

# Curriculum Vitae

## Dr. Nikhil Ashokbhai Baraiya

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Department of Mechanical Engineering,  
Saradar Vallabhbhai National Institute of  
Technology Surat,  
Ichchhanath, Surat-395007, India

### EDUCATION

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**PhD** (2014 – 2019)

**Institution:** Indian Institute of Technology-Madras, India.

**Title:** Syngas Combustion Dynamics in a Turbulent Bluff-body Combustor.

**Supervisor:** Prof. S.R. Chakravarthy

CGPA: 8.17

**Master of Technology (Turbomachines)** (2010–2012)

**Institution:** SVNIT-Surat, India.

**Thesis Title:** Numerical and Experimental Investigation on Can Type Gas Turbine Combustion Chamber.

**Supervisor:** Dr. R. D. Shah

CGPA: 9.18

**Bachelor of Engineering (Mechanical Engineering)** (2005-2009)

**Institution:** Shantilal Shah Engineering College Bhavnagar, India (Affiliated to Bhavnagar University, Bhavnagar, India)

Percentage in course work: 66.97%

Graduated in *First class with Distinction* (Department second in Mechanical Engineering, Bhavnagar university).

### RESEARCH EXPERIENCE

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- Acoustic characterization of a combustor.
- Flow field characterization using High Speed PIV.
- High speed OH\* chemiluminescence imaging.
- Study of flow/flame interaction by simultaneous time resolved PIV, CO<sub>2</sub>\*, CH\* and OH\* chemiluminescence during combustion instability in turbulent combustor.
- PLIF

### GRADUATE COURSES

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- Combustion explosion and detonation.
- Combustion flow diagnostics.
- Elements of gas dynamics and propulsion.
- Acoustic instability

## SKILLS

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- **Programming languages:** C, FORTRAN.
- **Tools and software:** ANSYS-Fluent, Matlab, Auto CAD, Lab-view (data acquisition).

## PROFESSIONAL EXPERIENCE

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1. **Assistant Professor,  
Mechanical Engineering Department  
Nirma Institute of technology, Ahmedabad**

(July 2012 to December-2012)

### **Roles and Responsibilities:**

Course instructor: -

- Elements of Mechanical Engineering
- Engineering Graphics 1 and 2

Lab Instructor: -

- Hydro and thermal turbo machines lab.
- Elements of Mechanical Engineering
- Engineering Graphics 1 and 2

2. **Assistant Professor,  
Department of Mechanical Engineering  
Sardar Vallabhbhai National Institute of Technology Surat**

(November 2019 to Current date)

### **Roles and Responsibilities:**

Course instructor: -

- **METM110:** Combustion
- **ME 602:** Gas Dynamics and Flow Through Turbomachines Passages
- **ME 612:** Design of Thermal Turbo machine
- **ME 721:** Advance Thermodynamics and Combustion
- **ME 403:** Energy Systems
- **ME 402:** Elements of Gas Turbines
- **ME429:** Fundamentals of Combustion
- **ME442:** Experimental Fluid Mechanics

Lab Instructor:

- Fluid Mechanics
- Heat and Mass Transfer
- FF&T
- **ME 612:** Design of Thermal Turbo Machines
- **ME 604:** Thermal Turbo Machines
- **ME207:** Measurement and Instrumentation
- Lab Practice-I M.Tech Turbomachines
- Software Practice-I M.Tech Mechanical
- Gas Turbine and Jet Propulsion Lab
- Advance Heat Transfer Lab
- Library Assignment

