasteurization vehicle" International Conference on Technologies for Energy Agriculture and Healthcare (ICTEAH 2024), K J Somaiya College of Engineering, Mumbai, 15-16th April 2024
- Akash S. Bidwaik, Iqbal Muzawar, Bronin Cyriac, Shailesh R. Nikam, Siddappa S. Bhusnoor, "Modelling and Experimental Studies on Performance Evaluation of Energy Efficient Mini-channel Shell and Tube Heat Exchanger" International Conference on Technologies for Energy Agriculture and Healthcare (ICTEAH 2024), K J Somaiya College of Engineering, Mumbai, 15-16th April 2024
- 3. Abhishek Pednekar, **S. R. Nikam**, "Investigation of Frequency Response of Bladeless Cylindrical Wind Turbine" 10th International and 50th National conference of Fluid Mechanics and Fluid Power (FMFP-2023) IIT Jodhpur (paper id 167)
- 4. Atharva Pandit, **S. R. Nikam** "Numerical Investigation of Chimney plume dispersion under crosswind conditions" 10th International and 50th National conference of Fluid Mechanics and Fluid Power (FMFP-2023) IIT Jodhpur (paper, paper id 181)
- Ishan Upadhyay, Shailesh R. Nikam and Kashinath N. Patil, "Standalone onwheel Solar Milk Pasteurization" 9th International conference on Advances in Energy Research 2017 at **IIT Bombay**, Dec 12-14th 2023.
- 6. Abhishek Pednekar, **S. R. Nikam**, "Experimental Investigation of Chimney Plume Dispersion Characteristics" 9th International and 49th National conference of Fluid Mechanics and Fluid Power (FMFP-2022) IIT Roorkee.
- 7. Somrick Das Biswas, Keshav Kabra, S. R. Nikam, Siddharth Anish, "Computational Analysis of Serpentine Nozzle" 9th International and 49th

National conference of Fluid Mechanics and Fluid Power (FMFP-2022) IIT Roorkee

- Shreyas Kotian, Nishant Jain, and Shailesh Nikam, "Numerical Investigation of Baffle Orientation on Recirculation Zones in a Shell and Tube Heat Exchanger" AIP Conference Proceedings 2421, 060003 (2022); <u>https://doi.org/10.1063/5.0076751(Scopus indexed)</u>
- Nikam S.R., Bhikole S., Suvagiya M. "Noise Source Characteristics of Compressible Jet from Non-axisymmetric Nozzles", 16th Asian Congress of Fluid Mechanics, Dec 13-17, 2019, JNCASR & IISc Bengaluru
- Kalpesh Pawar, S. R. Nikam and Prathamesh Chavan, "Effect of Chevron Nozzle Penetration on Heat Transfer Characteristics in an Impinging Jet", 7th International and 45th National Conference on Fluid Mechanics and Fluid Power (FMFP), December 10-12, 2018, IIT Bombay, Mumbai, India, FMFP 2018–Paper No.739.
- 11. S. R. Nikam and S. D. Sharma, "Mach number Effect on Aero acoustic Characteristics of Compressible Jet due to Chevron", Symposium on Applied Aerodynamics and Design of Aerospace Vehicle (SAROD-2018), 29-30 Nov & 1st Dec 2018, Bengaluru, organized by Aerodynamic Development Agency (ADA), CSIR National Aerospace Laboratory and Gas Turbine Research Engineering (GTRE)
- 12. M. Patil , K. N. Patil and **S. R. Nikam**, "Energy Conservation and Targeting of Ammonia Decomposition Process in Steel Industry" 6th International conference on Advances in Energy Research 2017 at **IIT Bombay**, Dec 12-14 2017, Paper ID 184.
- 13. S. R. Nikam and S. D. Sharma, "Effect of Chevron on Azimuthal variation of near field pressure fluctuations in compressible jet," in 23rd AIAA/CEAS Aeroacoustics Conference, 5th to 9st June 2017, Denver USA. DOI: 10.2514/6.2017-3863
- Chintak Parashar and S. R. Nikam, "Thermal Analysis of Heat Sink for Electronic Devices," International Conference on Emerging Trends And Research In Engineering at Navasahyadri Group of Institute, Pune, during 23-25th March 2017
- 15. S. Patil and S. R. Nikam, "Effect of Turbulence model and wind velocity on Aerodynamic Performance of Wind Turbine Blade," ICRCET 2016 organized by SIETK, Puttur, India.

