

CURRICULUM VITAE

Mr. Nikhil Aniruddha Bhave

Phone: +91-7447396441, +91-9096855441

Email: bhave.nikhil123@gmail.com

Google Scholar: <https://scholar.google.com/citations?user=sHYfo9gAAAAJ&hl=en>

ORCID ID: 0000-0001-9997-6991

Scopus Author ID: 57207845387 **Researchers ID:** ABF-5108-2021



Objective

To earn knowledge, respect, and money from a fruitful career advancement.

Area of Specialization

Mechanical Engineering, Thermal Engineering and Automobile Engineering

Research Interest

Environmental Engineering

Educational Qualifications

Ph.D. (Mechanical Engineering)	Rashtrasant Tukadoji Maharaj Nagpur University Name of Research Center: Department of Mechanical Engineering, Shri Ramdeobaba College of Engineering and Management, Nagpur (Awarded) Title of Thesis: Combustion and Emission Investigations on Homogenous Charge Compression Ignition Engine. Name of Supervisor: Dr. Mahendra M. Gupta, RCOEM, Nagpur.
M.Tech (Heat Power Engineering)	Visvesvaraya National Institute of Technology, Nagpur. (June-2012) Distinction (Score 7.98 CGPA) Title of Thesis: Performance and Emission Studies of Sesame Oil Methyl Ester in CI engine Name of Supervisor: Dr. J. G. Suryawanshi, VNIT, Nagpur.
B.E. (Mechanical Engineering)	Shri Sant Gajanan Maharaj College of Engineering, Shegaon (Affiliated to SGB, Amravati University, (July-2010) First Class (Score 61.57%)
HSC	Maharashtra State Board of Secondary and Higher Secondary Education (May-2006) Distinction (Score 77.33%)
SSC	Maharashtra State Board of Secondary and Higher Secondary Education (May-2004) Distinction (Score 84.53%)

Professional Membership

- Life Member: Associate Member of Institution of Engineer. **SMIIE 10122 (88)**
- Life Member: Member (MIE) Institution of Engineers **M-1741459**
- Life Member: IAENG Society of Mechanical Engineering **ID: 341998**

Work Experience

Total Experience: 9 years 2 months

S.N.	Name of Organization	Designation	Dates	Tenure
1	MKSSS Cummins College of Engineering for Women, Nagpur	Assistant Professor	8 th August 2021 to (till date)	23 months

1	Shri Ramdeobaba College of Engineering & Management, Nagpur. (Autonomous)	Assistant Professor	8 th Jan 2013 – 30 th June 2013 (A) 3 rd July 2013 to 20 th May 2014 (A) 1 st July 2015 to 30 th April 2016 (A) 1 st July 2016 to 25 th May 2018 (A) 1 st August 2018 to 17 th May 2019 (A) 1 st July 2019 to 31 st May 2020 (A)	5 years 9 months
2	Yashwantrao Chavan College of Engineering, Nagpur. (Autonomous)	Assistant Professor	26 th June 2014 to 30 th June 2015	1 Year
3	G. H. Raisoni Academy of Engineering and Technology, Nagpur.	Lecturer	11 th June 2012 – 11 st Nov 2012	5 months
4	Government Polytechnic, Nagpur.	Lecturer	13 th June 2011– 13 th April 2011	10 months

Achievements and Awards (2)

- 1 Received '**Best Paper Award**' – International conference on applied Mechanical Engineering Research at National Institute of Technology, Warangal (**NIT Warangal**). May 2019
- 2 Received '**Best Paper Award**' - International Conference on advancements in Science, Technology and Management, at S. B. Jain Institute of Technology, Management and Research, Nagpur, Dec 23-24 Dec, 2021.
- 3 **Qualified Graduate Aptitude Test in Engineering** 2010 with 83.33%.
Qualified Graduate Aptitude Test in Engineering 2016 with 75%.
- 4 Received '**Best Paper Award**' – ICMech-REC-2023 at National Institute of Technology, Warangal (**NIT Warangal**). June 2023

Software Proficiency

1. Working knowledge of Microsoft Office 2010
2. Working Knowledge of AutoCAD 2010
3. Certified for Ansys Fluent 14.5
4. Working knowledge of Origin 2020
5. Working knowledge of Mendeley Citation Management tool
6. Microsoft Certification for Python online course
7. Working knowledge of MATLAB.

Patents (4)

1. **Title of Invention:** Solar powered intake turbo fan for motor vehicles

Application No. : 201921021926

Status: Published in Indian Patent Journal on 26/07/2019.

