

Curriculum Vitae

Name: Charthankar Shantanu Babasaheb

Address: E-5, Kasliwal Ranwara, Near Emerald City, Garkheda Parisar
Chhatrapati Sambhajinagar (431 009).

E-mail: shantanubc@gmail.com

Mobile: +91 9421390378

Date of Birth: 10th July,1978

Web of Science ID: -[HHM-7498-2022](#)

ORCID iD: -[0000-0002-4944-7861](#)

SCOPOUS ID :-57940124300

Vidwan ID:- 186871

Google Scholar ID:- KdH2vcoAAAAJ

APAAR ID:- 698213152098



Academic Credentials

Class/ Degree	Specialization	Institution	University	Year	%/CGPA	Class
Ph.D.	Mechanical Engineering	Maharashtra Institute of Technology Aurangabad.	Dr.B.A.M. University, Aurangabad	2026	NA	Comple ted
M.E	Manufacturing Engineering	Marathwada Institute of Technology, Aurangabad.	Dr.B.A.M. University , Aurangabad	2015	62.75	First Class
B.E.	Mechanical	S.T.B. College of Engineering, Tuljapur.	Dr.B.A.M. University , Aurangabad	1999	67.60	Distincti on

M. E. Project: Experimental Study on The Effects of Different Grinding Fluids in Cylindrical Grinding of Inconel 718.

Ph. D. Research: Completed the PhD from Dr. Babasaheb Ambedkar Marathwada University, Chhatrapati Sambhajnagar in Mechanical Engineering. Thesis entitled “Characterization of two-phase flow in mini and micro channels”.

Key Research Areas:

- Two phase flow
- Mini, micro, nano channels
- CFD
- ICT in Education

Experience

Sr. No.	Organization	Post	From To	No. of Years
01	Maharashtra Institute of Technology, Aurangabad	Assistant Professor	01/07/2008 to till date	17 Year 08 Months
02	Marathwada Institute of Technology Polytechnic, Aurangabad	Lecturer	06/08/2007 30/06/2008	10 Months
03	Pembril Engineering Private Limited, Aurangabad	Maintenance Engineer	23/10/1999 to 22/10/2000	01

List of Courses Taught/Teaching at UG level

- Heat Transfer (12 times)
- Applied Thermodynamics (3 time)
- Engineering Thermodynamics (5 times)
- Automatic Control Systems (6 times)
- Hydraulic Machines and Heat Transfer (4 times)
- Fluid Mechanics (4 times)
- Fluid Mechanics and Machinery (7 times)
- Basics of Mechanical Engineering (12 times)
- Nano Technology (01 Time)
- HVAC (03Times)
- Energy Management (01 Time)

List of Courses Taught/Teaching at PG level

- Refrigeration and cryogenics systems (1 time)

Additional Assignments/Duties

- Working as lab in-charge of '**Heat Transfer Lab**' from January 2015 to till date.
- NBA Criterion 10 central committee member.
- Working as central committee member for AICTE/DTE approval.
- Working as central committee member for NBA.
- Worked as **Deputy Chief Superintendent** for **NEET-2024** examination.
- Working as class teacher for SY Mech Autonomous class for part I and Part II of AY 2023-24.
- Worked as Under study for Dr.B.A.M. U end semester examination in December 2023.
- Worked as **Deputy Chief Superintendent** for **NEET-2023** examination.
- Worked academic coordinator for FY L division in AY 2022-23
- Worked as class teacher for TY A division in part II of academic year 2021-2022.
- Worked as **Deputy Chief Superintendent** for **NEET-2022** examination.
- Worked as **faculty advisor** for **MIT ISHRAE Students' Chapter** for AY 2020-2021.
- Worked as **Deputy Chief Superintendent** for **NEET-2020** examination.
- Worked as **M. Tech Admission committee member** for AY 2019-2020.
- Working as **NBA Criterion IV** Departmental Coordinator.
- Working as **NAAC Criterion II** Departmental Coordinator.
- Worked as Kalavihangam 2019 Day events committee member.
- Worked as class teacher for TY B division in part I and II of academic year 2020-2021
- Worked as class teacher for first year A division in part II of academic year 2018-2019.
- Worked as syllabus setter for the subject of HVAC and HT.
- Worked as departmental coordinator of syllabus revision for Final Year B. Tech Mechanical Engineering w.e.f 2019-2020.
- Worked as departmental coordinator of syllabus revision for Third Year Mechanical Engineering w.e.f 2018-2019.
- Worked as seating squad member of Dr.B.A.M.U., Aurangabad.
- Worked as member of examination control cell for 2015-16 and 2016-17.
- Working as departmental result analysis coordinator.
- Worked as **Chief Superintendent** of Examination conducted by Dr.B.A.M. University in May/June 2017.
- Departmental coordinator for term work and class test marks online submission on Dr.B.A.M. U website for Nov/Dec 2016 examination.
- Worked as coordinator of mechanical engineering department for bus facility for students and staff.
- Worked as **Chief Superintendent** of Examination conducted by Dr.B.A.M. University in May/June 2016.

