

Somaiya Vidyavihar University

Name: Dr Sangita Nitin Bansode			E-mail: sangeetabansode@somaiya.edu	
Contact No: 9819090169 / 66449517				
Department/Section: Mechanical Engineering				
College: K J Somaiya College of Engineering				
DOJ Somaiya: 04/02/1999		Career Experience: 31 Yrs	Industry Experience: Nil	Teaching Experience: 31 Yrs
Present Academic Designation: Associate Professor			Present Administrative Designation:	

Area of research/specialization and Courses Delivered
<p>Research domain/interests/areas</p> <ol style="list-style-type: none"> Automation Robotics FEA Additive Manufacturing Casting <p>Courses Delivered</p> <ol style="list-style-type: none"> Computer Aided Engineering Robotics and AI Additive Manufacturing Finite Element analysis CAD / CAM / CIM Production Engineering Industrial Engineering Manufacturing Processes Computer Aided Manufacturing Basics of Robotics

Recognition as a teacher by any University	UG: Yes	PG: Yes	Ph.D : Yes
<p>Details of Recognitions</p> <ol style="list-style-type: none"> UG – Mumbai University PG - Mumbai University PhD - Somaiya Univesity 			

Education					
Examination	Name of the Degree	University/Board	Institute/College	Year	CPI/SPI/ %Marks
Ph.D	Doctorate in Mechanical Engg.	Mumbai University	VJTI - Matunga	2020	
PG	M.Tech in CAD/CAM & Robotics	Mumbai	VJTI , Matunga	2006	9.0
UG	Bachelor of Production Engineering	Marathwada University	JNEC College of Engineering	1989	68 %
Diploma	Mechanical Engineering	DTE Mumbai	Government Polytechnic Aurangabad	1986	68 %

Somaiya Vidyavihar University

NET/SET/Other					
Notable Experience Details					
Sr. No	Name of the organization	Designation	Date of Joining	Date of Leaving	Experience (Years)
1.	Pd. V.V.Patil COE A, Nagar	Lecturer	Aug 92	Aug 96	04
2.	K. J. Somaiya College of Engineering	Associate professor	04/02/99	Still working	27

Research Accomplishments and Projects		
No of students pursuing Ph.D as on date: 02		No of students completed Ph.D as on date:NA
No of students completed PG thesis / Project work as on date:		No of students / groups completed UG projects as on date:
Publications Total: 13	Number of Peer review Journal papers: 5	Number of Conference papers:4

Details of Publications:

International Journals

Journal Papers

1. Sangita Bansode, V.M.Phalle, Shankar S.Mantha.Taguchi Approach for Optimization of Parameters that Reduce Dimensional Variation in Investment Casting. Archives of Foundry Engineering. - ISSN (1897-3310) Volume 19(1), **2019** pp. 5 – 12. [Emerging Sources Citation Index]
2. Sangita Bansode, V.M.Phalle, S.S.Mantha. Optimization of process parameters to improve dimensional accuracy of investment casting using Taguchi approach. Advances in Mechanical Engineering –Volume 11(4), **2019** pp. 1-12. [Science Citation Index Expanded]
3. Sangita Bansode, V.M.Phalle, S.S.Mantha. Influence of Slurry Composition on Mould Properties and Shrinkage of Investment Casting. Transactions of the Indian Institute of Metals. Transactions of the Indian Institute of Metals ISSN 0972-2815. DOI 10.1007/s12666-020-01872-5
4. A Mobile Semi-Autonomous Robot For Soil Sampling: TechRxi (<https://www.techrxiv.org>). 19-11-2021 / 23-11-**2021** Author Vistasp Eduljiy, Atharva Pradhanly, Jay Shahly, Sumedh Somanly and Sangita Bansode1*(Published)
5. Development of A/C Duct inspection and cleaning Robot prototype using Internet of Things (IOT) -International conference in Advancements in Design and Tribology (ICADT-**2021**) *17th -18th December, 2021- SVNIT*– Neeraj Bhonde and Sangita Bansode (Presented)
6. Design of smart transformer Breather and analysis using Ansys Fluent – 43 World conference on Applied science engineering and technology – world conference – Goa India – Pritih Zanjad and Sangeeta Bansode – 29 and 30 December **2022**. (Presented)
7. Parameter Optimization for improving Digital Light Processing (DLP) Component Properties – Archana Pancharya and Sangita Bansode- **2023**- International journal of Engineering research in Mechanical and Civil engineering (IJERMCE). (Published)

Somaiya Vidyavihar University

8. 3D bioprinting: A systematic review for future Research Direction : Indian Journal of Orthopedics (**2023**): Kavita Kumari Thakur , Ramesh Lekuware , Sangita bansode , Rajesh Pansare (Published)
9. Optimization and Characterization of 3D bioprintable Alginate and Hydroxyapatite based Biomaterial Ink. Journal of The Institution of Engineers (India): Series C (**2024**), Thakur, K.K., Lekurwale, R., Bansode, S. et al.
10. Numerical analysis of heat loss from house roof and wall in winter to optimise energy consumption. International Journal of Mathematical Modelling and Numerical Optimisation. **2025**;15(3):230-45. Sinha R, Bansode SN.

