# Somaiya Vidyavihar University

Name: Dr. Maruti B Zalte				E-mail:marutizalte@somaiya.edu		
Contact	No: 9821132	516 / 02266449323		1		
Departme	ent/Section: El	lectronics & Telecommunicat	ion			
College:	K J Somaiya	College of Engineering				
DOJ	Somaiya:	Career Experience: Yrs	Industry Exp	erience:01 Yrs	Teaching	Experience:
August 02	2,2023	_			23 Yrs	_
Present Academic Designation: Associate Professor		Present Administrative Designation:				
		In-charge Admission, Jt. Associate Dean IAI				

## Area of research/specialization and Courses Delivered

## Research domain/interests/areas

- 1. Signal Processing
- 2. VLSI Design
- 3. Embedded Systems
- 4. Sensors & IoT

## **Courses Delivered**

- 1. Digital Signal Processing
- 2. VLSI Design
- 3. Microelectronics Devices and IC manufacturing
- 4. Digital Electronics
- 5. Introduction to MEMS
- 6. Elements of Electrical and Electronics Circuits
- 7. Digital Communication
- 8. Analog Electronics
- 9. Hardware Description Languages
- 10. Signals & Systems

Recognition as a teacher by any University	UG: Yes	PG: Yes	Ph.D: Yes/No
Details of Recognitions			

Education					
Examination	Name of the Degree	University/Boar	Institute/College	Year	CPI/SPI/
		d			%Marks
Ph.D	PhD Electrical	EE IITB,	EE IITB, Mumbai	2022	9
	Engineering	Mumbai			
PG	M.E. E&TC	Pune	College of Engineering Pune	2001	65%
UG	B.E. E&TC	Dr. BAMU,	Govt college of Engineering	1999	69%
		Aurangabad	Pune		
Diploma	Industrial Electronics	MSBTE	P.L Govt Polytechnic Latur	1999	78%

Notable Experience Details					
Sr. No	Name of the organization	Designation	Date of Joining	Date of	Experience
				Leaving	(Years)
1.	BE-DELFT Electronics Ltd	Trainee Engineer	September 2000	August 2001	01
2.	St. Francis Institute of	Lecturer	September 2021	August 2022	01
	Technology, Mumbai				
3.	K J Somaiya College of	Lecturer	August 2022	July 2008	06
	Engineering				
4.	K J Somaiya College of	Associate Professor	July 2008	Till date	
	Engineering				

## Somaiya Vidyavihar University

Research Accomplishments and Projects			
No of students pursuing Ph.D as on date:NIL		No of students completed Ph.D as on	
		date:NIL	
No of students completed PG thesis / Project work as on		No of groups completed UG projects as on	
date:NIL		date: 40	
Publications Number of Peer review Journal		Number of Conference papers:05	
Total:10 papers:05			

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

#### **International Journals**

- 1. "Passivation of solution-processed a-IGZO thin-film transistor by solution processable zinc porphyrin self-assembled monolayer," MB Zalte, TR Naik, A Alka, M Ravikanth, VR Rao, MS Baghini, IEEE Transactions on Electron Devices 68 (11), 5920-5924
- 2. "A solution processed amorphous InGaZnO thin-film transistor-based dosimeter for gammaray detection and its reliability," MB Zalte, V Kumar, SG Surya, MS Baghini IEEE Sensors Journal 21 (9), 10667-10674.
- 3. "Towards a low cost fully integrated IGZO TFT NO2 detection and quantification: A solution-processed approach," MT Vijjapu, S Surya, M Zalte, S Yuvaraja, MS Baghini, KN Salama Sensors and Actuators B: Chemical 331, 129450
- 4. "Performance of Naïve Bayes Classifier Multinomial Model on Different Categories of Documents", H Doshi, M Zalte Proceedings of the National Conference on Emerging Trends in Computer National Journals
- 5. "Comparison of supervised learning techniques for binary text classification," H Doshi, M Zalte International Journal of Computer Science and Information Security 10 (9), 52

#### **Conferences**

- A Low-cost Acetone Sensor using Amorphous InGaZnO Transistor for Potential Diagnosis of Diabetes by Breath Analysis, MB Zalte, International Conference on Technologies for Energy Agriculture and Healthcare ICTEAH 2024, K J Somaiya College of Engineering
- 2. IGZO thin film transistor based sensors for environmental sensing, 2020 5th IEEE International Conference on Emerging Electronics (ICEE), 1-4, MB Zalte, Mumbai
- 3. a-InGaZnO Thin-film Transistor as an Oxygen Gas Sensor with In-Situ Electrical Characterization, TR Naik, MB Zalte, MS Baghini 2020 5th IEEE International Conference on Emerging Electronics (ICEE), 1-4

Patents/Copy Rights		
No of Research / consultancy / projects completed: Rs:	No of Research / consultancy / projects on-going:	No of Research / consultancy / projects on applied as on date: Rs:
Details of Research / consultancy / projects:  Completed On-going Applied		
IPR/ Copyrights		

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

#### Attended

- 1. Workshop: Industry 4.0 and smart manufacturing, ETRX Department KJSCE
- 2. Train the Trainer program by Festo Pvt Ltd and ETRX department August 1-5, 2022
- 3. INUP workshop on "Nanofabrication Technologies" IITB, 2014
- 4. CDEEP course on "Biosensors and Bio-MEMS" EE IITB, 2014

5.

## Somaiya Vidyavihar University

## **Organized**

1. Visit to Nanofabrication facility for students enrolled in MEMS and VLSI 2022.

## **Delivered**

Date: 21 / 10 / 2024

- 1. Training for Staff MITCON Pune Vocational Training on Solar Energy 2013
- 2. Trainer Solar Photovoltaics: Fundamental, technologies & Applications 2011 NCPRE –IITB & K J Somaiya College of Engineering

	Notable Key Scholastic Achievements
1.	Completed PhD from EE IITB Mumbai under Quality Improvement program Fellowship AICTE
2.	Qualified GATE 1999 with 90 percentile and Completed M.E with Scholarship AICTE

	Notable Positions and Responsibility			
1.	Sports In-charge and Associate Dean Students' Affair K J Somaiya College of Engineering , 2008-2011			
2.	Dean Students' Affair K J Somaiya College of Engineering , 2011-2014			
3.	Admission In-charge K J Somaiya College of Engineering , 2023 till date			
4.	Jt. Associate Dean IAI September 2024 till date			
5.	Convenor, Laboratory Development committee Electronics & Telecommunication KJSCE 2022 till date			
6.	Member, Examination Squad Somaiya Vidyavihar University A.Y. 2023-22			
7.	Member, Prevention of Unfair Means Committee Somaiya Vidyavihar University 2022- till date			
8.				

MBZAlte

**Signature of Faculty Member**