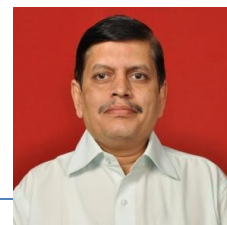


Dr. Nitin Madhukar Kulkarni



- **Dr. N. M. Kulkarni** is a Vice Principal and Professor of Electronic Science department at Fergusson College (Autonomous), Pune.
- He has experience of more than **36 years** teaching at Senior College: Under-graduate and post-graduate level and research in emerging areas of Electronics and Computers.
- He is took leaders role in implementing **AUTONOMY** in Fergusson College and is member of Key committees like - Governing Body, Academic Council, Examination and Finance Committee of the college
- He took keen interest in **administration** of various sections like admission, examination, planning and development, science promotion and internal quality assurance cell.
- He has published **35 books and 140 research papers** at National and international level.
- His research areas include ***Smart instrumentation, Communication and networking, embedded systems and wireless sensor networks.***
- He has completed 8 Research projects funded by the Department of Atomic Energy (DAE), Department of Science and Technology (DST), Indian Space Research Organization (ISRO), University Grants Commissions (UGC), and BCUD-University of Pune.
- He is a recognized research guide of Savitribai Phule Pune University and guided **12** research students for **M.Phil./Ph.D.**
- He was a coordinator and content developer for a MHRD and UGC sponsored project **ePG pathshala for developing e-contents for Electronic Science under National Mission on Education through ICT (NMEICT)** – UGC/MHRD- funding of 1.2 Crore.
- He visited **Hungary, Italy, Singapore and the US** for academic and research purposes.
- He is a **founder member of SPEED** (Society for promotion of Excellence in Electronics Discipline), **member of Instrumentation society of India** and **IEEE**.
- He is a recipient of **Best Teacher Award** from Pune Municipal Corporation and R. Chandrashekhar award of Indian Physics Association

Present position:

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Academic Background:

B.Sc. (1984), M.Sc. (1986), Ph.D. (1994) from Savitribai Phule Pune University (formerly University of Pune).

Research Interest:

- Smart Instrumentation,
- Power line communication,
- Wireless sensor Network
- Embedded systems

Additional professional activities

- Chairman, Board of Studies (Electronic Science) of Autonomous Fergusson College from 2016 to 2022
- Coordinator for Implementation of AUTONOMY in Fergusson college
- Member of Governing Body, Academic council, Examination committee, Finance committee, College development committee etc,
- Coordinator for Implementation of UGC- CPE (College with Potential for Excellence) and CE (College With Excellence) schemes 2012-2022
- College coordinator for Quality Assessment & Accreditation program (NAAC) from 2001-2010
- Scheduling and Planning Academic Calendar for College (1992 onwards)
- Member of Board of studies, University of Pune (2001 - 2007) and Fergusson College from 2016
- Member of Faculty of Science, University of Pune (2001-2007)

Other experience

- BOS member of Autonomous colleges – S. P. College, Pune, M. J. College, Jalgaon, and Pratap College, Amalner
- Member of Panel of Examiners for
 - Pune University (B.Sc, M.Sc., M. Phil, Ph.D.)
 - Solapur University (M.Phil, Ph.D.)
 - YCMOU (M.Phil.)
 - Bharati Vidyapeeth (B.Sc.)
 - Nagpur University (M.Sc.)
- Member of Staff selection committee – Poona College (1996), T. C. College, Baramati (2002), Pune District Education Trust, Akurdi (2002), A. Garware College (2003), Modern College, Pune (2004)
- Member of Local Enquiry committee – Sinhgad Institute of Science, Pune (2003), Symbiosis college of Arts, Commerce

and Science, Pune (2003), Indira College of Science, Wakad (2003)

- Panel of Examiners, MPSC, Govt. of Maharashtra
- Visiting faculty
 - ICIT VLSI design and research center,
 - Pune University (Electronic Science, Instrumentation Science),
 - Nano rachana technology, Govt. College of Engineering,
 - Resolve (Computer Science, Robotics, Embedded systems)
- Corporate training –
 - ARDE, ICIT VLSI center,
 - L& T Mumbai, Eton, Pune

Research Project Completed/Ongoing:

1. ***Monitoring quality of food and fruit containers during storage using RFID and Wireless sensor network***, Dr. N. M. Kulkarni and Dr. M. S. Zambare, BCUD (2013-15) [Rs. 2.10L]
2. ***Studying the impact of tree canopy on air pollution using Wireless sensor network*** Dr. M. S. Zambare and Dr. N. M. Kulkarni, UGC (2013-15) [Rs.0.83 L]
3. ***Development of Embedded interfaces to study body response to externally administered electrical/ em signals***, Dr. N. M. Kulkarni, UGC (2009-11) [Rs. 2L]
4. ***Metal-Oxide-polymer nanocomposites for detection of gas pollutants in Sugar Industry***, Dr. S. N. Kale and Dr. N. M. Kulkarni, DST (2009-11) [Rs. 19.2L]
5. ***Study of AC power line characteristics for power line communication***, Dr. N. M. Kulkarni, BCUD-UoP (2008-10) [Rs. 2.0 L]
6. ***Design of Reconfigurable Embedded System for Data collection platform***, Dr. N. M. Kulkarni Dr.A.D.Shaligram, and Dr. D.C.Gharpure, ISRO 2006-08.[Rs. 6.2L]
7. ***Development of PC based spectroscopic Ellipsometer for the study of thin films***, Dr. A. B. Lele and Dr. N. M. Kulkarni, Dr. S. Chattergi, DAE (1995-98) [Rs. 11.1L]
8. ***Fabrication of MSM Photodetectors and study their degradation using PLTS*** Dr. A. D.Shaligram and Dr.N.M.Kulkarni, DAE (1994-97) [Rs. 5.2 L]

[A] List of Publications: (International Journals)

1. **Classification of used electronic components based on circular Hough Transform**, Shubhangi Katti, Nitin Kulkarni and Arvind Shaligram, Int. Journal on research in Electronic and communication engineering , Vol. 7, Issue 1, 1621-1624 , March 2019, (ISSN: 2393-9028)

2. **Real Time Water Quality Monitoring System For Rivers**, Sujaya Dasgupta, M.S. Zambare, N. M. Kulkarni, A. D. Shaligram, ACTA TECHNICA NAPOCENSIS Electronics and Telecommunications, Volume 60, Number 2, pp 17-22, July 2019 (ISSN 1221-6542)
3. **Real- Time Water Quality Monitoring System Analysis of Pashan Lake, Maharashtra, India**, Sujaya Dasgupta, M.S Zambare, N. M. Kulkarni, A. D. Shaligram, Int. Journal of Engineering and Advanced Technology (IJEAT), Volume-8 ISSUE-6, pp 2331-2335, August 2019 (ISSN: 2249-8958)
4. **Classification of Color Coded Resistor Based Power Rating**, Shubhangi Katti and Nitin Kulkarni, Int. Journal of Advanced Research in Computer Science (IJARCS), Volume 9, No. 3, pp 14-17, May- June 2018 (ISSN: 0976-5697)
5. **Design and Analysis of Energy Harvesting System for Smart Wearable Device**, Dhawale S. M, Galbale V. S, N. M. Kulkarni, A. D. Shaligram, Research Review Int. Journal of Multidisciplinary (RRJOURNAL), ISSN: 2455-3085, pg. 50-52
6. **Hand gesture interface based on skin detection techniques for automotive infotainment systems**, A. G. Buddhikot, N. M. Kulkarni, and A. D. Shaligram, I. J. Image, Graphics and Signal Processing, Vol. 10, Issue 2, pp10-14, February 2018 (ISSN 2074-9074)
7. **Identification of spices by Electronic Nose using pattern recognition technique**, M. V. Kukade, N. M. Kulkarni, D. S. Kumbhar, D. C. Gharpure, Int. J. on Future revolution in Computer Science and communication engineering, vol. 4, Issue 3, pp 243-250 (March 2018).
8. **Profile Based Classification of Capacitors for Reuse**, Shubhangi Kattti, Nitin Kulkarni, IEEE International conference on Power, Control, Signals and Instrumentation Engineering at Chennai on Sept 21-22, 2017, pp 42-47.
9. **Development of alternative energy system for wearable electronic device**, S.M. Dhavale N. M. Kulkarni and A. D. Shaligram, Inter. J. of Advanced Research in electrical, electronics and instrumentation engineering, Vol. 6, Issue 6, pages 5105-5110, June 2017.
10. **Development of self powered energy harvesting system for mobile health monitoring**, S. M. Dhavale , N. M. Kulkarni and A. D. Shaligram, International Journal of Research in Advent Technology (E-ISSN: 2321-9637) vol.3 Issue 3 (special issue) pp. 52-56, Feb. 2015, (IF=1.473)
11. **Refractometric fiber optic sensor for In-Situ monitoring the state of charge of lead acid battery**, S.S. Patil, V. P. Labade, **N. M. Kulkarni**, A. D. Shaligram, Journal of Optical Technology, Vol. 3, pp61-66, March 2014, ISSN 1070-9762 (IF=0.245)
12. **Monitoring maximum duration of storage of yellow banana in control RH% using wireless sensor network**, Targol Abrishami, **N. M. Kulkarni**, and A. D. Shaligram, International Journal Scientific Research, vol. 2, Issue 8, pp 188-190, Aug, 2013, ISSN:2277-8179 (IF=0.3317)