National Journals

1. Productivity enhancement in investment casting foundry using automation technique in shelling operation. Industrial Engineering. ISSN/ISBN (2581-4915) Volume 12 (7), 2019. Sangita Bansode, V.M.Phalle, S.S.Mantha.
2. Simulation of Bonding Mechanics in Paper-Based Laminated Object Manufacturing Using Finite Element Analysis ,Journals of Mechatronics Machine Design and Manufacturing (2025)Volume-7, Issue-2. Siddhant Surendra Gaikwad, Sangita N. Bansode

Conferences

1. Rapid prototype a rapid approach for investment casting. National Conference, Saboo Siddikiq College of Engineering, 3-5 Jan 2013, Byculla, Mumbai.
2. Influence of feeders in distortion of investment casting, 62nd Indian Foundry Congress, 7-9 Feb 2014, Gandhi Nagar, Ahmedabad.
3. Optimised feeding system for investment casting to reduce dimensional variation, 63rd Indian Foundry Congress, 28 Feb-1 March, 2016, Greater Noida, Delhi.
4. Optimized design of feeding system for complex steel (CF8) investment casting to improve quality and productivity- International conference. ATSMDE, 21-22 Dec 2017, VJTI, Matunga, Mumbai.
5. CFD analysis of thin wall pump impeller for sustainable manufacturing and energy management - (ICTEAH 2024) 15-16 April 2024. KJSCE, Vidyavihar.
6. Optimization & Comparative Analysis of Scaffold Designs Using Finite Element Analysis , Rupesh Kharbe , Ramesh Lekurwale , Sangita Bansode , Rohan Kothurkar (ICTEAH 2025) 5th and 6th June 2025. KJSCE, Vidyavihar

Books/Book Chapters

1. Modelling and Analysis of Gas Turbine Fog Cooling System, Advances in Clean Energy and Sustainability, Springer 2024. International/ Springer Nature Singapore Pvt Ltd. 2024. <https://doi.org/10.1007/978-981-97-5415-1-Ramola Sinha and Sangita Bansode,>

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No of Research / consultancy / projects completed: Rs: Details of Research / consultancy / projects: Completed :NA On-going: NA Applied : NA	No of Research / consultancy / projects on-going: Rs:	No of Research / consultancy / projects on applied as on date: Rs:
IPR/ Copyrights : Real Time Machine & Production Monitoring System using IIoT for CNC Lathe Machine; diary number 31295/2024-CO/L : Status – Copyright filed (under scrutiny)		

FDPs/Seminars/Workshops/Training Programs Attended/ Organized/ Delivered
Attended <ol style="list-style-type: none"> STTP on Fault diagnosis of rotary machines and FEA Work shop on E - Foundry , Casting design and simulation STTP on Advance Machine Design Work shop on Industrial Automation Work shop on Smart manufacturing and IOT Hands-on Industrial Robot and Simulation
Organized and attended <ol style="list-style-type: none"> Software training for 3D Printing and design Nondestructive Testing training for faculty ANSYS used for Additive manufacturing Adams training for faculty Dynamic analysis training Computational fluid dynamics CNC programming – Lathe CNC programming - VMC Non Destructive Testing : Integrating Legacy and Emerging New Technique Solid CAM – CNC programming software
Delivered <ol style="list-style-type: none"> Lecture on DPT in NDT STTP Lecture on Plant layout – Flexim software Lecture on Design of drones in Drone STTP

Notable Key Scholastic Achievements	
1.	Sanctioned grant of 10000 Rs for interdepartmental UG project on Robotics
2.	Sanctioned grant of 56 lac for Ph D student project : bio printing (co guide)

Notable Positions and Responsibility	
1.	Convener- Faculty grievance cell convener
2.	Convener- NAAC criteria 2 convener
3.	Coordinator – IT infrastructure of Mechanical Department
4.	In charge - Production Engineering Lab
5.	Coordinator Honors course CAE
6.	NBA coordinator – Criteria 2

Date: 08 / 09 / 2025

Signature of Faculty Member