

Somaiya Vidyavihar University

Name: Dr. Shailesh R. Nikam			E-mail: shailesh.n@somaiya.edu		
Contact No: 91-66449495					
Department/Section: Mechanical Engineering					
College: K J Somaiya College of Engineering					
DOJ Somaiya: 8 th January 2013	Career Yrs	Experience:24	Industry Yrs	Experience:0	Teaching Experience:24 Yrs
Present Academic Designation: Associate Professor			Present Administrative Designation: --- (Principal/Vice-Principal/ Associate Dean/ HOD etc)		

Area of research/specialization and Courses Delivered

Research domain/interests/areas

1. Thermal and Fluid Science
2. Jet and wake flow control
3. Jet Acoustics
4. Cardiovascular flow
5. Solar Thermal system

Courses 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

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

1. Recognized UG, PG and PhD Teacher by Mumbai University
2. Recognized UG, PG and PhD Teacher by Somaiya Vidyavihar University (SVU)

Education

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

Notable Experience Details

Sr. No	Name of the organization	Designation	Date of Joining	Date of Leaving	Experience (Years)
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1.	K. J. Somaiya College of Engineering, Vidyavihar, Mumbai	Associate Professor	18 th December 2017	Till date	5
2.	K. J. Somaiya College of Engineering, Vidyavihar, Mumbai	Assistant Professor (Designation as per VI th Pay commission) Uni.: CONCOL/IS/ECD/20 13-14/1343 dated 25/2/2015	8 th January 2013	December 2017	5
3.	Parshvanath College of Engineering, Thane	Assistant Professor (Designation as per V th Pay commission) Uni.: CONCOL/SA/1797of 2008 dated 8 th April 2008	September 2006	December 2012	6
4.	Parshvanath College of Engineering, Thane	Lecture (As per V th Pay commission) Uni.: CONCOL/SA/5235 of 2004 dated 15 th September 2004	August 1998	August 2006	8

Research Accomplishments and Projects

No of students pursuing Ph.D as on date: 02(Co-guide)		No of students completed Ph.D as on date: Nil
No of students completed PG thesis / Project work as on date: 10		No of students / groups completed UG projects as on date: 15
Publications Total: 25	Number of Peer review Journal papers: 6	Number of Conference papers: 19

Details of Publications:

International Journals

1. Nachiket Methekar, Shreyas Kotian, Nishant Jain, Pranit Vartak, Prithish Naik, **Shailesh Nikam**, & Siddappa Bhusnoor, "NUMERICAL INVESTIGATION OF THERMOHYDRAULIC CHARACTERISTICS OF A GASKETED PLATE HEAT EXCHANGER", Computational Thermal Sciences, 14(1):61–102 (2022)
2. **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 Combustion <https://doi.org/10.1007/s10494-021-00299-2>
3. 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 2394-1707
4. **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, Special issue, eISSN

5. **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: 10.2514/1.J056931
6. **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: 10.1088/1873-7005/aa8501

Conferences

1. 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.
2. Somrick Das Biswas, Keshav Kabra, **S. R. Nikam**, Siddharth Anish, "Computational Analysis of Serpentine" 9th International and 49th National conference of Fluid Mechanics and Fluid Power (FMFP-2022) IIT Roorkee
3. 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); <https://doi.org/10.1063/5.0076751>
4. **Nikam S. R.**, Bhikole S., Suvagiya M., "Noise Source Characteristics of Compressible Jet from Non-axisymmetric Nozzles", **16th Asian Congress of Fluid Mechanics, Bangalore, Dec 2019.**
5. 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.
6. **S. R. Nikam** and S. D. Sharma, "Mach number Effect on Aeroacoustic 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, organised by Aerodynamic Development Agency (ADA), CSIR National Aerospace Laboratory and Gas Turbine Research Engineering (GTRE)
7. 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.
8. **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 9th June 2017, Denver USA. DOI: 10.2514/6.2017-3863
9. 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.
10. **S. R. Nikam** and S. D. Sharma, "Aero-acoustic Characteristics of Compressible Jet from Chevron Nozzle," *AIAA Paper-2014-2623*, DOI: 10.2514/6.2014-2623, **Atlanta USA, 2014**
11. **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.**
12. 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

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Group of Institute, Pune, during 23-25th March 2017

13. 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
14. 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
15. 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
16. 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
17. **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
18. **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.
19. **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.

