

# RESUME

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3. Present Designation: Associate Professor  
Department of Instrumentation Engg.,  
S.G.G.S. Institute of Engineering and Technology,  
Vishnupuri, Nanded. 431606. M.S. [India]

4. Date of Birth: 25<sup>th</sup> June 1967

## 5. Employment Details:

Employer's Name	Department	Duration	Designation
S.G.G.S.College of Engg.and Tech., Vishnupuri, Nanded, 431606	Instrumentation Engineering	30-08-1988 to 30-08-1994	Lecturer in Instrumentation
		31-08-1994 to 31-08-1998	Lecturer(Senior Scale)
		31-08-1998 to 08-08-2008	Lecturer(Selection Grade)
		08-08-2008 to Till date	Associate Professor (CAS)

6. Educational Qualifications: M.E. (Instrumentation), Ph.D. (IIT, Bombay)

Sr. No.	Degree	Department	Institution/ University/Board	Year
01	Ph.D.	Electrical Engineering	Indian Institute of Technology, Bombay	2008
Title of Ph.D. Thesis: Micro-fabricated System for Microbial Assay				
02	M.E	Instrumentation Engineering	Marathwada University, Aurangabad	1993
Title of M.E. Thesis: Microprocessor Based High Voltage Testing of Insulating Papers				
03	B.E	Instrumentation Engineering	Marathwada University, Aurangabad	1988
04	Diploma	Electrical Engineering	Board of Technical Education Bombay	1985
05	S.S.C.	SSC Board Latur Division	Maharashtra State Board, Aurangabad	1982

7. Teaching Experience: 27 Years UG 06 Years PG

8. Subjects taught to:

a. U.G.Classes :

1.	Elements of Electrical and Instrumentation Engineering	8.	Electrical Machines
2.	Transducer Technology	9.	Power Plant Instrumentation
3.	Electrical Machines	10.	PC Based Instrumentation
4.	Digital Electronics and Logic Design	11.	Embedded System Design
5.	Control System Components	12.	Basic Electronics Chemical and Analytical Instrumentation
6.	Digital System Design	13	Microprocessor and Microcontroller
7.	Feedback Control systems	14.	Introduction to MEMS

b. P.G.Classes :

Instrument Transducers  
Process Instrumentation

Digital Measurement Techniques  
IC Technology

9. M.Tech. Dissertations Guided:

Sr. No.	Name of the Project	Name of the students	Year
1.	Design and Development of Anodic Bonding set up	Ms. Gargi R. Pathak	2004-05
2.	SCADA for High Pressure Fixed Bed Reactor	Agnihotri Santosh P.	2005-06
3	Study of various Macromodels for Operational Amplifiers	Chikyal Neetu	2005-06
4.	Soot Blowing Operation in Boilers using PLC and SCADA	Gajanan Bellale	2007-08

5.	Microcontroller based Adjustable Speed Control of Single Phase Induction Motor	Mrs. Indira Biradar	2007-08
6.	Automation of Sterilization Process & Clean-In-Place (CIP) Plant using Hybrid Distributed Control system	Sanjay C. Jabde	2010-11
7.	Number Plate Identification Based on Image Processing Techniques	Sanjay B. Joshi	2010-11
8.	Automation of Sewage Treatment Plant using PLC & SCADA	Ms. Rachana R. Sangitrao	2011-12
9.	Design and Modeling of MEMS capacitive pressure sensor	Alfiya Ameen	2011-12
11.	Design Approach for Analog and Digital PID Controller	Sonal Shingnapure	2013-14
12.	Design Topology of Low Profile Transformer for Slim Adapter	Pankaj Rajbhoj	2014-15
13.	Design of PID Controller Strategies for Process Application	Gayatri Vangal	2015-16
14.	Design and Development of Dual Wavelength Based Chlorophyll Measurement System	Rushikesh Ambhore	2015-16
15.	Object Detection and Tracking System Using LabVIEW	Sheetal Waghmare	2016-17

## 10. Publications:

### Journal papers:

1. R.P.Subhedar, C.B.Deshpande, "**Microprocessor Based High Voltage Testing of Insulating Papers**", published in the Journal of the Institution of Engineers (India), Electrical Engg. Division, V75 Feb. 1995, pp. 198-204.
2. V.V.Sarwadnya, R.V.Sarwadnya, C.B.Deshpande, "**Microprocessor Based Alternator Synchroniser**", published in the Journal of the Institution of Engineers (India), Electrical Engg.Division, V80 Nov. 1999, pp. 109-114.
3. V. V. Sarwadnya, R. V. Sarwadnya, S.G. Kahalekar, "**Modeling and Simulation of On-chip Electromagnetics of Planar PCB Transformers**", International Journal of Advanced Electronics and Communication Systems 2014. Approved by CSIR-NISCAIR ISSN NO. 2277-7318.
4. J.B.Nade, R.V. Sarwadnya, "**The Soft Core Processors: A Review**", International Journal of Innovative Research in Electrical Electronics Instrumentation and Control Engg.Vol. 3, Issue 12, December 2015.

