

Name:- **Zambare Madhukar Sarvottam**

Personal Details:-

Name	Zambare	Madhukar	Sarvottam
	<i>SURNAME</i>	<i>FIRST NAME</i>	<i>MIDDLE NAME</i>
Department	Electronic Science		
Designation	Assistant professor		
Qualification(s)	M.Sc. , Ph.D. (Electronic Science)		
Certification(s)/Professional Courses/Exams			
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Member Of:-

College Committees	Other Committees
Coordinator, M.Sc. (Electronic Science), Fergusson College	Board of Studies, Savitribai Phule Pune University
	Faculty of Science, Savitribai Phule Pune University

Research Done:

Area of Interest in Research:

Power Electronics
Embedded Systems
Wireless Sensor Network

Books Published:

Name of Book	Author(s)	ISBN No.	Year	Edition	Publisher
1. A laboratory Manual on analog Digital devices and instrumentation (S.Y.B.Sc. Electronic Science Paper III)	Dr. A.B. Lele, Dr. A.D. Shaligram, Dr. S.V. Deuskar, Mr.S.S. Bhagwat and Dr.M.S. Zambare		1999		Manali
1. Practical Electronics (F.Y.B.CS Electronics Science Paper III)	Dr. A.B. Lele, Dr. A.D. Shaligram, Dr. S.V. Deuskar, Dr. N.M. Kulkarni, Mr.S.S. Bhagwat, Mr. J.V. Khedkar and Dr.M.S. Zambare, Pune		1998		Manali
2. Practical Electronics (S.Y.B.CS Electronics Paper III)	Dr. A.B. Lele, Dr. A.D. Shaligram, Dr. S.V. Deuskar, Dr. N.M. Kulkarni, Mr.S.S. Bhagwat and Dr.M.S. Zambare, Pune		1998		Manali

Research publications:

<p>1. "Dependence of plasma parameters on electron beam sensitivity of PPMMA films", M.S. Zambare, S.W. Gosavi, S.M. Gorwadkar and S.A. Gangal, Proc. of 10th Int. Symp. On Plasma Chem (ISPC 10), Bochum, Germany, (1991), p2.3-19.</p>
<p>2. "Improvement in the sensitivity of PPMMA electron resist by S and F atom doping", M.S. Zambare, S.W. Gosavi, S.M. Gorwadkar, B.A. Kuruvilla, S.K. Kulkarni and S.A. Gangal, Jpn.J. Appl. Phys. 31. (1992), p2640.</p>
<p>3. "Investigation on dry electron beam resist prepared by plasma polymerized of methyl methacrylate". M.S. Zambare S.W. Gosavi, S.M. Gorwadkar, and S.A. Gangal, CSIO Communication, 19, (1991), p52.</p>
<p>4. Synthesis and characterization of plasma polymerized dry electron beam resist", M.S. Zambare, S.W. Gosavi, S.M. Gorwadkar, B.A. Kuruvilla, S.K. Kulkarni and S.A. Gangal, Proc of 11th int. Symp. On Plasma Chem.(ISPC11), Loughborough, U.K.(1992).</p>
<p>5. "Analysis of e-beam sensitive PPMMA films from oxygen plasma using X-ray photoelectron spectroscopy" B.A. Kuruvilla, M.S. Zambare, S.W. Gosavi, S.M. Gorwadkar, S.A. Gangal, S.K. Kulkarni, J. Polym. Sci Polym Chem, 32, (1994), p2275.</p>
<p>6. "R.f. plasma assisted deposition of diamond like carbon films from methanol water vapour mixture", Manoj Kamath, M.S. Zambare, S.A. Gangal, S.K. Kulkarni, Diamond and Related Material, 4. (1994), p15.</p>
<p>7. "Computer controlled high precision rotating polarizer assembly for rotating polarizer Ellipsometer, S.P. Khedkar, A.S. Gaware, M.S. Zambare, S.V. Joshi, N.M. Kulkarni, A.B. Lele, and A.D. Shaligram, J. of Instru. Soc. Of India, vol.28, No.1,67 (1998).</p>
<p>8. "Design of low noise current amplifier for photo-multiplier tube, M.S. Zambare, N.D. Thakar, S.S. Bhagwat, N.M. Kulkarni, A.B. Lele, J. of Instru. Soc. of India, vol.29, No.1, 21(1999).</p>
<p>9. "Design of low cost Lock in amplifier, S.S. Bhagwat, M.S. Zambare, N.M. Kulkarni, A.B. Lele and A.D. Shaligram J. of Instru. Soc. of India, vol.29, No.1, 18(1999).</p>
<p>10. "Design of PC based polarimeter for sugar industry J.V. Khedkar, P.B. Joshi, M.S. Zambare, N.M. Kulkarni, and S.P. Khedkar Proc. Of 24th National Symposium on Instrumentation, Goa University, Goa(2000).</p>
<p>11. "Analysis of polarimetric data for cane juice in order to improve sugar factory performance J.V. Khedkar, U.P. Deshmukh, M.S. Zambare, S.P. Khedkar, N.M. Kulkarni and P.B. Joshi Proc. Of 24th National Symposium on Instrumentation, Goa University, Goa (2000).</p>
<p>12. "Fabrication of simple low cost pick and place type robotic systems, A.S. Gaware, Supriya Kotasthane, Dr.M.S. Zambare, and Dr.N.M.Kulkarni, Proc. Of 24th National Symposium on Instrumentation, Goa University, Goa(2000).</p>
<p>13. Development of a sensor monitoring system for CNC machines - A.S. Gaware, Supriya Kotasthane, Dr.M.S. Zambare, and Dr.N.M.Kulkarni, Proc. Of 24th National Symposium on</p>