NATIONAL CONFERENCE

1. Shreyas Kotian, Nishant Jain, Nachiket Methekar, and Shailesh Nikam, "Hemodynamic Characteristics in A Straight and Wavy Artery: A Numerical Study" Proceedings of the 48th National Conference on Fluid Mechanics and Fluid Power (FMFP) December 27-29, 2021, BITS Pilani, Pilani Campus, RJ, India. FMFP2021–08-278

- Somrick Das Biswas and Shailesh Nikam, "Passive Control of Flow Over Rectangular Cavities Using Aft Wall Geometry Modifications" Proceedings of the 48th National Conference on Fluid Mechanics and Fluid Power (FMFP) December 27-29, 2021, BITS Pilani, Pilani Campus, RJ, India. FMFP2021–02– 036
- 3. Shreyas Kotian, Nishant Jain, Nachiket Methekar, and **Shailesh Nikam**, "Turbulent Characteristics of Compressible Jet from a Chevron Nozzle: A numerical study" Proceedings of the 48th National Conference on Fluid Mechanics and Fluid Power (FMFP) December 27-29, 2021, BITS Pilani, Pilani Campus, RJ, India. FMFP2021–04–022
- 4. Nirav Subhash Dangi, **S. R. Nikam**, "Design and CFD Analysis of Multi Rotor Wind Turbines" Proceedings of the 48th National Conference on Fluid Mechanics and Fluid Power (FMFP) December 27-29, 2021, BITS Pilani, Pilani Campus, RJ, India, FMFP2021-10-003
- 5. **S. R. Nikam** and S. D. Sharma, "Effect of Chevron Nozzle Penetration on Mixing Characteristics of High Subsonic Jet," 44th National Conference on Fluid Mechanics and Fluid Power held at Amrita University, Kollam, Kerala, India, paper ID 39, 14-16th Dec. 2017
- 6. **S. R. Nikam** and S. D. Sharma, "Effect of Chevron on Mixing Characteristics of Compressible jet," 40th National Conference on Fluid Mechanics and Fluid Power held at NIT Hamirpur, HP, India, paper ID 144, 12-14th Dec. 2013.
- 7. S. R. Nikam, "Object Oriented Modeling of the Design Process," National conference on Sun Rising Technologies (NCSRT-05) held at Parshvanath College of Engineering Thane, on 18-19, November 2005.

Patent/Copyright

- Copyright on "COLD STORAGE SYSTEMS BY SOLAR INTERVENTIONS", Diary No. L-135950/2023, granted dated 10/11/2023
- Copyright on "Retrofitting Device to reduce Pollution Concentration from Chimney Plume", Diary Number: 5639/2024-CO/L applied on 20/02/2024 (under review)

Research Project:

Sr.	Title		Sponsoring	Amount	Year	Remark
No.			organization	(Rs.)		
1	Design	and	Science and	29,55,000	2023	Under review

	Development of a Non-rotating Turbine to Harness Wind Energy Using the Principle of Fluid- Structure Interaction	Engineering Research Board (SURE <u>SUR/2023/003484</u>)			
2	Design and development of Microchannel Heat Exchanger to use in battery thermal management system of an Electric Vehicle"	Somaiya Vidyavihar University	5,00,000	2023	Ongoing (Co-PI)
3	Development of Polymer electrolyte membrane (PEM) electrolyzer for green hydrogen production	Somaiya Vidyavihar University	3,00,000	2023	Ongoing (Co-PI)
4	Noise Suppression of High Subsonic Free Jet Project No.1463	Aerodynamic Research and Development Board of DRDO	20,00,000	2010- 2012	Completed. Assisted in this project at IIT Bombay along with Prof. S. D. Sharma

Notable Positions and Responsibility:

- Worked as an **Organizing Secretary** for the **International conference** on Technologies for Energy, Agriculture and Healthcare April 15-16th 2024 at K J Somaiya College of Engineering.
- Initiated Honours program in Aerospace Engineering in the Mechanical Engineering department
- Coordinating Honours program in Aerospace Engineering
- Chairman Board of Studies (BOS) for M.Tech in Energy Engineering (since 2023 till June 2024)
- Worked as a member of Board of Studies, M.Tech (Energy Engineering), at K J Somaiya College of Engineering.(2020-2023)
- Coordinator for M.Tech in Energy Engineering (2022-2024)
- Member of IQAC of K J Somaiya College of Engineering (since July 2019)
- Worked as a member of Faculty of Engineering and Technology at K J Somaiya College of Engineering (2019-2022)
- Worked as a member of Academic Council at K J Somaiya College of Engineering (2018-2021)