13. **Analysis of Refractometric fiber optic state-of-charge (SOC) monitoring sensor for Lead Acid battery**, S.S. Patil, V. P. Labade, N. M. Kulkarni, A. D. Shaligram, OPTIK-International journal of Light and Electron Optic, Vol. 124, Issue 22, pp 5687-5691, Elsevier, Nov. 2013, ISSN: 0030-4026, (IF=0.524)
14. **Lead acid battery management system for Electric vehicles**, V. P. Labade, N. M. Kulkarni, and A. D. Shaligram, Int. Journal of Electronics and Communication engineering and Technology, Vol 4, No. 397-107, June 2013 (ISSN: 0976-6472) (IF=5.89)
15. **Engineering Room Temperature SO₂ Gas Sensing Via Laser-Annealed Nanostructured SnO₂ Thin Films**, Sandip Dhobale, N. M. Kulkarni, R. J. Choudhary, D. M. Phase, and S. N. Kale, Science of Advanced Materials, Vol.4, pp 1-5 (2012), ISSN: 1947-2935 (IF=3.308)
16. **Estimation of specific gravity and state of charge of lead acid battery**, V. P. Labade and N. M. Kulkarni, Int. Journal of Management, Technology and Engineering Sciences, Vol. I Issue 6, 95-98 (2012), ISSN: 2249-7455
17. **Development of RFID interfacing system for food processing industry**, Targol Abrishami Ali and N. M. Kulkarni, Int. Journal of Management, Technology and Engineering Sciences, Vol. I Issue 6, 119-122 (2012), (ISSN: 2249-7455)
18. **Analysis of Human Machine interfacing techniques and its feasibility for infotainment system**, Anand. G. Buddhikot and N. M. Kulkarni, Int. Journal of Management, Technology and Engineering Sciences, Vol. I Issue 6, 176-178, (2012), (ISSN: 2249-7455)
19. **Wireless Sensor Network Based Traffic Monitoring: Overview and Threats to its Security**, Sareh N. Kheirabadi, N.M.Kulkarni and A.D.Shaligram, J. Global Research in Computer Science, Vol 2 (8), pp 60-66 ISSN 2229-371X, (2011) (IF=0.60)
20. **Improving the Inversion Algorithm over Binary Finite Fields**, Sareh N. Kheirabadi, N.M.Kulkarni and A.D.Shaligram, in Special topics in Computing and ICT Research, Strengthening the Role of ICT in Development, Ed. J.M. Kizza, K. Lynch and R. Nath, Vol. VII, Fountain Publications, Kampala, pp 2-13, ISBN 978-9970-25-128-5, (2011)
21. **Characteristics of Low voltage power line when used as communication channel**, Adnan S. Obeed, N. M. Kulkarni and A.D.Shaligram, International Journal of Applied Engineering Research, Volume 5, Number 5, pp. 747-762 (2010), ISSN: 0973-4562
22. **Selected Coding and Modulation Techniques for Reliable Power Line Communications**, Adnan S. Obeed, N. M. Kulkarni and Arvind D. Shaligram, International Journal of Applied Engineering Research, Volume 4 Number 9, pp.1801–1812, (2009), ISSN: 0973-4562

23. **Investigation of signal behaviors when transmitted through different power line characteristics media**, Adnan S. Obeed, N. M. Kulkarni and Arvind D. Shaligram, International Journal of Applied Engineering Research, Volume 4 Number 6, pp.1031-1043 (2009), **ISSN: 0973-4562**
24. **Design a System for Monitoring Human Health VIA Power Line Based on Basic Embedded System**, Adnan S. Obeed, N. M. Kulkarni and Arvind D. Shaligram, International Journal of Applied Engineering Research, Volume 4, Number 4, pp. 497—503, (2009), **ISSN: 0973-4562**
25. **Defect recovery study of e-irradiated silicon during rapid thermal annealing** , N. M. Kulkarni, R. N. Kulkarni and A. D. Shaligram, Phys. Status Solidii (a) 13, pp 283-289 (1992) [Impact factor=>1.463] **ISSN: 1862-6319**
26. **Data analysis and diagnostic package for lifetime spectra of multi-layered samples**, N. M. Kulkarni and A. D Shaligram, J. of Material Science Forum, Vol. 105-110, pp 1923-1926 (1992), **ISBN-13: 978-0-87849-636-5**
27. **Study of energy transfer processes in light absorbing pigments Chlorophyll using positron annihilation**, P. B. Vidyasagar, M. Banerjee, A. T. Palwe, G. R. Kulkarni, N. M. Kulkarni and A. D. Shaligram J. of Material Science Forum, Vol.105-110, pp 1757-1760 (1992), **ISBN-13: 978-0-87849-636-5**
28. **On the behavior of positron in semiconductors in presence of external electric field perturbation**, N. M. Kulkarni, S. A. Deuskar and A. D. Shaligram, J. of Material Science Forum, Vol. 105-110, pp 1117-1120 (1992), **ISBN-13: 978-0-87849-636-5**
29. **Effect of on-line irradiation on positron lifetimes and their relevance to defects in Semiconductor**, N. M. Kulkarni, R. N. Kulkarni and A. D. Shaligram, J. of Material Science Forum, Vol. 105-110, pp 1121-1123 (1992), **ISBN-13: 978-0-87849-636-5**
30. **Influence of static and alternating fields on positron annihilation in Silicon and Germanium**, N. M. Kulkarni and A. D. Shaligram, J. of Material Science Forum, Vol. 105-110, pp 731-734 (1992), **ISBN-13: 978-0-87849-636-5**

[B] List of Publications (National Journals)

1. **Measurement of Environmental parameters in a closed chamber using WSN**, Kalpana Kulkarni, N. M. Kulkarni, M.S. Zambare, J. of Instrum. Soc. Of India, Vol 44, no. 2, pp 137-140, (June 2014) **ISSN: 0970-9983**
2. **Low cost intelligent embedded battery management system**, V. P. Labade, A. G. Buddhikot, N. M. Kulkarni, and A. D. Shaligram, J. of Instrum. Soc. Of India, Vol 43, no. 4, pp 244-246, (Dec. 2013) **ISSN: 0970-9983**
3. **Hardware in the Local Loop (HIL) of rechargeable lead acid battery for electrical vehicles using Virtual Instrumentation**, V. P. Labade, N. M. Kulkarni, and A. D.