Instrumentation , Goa University, Goa(2000).
14. “Design of Human machine interface (HMI) for vacuum deposition unit V. P. Labade, M.S. Zambare, N. M. Kulkarni and A. D. Shaligram Proc. Of 24th National Symposium on Instrumentation, Goa University, Goa(2000).
15. “Design of optical fiber transmission system for an Ellipsometer”, Shubhangi Katti, J.V. Khedkar, S.P. Khedkar, M.S. Zambare, N.M. Kulkarni and A.D. Shaligram, Proc. Of 24th National Symposium on Instrumentation, Goa Univesity, Goa(2000).
16. “Low cost temperature transmitter using PCM for industrial automation” A.S. Gaware, M.S. Zambare and N.M. Kulkarni National Seminar on Advanced Instrumentation, CSIO, Chandigarah (Jan 2001)
17. “Development of GSM data link for Automatic weather stations”, Tony Louis, Balaji Chavan, M.S. Zambare, and N.M. Kulkarni, National Symposium On Instrumentation, (NSI-31) Nov 2007, Gwalior
18. “Develpoment of Intelligent Control for Solar Operated Emergency Lights, Balaji Chavan, Tony Louis, M.S. Zambare, and N.M. Kulkarni, National Symposium On Instrumentation, (NSI-31) Nov 2007, Gwalior.
19. “Development of DC Power Line Communication using FSK’ , Tony Louis, Balaji Chavan, M.S. Zambare, and N.M. Kulkarni, National Seminar On Interdisciplinary Asects Of Electronics (NSIAE-2006), 28th and 29th January, 2006 ASC College, Chopda, Dist. Jalgaon.
20. “Develpoment of Embedded System Communication Interface for Sensor networks”, Tony Louis, Balaji Chavan, M.S. Zambare, and N.M. Kulkarni, National Symposium On Instrumentation (NSI-30) 30th November, 1st and 2nd December, 2005, CUSAT Cochin, Kerala.
21. “Development of Microstepping Control for Measurements in Polarimeter”, Tony Louis, Balaji Chavan, M.S. Zambare, and N.M. Kulkarni, National Symposium On Instrumentation (NSI-30) 30th November, 1st and 2nd December, 2005, CUSAT Cochin, Kerala.
22. Study of ac power line characteristics for power line communication N.M. Kulkarni M.S. Zambare, poster presentation at “innovation-08” at PVP college, Pravaranagar on 26-27 nov. 2008.
23. Power scheduling in low power sensor networks, M.S. Zambare and N.M. Kulkarni, Poster presentation at “innovation-08” at PVP college, Pravaranagar on 26-27 nov. 2008
24. A study of Wireless sensor network configurations for optimization system performance M.S. Zambare, N.M. Kulkarni, M. Kapadia and D. Mahida at INNOVATION-2009-10, NASC, Ahemednagar on 09 and 10 December 2009.
25. Study of signal behavior in a power line transmission media, N.M. Kulkarni, Adnan S. Obeed, M.S. Zambare, S. Netaskar and Priya B., at INNOVATION-2009-10, nasc, Ahemednagar on 09 and 10 December 2009.
26. “Designing Multichannel Data Logging System for Monitoring Environmental Parameters,”

