

## Dr. SHAILESH DAMODARRAO AMBEKAR



**Office :** - ☒  
Associate Professor,  
Department of Mechanical Engineering,  
Government College of Engineering  
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Roe House No,E-7  
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### *Overview*

A Ph.D. (Mechanical Engineering ) with around 27 years of accomplished teaching, research and administrative experience. having a very good international exposure, author of several publications, mentor to Ph.D. & M.E students and having guiding influence in industry specific projects which successfully found solutions to problems facing units in the Automobile and Materials sector. Possesses excellent leadership and interpersonal relationship skills.

### *Personal*

<b>Born</b>	01/02/1975
<b>Gender</b>	Male
<b>Nationality</b>	Indian
<b>Languages</b>	English, Hindi, Marathi
<b>Marital Status</b>	Married

**Professional Qualifications**

- Ph.D.**            **Ph.D. (Mechanical Engg.)** awarded in Dec 2020, From College Of Engineering Pune, **SPPU, Pune** Maharashtra ,India
- Title of Thesis:** Design optimization of FRT Hybrid Nano composite for Maximizing Flexural Strength and minimizing wear rate
- Post-Graduation**    **M.E. (Mechanical Engineering)** from Government engineering College Aurangabad India in 2007 with **70.10 % marks (Distinction)**
- Graduation**    **B.E. (Mechanical Engg.)** from **Amaravati Unviersity Amravati** with **66.50% marks (First Division) in 1995**

**Trainings Attended**

<b>Subject</b>	<b>Venue</b>	<b>Period</b>
A Course On Engineering Optimization, Indian Institute Of Technology, Bombay,	Mumbai,	05-06-2000 (01 Week)
One Day Workshop On Revised Syllabus On EME And EG	MIT Aurangabad	9 <sup>th</sup> August 2002. (01 Week).
One Day Workshop On Teaching Methodology And Scope Of Syllabus For Production Processes And Manufacturing Technology	SE Mechanical Production Organized At COE Osmanabad	13 <sup>th</sup> August 2003 (1 Day).
A Course On Renewable Energy	GEC Aurangabad	16-01-2007 To 20-01-2007 (01 Week).
Attended One Month Training Program On CNC Programming And Machining	Swagati Engineering, Aurangabad	05/05/2008 To 07/06/2008 (One Month-04 Weeks).
National Workshop On Emerging Trends In Automobile Engg	NIT, Warangal	3-5 July 2008 (3 Days).
A Course On Building A Winning Team, Under SAE Collegiate Chapter	ADIT Vallabh Nagar	11 <sup>th</sup> To 15 <sup>th</sup> October 2008 (01 Week ).
A Course On Diesel Engine Management	IIT Kanpur	18/06/2009 To 22/06/2009 (01 Week )
National Workshop On Recent Advances In Eco-Friendly Lubricants	IISC, Banglore	From 8-9 April 2010. (02 ays).

Pedagogy	GEC Aurangabad	16/05/2011 To 21/05/2011 (01 Week).
Advance Engine Combustion And Diagnosis	IIT Kanpur	23/06/2011 To 28/06/2011 (01 Week).
Skill Matrix Enhancement And Effective Technical Learning	GEC Aurangabad	28/11/2011 To 09/12/2011 (02 Week)
Engineering Optimization Techniques And Its Application In Research Assurance	GEC Aurangabad	02/01/2012 To 12/02/2012 (02 Week)
Manufacturing Excellence Through Quality	IIT Roorkee	09/07/2012 To 13/07/2012 (01 Week)
Course On Automotive Control And Emmission Technologies	SCOE Pune	8-12 October 2012(01 Week)
Genetic Algorithm And Neuro Fuzzy Application In Engg.	GEC Aurangabad	17/12/2012 To 21/12/2012 (01 Week)
Product Design And Development	Iit Madaras, Chennai	21/01/2013 To 26/01/2013 (01 Week)
Challenges In Measurements Of Signal And Two Phase Flow Recent Trends	IIT Roorkee	24/06/2013 To 28/06/2013 (01 Week)
Bio-Techniques For Pollution Control And Resources Recovery	IIT Guwahati	1/07/2013 To 05/07/2013 (01 Week)
Network Security	GEC Aurangabad	7-11 October 2013