4. **Design of data transceiver for power line communication using VHDL**, S. M. Dhavale, A. B. Bhide, N. M. Kulkarni, A. D. Shaligram, Journal of Science information , Proc. National seminar on Advances in VLSI design and Technology, Akluj, pp 54-56 (19-20 Dec. 2011): ISSN 2229-5836
5. **Determination of battery performance parameters for electrical vehicles using VHDL**, V. P. Labade, N. M. Kulkarni, and A. D. Shaligram, Journal of Science information , Proc. National seminar on Advances in VLSI design and Technology, Akluj pp 49-53 (19-20 Dec. 2011) ISSN 2229-5836
6. **Intelligent battery health monitoring system for uninterrupted power supply**, V. P. Labade, N. M. Kulkarni, and A. D. Shaligram, J. of Instrum. Soc. Of India, Vol. 41 No. 4, 213-216, (2011), ISSN:0970-9983
7. **DC Power Line Communication Technology for Monitoring Personal Health**, Adnan S. Obeed, N. M. Kulkarni, and A.D. Shaligram, J. of Instrum. Soc. Of India, (2009), ISSN:0970-9983
8. **Development of a sensor monitoring system for CNC machines**, Supriya Kotasthane, A. S. Gaware, M. S. Zambare, and N. M. Kulkarni, J. of Instru. Soc. of India, vol.30, No.4, 257-261 (2000), ISSN: 0970-9983
9. **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, J. of Instru. Soc. of India, Vol.30, No.4, 220-223 (2000), ISSN: 0970-9983
10. **Design of Human machine interface (HMI) for vacuum deposition unit**, V.P. Labade, M. S. Zambare, N. M. Kulkarni and A. D. Shaligram, J. of Instru. Soc. of India, Vol. 30, No.2, 90-95 (2000), ISSN: 0970-9983
11. **Fabrication of simple low cost pick and place type robotic system**, A. S. Gaware, Supriya Kotasthane, M. S. Zambare, and N. M. Kulkarni, J. of Instru. Soc. of India, Vol.29, No.2, 86-89 (2000), ISSN: 0970-9983
12. **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, J. of Instru. Soc. of India, Vol.30, No.1 (2000), ISSN: 0970-9983
13. **Design of PC based polarimeter for sugar industry**, J.V. Khedkar, P.B. Joshi, M.S. Zambare, N. M. Kulkarni, and S. P. Khedkar J. of Instru. Soc. of India, vol.29, No.1 (2000), ISSN: 0970-9983
14. **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), ISSN: 0970-9983

15. **Design of low noise current amplifier for photo-multiplier tube**, M. S. Zambare, N. D. Thakar, S. S. Bhagwat, **N. M. Kulkarni**, and A. B. Lele, J. of Instru. Soc. of India, vol.29, No.1, 21 (1999), ISSN: 0970-9983
16. **Fabrication of a low cost semiautomatic ellipsometer**, A. S. Gaware, J. V. Khedkar, **N. M. Kulkarni**, A. B. Lele and A. D. Shaligram, J. of Instru. Soc. of India, vol.28, No.4, 221-225 (1998), ISSN: 0970-9983
17. **PC based data acquisition and analysis for spectroscopic ellipsometer**, J. V. Khedkar, A. A. Padhye, S. P. Khedkar, **N. M. Kulkarni**, A. B. Lele, and A. D. Shaligram, J. of Instru. Soc. of India, vol.28, No.2, 87-93 (1998), ISSN: 0970-9983
18. **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), ISSN: 0970-9983
19. **Development of a low cost ellipsometer for undergraduate laboratory**, J. V. Khedkar, S. P. Khedkar, **N. M. Kulkarni**, and A. B. Lele, Xth IAPT Conf. bulletin, 35 (1995)

[C] List of Publications (Conferences/Workshops/Seminars/Symposium)

1. **Design of gesture based HMI for image projection system**, Anand Buddhikot, N M Kulkarni Arvind Shaligram, on 20th & 21st January, 2017, Kaveri College of Arts, Science & Commerce, Pune National Level Conference On Applications of Computer and Electronic Science.
2. **“Requirement analysis of energy harvesting System for Wearable Electronics”**, S. M. Dhavale, N. M. Kulkarni, A. D. Shaligram “ Proceeding of International Conference on Functional Eco-Friendly Smart Emerging Materials (FESEM 2016), March 10-12, 2016 at Baburaoji Gholap College, Sangavi, Pune. [In Press]
3. **“Exploring Advance Materials For Rechargeable Battery In Electrical Vehicles”**, V. P. Labade, N. M. Kulkarni, Proceedings of National Conference Advanced Materials and Applications, March 4-5, 2016, Fergusson College, Pune- 411004, ISBN 978-93-5235-011-7. [In Press]
4. **“Sensor Node Development For The Analysis Of Plant Photosynthesis To Make Green And Clean Environment”**, Kalpana A. Kulkarni, N. M. Kulkarni, M. S. Zambare, Proceedings of National Conference Advanced Materials and Applications, March 4-5, 2016, Fergusson College, Pune- 411004, ISBN 978-93-5235-011-7. [In Press]
5. **“Development of Alternative Energy System from Vibration Sensor”**, S. M. Dhavale, N. M. Kulkarni, A. D. Shaligram, 19th National Seminar on Physics and Technology of Sensors(NSPTS-19) on March 3-5, 2016 at Shri Guru Gobind Singhji Institute of Engineering and Technology, Vishnupuri, Nanded [In Press]

6. **Modeling of respiration rate to estimate the quality of fruits**, N. M. Kulkarni, M.S.Zambare, Targol Abrishami, and A. D. Shaligram, Innovations-2015, Regional research conference, pp 12 (June 17,2015)
7. **Development of RPM and heat measurement System for Electric vehicle**, V. P. Labade, Siddhi Khaire, N. M. Kulkarni and A. D. Shaligram, Innovations-2015, Regional research conference, pp 12 (June 17,2015)
8. **Development of low cost wireless sensor network for automatic field monitoring with Arduino controller**, S. M. Dhavale, N. A. Wasnik, N. M. Kulkarni, Proceedings of National conference on Advances and Challenges in Green Technology, Singhagad college, Pune Feb 13-14, 2015 [ISBN: 978-93-5016-319-1]
9. **Establishing low cost wireless star sensor network for soil moisture monitoring and control with Arduino controller**, S. M. Dhavale, S. Pustake, N. M. Kulkarni and A. D. Shaligram, Proceedings of Advances in wireless sensor network and its applications, Akulj, pp. 29-31, December 12-13, 2014 [Journal of Research in Electronics -ISSN 2349-8226]
10. **Development of Energy Harvesting System for Wearable Electronics**, S. M. Dhavale, N. M. Kulkarni and A. D. Shaligram, Proceedings of Advances in wireless sensor network and its applications, Akulj, pp. 177-179, December 12-13, 2014 [Journal of Research in Electronics -ISSN 2349-8226]
11. **Simulation of real world analog to digital converter for wireless sensor network using Pspice**, Sujaya Dasgupta, N. M. Kulkarni, M.S. Zambare, Varsha Sonatakke and P.B. Buchade, Proceedings of Advances in wireless sensor network and its applications, Akulj, pp. 215-218, December 12-13, 2014 [Journal of Research in Electronics -ISSN 2349-8226]
12. **Measurement of solar irradiance for concentrated PV system**, A. S. Gaware, M. S. Zambare, N. M. Kulkarni, S. V. Ghaisas, Proceedings of National Conference on Advances in Electronics and its Interdisciplinary Applications NCAEIA-2014, (ISBN: 978-93-5174-783-3) PP 425-428, September 19-20, 2014
13. **Development of pendulum based alternative energy system for portable application**, S. M. Dhavale, N. M. Kulkarni and A. D. Shaligram, Proceedings of National Conference on Advances in Electronics and its Interdisciplinary Applications NCAEIA-2014, (ISBN: 978-93-5174-783-3) PP 404-407, September 19-20, 2014
14. **Recent trend in Wearable Electronics**, S. M. Dhavale, N. M. Kulkarni and A. D. Shaligram, Proceedings of National Conference on Advances in Electronics and its Interdisciplinary Applications NCAEIA-2014, (ISBN: 978-93-5174-783-3) PP 392-394, September 19-20, 2014