- Worked as **Training and placement coordinator** of Mechanical Engineering Department from 20/1/2015 to July 2015.
- Worked as Departmental Class Test coordinator from 20/7/2013 to 20/1/2015.
- Worked as a **Central Member of Training & Placement Cell** of Maharashtra Institute of Technology, Aurangabad from 1/12/2008 to 20/7/2013
- Worked as PO1 for Maharashtra State Assembly Election 2009
- Worked as a **Departmental In-Plant Training Coordinator** from 1/12/2008 to 20/7/2013
- Worked as **Co-convener of Techno-millennium-2008**.
- Worked as Training and Placement officer of MIT Polytechnic, Aurangabad from August 2007 to June 2008.

Membership of Professional Bodies

- Life member of INDIAN SOCIETY FOR TECHNICAL EDUCATION (ISTE) [LM 108805].
- Senior Member of Indian Institute of Industrial Engineering [SMIIE 10528 (23)].
- Member of International Association of Engineers [160598].

Research Projects/Projects Guided

- Worked with students on live industrial project [**Liebherr refrigerator (Projects)**] of **Liebherr Appliances India Private Limited Chh.Sambhajinagar** from **August 2024 to May 2025**.

Computer/Software Proficiency /LMS

- MS Office (MS Excel, MS Word, MS Power point)
- LMS: MOOC
- MSCIT

Seminar/Workshop/ Industrial Training/ STTP//FDP/CEP/Conference Attended

- Successfully completed Online FDP on **Going Digital: Designing & Creating MOOCs, scheduled from 2nd Feb - 6th Feb 2026** conducted in association with Faculty & Staff Development Centre, **Somaiya Vidyavihar University and Commonwealth of Learning - Commonwealth Educational Media Centre for Asia (COL- CEMCA)**.

- Successfully completed the **One Week Faculty Development Program (Online Mode) on “Finite Element Analysis: Theory, Modelling, and Applications using ANSYS”**, held from **19th to 23rd January 2026**.
- Successfully completed the **Forbes Marshall Online Faculty Development Program with the theme of Education for Industry Readiness (Part-1)** conducted on **March 12, 2025**.
- Successfully completed the two-week online **Faculty Development Programme (FDP) on Advances in Mechanical Engineering**, organized by the Department of Mechanical Engineering, **Prasad V Potluri Siddhartha Institute of Technology**, from **2nd to 13th December 2024**.
- Successfully completed the Five day **Faculty Development Programme (FDP)** on ‘**Exploring Multidisciplinary: What, why and how**’ organized by **Maharashtra State Faculty Development Academy, Pune** from **4th to 8th March 2024**.
- Successfully completed and received passing grade (81%) in “**ECObuild3x: Comfort and Health in Buildings**” a course of study offered by **DelftX**, an online learning initiative by **Delft University of Technology, Delft, Netherlands** through edX platform from **13/04/2021 to 30/05/2021**.
- Successfully completed 5-day online **FDP** on the theme “**Inculcating Universal Human Values in Technical Education**” organized by **AICTE** from **08/02/2021 to 12/02/2021**.
- Successfully participated in **accreditation webinar “W6-Development and use of rubrics for effective assessment”** organised by **NITTTR, Bhopal** on **July 28, 2020**.
- Successfully participated in **Five Days Technical Symposium On ‘Advances in Materials and Manufacturing Engineering’** organized by Department of Mechanical Engineering and Basic Sciences and Humanities, **G.S. Mandal’s Maharashtra Institute of Technology, Aurangabad** during **30th June to 4th July 2020**.
- Successfully participated in **Two week Faculty Development Programme On ‘Effective use of ICT tools in online teaching’** organized by **IQAC** and Department of Electronics and Telecommunication Engineering, **G.S. Mandal’s Maharashtra Institute of Technology, Aurangabad** in association with ‘**Department of Pharmacy, Government Polytechnic, Jalgaon**’ during **22nd June to 4th July 2020**.
- Successfully completed **One-week online Faculty Development Program on “Product Design & Novelty”** from **6th to 10th June, 2020** organized by Department of Mechanical Engineering, **Dr Vithalrao Vikhe Patil College of Engineering Ahmednagar, Maharashtra** and **The Institution of Engineers (India) Ahmednagar local Centre**.
- Successfully participated in **One-day webinar on “Kick start your Research work”** hosted by Department of Computer Science & Engineering, **JGI, Bengaluru** on **May 30, 2020**.
- Successfully participated in two-day **Webinar on “Application of Statistical tools and Energy Engineering”** on **20th and 21st May 2020** organised by Department of Mechanical Engineering **Shri. L. R. Tiwari COE, Thane, Maharashtra**.
- Successfully completed 4-week course on “**Learn Moodle 3.8 Basics**” run by Moodle HQ in February 2020.