### Conference papers:

1. C.B.Deshpande, S.J.Vaidya, R.P.Subhedar, "**PC Based Weather Monitoring System**" presented in the National Conference on Real Time Systems held at S.G.S.I.T.S. Indore during February 23-25, 1991.

2. C.B.Deshpande, S.J.Vaidya, R.P.Subhedar, “**Microprocessor Based Dielectric Oil Testing**”, presented in the International Conference on EC<sup>3</sup> – TENCON 91 of IEEE held at New Delhi during August 28-30, 1991.
3. Rajashree Sarwadnya, Rakesh Lal, “**On-chip Electrochemical Detection of L-Serine at Planar Gold Electrodes**”, accepted for publication in the *International Conference on Semiconductor Electronics at Malaysia* during November 25-27, 2008.
4. Rajashree Sarwadnya, Rakesh Lal, “**Development of Microfluidic Chip for Bacterial Chemotaxis**”, presented in the International Conference on MEMS2009 organized by IIT Madras during January 3-5, 2009.
5. Mr. Sumitkumar S. Rathor, Manik. K. Rodge, Mrs. Rajashree. V. Sarwadnya, “**Energy Resource Structure in India and Maharashtra: A Review**”, presented in the International conference on Recent Advances in Mechanical Engineering (ICRAME-2015) during 26th – 28th Feb – 2015.
6. Vishal A. Kangane, N. R. Kolhare, R. V. Sarwadnya and Anita L. Shelke, “**Implementation of Real Time Speaker Recognition System Using MFCC and Vector Quantization on TMS320C6713DSK**” 6th IEEE International Conference on Communication and Signal Processing-**ICCSP'16** Tamilnadu, India during April 06-08, 2016.
7. Anita Shelke, N. R. Kolhare, R.V. Sarwadnya, Vishal Kangane “**Wireless RF Communication Based On DSP Application**”, IEEE 3rd International Conference On Devices Circuits And Systems (ICDCS16) 3rd to 5th March 2016.

**(b) (Nontechnical)**

1. C.B.Deshpande, S.J.Vaidya, R.P.Subhedar, “What Can and Should Technical Institutes Do for Entrepreneurs”, presented in *the Two days Seminar on Role and Responsibilities of Technical Education Institutes in Innovation and Entrepreneurship held at S.G.G.S. College of Engg.& Tech. Nanded* during January 20-21, 1990.
2. S.G.Kahalekar, S.J.Vaidya, R.V.Sarwadnya, V.B.Mendhe, “Women Participation in Technical Education”, presented in the *International Conference on Management of Technical Education held at Bombay* during December 15-17, 1995.

**11. Honors and awards:**

Awarded Certificate of Merit for 1994-95 for the published Journal paper entitled ‘**Microprocessor Based High Voltage Testing of Insulating Papers**’ by The Institution of Engineers.

## 12. Sponsored Research / Consultancy Projects:

Title of Project	Duration and year of sanction	Amount of Grant received	Sponsoring Agency	Project Status
Development of EIS Setup for Biotechnology Applications	Three years 2009	07.65 Lakhs	AICTE-RPS	Completed