2. **Title of Invention:** Air Flow Accelerator and Turbulence Generator in Intake Manifold of Single Cylinder C.I. Engine

Application No. : 201921021289

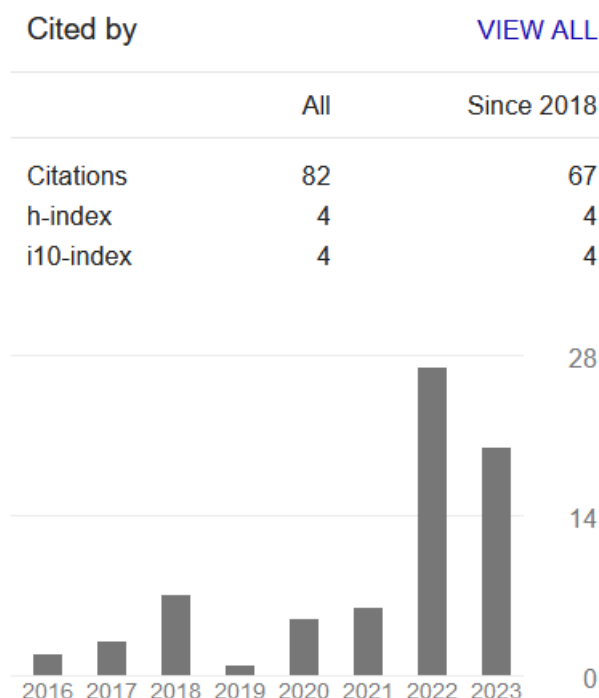
Status: Published in Indian Patent Journal on 26/07/2019.

3. Title of Invention: Ladle Tilting Mechanism for Pouring Molten Metal

Status: Applied to IPO

4. Copyright granted for Literary work with application number L-72110/2018

Google Scholar Citation Profile



Publications

International Journals: (16) (SCI: 05, SCOPUS: 15, UGC Cared: 03)

1. Nikhil A Bhave et al, Performance and Emission Studies of Sesame Oil Methyl Ester in Compression Ignition Engine, in International Journal of Emerging Technology and Advanced Engineering of (ISSN 2250-2459, ISO 9001:2008 Certified Journal, Volume 3, Issue 4, May 2013) Impact Factor: 2.345
2. Nikhil A Bhave et al, "Performance of Spark Ignition Engines under the influence of Magnetic Fields" in International Journal of Research in Aeronautical and Mechanical Engineering of ISSN (ONLINE): 2321-3051 Volume 1 Issue 03 2013, Impact Factor: 1.57
3. Nikhil A Bhave et al. 'Performance Analysis of An Inverted Trapezoidal Flume Shaped Photovoltaic-Thermal System, *Appl. Sol. Energy -Springer*, Vol. 54, Issue 6, pp 413-420, 2018 DOI: <https://doi.org/10.3103/S0003701X18060129> (SCOPUS indexed)
4. Nikhil A Bhave et al 'Productivity Improvement of Single Basin Inclined Solar Still Using Enamel Coating and Copper Chips', Desalination and Water Treatment, Issue 156(2019) Pages 161-167, DOI: <https://doi.org/10.5004/dwt.2019.24094> (SCI indexed)
5. Nikhil A Bhave et al. , 'Thermal Management of Photovoltaic Systems - case studies', IOP Conf. Series: Journal of Physics: Conf. Series 1240 (2019) 012021 [DOI: <http://10.1088/1742-6596/1240/1/012021>] (SCOPUS indexed)