- Participated and presented paper entitled “**Experimental investigations on two-phase pressure drop in small diameter at horizontal orientation**”, in the 25th National and 3rd International ISHMT-ASTFE, Heat and Mass Transfer Conference (**IHMTC-2019**), **December 28-31, 2019**, IIT Roorkee, Roorkee, India.
- Successfully completed the NPTEL online certification course in "**Course Design and Instruction of Engineering Course (TALE 2)**" conducted by **Indian Institute of Sciences, Bangalore** (Funded by Ministry of HRD, Govt. of India) from **July 2019 to September 2019** (4-week course).
- Successfully completed the NPTEL online certification course in "**Computational Fluid Dynamics (CFD)**" conducted by **Indian Institute of Technology, Madras** (Funded by Ministry of HRD, Govt. of India) from **January 2019 to April 2019** (12-week course).
- Successfully completed the NPTEL online certification course in "**Teaching and Learning in Engineering (TALE)**" conducted by **Indian Institute of Sciences, Bangalore** (Funded by Ministry of HRD, Govt. of India) from February 2019 to March 2019 (4-week course).
- Successfully completed the NPTEL online certification course in "**Two phase flow and heat transfer**" conducted by **Indian Institute of Technology, Roorkee** (Funded by Ministry of HRD, Govt. of India) from February 2018 to March 2018 (4-week course).
- Participated in Two days’ workshop on ‘**Outcome based education**’ conducted by IQAC of MIT, Aurangabad from 4/12/17 to 5/12/17.
- Participated in **one-week STTP** sponsored by AICTE under TQIP on ‘**Advances in Material Science and Engineering**’ (AMSE-2016) organized by Sardar Vallabhbhai Patel National Institute of Technology, Surat during 10/10/2016 to 14/10/2016.
- Participated in **one-week STTP** sponsored by AICTE under TQIP on ‘**Mathematical Modelling, Optimization, Fractional Calculus and their computations in Engineering Science**’ (MMOFCCES-2016) organized by Sardar Vallabhbhai Patel National Institute of Technology, Surat during 21/6/2016 to 25/06/2016.
- Participated in one-week STTP sponsored by AICTE under QIP on ‘**Fluid Flow Behaviour Using Computational Methods**’, organized by Mechanical Engineering Department of VJTI, Mumbai, held from,28/12/2015 to 1/1/2016.
- Successfully completed the NPTEL online certification course in "**Design and optimization of energy systems**" conducted by **Indian Institute of Technology, Madras** (Funded by Ministry of HRD, Govt. of India) from February 2015 to May 2015 (40 Hrs course).
- Participated in a **Two-week ISTE STTP** on ‘**Effective Mentoring of Online Students in Thermodynamics-WME209x**’ conducted by **IIT Bombay** from 5th February 2015 to 29th April 2015 held under National Mission on Education through ICT (MHRD).
- Participated in workshop conducted by **CMIA Energy Cell** on ‘**Workshop on compressed air**’ on 28/9/2014.

- Participated in **Two-week ISTE workshop** on ‘**Fluid Mechanics**’ conducted by **IIT Kharagpur** from 20th to 30th May 2014 held under National Mission on Education through ICT (MHRD) at Marathwada Institute of Technology, Aurangabad.
- Participated in Two day **Continuing Education Programme (CEP)** course on ‘**Research Methodology**’ at MIT, Aurangabad between 9th and 10th August 2013.
- Participated in **Two-week ISTE workshop** on ‘**Engineering Thermodynamics**’ conducted by **IIT Mumbai** from 11th December to 21st December 2012 held under National Mission on Education through ICT (MHRD) at Marathwada Institute of Technology, Aurangabad.
- Participated in Two-day workshop on ‘**Component Failures: Causes and Remedies**’ conducted by **Indian Institute of Metals Pune Chapter** at Marathwada Institute of Technology, Aurangabad on 23rd and 24th April 2010.
- Participated in Industry Education Partnership Training Programme organized by DTE, Mumbai and MSBTE Mumbai at “**Endurance Technologies, Aurangabad**” from 27th to 29th August 2007.
- Participated in One day Seminar at **Government College of Engineering Aurangabad** on ‘**National Mission on Education**’.

Seminar/Workshop/ Industrial Training/ STTP//FDP/CEP/Conference organized

- Worked as **Co-convener** of **Techno-millennium-2008**
- Worked as organizing committee member for Two-day national level workshop on “**Energy Efficient Buildings**” organized by **ISHRAE MIT Students’ chapter** and **ISHRAE Aurangabad subchapter** from **17/07/2020 to 18/07/2020**.
- Worked as organizing committee member for One week ATAL FDP on Industry 4.0 Technology, Challenges and Opportunities for Indian SMEs organized by **Maharashtra Institute of Technology Chh.Sambhajinagar (Aurangabad)** from **11 December to 16 December 2023**.