1. **Nikhil A. Baraiya and S. R. Chakravarthy**, “Effect of syngas composition on high frequency combustion instability in a non-premixed turbulent combustor.” *International Journal of Hydrogen Energy* 2019. Vol. 44, issue.12, pp.6299-6312. <https://doi.org/10.1016/j.ijhydene.2019.01.115> (IF: 7.13)
2. **Nikhil A. Baraiya and S. R. Chakravarthy**, “Excitation of high frequency thermoacoustic oscillations by syngas in a non-premixed bluff body combustor.” *International Journal of Hydrogen Energy* 2019. Volume 44, Issue 29, 7 June 2019, Pages 15598-15609. <https://doi.org/10.1016/j.ijhydene.2019.04.087> (IF: 7.13)
3. **N. Baladandayuthapani, Nikhil A. B. and S. R. Chakravarthy**, “Effect of inlet flow turbulence on the combustion instability in a premixed backward-facing step combustor.” *Proceedings of combustion institute* 2019. Volume 37, Issue 4, 2019, Pages 5189-5196. <https://doi.org/10.1016/j.proci.2018.06.143> (IF: 6.719)
4. **Nikhil A. Baraiya, Vikram Ramanan, N. Baladandayuthapani, Chetankumar S. Vegad and S. R. Chakravarthy**, “Experimental Investigation Into the Role of Mean Flame Stabilization On the Combustion Dynamics of High-Hydrogen Fuels in a Turbulent Combustor.” *Journal of Engineering for Gas Turbines and Power* 2021. *Paper No: GTP-20-1588*. <https://doi.org/10.1115/1.4050067> (IF: 1.732)
5. **Nikhil A. Baraiya, Vikram Ramanan, N. Baladandayuthapani, Chetankumar S. Vegad and S. R. Chakravarthy**, “Role of pumping and wrinkle propagation mechanisms in exciting different acoustic-modes in turbulent syngas combustion.” *International Journal of Hydrogen Energy* 2021. Volume 46, Issue 24, 6 April 2021, Pages 13413-13429. <https://doi.org/10.1016/j.ijhydene.2021.01.151> (IF: 7.13)
6. **Nikhil A. Baraiya, Vikram Ramanan, N. Baladandayuthapani, Chetankumar S. Vegad and S. R. Chakravarthy**, “Investigation of Oscillatory States Involving Acoustic Mode Shifts in a Turbulent Syngas Combustion using Non-stationary Time-series Analysis.” *Flow, Turbulence and Combustion* 2021 <https://doi.org/10.1007/s10494-021-00258-x> (IF: 2.566)
7. **Vikram Ramanan, Nikhil A. Baraiya, and S. R. Chakravarthy**, “Experimental Analysis of Two-period Quasi-periodic Oscillations in a Turbulent Hydrogen Combustor.” *Journal of Visualization* 2021 <https://doi.org/10.1007/s12650-021-00752-4> (IF: 1.974)
8. **Vikram Ramanan, Nikhil A. Baraiya, and S. R. Chakravarthy**, “Detection and identification of nature of mutual synchronization for low- and high-frequency non-premixed syngas combustion dynamics.” *Nonlinear Dynamics* (2022) <https://doi.org/10.1007/s11071-022-07264-2> (IF: 5.741)
9. **Nikhil A. Baraiya, Vikram Ramanan, N. Baladandayuthapani, Chetankumar S. Vegad and S. R. Chakravarthy**, “Experimental Analysis of Transition to Higher Acoustic Mode in Syngas Combustion Dynamics.” *Journal of Propulsion and Power* 2022 <https://doi.org/10.2514/1.B38601> (IF: 2.005)
10. **Nikhil A. Baraiya, Vikram Ramanan, N. Baladandayuthapani, Chetankumar S. Vegad and S. R. Chakravarthy**, “Dynamic Mode Decomposition of Syngas (H<sub>2</sub>/CO) Flame during Transition to High-Frequency Instability in Turbulent Combustor.” *Energy* 2022 <https://doi.org/10.1016/j.energy.2022.125998> (IF: 8.857)

11. N. Nishant, **Nikhil A. Baraiya**, “Analysis of four wall flow control in supersonic duct using ramped-vanes micro vortex generator. CEAS Aeronaut J 15, 191–205 (2024). <https://doi.org/10.1007/s13272-024-00723-z>
12. S. Jatoliya, P. Singh, **Nikhil A. Baraiya**, S. Karthikeyanathan, and S. R. Chakravarthy, “Experimental study of transition in dynamical states of thermo-acoustic oscillations in a turbulent bluff body combustor.” *Nonlinear Dynamics* (2024), pp. 1-23 <https://doi.org/10.1007/s13272-024-00723-z> (IF: 5.741)
13. P. Chaudhuri, R. Pande, & **N. A. Baraiya**, “A novel insight into the influence of temperature and heating rate on bamboo pyrolysis through kinetics and thermodynamic parameter analysis using thermogravimetric analyser.” *J Therm Anal Calorim* 149, 1385–1401 (2024). <https://doi.org/10.1007/s10973-023-127> (IF: 4.4)