		(01 Week)
Catia, Indo German Tool Room	Aurangabad	02 <sup>nd</sup> -17 <sup>th</sup> December 2013 (02 Week)
Computer Aided Design And Analysis Of Machine And Structural Elements	NIT Jaipur	23 <sup>rd</sup> December To 27 <sup>th</sup> 2013 (01 Week)
Ansys	Indo German Tool Room Aurangabad	30 <sup>th</sup> January To 15 <sup>th</sup> February 2014 (2 Week)
Fundamentals Of Tribology	National Institutes Of Technology Harimpur	26 <sup>th</sup> To 30 <sup>th</sup> May 2014 (01 Week)
Maintenance Management In Industries	National Institute Of Technology Harimpur	25 <sup>th</sup> To 29 <sup>th</sup> December 2014 (01 Week)
Computer Aided Product Design	Ssn College Of Engineering Chennai	15 <sup>th</sup> To 27 <sup>th</sup> June 2015 (02 Weeks)
Recent Trends In Energy Research	BATU Lonere	07 <sup>th</sup> To 11 <sup>th</sup> December 2015 (01 Week)
Computation And Optimization In Engineering	National Institute Of Technical Teachers Training And Research, Kolkata	28 <sup>th</sup> December 2015 To 8 <sup>th</sup> January 2016 (02weeks)

### **Professional Experience**

<b>From</b>	<b>To</b>	<b>Name of Organization</b>	<b>Designation</b>
07/01/2011	Till Date	Government college of Engineering, Aurangabad	Asst. Professor
1/08/2007	06/01/2011	M I T (E) A'bad	Asst. Professor
1/07/2007	31/07/2007	M I T (E) A'bad	Sr.Lecturer
3/09/1997	30/06/2007	M I T (E) A'bad	Lecturer
14/2/96	30/04/97	Anurang Engg Pvt Ltd A'bad	Trainee Engineer

## *Thesis Supervision*

### **M.Tech. Thesis**

1. Effect of Cryogenic treatment on carburized 20MnCr5 Gear material 2013-14, Government College of Engineering Aurangabad.
2. Optimization of cutting parameters for surface roughness in end milling process and MRR and machining time during turning process of Aluminium 26 Alloy in 2013-14, Government College of Engineering Aurangabad.
3. Optimization of weight of connecting rod (C70S6 material) using ANSYS and FEMFAT 2014-15, Government College of Engineering Aurangabad.

### *Accomplishments*

*(Govt. Engineering College Aurangabad)*

1. Working as Gymkhana Vice President of the College
2. Working as SAE BAJA -2023-24 Faculty Coordinator
3. Working as Departmental PG coordinator from Jan 2023
4. Working as Departmental MESA faculty Advisor from Sept 2021
5. Working as Departmental Testing and consultancy Coordinator from Sept 2021
6. Worked as Training and Placement Officer of Government college of engineering, Aurangabad since Sept 2020 to 31<sup>st</sup> Dec 2022
7. Worked as Training and Placement Officer of Government college of engineering, Aurangabad since Feb 2015 to July 2016
8. Worked as Inspection Committee Member for the Engineering college Inspections constituent by Regional Directorate Technical education, Aurangabad.
9. Worked as Chief Coordinator of External Examination Like UPSC, MPSC, DTE, Staff Selection Commission etc Examination for the centre as Government college of engineering Aurangabad.
10. Worked as Vehicle In Charge for Government College of engineering Aurangabad.
11. Worked as Chairman of Vigilance Squad for the Dr.BAMU Aurangabad.
12. Worked as Member of Affiliation Committee for the Dr. BAMU Aurangabad.
13. Worked as PRO committee member for the visit Hon'ble Chief Secretary, ministry of HRD, GOV of India.
14. Worked as faculty advisor student for competition such as SAE BAJA, SAE Supra etc
15. Worked as various port folios in charge/ member in state level FE admission counseling round and state level direct second year admission.
16. Worked as Dept controller of Examination.
17. Worked as member of different committees at college and departmental level like Lab/ stock/ document verification, ME admission etc.