15. **Development of E-Content for effective teaching and learning**, S. M. Dhavale, A. S. Paliwal, N. M. Kulkarni and A. D. Shaligram, Proceedings of National Conference on Advances in Electronics and its Interdisciplinary Applications NCAEIA-2014, (ISBN: 978-93-5174-783-3) PP 363-365, September 19-20, 2014
16. **Implementation of driver information system (DIS) using Hardware in the Loop**, V. P. Labade, N. M. Kulkarni, and A. D. Shaligram, Proceedings of National Conference on Advances in Electronics and its Interdisciplinary Applications NCAEIA-2014, (ISBN: 978-93-5174-783-3) PP 250-253, September 19-20, 2014
17. **Estimation of battery life and discharge behavior using battery simulator for HIL setup**, V.P.Labade, M.P.Zadikar,, N.V.Deshmukh, N. M. Kulkarni and A. D. Shaligram, Proceedings of National Conference on Advances in Electronics and its Interdisciplinary Applications NCAEIA-2014, (ISBN: 978-93-5174-783-3) PP 246-249, September 19-20, 2014
18. **An overview of Wireless optical communication**, Sujaya Dasgupta, N.M.Kulkarni, M.S.Zambare, Proceedings of National Conference on Advances in Electronics and its Interdisciplinary Applications NCAEIA-2014, (ISBN: 978-93-5174-783-3) PP 228-232, September 19-20, 2014
19. **Development of color vision system for identification of color coded resistors**, Shubhangi Katti, Nitin Kulkarni, Jayant Khedkar, Proceedings of National Conference on Advances in Electronics and its Interdisciplinary Applications NCAEIA-2014, (ISBN: 978-93-5174-783-3) PP 180-183, September 19-20, 2014
20. **Gesture interface for power point through skin recognition**, A. G. Buddhikot, N. M. Kulkarni, J. V. Khedkar and A. D. Shaligram, Proceedings of National Conference on Advances in Electronics and its Interdisciplinary Applications NCAEIA-2014, (ISBN: 978-93-5174-783-3) PP 177-179, September 19-20, 2014
21. **Tracking eye pupil as gesture interface for windows utility**, A. G. Buddhikot, N. M. Kulkarni, J. V. Khedkar and A. D. Shaligram, Proceedings of National Conference on Advances in Electronics and its Interdisciplinary Applications NCAEIA-2014, (ISBN: 978-93-5174-783-3) PP 177-179, September 19-20, 2014
22. **Sorting of electronic colour components using premeditated simulator**, V.P.Labade , Kirti Vaish, N. M. Kulkarni and A. D. Shaligram, Proceedings of National Conference on Advances in Electronics and its Interdisciplinary Applications NCAEIA-2014, (ISBN: 978-93-5174-783-3) PP 187-189, September 19-20, 2014
23. **Review paper on the next generation Wireless Technology**, Sujaya Dasgupta, N.M.Kulkarni, M.S.Zambare, Proceedings of National Conference on Advances in

Electronics and its Interdisciplinary Applications NCAEIA-2014, (ISBN: 978-93-5174-783-3) PP 120-125, September 19-20, 2014

24. **Monitoring quality of fruits during storage and transportation**, Targol Abrishami, **N. M. Kulkarni**, and A. D. Shaligram, Proceedings of National Conference on Advances in Electronics and its Interdisciplinary Applications NCAEIA-2014, (ISBN: 978-93-5174-783-3) PP 93-97, September 19-20, 2014
25. **Inexpensive method for monitoring the quality of fruits in warehouses**, Targol Abrishami, **N. M. Kulkarni**, and A. D. Shaligram, Proceedings of Innovations-2014, (ISBN: 978-93-83993-89-5) H. V. Desai, college, Pune, pp 18, April 26-27, 2014
26. **Studying the Effect of Active Load on Battery Performance for Efficient Electrical Vehicle using Virtual Instrumentation**, V.P.Labade ,N. M. Kulkarni and A. D. Shaligram, Proceedings of 3rd International Conference on Recent Trends in Engineering & Technology by ELSEVIER (ISBN: 978-93-5107-221-8), PP 728-732, March 28-30, 2014
27. **Development of fruit freshness monitoring system for wireless sensor network**, Targol Abrishami, **N. M. Kulkarni**, and A. D. Shaligram, Proceedings of 18th National Seminar on Physics and Technology of Sensors (NSPTS-18), T.C. College, Baramati, pp. 87-88, March 6-8, 2014
28. **Verification of battery performance parameters for efficient EV/HEV**, V. P. Labade, **N. M. Kulkarni**, and A. D. Shaligram, National Conference on Energy and Environment, University of Pune, pp. 140-141, Feb. 20-22, 2014, ISBN:978-93-83993-10-9
29. **Design of energy harvesting system for portable wearable electronics gadgets**, S. M. Dhavale, **N. M. Kulkarni**, and A. D. Shaligram, National Conference on Energy and Environment, University of Pune, pp. 113, Feb. 20-22, 2014, ISBN:978-93-83993-10-9
30. **Preparing campus energy consumption maps for load balancing augmented with other electrical energy sources**, A. B. Bhide, **N. M. Kulkarni**, Sharad Pustake, and A. D. Shaligram, National Conference on Energy and Environment, University of Pune, pp. 152-153, Feb. 20-22, 2014, ISBN:978-93-83993-10-9
31. **Energy Audit of academic institution for improving energy sustainability**, A. B. Bhide, **N. M. Kulkarni** and A. D. Shaligram, Proceedings of National conference on Sustainable energy development and environment system (ISBN 978-93-83414-18-5), Vol. I, pp 61-63 at H. V. Desai College, Pune (10-11 Jan 2014)
32. **Energy harvesting from DC motor**, S. M. Dhavale, **N. M. Kulkarni**, A. D. Shaligram, National conference on Recent advances in computer science and Electronics, Vidnyan Mahavidyalaya, Sangola (3-4 Jan. 2014)