## BOOK/ BOOK CHAPTER

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1. **Nikhil A. Baraiya** and S. R. Chakravarthy, “*Syngas combustion Dynamics in a bluff body turbulent combustor.*” Mukhopadhyay, A., Basu D. N., Mondal, S., and Sen, S. (Eds.). Monograph on Dynamics and Control of Energy Systems. Springer (2020) (pp. 239-263). [https://doi.org/10.1007/978-981-15-0536-2\\_11](https://doi.org/10.1007/978-981-15-0536-2_11)
2. **Nikhil A. Baraiya** and S. R. Chakravarthy, “*Experimental Investigation of Combustion Instability in Syngas Turbulent Combustor.*” In: Sikarwar, B.S., Sundén, B., Wang, Q. (eds) *Advances in Fluid and Thermal Engineering. Lecture Notes in Mechanical Engineering.* Springer (2021), Singapore. [https://doi.org/10.1007/978-981-16-0159-0\\_80](https://doi.org/10.1007/978-981-16-0159-0_80)
3. **Nikhil A. Baraiya** and S. R. Chakravarthy, “*Effect of Fuel Composition on Thermoacoustic Instability in a Turbulent Combustor.*” In: Sikarwar, B.S., Sundén, B., Wang, Q. (eds) *Advances in Fluid and Thermal Engineering. Lecture Notes in Mechanical Engineering.* Springer (2021), Singapore. [https://doi.org/10.1007/978-981-16-0159-0\\_79](https://doi.org/10.1007/978-981-16-0159-0_79)
4. K. Kadia, **N. A. Baraiya**, R. D. Shah, “*Numerical Investigation on Characteristics of Methane Combustion.*” In: Mehta, H.B., Rathod, M.K., Abiev, R., Arıcı, M. (eds) *Recent Advances in Thermal Sciences and Engineering. Lecture Notes in Mechanical Engineering.* Springer (2023), Singapore. [https://doi.org/10.1007/978-981-19-7214-0\\_27](https://doi.org/10.1007/978-981-19-7214-0_27)
5. K. Kadia, **N. A. Baraiya**, R. D. Shah, “*Effect of Dilution on Lean Blow-Off Limit of Methane Combustion.*” In: Mehta, H.B., Rathod, M.K., Abiev, R., Arıcı, M. (eds) *Recent Advances in Thermal Sciences and Engineering. Lecture Notes in Mechanical Engineering.* Springer (2023), Singapore. [https://doi.org/10.1007/978-981-19-7214-0\\_34](https://doi.org/10.1007/978-981-19-7214-0_34)
6. K. Kadia, **N. A. Baraiya**, R. D. Shah, “*Effect of Dilution on Emission from Methane Combustion.*” In: Mehta, H.B., Rathod, M.K., Abiev, R., Arıcı, M. (eds) *Recent Advances in Thermal Sciences and Engineering. Lecture Notes in Mechanical Engineering.* Springer (2023), Singapore. [https://doi.org/10.1007/978-981-19-7214-0\\_38](https://doi.org/10.1007/978-981-19-7214-0_38)
7. N. Nishant, **N. A. Baraiya**. “*Flow Control Using MVG in Shock Wave/Boundary Layer Interaction.*” In: Banerjee, J., Shah, R.D., Agarwal, R.K., Mitra, S. (eds) *Recent Advances in Fluid Dynamics . Lecture Notes in Mechanical Engineering.* Springer (2023), Singapore. [https://doi.org/10.1007/978-981-19-3379-0\\_16](https://doi.org/10.1007/978-981-19-3379-0_16)
8. V. Singh, **N. A. Baraiya**. “*A Review on Design and Optimisation of Axial Fan.*” In: Banerjee, J., Shah, R.D., Agarwal, R.K., Mitra, S. (eds) *Recent Advances in Fluid Dynamics . Lecture Notes in Mechanical Engineering.* Springer (2023), Singapore. [https://doi.org/10.1007/978-981-19-3379-0\\_17](https://doi.org/10.1007/978-981-19-3379-0_17)
9. A. B. Gade, **N. A. Baraiya**. “*Qualitative Study on Parameters Affecting the Structure of Sprays and Its Atomization.*” In: Banerjee, J., Shah, R.D., Agarwal, R.K., Mitra, S. (eds) *Recent Advances in Fluid Dynamics . Lecture Notes in Mechanical Engineering.* Springer (2023), Singapore. [https://doi.org/10.1007/978-981-19-3379-0\\_30](https://doi.org/10.1007/978-981-19-3379-0_30)