18. Worked as MESA Faculty co-ordinator for four years.
19. Working as dept coordinator for industry institute interaction activities / Minor Civil work In charge under TEQIP 2 activities.
20. Worked as technical zonal and master trainer and counting assistance for national parliamentary elections, state legislative election and Aurangabad Gram Panchayat election in the last 4 years.
21. Worked as coordinator for the state level training programme under DTE funds.
22. Worked as paper setter and examiner in the college and outside of the college as an External Examiner for UG/PG courses.
23. Arranging industrial tours for the student
24. Life member of ISTE and institute of engineers
25. Effective implementation of curricula for the concerned courses/ subject
26. Planning and delivering class room and laboratory instructions
27. Students assessment and evaluation including tasks related with mid term tests and end term examinations.
28. Design and development of learning resources.
29. Working as lab in charge for Auto Lab planning setting of laboratories.
30. Laboratories and academic facilities development
31. Plan and execute students development activities
32. Guidance and counseling to students
33. Participate in professional activities through interaction with industries, consultancy, testing, continuing education and training, industry sponsored project, entrepreneurship development, research.
34. Keep abreast of the newer knowledge, skill and technology through self up graduation and dissemination of knowledge through articles, books, journals and seminars etc.'
35. Self development through qualification improvement, experience enrichment professional activities and interaction with professional bodies

### ***Publications***

#### **International Journals**

- Dry Sliding Wear behavior of Cryogenic Treated 20MnCr5 Alloy Steel  
SS Kadam, SD Ambekar International Journal of Engineering Science Invention  
ISSN (Online): 2319 – 6734, ISSN (Print): 2319 – 6726 www.ijesi.org Volume 3  
Issue 5 | May 2014 | PP.67-72
- Experimental Analysis of Material Removal Rate in Drilling of 41Cr4 by A  
Taguchi's, S.A.Syed , S.D.Ambekar , Vol-01, Issue 04, July 2015.
- Design of Connecting Rod for Light Weight Using C70S6 Material, Deepak G.  
Gotiwale and Shailesh D. Ambekar, ISSN 2319-5924 Vol 3, Issue3, 2014, pp44-  
52.