6. Nikhil A Bhave et al “Performance Analysis Of Conical Shape Solar Distillation Unit, International Journal of Mechanical and Production Engineering Research and Development (IJMPERD), Volume 9, Page 139-144 (**SCOPUS indexed**)
7. Nikhil A Bhave et al “Analysis of Refrigeration System In Whirlpool - An Industrial Case” International Journal of Mechanical and Production Engineering Research and Development (IJMPERD), Volume 9, Page 132-138 (**SCOPUS indexed**)
8. Nikhil A Bhave et al “The Performance and Emission Predictions of Direct Injection Diesel Engine” International Journal of Mechanical and Production Engineering Research and Development (IJMPERD), Volume 9, Page 32-37 (**SCOPUS indexed**)
9. Nikhil Aniruddha Bhave, Mahendra M. Gupta & Sandeep S. Joshi (2020) Effect of Brown’s gas addition on combustion and emissions of homogeneous charge compression ignition engine, Energy Sources, Part A: Recovery, Utilization, and Environmental Effects, DOI: <https://doi.org/10.1080/15567036.2020.1817194> (**SCI indexed**)
10. Bhave, N. "Combustion, Performance and Emission characteristics of Early Direct Injection Compression Ignition Engine with varying Oxy hydrogen gas Concentration," SAE Technical Paper 2021-01-1171, 2021. <https://doi.org/10.4271/2021-01-1171> (**SCOPUS indexed**)
11. Nikhil A. Bhave, Experimental investigation of Al₂O₃ nanosuspension in vapor compression refrigeration system using tetrafluoroethane and iso-butane refrigerants, Vol. 50 Part 5 Pages 1804-1813 Elsevier Materials Today: Proceedings, <https://doi.org/10.1016/j.matpr.2021.09.209> (**Scopus indexed**)
12. Bhave, Nikhil, Mahendra Gupta, and Sandeep Joshi. “Hydroxy Gas Enriched Diesel Fuel Investigations on Homogenous Charge Compression Ignition Engine with Change in Injector Opening Pressure.” Petroleum Science and Technology. Taylor & Francis. Vol. 40 Issue. 7 Pages: 839-856 doi: <https://doi.org/10.1080/10916466.2021.2007126> (**SCI indexed**)
13. Nikhil Aniruddha Bhave, ‘Effect of Oxy-hydrogen Gas Addition on Combustion, Performance, and Emissions of Premixed Charge Compression Ignition Engine’ in Vol 227 Pages 107098 Elsevier Fuel Processing Technology <https://doi.org/10.1016/j.fuproc.2021.107098> (**SCI indexed**)
14. Nikhil Aniruddha Bhave, ‘Combustion, performance, and emission characteristics of diesel engine using oxyhydrogen gas as a fuel additive’, in Springer Journal of Environmental Science and Pollution Research <https://doi.org/10.1007/s11356-021-17975-5> (**SCI indexed**)
15. Nikhil Aniruddha Bhave Research Directions for Homogenous Charge Combustion Ignition Engine SAMRIDDHI: A Journal of Physical Sciences, Engineering and Technology Vol 14 Pages: 123-128 (UGC Care Journal)
16. Nikhil Aniruddha Bhave, Linkages Between Critical Success Factors and Performance Measures for Improvement in Service Quality-Life Insurance Perspective SAMRIDDHI: A Journal of Physical Sciences, Engineering and Technology Vol 14 Pages: 123-128 (UGC Care Journal)

17. Nikhil Aniruddha Bhawe, Analysis of the Performance of Green Pea Depoding Machine using Treadle Mechanism SAMRIDDHI: A Journal of Physical Sciences, Engineering and Technology Vol 14 Pages: 123-128 (UGC Care Journal)

International Conferences: (16)

1. Nikhil A Bhawe et al, 'Performance Analysis of Parabolic Trough Solar Collector with 'U' tube and Helical coil Receivers', **6th International Conference on "Advances in Energy Research"** (ICAER 2017) at *IIT Bombay, Powai, Mumbai, INDIA* 12-14 December, 2017
2. Nikhil A Bhawe et al, 'Productivity improvement of single basin inclined solar still using Enamel coating and copper chips', **International Conference on Desalination, organized by Indian Desalination association and NIT Trichy, INDIA**, April 20-21, 2018
3. Nikhil A Bhawe et al., 'Design, development and analysis of Intake manifold of Single cylinder Diesel Engine', **International conference on applied Mechanical Engineering Research** at National Institute of Technology, Warangal (NIT Warangal) May 2019.
4. Nikhil A Bhawe et al., 'Performance Analysis Of Conical Shape Solar Distillation Unit', **1st International Conference on Advances and Challenges in Energy Research**, at RCOEM, Nagpur, March 15-17, 2019.
5. Nikhil A Bhawe et al., 'Analysis of Refrigeration System In Whirlpool - An Industrial Case', **1st International Conference on Advances and Challenges in Energy Research**, at RCOEM, Nagpur, March 15-17, 2019.
6. Nikhil A Bhawe et al., 'The Performance and Emission Predictions of Direct Injection Diesel Engine', **1st International Conference on Advances and Challenges in Energy Research**, at RCOEM, Nagpur, March 15-17, 2019.
7. Nikhil A Bhawe et al., 'Thermal Management of Photovoltaic Systems - case studies', abstract proceeding of **2nd International Conference on New Frontiers in Engineering, Science & Technology (NFEST 2019)** at NIT Kurukshetra. *INDIA*, PP 7, Feb 18-22, 2019.
8. Nikhil A Bhawe et al, 'Performance Analysis of Corrugated Inclined Basin Solar Distillation System Coupled with Parabolic Trough Collector', '**International Conference on Advances in Mechanical Engineering (ICAME 2020)**' at Visvesvaraya National Institute of Technology, Nagpur, January 10 - 11, 2020.
9. Nikhil A Bhawe et al, 'Combustion, Performance and Emission characteristics of Diesel Engine using Oxy-hydrogen gas as a Fuel Additive', **2nd International Conference on Chemical, Bio & Environmental Engineering (ChemBioEn-2021)** at Dr B R Ambedkar National Institute of Technology, Jalandhar, Punjab on August 20-22, 2021
10. Nikhil A Bhawe et al, 'Biodiesel from Neem Oil and its Effect on Engine Performance and Exhaust Emissions', **2nd International Conference on Chemical, Bio & Environmental Engineering (ChemBioEn-2021)** at Dr B R Ambedkar National Institute of Technology, Jalandhar, Punjab on August 20-22, 2021
11. Nikhil A Bhawe et al, 'Performance, energy and exergy investigation of vapour compression refrigeration system using low global warming potential refrigerant with nanosuspension', **2nd**