## CONFERENCE PAPERS

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1. **Nikhil, A.B., Baladandayuthapani, N., Chakravarthy, S. R. and Balachandran, R.** “Experimental investigation of combustion dynamics in synthesis gas combustor”, 10th ASPACC, July-2015, Beijing, China.
2. **Nikhil, A.B., Baladandayuthapani, N., Chakravarthy, S. R. and Balachandran, R.** “The effect of syngas composition on combustion dynamics of bluff-body type combustor.”, International Symposium on Thermoacoustic Instabilities, June 2016, Munich, Germany.
3. **Baladandayuthapani, N., Ramanan, V., Nikhil A. B. and Chakravarthy, S. R..** “Turbulence induced instability in a backward facing step combustor.”, International Symposium on Thermoacoustic Instabilities, June 2016, Munich, Germany.
4. **Nikhil, A. Baraiya, Baladandayuthapani, N. and Chakravarthy SR.** “Experimental Investigation of Combustion Dynamics in a Turbulent Syngas Combustor.” Proceedings of ASME Turbo Expo 2017
5. **Nikhil, A. Baraiya., and Chakravarthy SR.** “Effect of chemical composition of syngas on combustion dynamics inside bluff-body type turbulent syngas combustor.” Proceedings of ASME Turbo Expo 2018
6. **Nikhil, A. Baraiya., and Chakravarthy S. R.** “The role of mean flame anchoring on the stability characteristics of syngas, synthesis natural gas and hydrogen fuels in a turbulent non-premixed bluff-body combustor.”, Proceedings of ASME Turbo Expo 2019
7. **Baraiya, N.A. and Chakravarthy, S.R., 2020.** Effect of Fuel Composition on Thermoacoustic Instability in a Turbulent Combustor. Flame 2020, Amity University, Noida, India
8. **Baraiya, N.A. and Chakravarthy, S.R., 2020.** Experimental Investigation of Combustion Instability in Syngas Turbulent Combustor. Flame 2020, Amity University, Noida, India (*Best paper award*)
9. **Vegad, Chetankumar S., Nikhil A. Baraiya, Satyanarayanan R. Chakravarthy, and Amit Kumar.** "Proper Orthogonal Decomposition of Atomizing Free-Surface Circular Liquid Sheet." In International Conference on Liquid Atomization and Spray Systems (ICLASS), vol. 1, no. 1. 2021.
10. **Keyur Kadia, Nikhil A. Baraiya, R. D. Shah.** “Effect of Dilution on Emission from Methane Combustion.” 2nd National & 1st International Conference on Advances in Fluid Flow and Thermal Sciences (ICAFFTS-2021) at SVNIT Surat, September 24-25, 2021.
11. **Keyur Kadia, Nikhil A. Baraiya, R. D. Shah.** “Effect of Dilution on Lean Blow-off Limit of Methane Combustion.” 2nd National & 1st International Conference on Advances in Fluid Flow and Thermal Sciences (ICAFFTS-2021) at SVNIT Surat, September 24-25, 2021.
12. **Keyur Kadia, Nikhil A. Baraiya, R. D. Shah.** “Numerical Investigation on Characteristics of Methane Combustion.” 2nd National & 1st International Conference on Advances in Fluid Flow and Thermal Sciences (ICAFFTS-2021) at SVNIT Surat, September 24-25, 2021.
13. **Nishnat N. and Nikhil A. Baraiya.** “Flow Control Using MVG In Shock Wave/Boundary Layer Interaction.” 2nd National & 1st International Conference on Advances in Fluid Flow and Thermal Sciences (ICAFFTS-2021) at SVNIT Surat, September 24-25, 2021.