Books/Book Chapters

1. 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. https://doi.org/10.1007/978-981-15-5183-3_39
2. Nikam S.R., Sharma S.D. (2021) Mach number Effect on Aeroacoustic Characteristics of Compressible Jet Due to Chevron. Design and Development of Aerospace Vehicles and Propulsion Systems. Lecture Notes in Mechanical Engineering. Springer, Singapore. https://doi.org/10.1007/978-981-15-9601-8_1

Patents/Copy Rights : Nil

No of Research / consultancy / projects completed:
Rs:

No of Research / consultancy / projects on-going:
Rs:

No of Research / consultancy / projects on applied as on date:
Rs:

Details of Research / consultancy / projects:

Completed: Nil

On-going: Nil

Applied:

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Sr. No.	Title	Sponsoring organization	Role	Amount (Rs)	Year	Remark
1	Chimney Plume Control to Reduce Pollutant Concentration	Science and Engineering Research Board (SERB) File Number : SUR/2022/004472	PI	29,75,000	2022	Under review
2	Green Hydrogen Production using Solar Powered Electrolysis process	Science and Engineering Research Board (SERB) File Number: SPG/2022/001145	Co-PI	27,04,000	2022	Under review

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FDPs/Seminars/Workshops/Training Programs Attended/ Organized/ Delivered
<p>Attended</p> <ol style="list-style-type: none"> 1. 7th National Workshop on Research Methodologies in Fluid Mechanics on “Challenges in Computational Fluid Dynamics”, June 13-17, 2022, IIT Roorkee. 2. 6th National Workshop on Research Methodologies in Fluid Mechanics, June 7-11, 2021, BITS Pilani. 3. A national level workshop for higher educational institute on Transformation through NAAC accreditation Process organized by Institute for Academic Excellence. 4. NPTEL Course on “Cardiovascular Fluid Mechanics” in Jan-March 2020. 5. Attended QIP course on “Stealth Technology” at IIT Bombay, Mumbai in Nov 2019. 6. Attended QIP course on “Laboratory and Ergonomic Safety for Engineers” at IIT Bombay, Mumbai from 11th -15th June 2018. 7. Attended AICTE-ISHRAE sponsored one week refresher course on “Refrigeration and Air Conditioning” at C. O. E. P. Pune from 26th -30th June 2017. 8. Attended GIAN (Global Initiative for Academic Network) course on “Acoustics and Industrial Noise Control” at IIT Kharagpur from 15-19th May 2017. 9. National workshop on “Faculty Development Program under ISTE chapter of P.C.O.E. Thane held on 9th and 10th January 2007. 10. 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. 11. Attended National conference on “Rapid Prototyping and its application” at VNIT Nagpur in March 2006. 12. Attended preconference workshop on “Rapid Prototyping” at VNIT Nagpur in March 2006. 13. 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

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<p>14. One day national workshop on “Technical writing and Presentation Skills” conducted by P. C. O. E. Thane, 2004.</p> <p>15. AICTE sponsored two week “Technical Teachers Empowerment Programme” held at V.N.I.T. Nagpur in July 2004.</p> <p>16. One month In plant Training in “Ispat Industry LTD. Nagpur” in 1996</p>
<p>Organized</p> <ol style="list-style-type: none"> 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. Organized one day workshop on “Rapid prototyping & its application” in April 2007 at Parshvanath College of Engineering.
<p>Delivered</p> <ol style="list-style-type: none"> Webinar delivered on “Jet Noise Control” at Amity University Mumbai, May 2020. 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. 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.

Notable Key Scholastic Achievements	
1.	Travel grant awarded by University Grant Commission (UGC), New Delhi to attend 20 th Aeroacoustics International conference at Atlanta USA in year 2014.
2.	

Notable Positions and Responsibility	
1.	Member of IQAC of K J Somaiya College of Engineering
2.	Member of Faculty of Engineering and Technology at K J Somaiya College of Engineering.
3.	Worked as a member of Academic Council at K J Somaiya College of Engineering
4.	Member of Board of Studies, Mechanical Department, at K J Somaiya College of Engineering
5.	Member of Board of Studies, M.Tech (Energy Engineering), at K J Somaiya College of Engineering
6.	Worked as Associate Head of the Department, Mechanical Engineering, at K J Somaiya College of Engineering, Vidyavihar, Mumbai
7.	Member of Institute Library Advisory committee at K. J. Somaiya College of engineering.
8.	Member of department NBA committee at K. J. Somaiya College of engineering
9.	Department budget coordinator at K. J. Somaiya College of engineering
10.	Faculty advisor for ISHRAE student chapter (2015-till date) at K. J. Somaiya College of Engineering

Outreach:

- Worked as reviewer and 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.

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- Examination auditor at Sardar Patel College of Engineering, Andheri, Mumbai in year 2017, 2018, 2019, 2020 and 2021
- 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, and 2021.
- Worked as Subject expert for Syllabus revision of Mechanical Engineering at Sardar Patel College of Engineering, Andheri, Mumbai in year 2017, 2020, and 2021.
- 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.

Date: 07/02/ 2023