33. **Audit of e-Waste of Electronics Laboratory**, M. S. Zambare, N. M. Kulkarni and A. D. Shaligram, Environment Observer (ISSN 2320-5997) Vol. 16, pp 27-29, Proceedings of National conference on Hazardous e-waste management (23-24 Dec. 2013).
34. **Real time system implementation of ON-OFF temperature controller using LABVIEW**, M. A. Natu, V. P. Labade, and N. M. Kulkarni, Proceedings of National Conference on emerging trends on Computer Science and Computer Applications (NCETCSA-2013) ISBN: 978-93-5137-872-3, pp. 108-112 (7-8 Dec. 2013)
35. **Potential approaches for effective interface with infotainment system**, A. G. Buddhikot, N. M. Kulkarni, A. D. Shaligram, Proceedings of National Conference on emerging trends on Computer Science and Computer Applications (NCETCSA-2013) ISBN: 978-93-5137-872-3, pp. 98-101 (7-8 Dec. 2013)
36. **Measurement of environmental parameters in a closed chamber using wireless sensor node**, K. A. Kulkarni, N. M. Kulkarni, M. S. Zambare, National Symposium on Instrumentation, BVB College of Engineering & Technology, Hubali (24-26 Oct. 2013)
37. **Constraints analysis of hand free interfaces for infotainment system**, A. G. Buddhikot, N. M. Kulkarni, A. D. Shaligram and Revati Kulkarni, Proceedings of National Conference on Recent Initiatives towards Green Electronics, Biyani College, Amaravati (NCRIGE-2013), pp 104-107, (Feb 8-9, 2013) ISBN: 978-81-92256-9-2
38. **Performance evaluation of force sensing resistor (FSR) for planter pressure measurement**, D. P. Londhe, K. A. Kulkarni, N. M. Kulkarni and M.S. Zambare, Proceedings of National Conference on Recent Initiatives towards Green Electronics, Biyani College, Amaravati (NCRIGE-2013), pp 137-140, (Feb 8-9, 2013) ISBN: 978-81-92256-9-2
39. **Monitoring quality of banana during storage and transportation using wireless sensor network**, Targol Abrishami, N. M. Kulkarni, and A. D. Shaligram, Proceedings of National Conference on Recent Initiatives towards Green Electronics, Biyani college, Amaravati (NCRIGE-2013), pp 173-175, (Feb 8-9, 2013) ISBN: 978-81-92256-9-2
40. **Measurement of Electromagnetic interference for electromagnetic compatibility (EMC) testing**, S. M. Dhavale, N. M. Kulkarni, and A. D. Shaligram, Proceedings of National Conference on Recent Initiatives towards Green Electronics, Biyani college, Amaravati (NCRIGE-2013), pp 188-190, (Feb 8-9, 2013) ISBN: 978-81-92256-9-2
41. **Online monitoring of battery performance parameters for electric and hybrid electric vehicle**, V. P. Labade, N. M. Kulkarni, and A. D. Shaligram, Proceedings of National Conference on Recent Initiatives towards Green Electronics, Biyani college, Amaravati (NCRIGE-2013), pp 212-215, (Feb 8-9, 2013) ISBN: 978-81-92256-9-2

42. **Design of DC motor simulator for battery operated vehicles in hardware in the loop (HIL) testing**, V. P. Labade, N. M. Kulkarni, and A. D. Shaligram, Proceedings of National Conference on Recent Initiatives towards Green Electronics, Biyani college, Amaravati (NCRIGE-2013), pp 216-219, (Feb 8-9, 2013) ISBN: 978-81-92256-9-2
43. **Development of an embedded system for monitoring CO₂ and O₂ level**, K. A. Kulkarni, D. P. Londhe, N. M. Kulkarni, A. D. Shaligram and M. S. Zambare, Proceedings of National Conference on Recent Initiatives towards Green Electronics, Biyani college, Amaravati (NCRIGE-2013), pp 305-309, (Feb 8-9, 2013) ISBN: 978-81-92256-9-2
44. **Integration of RFID and Wireless Sensor Network in Food Industry**, N. M. Kulkarni, (Invited talk) Proceedings of State level seminar on Recent Developments in Embedded Technology, pp14-15, KBP College, Pandharpur (21-22 December 2012),
45. **Refractometric Fiber Optic Sensor for in-situ monitoring the State-of-Charge (SOC) of Lead Acid Battery**, Supriya Patil, Vijay Labade, Nitin Kulkarni and Arvind Shaligram, Sixth International Conference on Sensing Technology (ICST-2012)- Special focus on sensors for agriculture and environmental monitoring, CDAC, Kolkata pp. 66-67 (18-21 Dec. 2012)
46. **Development of web-based instrumentation for college laboratory application**, V. P. Labade, M. A. Natu, S. S. Apte, N. M. Kulkarni and A. D. Shaligram, Proceedings of International conference on perspective of computer confluence with Sciences (ICPCCS-12), pp-92-95 (Dec. 2012) ISBN: 978-93-82062-76-9
47. **Significance of Best Practices on Quality Assessment during the Re-Accreditation process**, R. G. Pardeshi, S. S. Terdalkar, and N. M. Kulkarni, Proceedings of the National conference on Challenges before Re-Accreditation, Vivekanand College, Kolhapur, pp. 11-16, (14-15 Dec. 2012) ISBN: 978-81-921350-1-4
48. **Smart performance monitoring system for renewable energy sources used in uninterrupted power supply**, V. P. Labade, N. M. Kulkarni, and A. D. Shaligram, First International symposium on Physics and Technology of sensor, pp 124-126 (8-10 March 2012), **Publisher- IEEE reliability Society**
49. **Image enhancement for noisy environment considering gesture recognition**, A. G. Buddhikot, N. M. Kulkarni, National seminar on “ Recent Advancement and Innovations in Image processing-its methods and applications, Pratibha College, Chinchwad (Feb. 23-25, 2012)
50. **Use of MATLAB as a modeling and simulation tool for harnessing the research skills**, V. P. Labade, S. S. Terdalkar, and N. M. Kulkarni, Seminar on harnessing research skills

and technology through scientific research methodology, Nasik (30 Jan 2012) ISBN: 978-93-81354-34-5

51. **Implementation of an DC motor speed control using MATLAB interface**, DVLK Manasa, V. P. Labade, N. M. Kulkarni, and A. D. Shaligram, Proceedings of National colloquium on novel approach in computing technology (ISBN 978-81-920427-1-8) , Pune, pp 10 (20-21 Jan 2012): ISBN 978-81-920427-1-8
52. **Addressing the challenges of traditional educational institutes of higher education: A case study of Fergusson College**, R. G. Pardeshi, N. M. Kulkarni and S. S. Terdalkar, Proceedings of National conference on opportunities and challenges in higher education, Pune (Nov. 30-Dec.2 2011), pp 216-222, ISBN:978-81-909640-7-6
53. **Design of real-time monitoring system for measurement of battery parameters for electrical vehicle**, V. P. Labade, N. M. Kulkarni, and A. D. Shaligram, National conference on recent trends in alternate energy, Calicut, pp 33 (9-10 Jun 2011) – Best Paper Award.
54. **Designing multichannel data logging system for monitoring environmental parameters**, K.A. Kulkarni, Y. S. Khandage, M. S. Zambare, S. P. Khedkar, N. M. Kulkarni, National conference on Sensors Networks and Embedded systems, Pune, pp-46 (Feb. 2-4, 2011)
55. **Efficient implementation of Security Algorithms for wireless sensor nodes**, Sareh N. Kheirabadi, N.M.Kulkarni and A.D.Shaligram, National conference on Sensors Networks and Embedded systems, Pune, pp47 (Feb. 2-4, 2011)
56. **Security threats to wireless sensor network based traffic monitoring**, Sareh N. Kheirabadi, N.M.Kulkarni and A.D.Shaligram, National conference on Sensors Networks and Embedded systems, Pune, pp-49 (Feb. 2-4, 2011)
57. **Effect of active load on battery consumption parameters of electrical vehicles**, V. P. Labade, N. M. Kulkarni, R. N. Kulkarni and A. D. Shaligram, National conference on Sensors Networks and Embedded systems, Pune, pp-82 (Feb. 2-4, 2011)
58. **Implementation of gesture recognition for infotainment system**, A. G. Buddhikot, N. M. Kulkarni, J. V. Khedkar and A. D. Shaligram, National conference on Sensors Networks and Embedded systems, Pune, pp-87 (Feb. 2-4, 2011)
59. **Study of signal behavior in a power line transmission media**, N. M. Kulkarni, Poster presentation at “Innovations 2009-10”, Regional conference for Pune University College Teachers, ASC, Nagar (9-10 Dec. 2009)
60. **Power Aware Sensor Interfacing Systems For Biomedical Applications**, Anuradha Kamble, N. M. Kulkarni, State level conference on Optical Fiber Communication and Sensor Applications (OFCS-2008), Nagar Dec. 22-24, 2008