14. **Vijender Singh and Nikhil A. Baraiya.** “A Review on Design and Optimization of Axial Fan.” 2nd National & 1st International Conference on Advances in Fluid Flow and Thermal Sciences (ICAFFTS-2021) at SVNIT Surat, September 24-25, 2021.
15. **Abhishek Bhupendra Gade and Nikhil A. Baraiya.** “Qualitative Study on Parameters Affecting the Structure of Sprays and its Atomization.” 2nd National & 1st International Conference on Advances in Fluid Flow and Thermal Sciences (ICAFFTS-2021) at SVNIT Surat, September 24-25, 2021.
16. **Vijendra Singh and Nikhil A. Baraiya.** “Inverse Design of a Centrifugal Fan for High Flow Rate Operating at Low Noise Level.” ASME Turbo Expo 2022, Paper No: GT-2022-82962, Rotterdam, The Netherlands, June 13 – 17, 2022
17. Nishant N and **Nikhil A. Baraiya.** “Numerical study of alleviation of shock induced flow separation using ramped vane micro vortex generators” Symposium on Applied Aerodynamics and Design of Aerospace Vehicles SAROD 2022, Hyderabad during 15-17 December 2022.
18. Vijendra Singh, Nishant N and **Nikhil A. Baraiya.** “Review on Aerodynamics and Acoustics Performance of Contra Rotating Fans” FMFP 2022, 14-16 December, IIT Roorkee, India
19. Venna Seshi Reddy, Vijendra Singh, **Nikhil A. Baraiya,** and Vimal K. Patel. “Review on Performance Assessment of Centrifugal Compressor” FMFP 2022, 14-16 December, IIT Roorkee, India
20. Nishant N and **Nikhil A. Baraiya.** “Numerical analysis of shock induced flow separation control using ramped vane micro vortex generators” AIAA SciTech Forum, 23-27 January 2023, National Harbor, MD & Online. AIAA 2023-2188, Session: Topics in High-Speed Air-Breathing Propulsion II <https://doi.org/10.2514/6.2023-2188>
21. Sunil Jatoliya, Mayur Vadoliya, Ankit Dekhatawala, **Nikhil A. Baraiya\*** and R. D. Shah. “Numerical Study of Flame Stabilization Mechanisms in Turbulent Bluff Body Combustor” Proceedings of the 10th International and 50th National Conference on Fluid Mechanics and Fluid Power (FMFP) Paper No. FMFP2023–INS–305, December 20-22, 2023, IIT Jodhpur, India
22. Mayur Vadoliya, Ankit Dekhatawala, Sunil Jatoliya, R. D. Shah and **Nikhil A. Baraiya** “Numerical Study of Flame Characteristics of Multi-tube Inverse Diffusion Burner” Proceedings of the 10th International and 50th National Conference on Fluid Mechanics and Fluid Power (FMFP) Paper No. FMFP2023–PAP–252, December 20-22, 2023, IIT Jodhpur, India