International Conference on Chemical, Bio & Environmental Engineering (ChemBioEn-2021)
at Dr B R Ambedkar National Institute of Technology, Jalandhar, Punjab on August 20-22, 2021

12. Bhave, N. "Combustion, Performance and Emission characteristics of Early Direct Injection Compression Ignition Engine with varying Oxy hydrogen gas Concentration," at **SAE Powertrains, Fuels & Lubricants Digital Summit by SAE International** on 28-30th September 2021
13. Nikhil A Bhave et al, 'Effect of Varying Flowrate of Oxy-hydrogen gas addition on Combustion and Emission characteristics of Early Direct Injection Homogenous Charge Compression Ignition Engine, **International Conference on Energy Conversion and Thermo-fluid Systems (i-CONNECTS 2021)** Nov 19-20, 2021, NIT Jaipur, Jaipur-302017, Rajasthan, India
14. Nikhil A Bhave et al, 'Feasibility of acid oil as a source of biodiesel and its effect on engine execution and exhaust emissions, **International Conference on Energy Conversion and Thermo-fluid Systems (i-CONNECTS 2021)** Nov 19-20, 2021, NIT Jaipur, Jaipur-302017, Rajasthan, India
15. Nikhil A Bhave et al., 'Research directions for homogeneous charge compression ignition engine', International Conference on advancements in Science, Technology and Management, at S. B. Jain Institute of Technology, Management and Research, Nagpur, Dec 23-24 Dec, 2021.
16. Nikhil A Bhave et al., 'Design and Fabrication of Economical Industrial Air Filter', International Conference on advancements in Science, Technology and Management, at S. B. Jain Institute of Technology, Management and Research, Nagpur, Dec 23-24 Dec, 2021.
17. Nikhil A Bhave et al., 'Analysis of the Performance of Green Pea Depoding Machine using Treadle Mechanism', International Conference on advancements in Science, Technology and Management, at S. B. Jain Institute of Technology, Management and Research, Nagpur, Dec 23-24 Dec, 2021.
18. Nikhil A Bhave et al., 'Performance And Emission Characteristics of Higher Blends of Preheated Pongamia Methyl Ester using Exhaust Gas Waste Heat Recovery in Compression Ignition Engine', ICMech-REC-2023, at at National Institute of Technology, Warangal (NIT Warangal) 24-25 June 2023.
19. Nikhil A Bhave et al., 'Experimental Investigation of Neem Oil Biodiesel as An Alternative Fuel for C.I. Engine', ICMech-REC-2023, at at National Institute of Technology, Warangal (NIT Warangal) 24-25 June 2023.
20. Nikhil A Bhave et al., 'Performance Investigations On Evacuated Tube Solar Cooker In Free And Forced Circulation Arrangements, ICMech-REC-2023, at at National Institute of Technology, Warangal (NIT Warangal) 24-25 June 2023.

Book Chapters: (3)

1. Nikhil A Bhave et. al. 'Design, Development and Analysis of Intake Manifold of Single-Cylinder Diesel Engine' Chapter-11, 'Advances in Applied Mechanical Engineering, Lecture Notes in Mechanical Engineering, Springer, Singapore.' pp 91-105, Feb 2020, (DOI: https://doi.org/10.1007/978-981-15-1201-8_11 , ISBN 978-981-15-1200-1) (**Scopus Indexed**)
2. Nikhil A Bhave et. al. 'Performance Analysis of Corrugated Inclined Basin Solar Distillation System Coupled with Parabolic Trough Collector', 'Advances in Mechanical Engineering', June 2020, pp 9-15. (DOI: https://doi.org/10.1007/978-981-15-3639-7_2 , ISBN 978-981-15-3639-7) (**Scopus Indexed**)
3. Nikhil A Bhave et al , 'Performance Analysis of Parabolic Trough Solar Collector with 'U' tube and Helical coil Receivers', 6th International Conference on "Advances in Energy Research" (ICAER 2017) at **IIT Bombay, Powai, Mumbai, INDIA** 12-14 December, 2017. https://doi.org/10.1007/978-981-15-2662-6_6