61. **Study of ac power line characteristics for power line communication**, N. M. Kulkarni, Poster at “Innovation-08” Regional conference for Pune University College Teachers at Pvp college, Pravaranagar (26-27 Nov. 2008)
62. **Development of low power and low cost sensor nodes**, M.S.Zambare and N. M. Kulkarni, Poster at “Innovation-08” at Pvp college, Pravaranagar on 26-27 Nov. 2008
63. **Development of an automated sequence musical note generator**, V. P. Labade and N.M. Kulkarni, Poster at “Innovation-08” at Pvp college, Pravaranagar on 26-27 Nov. 2008
64. **Design of Embedded System for Reliable Transmission Through AC Power Line**, Adnan S. Obeed, N. M. Kulkarni, and A.D. Shaligram, International Conference on “Emerging Techniques in Computing Electronics, Embedded System and VLSI Design, (20-21 march 2008)
65. **Reconfigurable embedded network system for distributed data collection platform**, Anand G. Buddhikot, N.M. Kulkarni, D.C. Gharpure, and A.D. Shaligram, , International Conference on “Emerging Techniques in Computing Electronics, Embedded System and VLSI Design, (20-21 march 2008)
66. **An embedded system for measurement of musical note quotient (MNQ)**, V. P. Labade, N. M. Kulkarni, and A.D. Shaligram, National symposium on Instrumentation (NSI-32) (24-26 Oct. 2007)
67. **A Comparative Performance Evaluation of Coding and Modulation Techniques for Establishing Reliable Power Line Communication**, Adnan S. Obeed, N. M. Kulkarni, and A.D. Shaligram, National Seminar on Recent Advances in Sensors and Instrumentation (NSRASI-07), Akluj, 15th and 16th October, 2007
68. **Development of reconfigurable “sensor data acquisition” network based on micro-controller master-slave architecture**, Anand G. Buddhikot, N.M. Kulkarni, D.C. Gharpure, and A.D. Shaligram, National Seminar on Recent Advances in Sensors and Instrumentation (NSRASI-07), Akluj, 15th and 16th October, 2007
69. **DC Power Line Communication Technology for Monitoring Personal Health**, Adnan S. Obeed, N. M. Kulkarni, and A.D. Shaligram, National Symposium on Instrumentation: NSI-31, Gwalior (12-15 October 2006)
70. **Development of Test-jig for reconfigurable data acquisition system**, Anand G. Buddhikot, N.M. Kulkarni, D.C. Gharpure, and A.D. Shaligram, National Symposium on Instrumentation: NSI-31, Gwalior (12-15 October 2006)
71. **Development of GSM data link for automatic weather station**, Balaji Chavan, M. S. Zambare and N. M. Kulkarni, National Symposium on Instrumentation: NSI-31, Gwalior (12-15 October 2006)

72. **Probing metal semiconductor junction using MATLAB**, V. P. Labade, N. M. Kulkarni, and A.D. Shaligram, National seminar on recent trends in material science (RTMS-2006), North Maharashtra University, Jalgaon, pp10 (24-26 March 2006)
73. **RTOS and its importance in medical applications**, Shailza Thapa and N. M. Kulkarni, National seminar on advances in software technology, Sangamner (Feb. 2006)
74. **Exploring wireless technology for electronic test and measuring instruments**, Manjusha Gavali and N. M. Kulkarni, National seminar on advances in software technology, Sangamner (Feb. 2006)
75. **Development of intelligent control for solar operated emergency lights**, Balaji Chavan, M. S. Zambare and N. M. Kulkarni, National seminar on Interdisciplinary applications of Electronics: NSIAE-06, Chopada, (28-29 Jan. 2006)
76. **Development of DC power line communication system using FSK**, Tony Louis, Balaji Chavan, N. M. Kulkarni and M. S. Zambare, National seminar on Interdisciplinary applications of Electronics: NSIAE-06, Chopada, (28-29 Jan. 2006)- Third prize for Poster presentation
77. **Single frequency EIS calculations for the sensor parameter evaluation**, Sunil Bhagwat, M.S. Zambare, N. M. Kulkarni, A. D. Shaligram, National symposium on Instrumentation, Cochin, NSI-30 (2005).
78. **Design of micro-stepping control for measurements in polarimeter**, Emam Shaikh, Nitin Chavan, M.S. Zambare, N. M. Kulkarni, A. D. Shaligram, National symposium on Instrumentation, NSI-30, Cochin (Nov./Dec. 2005).
79. **Development of embedded system communication interface for sensor networks**, Nitin Chavan, M. S. Zambare, N. M. Kulkarni and A. D. Shaligram, National symposium on Instrumentation, Cochin (Nov./Dec. 2005).
80. **Optical fiber based telemetry system using PCM encoder and decoder**, M.S. Zambare, A. S. Gaware and N. M. Kulkarni, National Seminar On Advanced Instrumentation, CSIO, Chandigarh (Jan 2001)
81. **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, Chandigarh (Jan 2001)
82. **Position lifetime studies of Al-Si ohmic contact formed by rapid Thermal processing**, N. M. Kulkarni, R. N. Kulkarni and A. D. Shaligram, Int. Workshop on Physics Of Semiconductor Devices, New Delhi (1992)
83. **Position lifetime studies of electron irradiated silicon**, N. M. Kulkarni, A. D. Shaligram, S. D. Dhole, and V. N. Bhoraskar, Int. Workshop on Physics Of Semiconductor Devices, New Delhi (1991)

84. **Modeling of Positron annihilation in presence of Defect in semiconductors**, N. M. Kulkarni and A. D. Shaligram, Solid State Physics Symposium , BARC, Bombay (1991)
85. **Development of databank for making positron annihilation technique a routine Characterization**, N. M. Kulkarni and A. D. Shaligram , Proceedings of National Conference On Applications of Databases in Physical Sciences, BARC, 102 (1991)
86. **RTP induced defects in silicon studied by positron annihilation technique**, N. M. Kulkarni, Revati Kulkarni, and A. D. Shaligram, SPIE's Proceedings of Microelectronics Processing Integration, California (1990)
87. **Iterative Slope Intercept Method: An extended graphical method for analyzing the positron lifetime spectra**, N. M. Kulkarni and A. D. Shaligram, Proc. of Int. Conf. On Controls and Modeling, Tehran, 2-165 (1990)
88. **Position lifetime studies in Semiconductor in presence of DC electric field**, N. M. Kulkarni and A. D. Shaligram, Proceedings of International Conference of Physics of Semiconductor Devices , New Delhi, 620 (1989)
89. **Characterization of SiO₂ using Positron Annihilation Technique**, N. M. Kulkarni, D. S. Diwate and A D. Shaligram, Proceedings of Third National Conference On Positron annihilation and Crompton Profile, 228 (1990)
90. **AC electric field effect on position lifetime parameters in Silicon and Germanium**, N. M. Kulkarni and A. D. Shaligram, Proceedings of Third National Conference On Positron annihilation and Crompton Profile,, 252(1990)
91. **DC electric field on positron lifetime parameters in silicon**, N. M. Kulkarni and A. D. Shaligram, Proceedings of Solid State Physics Symposium, IIT Madras, 52 (1989)

[D] List of Publications – Books

1. **A text book of Advanced networking** (MSc), N.M. Kulkarni and Anand Jain, Vision Publication (2011)
2. **Advanced Networking** (MCS), N.M. Kulkarni, Vision Publication (2006)
3. **Internet Technology** (MCM), N. M. Kulkarni, Vision Publication (2005)
4. **Networking Technologies** (MCM), N. M. Kulkarni and A.D. Shaligram, Vision Publication (2004)
5. **Circuit Design: Principles and Applications-I** (SYBSc), Bhagwat, Deuskar, Kulkarni, and Shaligram, Manali Prakashan, Pune (2003)
6. **Communication Systems- I** (SYBSc), Bhagwat, Deuskar, Kulkarni, and Shaligram, Manali Prakashan, Pune (2003)
7. **Circuit Design: Principles and Applications-II**(SYBSc), Bhagwat, Deuskar, Kulkarni, and Shaligram, Manali Prakashan, Pune (2003)
8. **Basic Electronics Practicals** (FYBSc), Bhagwat, Deuskar, Khedkar, Kulkarni, Labade & Shaligram, Manali Prakashan, Pune (2003)
9. **Process Control** (SYBSc-Computer Science), Bhagwat, Deuskar, Kulkarni, Shaligram, Kukade, & Bapat, Manali Prakashan, Pune (2003)