- Dynamic Effect Analysis And Flexural Storage Modulus Optimization Of CFRP Hybrid Nano Composites Using RSM, Shailesh D. Ambekar, Vipin Kumar Tripathi, Huynh Tan Hoi, VOLUME 9, ISSUE 08, AUGUST 2020.
- Investigation of the Effect of Nano Particles on Visco-elastic Behaviour of CFRP Hybrid Nanocomposites, Shailesh D. Ambekar\* , Vipin K. Tripathi, ISSN 0976 – 6693.
- Comparative study of effect of Cryogenics heat treatment and Case hardening on the Wear Property of 20MnCr5, S. D. Ambekar<sup>1, a</sup>, Sandeep Kadam<sup>2, b</sup>, S. A. Sonawane<sup>3, c</sup>, ISSN: 1662-7482, Vol. 798, pp 435-439.
- Cutting parameters optimization for surface finish and machining time in turning of OHNS O1 grade hardened tool steel for near dry machining, S.A. Haseeb, S.D. Ambekar, Int Res J Eng Technol 3 (8), 2321-0613.
- The Multi-objective Optimization Design Approach for Carbon Fiber Hybrid Nanocomposites Containing NanoClay and NanoZnO Particles by Using OptiComp, SD Ambekar, VK Tripathi, Journal of Bio-and Tribo-Corrosion 6 (3), 1-15
- Wear Behaviour of Cryogenic Treated M2 Tool Steel under Dry Sliding Condition, SA Sonawane, VK Tripathi, SD Ambekar, Applied Mechanics and Materials 798, 395-401
- Influence of Process Parameters on Depth of Penetration In GMAW Process by Using Taguchi Method, SD Ambekar, SR Wadhokar, International Journal of Science and Research 4 (5)
- Optimization of flexural strength of CFRP hybrid nano composites containing nanoZnO and nanoclay particles, Shailesh D. Ambekar, Vipin Kumar Tripathi, Huynh Tan Hoi, ISSN 2277-8616, VOLUME 9, ISSUE 08, AUGUST 2020.
- Ambekar. SD," Experimental Analysis of Material Removal Rate in Drilling of 41Cr4 by a Taguchi's Approach, SS Ahmed, Journal of Engineering Research and Applications 5 (5), 28-33
- Dry Sliding Wear Behavior Of Carburized 20MnCr5 Alloy Steel, SS Kadam, SD Ambekar, Int. J. Eng. Sci. Invent 3, 67-72.
- Design of Connecting Rod For Weight Reduction Using C70S6 Material, DG Gotiwale, SD Ambekar, International Journal of Scientific & Engineering Research 5 (5), 1253-1260.
- A review on optimization of cutting parameter for surface roughness, material removal rate and machining time of aluminium LM-26 alloy, HR Ghan, SD Ambekar, Int. J. Res. Aeronaut. Mech. Eng 2 (2), 23-28
- Parametric Optimization of Gas metal arc welding process by using Taguchi method on stainless steel AISI 410, PROF. S. D. AMBEKAR, SUNIL R.WADHOKAR, Vol. 3, Issue: 1, January : 2015 (IJRMEET) ISSN: 2320-6586.
- Optimization of cutting parameter for Surface Roughness, Material Removal rate and Machining Time of Aluminium LM-26 Alloy, H. R. Ghan, S.D.Ambekar, Volume 3, Issue 2, March 2014, ISSN: 2319-5967
- Optimization and analysis of wear rate of CFRP-nanoZnO/nanoclay hybrid composites using RSM, VK Tripathi, S Ambekar,Journal of Bio-and Tribo-Corrosion 5 (4), 1-13
- A review on influence of nano particles on the wear behaviour of epoxy resin powder coatings” Vishal Arke, U. V. Hambire and S. D. Ambekar, Advances and

Applications in Mathematical Sciences Volume 21, Issue 9, July 2022, Pages 4991-4997 © 2022 Mili Publications, India

- Design and cfd simulation of savonius type vertical axis airstream rotor in ansys fluent onkar dhakne, dr. Shailesh ambekar, dogo rangsang research journal ugc care group i journal issn : 2347-7180 vol-13, issue-1, no. 3, january 2023
- Multi-objective optimization and manufacturing of low-cost vertical axis wind turbine rotor for national highway in india for power generation, Onkar Dhakne, Dr. Shailesh Ambekar, Dogo Rangsang Research Journal UGC Care Group I Journal ,ISSN : 2347-7180 Vol-13, Issue-5, No. 5, Ma23

#### **International and national Conference**

- Comprehensive Review on Effect of Zinc, Chromium, Titanium Nanoparticle Coating on Mechanical Properties of EN24T Steels, Mirza Adnan Baig, S.D. Ambekar and Umesh V. Hambire, 7th International Conference on “Computational Optimization, Modelling and Simulation: Recent Trends and Challenges”, (Shaastrarth-2022), 25 & 26 March, 2022, Rungta College Of Engineering And Technology, Bhilai

#### ***Ph.D. Thesis***

**Title:** Design optimization of FRT Hybrid Nano composite for Maximizing Flexural Strength and minimizing wear rate

**Supervisor:** Dr. V.K.Tripathi  
Department of Mechanical Engineering., College of Engineering, Pune,  
Shivajinagar,  
Pune- 411005

#### ***Membership of Professional Bodies***

- Life Member of Indian Society for Technical Education
- Member of The Institution of Engineers (India) (M-135094-8)

Date: Sept 21<sup>st</sup> 2021

Place : Aurangabad

(Shailesh Damodarrao Ambekar)