National Conferences: (2)

- 1 Nikhil A Bhave et al., 'Research directions for homogeneous charge compression ignition engine', abstract proceeding of National Conference on Internal Combustion Engines and Combustion at **NIT Kurukshetra**. INDIA, Nov 1-4, 2019.
- 2 Nikhil A Bhave et al., 'Performance and Emission Investigation of Double Cylinder 4-Stroke CI Engine Using Methyl Esters of Neem, abstract proceeding of National Conference on Internal Combustion Engines and Combustion at **NIT Kurukshetra**. INDIA, Nov 1-4, 2019.

Trainings/Conferences /Workshops

- One week Faculty Development Program on 'Developing Professional Attributes for OBE Curriculum' organised by National Institute of Technical Teachers Training and Research, Chennai, fro 13-17 Sept 2021
- Received Certificate of Excellence for Basic Thermodynamics course with passing grade for **four months** course of study by **IITBombayX**, an online learning initiative of IIT Bombay through edX in 2019.
- Received Certificate of Excellence for Introduction to Python course with passing grade for **four months** course of study by **Microsoft**, an online learning initiative of Microsoft through edX in 2018
- One week faculty induction training programme from 15th February to 22nd february 2014 by Dale Carnegie.
- Two-week ISTE workshop on Fluid Mechanics conducted by IIT Kharagpur from 20th May 2014 to 30th May 2014
- Two-week ISTE workshop on Fluid Mechanics conducted by IIT Kharagpur from 20th May 2014 to 30th May 2014
- Three days Faculty induction program under RAHE from 24 June 2012 to 26 June 2012.

Teaching

Courses Taught:

PG Courses: Automobile Engineering, Convective Heat and Mass Transfer,

UG Courses: Engineering Graphics and Design, Engineering Thermodynamics, Thermal Engineering, Heat Transfer, Fluid Mechanics, Energy Conservation and Management

Events Organized / Session Chair / Event Judge / Board Member

1. **Organizing member**, 1st International Conference on Advances and Challenges in Energy Research (ICACER-2019), at Shri Ramdeobaba College of Engineering and Management, Nagpur March 2019.
2. **Organising member**, **CREST** (Campus Readiness and Employability Assessment Test) for final year Mechanical Engineering students of UG and PG for consecutive **5 years**.
3. **Co-ordinator** of Smart India Hackathon of 2017, 2018 and 2019.
4. **Organiser** FOSS (Software Training Program by IIT Bombay) for Department of Mechanical Engineering in 2019.

Guided PG Thesis (1)

1. Analysis of Refrigeration System in Whirlpool - An Industrial Case

Guided UG Thesis (1)

1. Design and Analysis of Dental Surgery Fluid Suction Machine

Administrative and Extracurricular activities

1. Co-ordinator, **Training and Placement**, Department of Mechanical Engineering from 2015 to 2020
2. Co-ordinator, **Higher Studies Cell**, Department of Mechanical Engineering from 2018 to 2020
3. Co-ordinator, **Prerna**, GATE Guidance, Department of Mechanical Engineering from 2019 to 2020
4. Organised training programs like **FACE, AMCAT** etc for Department of Mechanical Engineering from 2016 to 2020
5. Organised **Disha**, Lecture series for career advancement of 2nd year students of Department of Mechanical Engineering in 2018
6. Organised **Insight**, an interview program for 2nd year students of Department of Mechanical Engineering in 2017- 2019

Personal details

- **Fathers Name:** Aniruddha Laxmanrao Bhave
- **Mothers Name:** Mrs. Kiran Aniruddha Bhave
- **Date of birth:** 27th June 1988
- **Gender:** Male
- **Marital status:** Single
- **Nationality:** Indian
- **Languages known:** English, Marathi, Hindi.
- **Hobbies:** Guitar Playing and music
- **Adhaar No:** 456809611162
- **PAN No:** AXVPB9499C
- **Passport No.:** T6831165
- **Address:** Flat No 101, Ashish Apartment, Vasudeo Nagar, Hingna Road, Nagpur 440016

I hereby declare that the above written details are true to the best of my knowledge and belief.



Date: 10 July 2023

Place: Nagpur

Mr. Nikhil Aniruddha Bhave