<p>K.A. Kulkarni, Y.S. Khandge, N.M. Kulkarni and M.S. Zambare, National Conference on Sensor Networks and Embedded Systems, Abasaheb Garware College, Pune On 2nd, 3rd and 4th February 2011.</p>
<p>27. “Use of Gas Sensors and Wireless Sensor Network for the Environmental Parameter Monitoring: Current trends and Challenges,” K.A. Kulkarni , and M.S. Zambare, International conference held at Aurangabad.March23-25, 2012, " Current Trends and Challenges in Management Engineering, Computer Applications and Technology"</p>
<p>28. K.A.Kulkarni, J.V.Khedkar,S.P.Khedkar, M.S.Zambare, A.D.Shaligram ,“Mathematical modelling of variation of CO2 and O2 contents in a close chamber due to vegetation” , published in proceedings of National Conference on Advances in Electronics and its Interdisciplinary Applications (NCAEIA-2014),ISBN:978-93-5174-783-3,pp-380</p>
<p>29. Khandge Y.S, Tilekar R.T.,Komal Deokar, Akshada Joshi and Zambare M.S., “Implementation of DT Filters in real time on TMS320C6713 DSK”, published in proceedings of National Conference on Advances in Electronics and its Interdisciplinary Applications (NCAEIA-2014), ISBN:978-93-5174-783-3,pp-190</p>
<p>30. Khandge Y.S, Tilekar R.T, Das Ritika and Zambare M.S.,“Implementation of real time Audio effects on TMS320C6713 DSK”, published in proceedings of National Conference on Advances in Electronics and its Interdisciplinary Applications (NCAEIA-2014), ISBN:978-93-5174-783-3,pp-194</p>
<p>31. Kamble Panchsheela,Pawar Bhushan,Kabade Akshay and Zambare Madhukar “Modelling the Digital system using Verilog and VHDL with Specific Case Study” , published in proceedings of National Conference on Advances in Electronics and its Interdisciplinary Applications (NCAEIA-2014), ISBN:978-93-5174-783-3,pp-149</p>
<p>32. Panchsheela B. Kamble, M.S. Zambare and J.V. Khedkar, “Information Communication Technology in Education” at Two day National Conference on “Impact of ICT in Education” at Poona College on 23rd and 24th January 2015.</p>
<p>33. Sujaya Dasgupta, N.M. Kulkarni, M. S. Zambare,” Review Paper on the Next-Generation Wireless Technologies”, Proceedings of National Conference on Advances in Electronics & its Interdisciplinary Applications, 19th and 20th September 2014, Fergusson College,Pune-411004 , ISBN: 978-93-5174-783-3,</p>
<p>34. Sujaya Dasgupta, N.M. Kulkarni, M. S. Zambare,” An Overview of Optical Wireless Communication”, Proceedings of National Conference on Advances in Electronics & its Interdisciplinary Applications, 19th and 20th September 2014, Fergusson College,Pune-411004, ISBN: 978-93-5174-783-3</p>
<p>35. Sujaya Dasgupta, N.M. Kulkarni, M. S. Zambare, Varsha Sontakke, P.B.Buchade,” Simulation Techniques for Real World Digital Systems Design and Analysis “, Proceedings of National Conference on Modern Approach for Green Electronics & Computing, 29th and 30th September 2014,Yashavantrao Chavan Institute of Science, Satara-415001, ISBN: 978-81-92873.</p>
<p>36. Sujaya Dasgupta, N.M. Kulkarni, M. S. Zambare, Varsha Sontakke, P.B. Buchade,” Simulation</p>

of Real World Analog to Digital Converter for Wireless Sensor Network Using Pspice”, Proceedings of National Conference on Advances in Wireless Sensor Network and Its Applications- A special Issue of Society for Promotion of Excellence in Electronics Discipline (SPEED) Journal of Research in Electronics (2015), PP 215-218, 12th an 13th December, 2014, Shankarrao Mohite Mahavidyalaya, Akhuj , Solapur – 413 101 ISSN: 2349-8226.

37. Sujaya Dasgupta, N.M. Kulkarni, M. S. Zambare, “Ubiquitous Learning- A New Era of Adaptive Learning”, Application of Advanced Technology for Enhancing Quality of Science Education International Conference on 26 & 27 February 2015 , Modern College of Arts, Science & Commerce , Shivajinagar, Pune -411005.

