Name: Prof. Shilpa Sadanand Bhambure	E-mail:shilpabhambure@somaiya.edu
Contact No: (022) 66449529	<u> </u>
Department/Section: Mechanical	
College: K J Somaiya School of Engineering	
DOJ Somaiya: 21 <sup>st</sup> Career Experience: 20 Yrs	Industry Experience:Yrs   Teaching   Experience:
July 2008	20 Yrs
Present Academic Designation: (Assistant	Present Administrative Designation: -
Professor)	

## Area of research/specialization and Courses Delivered

## Research domain/interests/areas

- 1. Computer Aided Design and Engineering
- 2. Composite Materials

# Courses Delivered

- 1. Engineering Drawing
- 2. Engineering Mechanics
- 3. Computer Aided Machine Drawing
- 4. Computer Aided Design
- 5. Computer Aided Engineering
- 6. Industrial Engineering & Enterprise resource planning
- 7. Thermodynamics

UG: Yes	PG: Yes	Ph.D: Yes/No
avihar University		
	l	,

Education					
Examination	Name of the	University/Board	Institute/College	Year	CPI/SPI/
	Degree				%Marks
Ph.D	PhD Mechanical	Mumbai University	VJTI	2023	
PG	M.E. Mechanical	Mumbai University	KJSCE	2013	74.75%
UG	B.E. Mechanical	Shivaji University	RIT Sakharale	1999	63.58%
Diploma					
NET/SET/Other					

	Notable Experience Details					
Sr. No	Name of the	Designation	Date of Joining	Date of Leaving	Experience	
	organization				(Years)	
1.	VJTI Matunga,	Lecturer	Aug. 2004 –	January 2007	2 years	
	mumbai		Dec. 2006			
2.	K. J. Somaiya COE,	Lecturer	Jan. 2007 –May	June 2008	1.5 years	
	Vidyavihar		2008			
3.	K. J. Somaiya School	Assistant Professor	July 2008 – Till	-	17 years	
	of Engineering,		Date			
	Vidyavihar					

Research Accomplishments and Projects			
No of students pursuin	ng Ph.D as on date:	No of students completed Ph.D as on date:-	
No of students completed PG thesis / Project work as on		No of students / groups completed UG	
date:01		projects as on date: 25	
Publications	Number of Peer review Journal	Number of Conference papers: 05	
Total: 05	papers: 03		

#### **Details of Publications:**

#### **International Journals**

- Shilpa S. Bhambure, Addanki S. Rao & Thambiannan Senthilkumar "Characterization of Control and Chemically Modified Kenaf Fiber", Journal of Natural Fibers, Taylor & Francis, https://doi.org/10.1080/15440478.2021.1993500 Impact Factor: 5.323
- Shilpa Bhambure, A. S. Rao and T Senthilkumar "Analysis of Mechanical Properties of Kenaf and Kapok Fiber Reinforced Hybrid Polyester Composite" Journal of Natural Fibers, Taylor & Francis DOI: 10.1080/15440478.2022.2156964 Impact Factor: 5.323

#### **National Journals**

3. Shilpa Bhambure, A. S. Rao and T Senthilkumar (2022) "Effect of Chemical Treatments on Physical Properties of Kenaf Bast Fibers", Indian Journal of Fibre & Textile Research (IJFTR) NISCAIR Publications Impact factor: 0.84

#### Conferences

- Shilpa Bhambure, A. S. Rao "Experimental Investigation of Impact Strength of Kenaf Fiber Reinforced Polyester Composite" VIT Chennai March 2021, Materials Today: Proceedings 46(6) DOI: 10.1016/j.matpr.2021.02.055, Volume 46, Part 2, 2021, Pages 1134-1138.
- 5. Shilpa Bhambure, A. S. Rao "Estimation of Mechanical Properties of Kenaf Fiber Reinforced Polyester Composites" Lecture Notes in Mechanical Engineering, https://doi.org/10.1007/978-981-16-7787-8, Print ISBN 978-981-16-7786-1, ISBN 978-981-16-7787-8 (eBook).
- 6. Shilpa Bhambure, A. S. Rao "A Review on Biotribology in Engineering and Medical Applications" TriboIndia 2018, VJTI Mumbai (SSRN Electronic journal).
- 7. Shilpa Bhambure, A. S. Rao "A Role of Bio Manufacturing in Industrial Applications" NITIE Mumbai (SSRN Electronic journal).
- 8. Shilpa Bhambure, A. S. Rao "A Review on Bio Composites in Industrial Applications" Pillai College of Engineering.
- 9. Priyanka Patil, Shilpa Bhambure "Influence of body weight on the Knee Joint Cortical Bones using Finite element analysis" K J Somaiya School of Engineering, June 2025.