## RESEARCH PROJECTS

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1. Combustion Dynamics of Rocket Engine and its Active Control Using High energy Plasma Discharge for Phase Desynchronization, Role: **PI** (Solo), Amount: **19,50,000/-**, Sponsoring Agency: **ISRO**, Phase: Ongoing (27-04-2023 to 26-04-2025)
2. Investigation on explosion dynamics of hydrogen-rich fuels with a parametric variation of fuel components and obstacles, Role: **PI**, Team: Co-PIs [Dr. Naresh Yarramsetty (DoME, SVNIT), Dr. Meenatchidevi Murugesan (IIT Dharwad), Dr. Sudipto Mukhopadhyay (IIT Jodhpur)] Amount: **61,93,176/-**, Sponsoring Agency: **CRG-DST**, Phase: Ongoing (30-06-2024 to 31-05-2026).
3. Development of Fuel-flexible Combustor Operating at High-pressure for Optimum Emissions and Combustion Dynamics. (2023 – 2025), Role: Co-PI, Team: PI (Dr. R. D. Shah), Amount: **33,03,969/-**, Sponsoring Agency: **CRG-DST**, Phase: Ongoing
4. Investigation of Thermal and Emissions Characteristics With Multi Tube Inverse Diffusion Flame Burner (2022 – 2024), Role: Co-PI, Team: PI (Dr. R. D. Shah), Amount: **7,95,000/-**, Sponsoring Agency: **GUJCOST-DST**, Phase: Ongoing

5. Development of Combustion Diagnostics Lab under FIST programme (2022 – 2027), Role: Co-PI, Team: PI ( Dr. J. Banerjee), Co-PIs (Dr. P V Bhale, Dr. H B Mehta, Dr. R D Shah, Dr. Nikhil A Baraiya, Dr. Y. Naresh, Dr. Rohan Pande), Amount: **102,00,000/-**, Sponsoring Agency: **DST**, Phase: Ongoing
6. Development of test facility to study combustion dynamics of high-hydrogen and bio-fuels in turbulent gas turbine combustor (2021 – 2023), Role: PI, Amount: **8,85,000/-**, Sponsoring Agency: **SVNIT** (Seed Money), Phase: Ongoing.
7. Development of a pulsating heat pipe based hybrid pyramid type solar still for efficient desalination Role: Co- PI, PI (Dr. Y. Naresh,), Co-PIs (Dr. J. Banerjee, Dr. H B Mehta, Dr. Nikhil A Baraiya,), Amount: **31,73,808/-**, Sponsoring Agency: CRG-DST, Phase: Ongoing (10-05-2024 to 09-05-2026)
8. Upgradation of High-pressure, High-temperature Small-scale Gas Turbine Combustor Test Rig at Centre for R&D in Small-Scale Gas Turbine Combustors, Role: Co-PI, Amount: **169,72,000/-**, Sponsoring Agency: **COPT**, Phase: Submitted

#### CONFERENCE/ SEMINARS/ STTPS/ WORKSHOPS

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1. TEQIP-III sponsored STTP on “**Thermal management: An overview, challenges and solutions**” from 2<sup>nd</sup> -7<sup>th</sup> November 2020 (Organized)
2. TEQIP-III sponsored STTP on “**Combustion Concepts and Applications**” from 30<sup>th</sup> November to 4<sup>th</sup> December 2020 (Organized)
3. Workshop on “Design and Analysis of Thermal Systems Using Axstream" from April 12-16, 2021 (Organized)
4. Workshop on “Thermal System Design and Analysis Using COMSOL” from October 25-29, 2021 (Organized)
5. 2nd National and 1st International conference on Fluid Flow and Thermal Sciences, Diamond Jubilee Celebration, from September 24-25, 2021 (Organized)

#### INVITED LECTURES

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1. “ Gas Turbine Combustion Diagnostics.” In Webinar series on “ An Engineering Approach to the Gas Turbine Systems.” At KLS GIT, Belgavi on 29<sup>th</sup> July 2020.
2. “ Thermo acoustics Instabilities” In TEQIP sponsored STTP on Combustion Concepts and Applications at SVNIT
3. “Combustion Dynamics of Hydrogen-rich fuels” National Conference on “Turbomachines, Energy, and Combustion” (NCTEC-2021), SVNIT, 29-11-2021
4. “Session Chair” National Conference on “Turbomachines, Energy, and Combustion” (NCTEC-2021), SVNIT, 29-11-2021
5. “Data Analysis using MATLAB” In STTP on MATLAB and its Application in Engineering and Research (MATER-2022) 26<sup>th</sup> – 30<sup>th</sup> September 2022 (26-09-2022).
6. “Data Analysis using MATLAB” In STTP on MATLAB and its Application in Engineering and Research (MATER-2024) 8<sup>th</sup> – 12<sup>th</sup> January 2024 (12-01-2024).
7. “Fundamentals of Aerodynamics” Bootcamp 6.0 on "Drone Technology and Applications" 22<sup>nd</sup> – 26<sup>th</sup> April 2024 (24-04-2024). 3rd Floor, VLSI LAB, EC Department, SVNIT