10. **Computer Organization** (SYBSc-Computer Science), Bhagwat, Deuskar, Kulkarni, Shaligram, Kukade, & Bapat, Manali Prakashan, Pune (2003)
11. **Digital Electronics** (FYBSc-Computer Science), Bhagwat, Deuskar, Kulkarni, Shaligram, Kukade, & Tank, Manali Prakashan, Pune (2003)
12. **Linear Electronics** (FYBSc-Computer Science), Bhagwat, Deuskar, Kulkarni, Shaligram, Kukade, & Tank, Manali Prakashan, Pune (2003)
13. **Communication Systems- II** (SYBSc), Bhagwat, Deuskar, Kulkarni, and Shaligram, Manali Prakashan, Pune (2003)
14. **Principles of Digital Electronics** (FYBSc), Bhagwat, Deuskar, Khedkar, Kulkarni, Shaligram, Manali Prakashan, Pune (2002)
15. **Principles of Analog Electronics** (FYBSc), Bhagwat, Deuskar, Khedkar, Kulkarni, Shaligram, Manali Prakashan, Pune (2002)
16. **Business Data Processing and COBOL** (SYBCS), Shaligram, Kulkarni, Page, and Ajay Kumar, Manali Prakashan, Pune (2001)
17. **Fundamentals of computers & Data processing** (FYBCS), Shaligram, Kulkarni, Page, and Ajay Kumar, Manali Prakashan, Pune (2001)
18. **Introduction to programming and C language** (FYBSc), Shaligram, Kulkarni, Page, and Ajay Kumar, Manali Prakashan, Pune (2001)
19. **Programming in Pascal** (FYBCS), Shaligram, Kulkarni, Page and Ajay Kumar, Manali Prakashan, Pune (2000)
20. **C programming and Data Structure** (SYBCS), Shaligram, Kulkarni, Page and Ajay Kumar, Manali Prakashan, Pune (2000)
21. **Practical Electronics** (SYBCS Paper - III), Lele, Shaligram, Deuskar, Kulkarni, Bhagwat, Zambare Manali Prakashan Pune (1999)
22. **A Laboratory Manual on Analog. Digital devices and Instrumentation** (SYBSc Paper III), Lele, Shaligram, Deuskar, Kulkarni, Bhagwat, Zambare, Manali Prakashan, Pune (1999)
23. **Computer Aided design and Simulation Tools** (TYBSc), N. M. Kulkarni and A. D. Shaligram, Pune (1999)
24. **Computer Instrumentation** (SYBCS Paper - II), Lele, Shaligram, Deuskar, Kulkarni, Bhagwat, Manali Prakashan Pune (1998)
25. **Practical Electronics** (FYBCS Paper - III), Lele, Shaligram, Deuskar, Kulkarni, Bhagwat, Khedkar, Zambare, Manali Prakashan, Pune (1998)
26. **Computer Organization and Microprocessors** (SYBCS), Lele, Shaligram, Deuskar, Kulkarni, Bhagwat, Manali Prakashan Pune (1998)
27. **Digital Electronics** (FYBCS Paper - II), Lele, Shaligram, Deuskar, Kulkarni, Bhagwat, Khedkar, Manali Prakashan, Pune (1997)
28. **Linear Electronics** (FYBCS. Paper - I), Lele, Shaligram, Deuskar, Kulkarni, Bhagwat, Khedkar, Manali Prakashan, Pune (1997)
29. **Digital Electronic: Devices and Instrumentation** (SYBSc Paper - II), Lele, Shaligram, Deuskar, Kulkarni, Bhide, Bhagwat, Khedkar, Manali Prakashan ,Pune (1996)
30. **Analog Electronic: Devices and Instrumentation** (SYBSc Paper - I), Lele, Shaligram, Deuskar, Kulkarni, Bhide, Bhagwat, Manali Prakashan Pune (1996)
31. **A Laboratory manual on Basic and Digital Electronics** (FYBSc Paper - III), Lele, Shaligram, Deuskar, Kulkarni, Bhide, Bhagwat, Manali Prakashan Pune (1995)

32. **Passive Components, Networks and Systems** (FYBSc Paper - I), Lele, Shaligram, Deuskar, Kulkarni, Bhide, Bhagwat, Manali Prakashan Pune (1994)
33. **Basic Electronics and Digital Fundamentals** (FYBSc Paper - II), Lele, Shaligram, Deuskar, Kulkarni, Bhide, Bhagwat, Manali Prakashan Pune (1993)
34. **Instrumentation: Transducers and Sensors**, Aiyer, Kulkarni, Deuskar, Karekar, and Kulkarni, Yashwantrao Chavan Open University Press (1992)
35. **Communication Electronics**, Aiyer, Kulkarni, Deuskar, Karekar, and Kulkarni, Yashwantrao Chavan Open University Press (1992)

[E] Participation in Seminars, Workshops, Courses

(a) International Level : 4

1. Eighth International Conference on "Positron Annihilation", Hungary (1991)
2. International conference on Instrumentation, Pune, India (19-21 Dec. 2004)
3. International conference on Advancement in Engineering , applied science and management, CDAC, Juhu, Mumbai, 20th August 2017
4. One day International conference on Recent trends in Science and Technology, Willingdon College, Sangali, 29th June 2022.

(b) National/State/University Level : 65

	Name of the programme	Place	Organised by	Duration	Year
1.	National seminar on Mechatronics	Biyani Science college, Amravati	UGC	27 March	2017
2.	State level seminar on Emerging trends in Electronics	Pratibha College, Pune	SPPU	20th January	2017
3.	National conference on Applications of computer science and Electronic science	Kaveri College,Pune	SPPU	20 and 21 January	2017
4.	One day workshop on Graduation ceremony	Modern College, Pune	SPPU	13 January	2016
5.	Innovations-2015 Regional Research Conference	Fergusson College, Pune	BCUD, SPPU	17 June	2015
6.	National Conference on Advances in Electronics and its interdisciplinary applications	Fergusson College, Pune	IEEE, SPEED, BCUD, SPPU	19-20 Sept.	2014
7.	National conference on Energy and Environment	Savitribai Phule Pune University	BCUD, SPPU	20-22 Feb	2014
8.	National conference on Sustainable energy development and environment system	H. V. Desai College, Pne	UGC, Pune	10-11 Jan.	2014
9.	National conference on Hazardous e-waste management	Modern College, Pune	UGC Pune	23-24 Dec.	2013
10.	National conference on emerging trends on computer Science and computer applications	Fergusson College, Pune	BCUD SPPU	7-8, Dec.	2013