Best Poster Awards:

1. **Sujaya Dasgupta**, N.M. Kulkarni, M. S. Zambare, Varsha Sontakke, P.B.Buchade, “ Simulation Techniques for Real World Digital Systems Design and Analysis “, Proceedings of National Conference on Modern Approach for Green Electronics & Computing, 29th and 30th September 2014, Yashavantrao Chavan Institute of Science, Satara-415001, ISBN: 978-81-92873
2. **Sujaya Dasgupta**, N.M. Kulkarni, M. S. Zambare, Varsha Sontakke, P.B. Buchade , “ Simulation of Real World Analog to Digital Converter for Wireless Sensor Network Using Pspice”, National Conference on Advances in Wireless Sensor Network and Its Applications, 12th an 13th December, 2014, Shankarrao Mohite Mahavidyalaya, Akhuj , Solapur – 413 101
3. Second runner up in poster presentation at NCAEIA 2014 for **K.A.Kulkarni**, J.V.Khedkar,S.P.Khedkar, M.S.Zambare, A.D.Shaligram , “**Mathematical modelling of variation of CO₂ and O₂ contents in a close chamber due to vegetation**”
4. Second runner up in poster presentation at NCAEIA 2014 for **Khandge Y.S**, Tilekar R.T, Das Ritika and Zambare M.S., “Implementation of real time Audio effects on TMS320C6713 DSK”

Seminars and Workshops Attended:-

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| 1. | Winter school on “Surfaces and interfaces” sponsored by UGC and IUC Department of physics, university of pune, january 1991. |
| 2. | Training program on “maintenance of vacuum systems”, sponsored by department of instrumentation centre (USIC),University of Poona and Western Regional Instrumentation Centre ,University of Bombay,Jan.1991. |
| 3. | Annual conference of material research society of india, N.C.L .Pune, Feb.1990. |
| 4. | 10 th international symposium on plasma chemistry (ISPC 10), Bochum, Germany, Aug.1991. |

5.	National symposium on “advances in microelectronic devices and fabrication techniques”, organized by Central Scientific instruments organisation, Chandigarh, Nov.1992.
6.	National seminar on “Power Electronics”, jointly conducted by IETE and Bharati Vidyapeeth, Pune, June 28-July 1999.
7.	Orientation course for college Teachers, Acedemic Staff College, Pune Universty, Pune (2002).
8.	Workshop on “Vocational courses in T.Y.BSc (Electronic science)”, Fergusson College, Pune, Aug.1996.
9.	National symposium on instrumentation (NSI-22), Goa University, Goa(2000).
10.	National workshop on “University Education and Management”, Fergusson College , Pune(2001)
11.	National seminar on “Recent Trends in VLSI design ”,Pune University, (2001)
12.	National seminar on “Advances in DSP-VLSI”, Pune University(2001)
13.	Workshop on “Academic reforms and Future directions in Electronic Science”, Fergusson College, Pune (Dec.2001)
14.	Workshop on “F.Y.B.Sc. Electronic Science Practicals”, Fergusson College, Pune (Jan.2002)
15.	National symposium of instrumentation (N S I-24) is attended at the Goa university, Dec 2000
16.	A workshop on F Y B Sc (Electronic Sc.) syllabus framing organized by department Oof electronic science, Fergusson College, Pune-4, 06 Jan 2002
17.	One-Day workshop on Effective Teaching Skills in E FA Fergusson College, Pune, 27 July 2002
18.	One day workshop on Electronic circuit simulation using P-SPICE at the Department Of Electronic Science University of Pune, 02 Feb 2003
19.	Two-Day workshop on Implementation of T Y B Sc. (Electronic Sc.) Practicals at Department of Electronic Sc., Fergusson College, Pune-4, 23-24 July 2004
20.	One-day workshop on Revision of M.Sc. (Electronic Sc.) Syllabi organized by Department of Electronic Sc, Modern College, Pune-5, 25 Oct 2004
21.	One day workshop on F.Y.B.Sc. (Electronic Sci.) Syllabus Revision at Department of Electronic Sc., Fergusson College, Pune-4, 6 August 2007
22.	National Symposium On Instrumentation (NSI-30) 30 th November, 1 st and 2 nd December, 2005, CUSAT Cochin, Kerala
23.	National Conference on Sensor Networks and Embedded Systems, Abasaheb Garware College, Pune On 2 nd , 3 rd and 4 th February 2011.
24.	National conference on “Recent Initiatives towards Green Electronics,” organized by post graduate department of electronics, Brijlal Biyani Sccience College, Amarawati (Maharashtra), Feb. 8-9, 2013.
25.	International conference held at Aurangabad.March23-25, 2012, " Current Trends and Challenges in Management Engineering, Computer Applications and Technology"

Seminars and Workshops Organized:-

1.	Two-Day workshop on Implementation of T Y B Sc. (Electronic Sc.) Practicals at
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Department of Electronic Sc., Fergusson College, Pune-4, 23-24 July 2004
2. One day workshop on F.Y.B.Sc. (Electronic Sci.) Syllabus Revision at Department of Electronic Sc., Fergusson College, Pune-4, 6 August 2007
3. Worked as a coordinator of " Guidance for SET/NET to PG students and Teachers of Electronics ", Jan-March 2011.

Other Accomplishments:-