## 13. Refresher Courses/ Continuing education programmes attended / organized:

Sr. No	Title of Course	Institute and Sponsorer	Duration	Dates	
				From	To
01	Electronic Instrumentation	Govt. College of Engg. Pune (ISTE)	Two week	19/06/89	03/07/89
02	Process Control and D.C.S Overview	SGGSCE&T, Nanded and Tata Honeywell, Pune	One week	26/4/93	30/04/93
03	TDC 3000 and LCS 620 Implementation	Tata Honeywell Ltd., Pune	Three Week	01/11/93	19/11/93
05	Entrepreneurship Development	Cusrow Wadia Institute of Technology, Pune (ISTE)	Two Week	04/07/94	16/07/94
06	Induction Training for Teachers	S.S.G.M. College of Engg. Shegaon (ISTE)	03 Days	05/08/94	07/08/94
07	Strategic Planning and Institutional Development	SGGSCE&T, Nanded (ISTE)	03 Days	30/11/94	02/12/94
08	Microprocessors In Instrumentation	SGGSCE&T, Nanded (QIP- AICTE)	Two Week	17/06/96	28/06/96
9	Advances in Power Plant Instrumentation	SGGSCE&T, Nanded & Dahanu Thermal Power Station, BSES Ltd.	03 Days	13/11/95	15/11/95
10	Industry-Institute Partnership	SGGSCE&T, Nanded (ISTE)	One week	03/03/97	08/03/97
11	Biomedical Instrumentation	B.M.I.C. SGGSC&T, Nanded	One week	21/07/97	26/07/97
12	Digital Signal Processing	SGGSCE&T, Nanded (ISTE)	Two Week	16/03/98	27/03/98
13	Innovation and Optimization using TRIZ and Taguchi Techniques	IIT Bombay	02 Days	28/04/01	29/04/01
14	Simulation of Power Electronic Systems	IIT Bombay (QIP-AICTE)	One week	08/05/01	12/05/01
15	STTP on "Mobilization of Financial Resources in Technical Institutes by Industry-Institute Interaction"	MGM College of Engg. Nanded (ISTE)	Two Week	07/01/02	18/01/02
16	Short-Term Course on "Advanced Topics in Linear Systems Theory"	IIT Bombay (QIP-AICTE)	Two Week	13/05/02	24/05/02
17	Workshop on "Elements of Microelectronics"	IIT Bombay (Intel-CEP IITB)	04 Days	17/12/03	20/12/03
18	Symposium on Nanotechnology	IIT Bombay (IRCC-IITB)	02 Days	02/10/04	03/10/04
19	Short-Term Course on "Recent	SGGSIE&T Nanded (TEQIP)	03	27/01/06	29/01/06

	Trends in Instrumentation & Control”		Days		
20	Faculty Development Programme on “Quality Assurance in Technical Education”	SGGSIE&T Nanded (TEQIP)	03 Days	04/05/06	06/05/06
21	Induction Training program on Teaching –Learning Strategies	SGGSIE&T Nanded (TEQIP)	03 Days	25/03/07	27/03/07
22	Teaching Engineering Effectively	IIT Bombay CE&QIP	One Week	27/09/07	01/10/07
23	Training in Microelectronics & Nanotechnology Laboratory	I I T Bombay	Four Week	01/07/08	02/08/08
24	National workshop on MEMS Technology and Applications	Cummins’ COE Pune NPMASS & ISSS	03 Days	22/01/09	24/01/09
25	2 <sup>nd</sup> INUP Workshop on Nanofabrication Technologies	IIT Bombay	02 Days	30/05/09	31/05/09
26	Hands on Training on MEMS Fabrication	NPMASS-CEERI, Pilani Rajasthan	Two Week	01/06/09	12/06/09
27	SCILAB and Its Application to Global Optimization and Fractional Differential Equations	SGGSIE&T Nanded & IIT Bombay	03 Days	23/04/10	25/04/10
28	One Day Workshop on Industrial Instrumentation	SGGSIE&T Nanded & IIT Bombay	01 Day	16/03/11	16/03/11
29	Two Week Course on Linear Algebra and It’s Applications	SGGSIE&T Nanded (TEQIP)	Two Week	21/05/12	02/06/12
30	13 <sup>th</sup> INUP Hands-on Training Workshop on Nanofabrication Technologies & TCAD Sentaurus Workshop	IIT Bombay (INUP)	One Week	26/11/12	30/11/12
31	International Conference on Elements of Electronics	IIT Bombay	03 Days	15/12/12	17/12/12
32	FDP on Wireless Sensors and Their Applications	SGGSIE&T Nanded (TEQIP)	One Week	18/03/13	22/03/13
33	Interdisciplinary International Collaborative Programme entitled sustainable Energy Development Learning Camp <b>(Organized)</b>	SGGSIE&T Nanded (TEQIP-II)	One Week	16/09/13	20/09/13
34	Indo-German Winter Academy <b>(Organized)</b>	COE Pune and Ostfalia University of Applied Sciences Germany	One Week	24/11/13	30/11/13
35	FDP on Emerging Trends in Nanoscience and Nanotechnology <b>(Organized)</b>	SGGSIE&T Nanded (TEQIP)	One Week	06/08/13	10/08/13
36	Interdisciplinary International Collaborative Programme entitled sustainable Energy Development Project Design & Learning Camp <b>(Organized)</b>	SGGSIE&T Nanded (TEQIP-II)	One Week	16/09/13	20/09/13
37	Workshop on MEMS Design and Simulation using TCAD Software <b>(Organized)</b>	SGGSIE&T Nanded (TEQIP-II)	03 Days	24/03/14	26/03/14
38	QIP Short term course on Embedded Control Systems	IIT Bombay AICTE (CE & QIP)	One Week	12/05/14	16/05/14
39	Workshop on Advanced Control of Underwater Vehicles	SGGSIE&T Nanded (TEQIP-II)	02 Days	09/01/15	10/01/15
40	Training programme on Best Practices in Outcome Based Curricula Design and Pedagogy Alignment	YASHADA Pune	One Week	09/02/15	13/02/15