#### Books/Book Chapters

10. ---

## Patents/Copy Rights

1. A Suture Device (Issue No- 14/2022)

No of Research / consultancy /	No of Research / consultancy / No of Research / consultancy / No of Research / consultancy /				
projects completed:	projects on-going:	projects on applied as on date:02			
Rs <u>:</u>	Rs <u>:</u>	(Rs: 8,50,000) (Rs:41,43,360)			
Details of Research / consultancy	/ projects:				
Completed					
On-going	On-going				
Applied					
1. SVU Collaborative Research					
2. Core Research Grant					
IPR/ Copyrights					
Patent granted "A SUTURE DEVICE" on 16 <sup>th</sup> October 2023					

# FDPs/Seminars/Workshops/Training Programs Attended/ Organized/ Delivered

#### Attended

- 1. Four days training program on Inventor Professional (2008) at Don Bosco Institute of Technology, Vidyavihar, Mumbai from 29<sup>th</sup> July 1<sup>st</sup> August 2008.
- 2. One week STTP on Manufacturing processes and Systems: An IT Perspective (University Approved) in K. J. Somaiya College of Engineering, Vidyavihar, Mumbai- 400 077 conducted during 6<sup>th</sup> July 10<sup>th</sup> July 2009.
- 3. Two week workshop on (ISTE workshop) Thermodynamics in Mechanical Engineering at K. J. Somaiya College of Engineering, Vidyavihar, Mumbai- 400 077 remote centre conducted by IIT Bombay during 14<sup>th</sup> June 24<sup>th</sup> June 2011.
- 4. One day program on J-Gate training programme at Bharati Vidyapeeth College of Engineering Kharghar, Mumbai held in June 2012.
- 5. One day orientation program on Engineering Drawing at SIES, Nerul, Mumbai held on 10<sup>th</sup> September 2012.
- 6. One week Workshop on (TEQIP) Product Design Validation Using Finite Element Analysis (TEQIP) at Sardar Patel College of Engineering, Andheri during 24<sup>th</sup> June to 28<sup>th</sup> June 2013.
- 7. Three days workshop on Computer Aided Machine Drawing at Fr. C. Rodrigues Institute of Technology, Vashi during 11<sup>th</sup> July 13<sup>th</sup> July 2013.
- 8. One day training programme on "E-Foundry: Casting Design and Simulation" at VJTI Matunga Mumbai in association with IIT Bombay held on 26th October 2013.
- 9. Two week workshop on (ISTE workshop) Engineering Mechanics at SIES, Nerul Mumbai remote centre conducted by IIT Bombay during 26<sup>th</sup> Nov 6<sup>th</sup> December 2013.
- 10. One day Institutional training program on Energy Conservation at K. J. Somaiya College of Engineering, Vidyavihar, Mumbai- 400 077 held on 7<sup>th</sup> March 2014.
- 11. One week Training program on Solid works Design, Validation Software at K. J. Somaiya College of Engineering, Vidyavihar, Mumbai- 400 077 in the month of January 2015.
- 12. One day training program on Internet of Things (IoT) at Sardar Patel College of Engineering, Andheri Mumbai held on 7<sup>th</sup> May 2016.
- 13. One day Workshop on "VSSC ISRO'S FEAST Technology at Mech. Dept. VJTI on 8<sup>th</sup> Nov.

2016

- 14. One week STTP on "Biology for Engineers" conducted by IIT Bombay during  $5^{\rm th}$  June  $-9^{\rm th}$  June 2017
- 15. Three days workshop on Medical Device Hakathon (MEDHA-2017) conducted by IIT Bombay, during 14<sup>th</sup> July-16<sup>th</sup> July 2017. (Received Winner award of the event (Free entry to MEDIC at COEP in Sept. 2017))
- 16. Two days workshop on "3D printing" conducted by IIT Bombay, during 21<sup>st</sup> and 22<sup>nd</sup> August 2017.
- 17. Five days "Medical Device Innovation Camp" (MEDIC-2017) conducted by COEP Pune during 13th -17th September 2017.
- 18. Six days workshop on "Fundamentals and applications of Fracture Mechanics" at VJTI Matunga Mumbai during 22<sup>nd</sup> -27<sup>th</sup> January 2018.
- 19. NPTEL online course on "Introduction to Research" Aug-Sept-2018.
- 20. One day workshop on "Industrial Tribology" at VJTI Matunga Mumbai on 12 December 2018.
- 21. Three days workshop on "Fiber Reinforced Composites" at CIRCOT Mumbai during 4-6 February 2019.
- 22. NPTEL online course on "Introduction to Composites" from Jan-Apr 2019.
- 23. Webinar on Design- Past, Present and Future organized by Department of Mechanical Engineering, D.J. Sanghavi 13<sup>th</sup> June 2020.
- 24. Online Faculty Development Programme on "Advances In Composite Materials and Manufacturing Process" organized by Department of Mechanical Engineering, St. Ann's College of Engineering and Technology, Chirala from 22/06/2020 to 26/06/2020.
- 25. Participated and passed the Online quiz "Advances In Composite Materials And Manufacturing Process" conducted by Department of Mechanical Engineering, St. Ann's College of Engineering and Technology, Chirala on 26-06-2020.
- 26. Online FDP on "Online Teaching and E Content" conducted by S.K.Somaiya College on 11<sup>th</sup> and 12<sup>th</sup> June 2020.
- 27. Webinar on "Virtual lab for Experimental Learning" conducted by L.T College of Engineering on 18<sup>th</sup> June 2020.
- 28. Online STTP on "Applications of Optimization Techniques in Mechanical Engineering" organized by Vitarka Projects from 7-11 August 2020.
- 29. Online webinar on "Transforming Business Operations using Industry 4.0 Technologies" organized by IIIE Mumbai Chapter on 11<sup>th</sup> July, 2020.
- 30. One day Symposium "Awareness to action- Single use Plastic" conducted by KJSCE Mechanical department on 22<sup>nd</sup> February 2022.