- Worked as a member of Board of Studies, Mechanical Department, at K J Somaiya College of Engineering.(2019-2022)
- Worked as Associate Head of the Department, Mechanical Engineering, at K J Somaiya College of Engineering, Vidyavihar, Mumbai from August 2018-2021
- Member of Institute Library Advisory committee at K. J. Somaiya College of engineering.
- Worked as a Department coordinator for semester long Internship (2020-2023)
- Worked as coordinator for NAAC criteria-4 in year 2021-2022
- Member of department NBA committee at K. J. Somaiya College of engineering.
- Department budget coordinator at K. J. Somaiya College of engineering.
- Faculty advisor for ISHRAE student chapter (2015-till date) at K. J. Somaiya College of Engineering.
- Worked as Laboratory in charge of Refrigeration and Air Conditioning Lab. at K. J. Somaiya College of engineering.
- Working as Laboratory in charge of Renewable Energy Lab. at K. J. Somaiya College of engineering.
- Worked as Head of the Department, Mechanical Engineering, at Parshvanath College of Engineering, Thane from September 2007 to June 2009.
- Worked as Faculty advisor for SAE student Chapter (2004-2006) at Parshvanath College of Engineering, Thane.
- Organized Industrial visit and visited various industry and research laboratory like Cryogenics Lab at IITB, ARAI Pune, Sawla cold storage Turbhe, Eklahre, Jindal, Tarapur, BSES Dahanu Thermal Power Plant, Hindalco Ind. Silvasa, Blue Star Wada, STULZ Ind etc.

Outreach:

- Worked as reviewer for 10th International and 50th National Conference on Fluid Mechanics and Fluid Power (FMFP) organized by IIT Jodhpur (20-22 Dec 2023)
- Board of Studies (BOS) member at Amity School of Engineering & Technology Panvel for Aeronautical Engineering, 2023.
- Board of Studies (BOS) member at Amity School of Engineering & Technology Panvel for Automobile Engineering, 2023.
- Worked as session chair at 9th International and 49th National Conference on Fluid Mechanics and Fluid Power (FMFP) organized by IIT Roorkee (2022)
- Worked as reviewer for International Conference SPICON 2022 organized by SPCOE Andheri Dec 2022.
- Member of PhD Research Progress committee (RPC) at Amity School of Engineering & Technology Panvel and SPCOE Andheri
- Worked as session chair for the 2nd IC-RACT-2022- International Conference on Recent Trends in Computational Techniques on 10th & 11th March 2022 in

collaboration with **National University Taipei, Taiwan** and **Tokyo University of Technology, Japan** at Amity School of Engineering & Technology.

- Worked as reviewer for the 2nd IC-RACT-2022- International Conference on Recent Trends in Computational Techniques on 10th & 11th March 2022 in collaboration with National University Taipei, Taiwan and Tokyo University of Technology, Japan at Amity School of Engineering & Technology.
- Examination auditor at Sardar Patel College of Engineering, Andheri, Mumbai in year 2017, 2018, 2019, 2020 and 2021
- Worked as reviewer for International conference ICTIEE 2021
- Worked as reviewer for International conference ICTIEE 2020
- Worked as M.Tech. Thesis examiner at Aerospace Engineering IIT Bombay, Mumbai, in year June 2018, 2019.
- Worked as M.Tech. Thesis examiner at Sardar Patel College of Engineering, Andheri, Mumbai in year 2017, 2018, 2019, 2020, 2021, 2023.
- Worked as Subject expert for Syllabus revision of Mechanical Engineering at Sardar Patel College of Engineering, Andheri, Mumbai in year 2017, 2020, 2021 and 2024.
- Worked as reviewer for Journal of Thermal Engineering
- Worked as reviewer for 2nd Biennial International Conference on Nascent Technologies in Engineering an IEEE Technically Co-Sponsored Conference held at Fr. C. Rodrigues Institute of Technology, Vashi, Navi Mumbai, India, January 27-28, 2017.
- Worked as reviewer for 43rd National and 6th International Conference organized by National society of Fluid Mechanics and Fluid Power at MNNIT Allahabad, December 2016.
- Worked as syllabus revision committee member for Mumbai University, Mechanical Engineering in year 2008-2009.