#### AWARDS AND ACHIEVEMENTS

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1. **Young Engineer Turbo Expo Travel Award** for ASME Turbo Expo at Phoenix Arizona USA 2019
2. **ASME (American Society of Mechanical Engineering) Active Member from** 2018.
3. **Placement coordinator at SVNIT Surat for M.Tech Turbomachines** (2010-2012).
4. **Department second** in Mechanical Engineering, Bhavnagar University.
5. **Placement coordinator for Mechanical Engineering Department at Shantilal Shah Engineering College,** Bhavnagar (2007-2009).

6. **Coordinator** Technomantra 2K8 at Shantilal Shah Engineering College, Bhavnagar (2008).
7. **Best Paper award** in Flame 2020, at Amity University, Noida, India

## ADMINISTRATIVE DUTIES

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- PG in-charge (M.Tech Turbomachines, O.O. No. DoME/3884/2023-24, Dated: 21/12/2023) [01-01-2024 – Till date]
- Project/ Seminar Committee (O.O. No. DoME/1256/2023-24) [23/06/2023 – Till date]
- Internship Committee (O. O. No. DoME/5258/2023-24) [ 04/03/2024 – Till date]
- Warden (Gajjar Bhavan) (O. O. No. E/2207, Dated 13/03/2023) [ 13/03/23 – Till date]
- Lab-in Charge of Reacting Gas Dynamics Lab (O. O. No. MED/Lab.Incharges/2928/2020-21 & DoME/Lab.Incharges/570/2022-23) [ 05-03-2021 – Till date]
- Lab-in Charge of Turbomachines Simulation Lab (O. O. No. No.MED/Lab. Incharge/ 604 & DoME/Lab.Incharges/570/2022-23) [ 15-06-2021 – Till date]

## CO-CURRICULAR ACTIVITIES

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- Manufacturing of Cryogenics Pressure Vessel' **Inox India Ltd. Kandla** (1 month vocational training)(**June2008**)
- Manufacturing of Helical gears **Elecon Comp. Ltd. V.V.Nagar** (1 month vocational training) (**Dec 2008**)
- Took part in many national level robotics events held at Nirma Univeristy, L.D. College of engineering, Chanaga Institute of technology, C U Shah college of engineering and Sankalchand Patel College of Engg(**2006-2008**)
- Attended Gian course on **Combustion and flow Diagnostics**, conducted by Prof. A. Dreizler. (**Oct. 2016**)

## ALUMNI (2020 – 2024)

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Keyur Kadia	M.Tech	Acquisy Solution Pvt Ltd
Vedant Gaikwad	M.Tech	Kirloskar Pneumatic Co Ltd
Nishantt N	M.Tech	NAL Bengaluru
Vijendra Singh	M.Tech	Xylem Water Solutions India Pvt. Ltd.
Abhishek Gade	M.Tech	Newen Systems Private Limited
Anirudh Nautiyal	M.Tech	Siemens Pune
Meera Sudheer	M.Tech	Siemens Pune
Manan Jain	M.Tech	Siemens Pune
Venna Seshi Reddy	M.Tech	Metso Vadodra

## PHD OPENING

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Enthusiastic and interested students who wants to pursue PhD under the Research area given below can contact me at [nikhil@med.svnit.ac.in](mailto:nikhil@med.svnit.ac.in) The areas of Research are:

- Combustion Dynamics • Explosion Dynamics • Combustion Diagnostics • Jet and Rocket Propulsion • Hydrogen-rich Fuels Combustion • Non-linear Dynamics • Supersonic Combustion • Fuel Cell • Gasification and Pyrolysis