41	Workshop on Cyber Security & Forensic Tools	SGGSIE&T Nanded (TEQIP-II)	02 Days	27/03/15	28/03/15
42	STTP on Biomedical Signal Processing	SGGSIE&T Nanded (TEQIP-II :CoE)	One Week	30/03/15	03/04/15
43	Workshop on Probability, Statistics and Random Processes	SGGSIE&T Nanded (TEQIP-II :CoE)	02 Days	28/02/15	01/03/15
44	U Deliver V Nurture: Intellect Creation and Protection for Image Processing	SGGSIE&T Nanded (TEQIP-II :CoE)	01 Day	25/04/15	--
45	Two Week Course on Advances in Multi-rate Signal Processing	SGGSIE&T Nanded (AICTE)	Two Week	29/06/15	10/07/15
46	CDEEP Course on Simulation Tools in Electronics and Digital Systems	IIT Bombay TEQIP-KITE MHRD India	One Week	04/01/16	08/01/16
47	CMOS, Mixed Signal and Radio Frequency VLSI Design	Two-Week ISTE STTP NMEICT-IIT Kharagpur (Remote Center: MGMCE Nanded)	Two Week	30/01/17	04/02/17

### 13. Participation in design of Curricula:

Participated in design of curricula in Instrumentation Engg. Course of S.R.T. Marathwada University, Nanded at U.G. level. Also participated in the design of curricula at SGGS Institute of Engg. & Technology in the autonomous structure. Courses designed at Basic Electronics, Advanced Sensors, Power plant Instrumentation and Unit Operation and Chemical and Analytical Instrumentation.

### 14. Contribution towards corporate life of Institute, Exam work, Extensive activities:

- a) Worked as an in-charge for 'Chemical and analytical Instrumentation' laboratory during 1996-1998.
- b) Conducted practical sessions of 'Signal Conditioning modules' in the short term QIP course on 'Microprocessors In Instrumentation' during June 17<sup>th</sup> - 28<sup>th</sup> 1996.
- c) Acted as a resource person for the course on 'Biomedical Instrumentation' conducted at SGGSC&T, Nanded during July 21<sup>st</sup> -26<sup>th</sup> 1997.
- d) Worked as a member of Departmental Time table Committee and Canteen committee, Gathering Committee etc.
- e) Associated for the Personality Development Programme of Instrumentation Students in April 2002.
- f) Guided various projects at UG and PG level.
- g) Life Member of ISTE (LM 6807)

- h) Worked as a member of M.E (Instrumentation) admission committee for the academic year 2002-03.
- i) Acted as a resource person for the short-term course on 'Biomedical Instrumentation' conducted at SGGSC&T, Nanded during April 15<sup>th</sup> – 17<sup>th</sup> 2006.
- j) Worked as Under Study (US) for the S.R.T.M. University examinations conducted during May-June 2007.
- k) Acted as a resource person for the short-term course on 'Pedagogical Training in Engineering Education' conducted at SGGSC&T, Nanded during March-4-8, 2009.
- l) Acted as a resource person for the Content upgradation programme on Embedded Systems Sponsored by MSBTE Mumbai conducted during 01/01/2010 to 08/01/2010.
- m) Delivered guest lecture on Bacterial Chemotaxis in Engineering Applications for M.Sc. students at Netaji SubashChandra Bose College, Nanded on February 06, 2010.
- n) Co-ordinator of National MEMS Design Centre (NMDC) at SGGGS Institute of Engg. & Technology Nanded during 2010-2011.
- o) Chairman of Mahila Takrar Nivaran Samiti for the academic year 2011-12, 2012-13 and 2013-14.
- p) Worked as a judge for Science exhibition at Gyan Mata Vidya Vihar Nanded on 12/02/2010 and Oxford International School, Nanded on 09/02/2013.
- q) Delivered an expert lecture on Introduction to Nanotechnology in the one week FDP on Emerging Trends in Nanoscience and Nanotechnology at SGGGS Institute of Engg. & Technology Nanded during August 06-10, 2013.
- r) Delivered an expert lecture on Overview of MEMS Technology and Applications in the TEQIP-II sponsored workshop on MEMS Design and Simulation using TCAD Software at SGGGS Institute of Engg. & Technology Nanded during March 24-26, 2014.
- s) Delivered an expert lecture on Bio-MEMS in the one week STTP on Micro-Electro-Mechanical-Systems (MEMS) at Shri Ramdeobaba College of Engg. & Management Nagpur during April 20-25, 2015.
- t) Incharge of Electrical Maintenance Cell w.e.f. 22/08/2017.
- u) Incharge of Music Club w.e.f.10/07/2013.