11.	National Conference on Recent Initiatives towards Green Electronics	Brijlal Biyani College, Amaravati	DST, UGC, IEEE, SPEED	Feb. 8-9	2013
12.	Workshop on Revision & Implementation of FYBSc Electronic Science	Garware College, Pune	Dept. of Electronic Science	Feb. 4	2013
13.	State level workshop on Choice based credit system	C T Bora College, Shirur	C T Bora College, Shirur	Jan. 16	2013
14.	State level seminar on Recent development in Embedded system (Resource Person)	KBP College, Pandharpur	UGC	Dec. 21-22	2012
15.	National conference on Challenged before Re-accreditation	Vivekanand College, Kolhapur	NAAC	Dec. 14-15	2012
16.	Workshop on View on Electronic Science syllabus upgradation for FYBSc Computer Science	Fergusson College, Pune	Dept. of Electronic Science	Dec. 1	2012
17.	International conference on current trends and challenges in Management, Engineering, computer applications and Technology	Deogiri College, Aurangabad	Deogiri College, Aurangabad	March 23-25	2012
18.	National Colloquim on novel approaches in computing technology	Indira College of Engineering, Pune	Indira College of Engineering, Pune	Jan 20-21	2012
19.	National conference on Opportunities and Challenges in Higher Education	H. V. Desai College, Pune	H. V. Desai College, Pune	Nov 3- - Dec 2	2011
20.	Workshop on Capacity building	Fergusson College, Pune	UGC	Apr. 18-20	2011
21.	National seminar on Physics and Technology of Sensors – Technology Workshop on WSN	University of Pune	IEEE and University of Pune	March 3	2010
22.	Training workshop on Mentoring	Dept. of Psychology	Fergusson College, Pune	Oct. 15	2010
23.	Regional conference on Pune University college teachers “Innovations 2009	NACSc College, Ahmednagar	BUCD, University of Pune	Dec. 9-10	2009
24.	Workshop on TYBSc Syllabus revision (Paper-I)	Modern College, Pune	University of Pune	Dec. 8	2009
25.	Workshop on TYBSc Syllabus revision (Paper-II)	A. Garware college, Pune	A, Garware college, Pune	Dec. 5	2009
26.	Workshop on TYBSc Syllabus revision (Paper-III) Microcontrollers & power Electronics	Fergusson College, Pune	Fergusson College, Pune	Nov. 28	2009
27.	Workshop on Train the trainers for Principal/ teachers	University of Pune	MHRD, GoI	May 22-23	2009
28.	State level seminar on National Ethos of Higher Education – Retrospect and Prospects	DES, Pune	DES, Pune	March 16-17	2009
29.	Seminar on Advantages of Autonomy to colleges	Modern College, Pune	QIP, University of Pune	Feb. 4	2009

30.	State level seminar on Impact of Sixth pay commission with special reference to unia-ded colleges	Huzurpaga Mahila Vanijya Mahavidyalaya, Pune	QIP, University of Pune	Dec. 11	2008
31.	Regional conference on Pune University college teachers “Innovations 2008	PVP College, Pravaranagar	BUCD, University of Pune	Nov. 26-27	2008
32.	Workshop on software applications in Electronic Circuit Design	NACSc College, Ahmednagar	BUCD, University of Pune	Jan. 17	2008
33.	Workshop on revision of MSc-I Electronic Science syllabus	Poona college, Pune	QIP, University of Pune	Aug 11	2007
34.	Workshop on Revision of FYBSc Electronic Science syllabus	Fergusson College, Pune	Dept. of Electronic Science	Aug. 6	2007
35.	VLSI design-training workshop	E&TC department PCMC polytechnique	Maharashtra Board of Technical education	Feb. 7	2007
36.	Management development workshop on changing paradigm	Yashada	University of Pune	Aug. 3-5	2006
37.	Workshop on revision of MSc-II Electronic Science syllabus	Fergusson College, Pune	Fergusson College, Pune	March 12	2005
38.	International conference on Instrumentation	College of Engineering, Pune	Instrumentation society of India	Dec. 19-21	2004
39.	National seminar on GATS –Impact India	BMCC college, Pune	NAAC	Dec. 6-7	2004
40.	Workshop on the revision of MSc Electronic Science syllabus	Modern College, Pune	Modern College, Pune	Oct. 25	2004
41.	Workshop on Implementation of TYBSc Electronic Science Practicals	Fergusson College, Pune	Fergusson College, Pune	July 23-24	2004
42.	Workshop on Syllabus framing of TYBSc Electronic Science	Poona college, Pune	Poona college, Pune	Feb-13	2004
43.	One day workshop on framing syllabus of Electronic materials for TYBSc	Electronic Science Dept.	T.C. College, Baramati, Pune	Jan 10	2004
44.	UGC National conference on “Revamping of Science Education”	Amphi Theatre	Fergusson College, Pune	Dec. 5-6	2003
45.	One day workshop on framing syllabus of Micro-controllers and Process Automation for TYBSc	Electronics Dept.	LVH college, Panchavati, Nasik	Nov. 29	One-day
46.	One day Tutorial on “ Cellular Mobile Telecommunications	Institute of Engineers	IETE, Pune	Aug. 3	2003
47.	Workshop on Framing Syllabus of Analog and Digital circuits and Applications	Electronic Science Department	Nasik road College, Nasik	July 19	2003
48.	Workshop for State Eligibility Test (SET)	Electronic Science Department	Shivaji University, Kolhapur	Jan. 18-20	2003
49.	Workshop on “Modelling and Simulation	Electronic Science Department	Arts, Science, & Commerce College, Hadapsar	Jan 11	2003

50.	Natioanl Seminar on “Basic Science as a Career”	Institute of Engineers	Modern College, Pune	Dec. 16-18	2002
51.	Workshop on Revision of Syllabus of S.Y.B.Sc. (Electronic Science)	Electronic Science Department	Arts, Science, and Commerce College, Rahuri	Oct 13	2002
52.	Workshop on Revision of B.Sc. Practicals	Electronic Science Department	Pune University, Pune	June 21-25	2002
53.	Workshop on Revision of Syllabus of B.Sc. (Electronic Science)	Electronic Science Department	K.T. H. M. College	April 17	2002
54.	Workshop on F.Y.B.Sc. Practicals	Electronic Science Department	Fergusson College, Pune	Jan 6.	2002
55.	A workshop on syllabus revision and Academic reforms in Electronic Science	Electronic Science Dept	Fergusson College, Pune	Dec. 15	2001
56.	Workshop on “University Education and Management”	Amphi Theatre	Fergusson College, Pune	Sept. 18	2001
57.	National Seminar on “ Quality Assurance and Performance Evaluation of Higher Education”	IUCAA, Pune	NAAC, Bangalore	Aug. 9-10	2001
58.	National Symposium on Instrumentation (NSI-23)	Department of Physics	Goa University, Goa	3 days	2000
59.	Refresher course in Electronic Science (Intelligent Instrumentation), Pune University, Pune (1999).	Department of Electronic Science	Pune University, Pune	June 4- July 1	1999
60.	National Symposium on Instrumentation (NSI-22)	Electronics Test Laboratory	National Physical Laboratory, Delhi	3 days	1998
61.	Refresher course in Electronic Science (Instrumentation, Networking)	Department of Instrumentation Science	Pune University, Pune	July 23 – Aug. 19	1997
62.	Refresher course in Electronic ScienPC-basedased Instrumentation	Department of Electronic Science	Pune University, Pune	Jun 1-28	1994
63.	Refresher course in Physics (Atmospheric and Space Science)	Department of Physics	Pune University, Pune	Sept. 8 – Oct.. 5	1993
64.	National workshop on "Database systems and Application”	Bhabha	Babha Atomic Research Center, Bombay	2 days	1992
65.	Orientation course for College Teachers	Academic Staff College	Pune University, Pune	Nov. 3-30	1992
66.	ThirNationalal Conference on "Positron Annihilation and Crompton profile"	Physics Department	Jaipur University, Jaipur	Jan. 17-19	1990
67.	Summer Workshop on "Data Structures, FilesDatabaseses and System Analysis and Programming languages	Department oComputerer Science	University of Pune, Pune	June 01–20	1987
68.	Workshop in Computer Science	Physics Department	HPTCollege, Nasik	Nov. 15	1987
69.	Workshop on "Physics Practicals-85 pattern"	Physics Department	HPT Arts & RYK Science College, Nasik	Dec 27 – 28.	1986