- 31. Attended IP Awareness Training program conducted by NIPAM on 6<sup>th</sup> April 2023
- 32. One week online National level FDP on "Indian Knowledge Systems: An Introduction" conducted by Gokul University, Siddhpur, Gujrat from 4<sup>th</sup> December to 10 December 2024.
- 33. One week online National level FDP on "Outcome Based Education and Application of Generative AI in Teaching and Research conducted by Guvahati University, Assam in association with ipsr solutions limited from 17 April 2024 to 24 April 2024.
- 34. One day training on "Composite Manufacturing" at JSM composites Turbhe on 17<sup>th</sup> July 2024.
- 35. One week Short Term Programme on "Sustainable Product Design and Manufacturing" conducted by Mata Vaishno Devi University, Katra, Jammu in Collaboration with School of Mechanical Engineering from 22<sup>nd</sup> July to 27<sup>th</sup> July 2024.
- 36. One week online FDP on "Machine Drawing through AutoCAD" organized by CVR College of Engineering Telangana from 9<sup>th</sup> to 13<sup>th</sup> September 2024.
- 37. One week online National level FDP on "Outcome Based Education and Application of Generative AI in Teaching and Research conducted by in association with ipsr solutions limited from 2<sup>nd</sup> Jan 2025 to 9<sup>th</sup> Jan 2025.
- 38. Two week online FDP on "Experimental and Simulation Based Approaches in Additive Manufacturing" Jointly organized by Indian Institute of Technology (BHU) Varanasi and Electronics and ICT Academy PDPM IIITDM Jabalpur from 21<sup>st</sup> July to 30<sup>th</sup> July 2025.

#### Organized

- 1 Medical Device Hackathon 2017 organized by KJSCE in collaboration with IIT Bombay.
- 2 World Environment Day 5<sup>th</sup> June 2021 workshop on Exploring Green Behaviors through Social Psychology Organized by K J Somaiya College of Engineering's Eco- task force under the UGC Quality Mandate SATAT and IQAC.
- 3 Medical Device Hackathon May 2022 organized by KJSCE in collaboration with IIT Bombay.
- 4 Seminar on "Personal Finance" for faculty and staff members on 6<sup>th</sup> February 2023.
- 5 Seminar on 'Introduction to Intellectual Property' on 6<sup>th</sup> April 2023.
- 6 International Conference on Technologies for Energy, Agriculture, and Healthcare on 5<sup>th</sup> and 6<sup>th</sup> June 2025

#### Delivered:

- 1. "Characterization of Composite Material" at ICAR-CIRCOT in STTP held on Training on Composite Materials on 7<sup>th</sup> February 2023.
- 2. "CNC part programming" at KJSCE in Summer school training held in May 2024.

		Notable Key Scholastic Achievements
1	•	3 Journal papers accepted and 2 are submitted
2.	•	Special study material for subject Engineering Drawing

3.	Participated and passed the Online quiz on Advances in Composite Material
4.	Delivered talk on Characterization of Composite Material at CIRCOT Mumbai
5.	Prepared Engineering Drawing Booklet for all FY students along with key points of all topics
	which help them to understand the subject easily.

	Notable Positions and Responsibility		
1.	FY Engineering Drawing Coordinator		
2.	2. NAAC Criteria VI Committee Member		
3.	NBA Criterial IX coordinator		

Date: 09/09/2025 Signature of Faculty Member