<u>STTP/Workshop/organised & Lecture delivered:</u>

- Webinar delivered at Amity University Panvel in 11th May 2020 on "Aeroacoustics characteristics of High Subsonic Jet flow"
- Lecture delivered on "Fuel supply and Performance of Internal Combustion Engine" in short term training program on "Internal Combustion Engine and Vehicle Dynamics: Theoretical and Practical Approaches" at K. J. Somaiya College of Engineering during 20th to 21st October 2018.
- **Organized** one week ISTE/AICTE approved short term training program on "Advances in Fluid Dynamics: Experimental and Computational Approaches" at K. J. Somaiya College of Engineering during 1st to 5th January 2018.
- Lecture delivered on "Jet Noise" in ISTE/AICTE approved short term training program on "Advances in Fluid Dynamics: Experimental and Computational Approaches" at K. J. Somaiya College of Engineering during 1st to 5th January 2018.

Organized one day workshop on "Rapid prototyping & its application" in April 2007 at Parshvanath College of Engineering.

Laboratory Infrastructure developed

- Developed I C Engine lab at Parshvanath College of Engineering, Thane
- Developed refrigeration and Air Conditioning lab at Parshvanath College of Engineering, Thane
- Design and developed Cooling tower experimental setup at K J Somaiya College of Engineering
- Design and developed Compact Heat Exchanger experimental setup at K J Somaiya College of Engineering
- Design and developed impinging Jet setup at K J Somaiya College of Engineering
- Design and developed VCRS experimental setup at K J Somaiya College of Engineering
- Design and developed wind tunnel experimental facility at K J Somaiya College of Engineering.

Training Details:

- 7th National Workshop on Research Methodologies in Fluid Mechanics on "Challenges in Computational Fluid Dynamics", June 13-17, 2022, IIT Roorkee.
- 6th National Workshop on Research Methodologies in Fluid Mechanics, June 7-11, 2021, BITS Pilani.
- A national level workshop for higher educational institute on Transformation through NAAC accreditation Process organized by Institute for Academic Excellence, 21st-22nd June 2021.
- NPTEL Course on "Cardiovascular Fluid Mechanics" in Jan-March 2020.
- Attended QIP course on "Stealth Technology" at IIT Bombay, Mumbai in Nov 2019.
- Attended QIP course on "Laboratory and Ergonomic Safety for Engineers" at IIT Bombay, Mumbai from 11th -15th June 2018.
- Attended AICTE-ISHRAE sponsored one week refresher course on "Refrigeration and Air Conditioning" at C. O. E. P. Pune from 26th -30th June 2017.
- Attended GIAN (Global Initiative for Academic Network) course on "Acoustics and Industrial Noise Control" at IIT Kharagpur from 15-19th May 2017.
- National workshop on "Faculty Development Program under ISTE chapter of P.C.O.E. Thane held on 9th and 10th January 2007.

- Attended and worked as session co-chair in International conference on "Advances in Manufacturing and Technology Management" organized by Parshvanath college of Engineering, Thane in Jan 2007.
- Attended National conference on "Rapid Prototyping and its application" at VNIT Nagpur in March 2006.
- Attended preconference workshop on "Rapid Prototyping" at VNIT Nagpur in March 2006.
- ISTE approved short term course titled "Enabling Technologies and Technology Driven Practices for Accentuating Value Chain Management" from held at S.P.C.O.E. Andheri, Mumbai, 9th May to 3rd June 2005
- One day national workshop on "Technical writing and Presentation Skills" conducted by P. C. O. E. Thane, 2004.
- AICTE sponsored two week "Technical Teachers Empowerment Programme" held at V.N.I.T. Nagpur in July 2004.
- One month Inplant Training in "Ispat Industry LTD. Nagpur" in 1996.

Scholarship and awards:

- ISTE KJSCE chapter best technical paper award in year 2019
- Travel grant of Rs 1,61,000 awarded by University Grant Commission (UGC), New Delhi to attend 20th Aeroacoustics International conference at Atlanta USA in year 2014.
- Travel grant awarded by Science and Engineering Research Board (SERB), New Delhi to attend 25th Aeroacoustics International conference at TU Delft Netherland in year 2019.(Did not availed)

Extracurricular:

- Participated in Innovation 1998 (project competition) Organized by IES Nagpur
- Qualified in GATE 2000 with percentile 77.07%
- Life Member of Indian Society of Technical Education (ISTE) LM 47925
- Life Member of National Society of Fluid Mechanics and Fluid Power (NSFMFP) LM 687
- Life Member of Acoustic Society of India LM 939
- Member of ISHRAE society Membership number 56524