List of Research Publications

Papers in National/ International Journal

- “On the Prediction of Experimental Two-Phase Pressure Drop Through Microchannels” Thermal Science, 2025, <https://doi.org/10.2298/TSCI241003031B>
- “The Effect of Gas and Liquid Velocities on Two-Phase Flow Pressure Drop through Minichannels and Microchannels.” Indian Journal of Science and Technology. 18(16): 1260-1269. <https://doi.org/10.17485/IJST/v18i16.424>

- A paper entitled “Experimental study on two-phase flow pressure drop using ferrofluid (fe₃o₄) and magnetic field in small diameter tube bends”, published in International Journal of Engineering Applied Sciences and Technology, 2018, Vol. 3, Issue 5, ISSN No. 2455-2143, Pages 18-32.
- A paper entitled “Effect of magnetic field on pressure drop using two-phase flow in small diameter tubes at horizontal orientation”, published in International Journal of Engineering Applied Sciences and Technology, 2018, Vol. 3, Issue 5, ISSN No. 2455-2143, Pages 38-45.
- A paper entitled, “Experimental study on the effects of different grinding fluids in cylindrical grinding of Inconel 718”, published in International Journal of Applied Engineering Research, ISSN 0973-4562 Vol. 10 No.54 (2015).

Papers in National /International Conference Proceedings

- The Paper “Experimental Studies on The Prediction of Two-Phase Pressure Drop Through Minichannels”, presented by Mr.S.B. Charthankar, at **International Conference on Energy and Materials Technologies (Online) (ICEMT 2021) AUG 20-21, 2021** organized by Department of Mechanical Engineering, **Sri Sivasubramaniya Nadar College of Engineering Kalavakkam-603110. Tamil Nadu, India.**
- A paper entitled “**Experimental investigations on two-phase pressure drop in small diameter at horizontal orientation**”, in Proceedings of the 25th National and 3rd International ISHMT-ASTFE, Heat and Mass Transfer Conference (**IHMTC-2019**), published by **Begell House Inc** in May 2021.
- “Application of coconut coir for eco-friendly insulated sandwich panel” in **4th International Conference (Online) On “Recent Trends Research in Engineering & Science (ICRTRES-20)”** organized by Padmshri Dr. V. B. Kolte College of Engineering, Malkapur.

Book Chapter Publication

- 1. " Experimental Studies on the Two-Phase Pressure Drop Through Minichannels”, Springer Nature Singapore Pte Ltd. 2023, N. L. Narasimhan et al. (eds.), Recent Advances in Energy Technologies, Lecture Notes in Mechanical Engineering, https://doi.org/10.1007/978-981-19-3467-4_16.

NPTEL Certification

Start Date	End Date	Duration (in Weeks)	Course Name	Marks (Out of 100)	Performance

29 th July 2019	20 th September 2019	4	Course Design and Instruction of Engineering Course (TALE 2)	77	Elite Silver
25 th February 2019	22 nd March 2019	4	Teaching and Learning in Engineering (TALE)	73	Elite
January 2019	April 2019	12	Computational Fluid Dynamics (CFD)	63	Elite
February 2019	March 2019	4	Two phase flow and heat transfer	44	Successfully Completed

Awards, Achievements and Recognition

- Translated ‘Basics of Thermodynamics’, a Second Year UG book in Marathi language, which is available on <https://ekumbh.aicte-india.org/book.php>
- Selected as **Translation Editor** for **NPTEL-Chitralakha Platform Project** from April 2025.
- Secured first position for the project titled “Design of a District Cooling System for a Multi-Specialty Hospital” in **ISHRAE HVACR Hackathon 2024-25**.
- Selected as **Technical Book Translator** for **AICTE Udaan Project** from Nov 2023.
- Selected as **NPTEL-translator** from May 2020 for translation of **NPTEL Mechanical Engineering Lectures** into **MARATHI** language and completed the given task.
- Successfully completed **GIZ-MASSIA project competition 2018-2019** for ‘**Reduction in MIG Welding Spatter**’ at ‘Accrete Electromech Pvt. Limited, MIDC Waluj, Aurangabad. Received fund of **Rs.10,000/-** from **Tata Technologies** for manufacturing the prototype.
- Received the special prize in **GIZ-MASSIA project competition 2017-2018** for ‘**Discharge Coil Manufacturing Process Automation**’ at ‘Elegant Coating Pvt. Limited, MIDC Waluj, Aurangabad.

Date: 18-03-2026

Place: Chh.Sambhajinagar (Aurangabad.)

Dr.S.B. Charthankar