

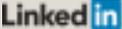


## Dr. Kirti Satish Agashe

Head of Industrial Electronics  
Department, V.P.M's Polytechnic, Thane  
Maharashtra state, India  
**D.I.E.B.E** (Electronics)  
**M.E.** (Electronics),  
**Ph.D** ( Electronics Engineering)  
V.J.T.I., Mumbai University  
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### Membership in Professional Societies

Life Member Indian Society for Technical Education (LM17371)  
Life Member of Indian Nuclear Society (LM8906)  
Life Member of Power Beam Society of India (LM56)  
Indian Science Congress Association(7498795799)  
Founder Member of Global Society for Basic & Applied Science

### Residence:

B1003, Mittal Park, Thane(W) (M.S), India, 400602

## PROFESSIONAL SUMMARY

- ✓ Working as Head of Industrial Electronics Department
- ✓ **29 years** of teaching experience in the field of Electronics and **1 year** Industrial experience and **6 year** Research experience.
- ✓ **Published 26 research papers** at National and International level journals and conferences.
- ✓ Worked as a Principal Investigator (India) for collaborative research project funded by **UKIERI** (UK India Education & Research) on “Artificial Heart” .MoU between Aston University UK and V.P.M” s Polytechnic, India.
- ✓ **External Funding/ Research Support** for Research on Resistive switching Random Access Memory(ReRAM) under Indian Nanoelectronics User” s Program (INUP), DIT, IIT Bombay
- ✓ Tata Institute of Fundamental Research (TIFR)
- ✓ User Inter University Acceleration Centre (IUAC)Delhi.
- ✓ **Organized National conferences :** Geoinformatics, Atomic Energy for National Development, Next Generation Electronics as convener/Organizing Secretary in collaboration with leading technical organization and Industry.
- ✓ **Worked** for Development of New Curriculum Design and laboratory manuals for Diploma courses of Maharashtra State Board of Technical Education.

## RESEARCH PUBLICATION

1. Kirti Agashe , Dr.Nisha Sarwade, Dr.Sangeeta Joshi “**Memristor: The advancement in Fundamental circuit Elements**”, ICEAT-2013 International conference, Sinhagad Institute of Technology, Paper published in “International Journal of Engineering Sciences(ISSN 0976-6693) 1<sup>st</sup> issue, Volume 2, 10<sup>th</sup> April 2013
2. Kirti Agashe , Dr.Nisha Sarwade, Dr.Sangeeta Joshi, “**Resistive switching in Titanium dioxide thin films for the emerging non volatile emerging memory devices**”,Bionano frontier journal (ISSN 0974-0678), Vol6 (2) July-December 2013, Page 318.
3. Amisha A. Mestry , Pravin U.Dere , Sanjay Hundiwale, Kirti Agashe ,“**SPICE Modeling of Memristor and memristive systems: A review**”, International Journal of Emerging Technologies and Applications in Engineering, Technology and Sciences (IJ-ETA-ETS) ISSN 0974-3588 Volume 22, Special Issue-Issue 1, 6<sup>th</sup> April 2014.
4. Kirti Agashe , Nisha Sarwade, Sangeeta Joshi, “**Versatile Memristor and research Novelty**”, Proceedings IEEE Engineering in Medicine and Biology Society of Malaysia(EMBS) student conference proceeding, ,June 2014.
5. Omkar S. Joshi, Kirti S. Agashe , Mark Prince , Geoff D. Tansley,“**An ECG delay unit for the testing of the BiVAD system with an IABP (Co-Author)**”, Proceedings IEEE Engineering in Medicine and Biology Society of Malaysia(EMBS) student conference proceeding, ,June 2014.
6. Kirti S.Agashe ,“**Titanium dioxide thin films for emerging non volatile memory devices**“, International Conference on Emerging Trends and Challenges in science and Technology , Bionano Frontier Journal , ISSN 0974-0678 , 3-8 November ,2014.
7. Amisha A. Mestry , Pravin U.Dere , Sanjay Hundiwale, Kirti Agashe , “**Implementation of memristor circuits using LTSpice**”, International Research journal of Management Science and Technology, Vol 5 Issue 8,ISSN 2250 – 1959 (Online) 2348 – 9367, 2014.
8. Kirti Agashe , Nisha Sarwade, Sangeeta Joshi “**Resistive switching in titanium dioxide thin films for the emerging non volatile memory device**” Bionano frontier journal(ISSN 0974-0678)
9. Amisha A. Mestry , Pravin U.Dere , Sanjay Hundiwale, Kirti Agashe “**Implementation of Memristor circuits using LT spice**”, International research journal of management science and technology, ISSN-2250-1959(0) 2348-9367(P) , Volume 5 ,Issue 8 .2014
10. Kirti Agashe , Nisha Sarwade, Sangeeta Joshi ,Amisha A.Mestry ,“**On the SPICE Modeling of Current controlled and Voltage controlled Memristor and Memristive systems**” ,Next Generation Electronics-2015” (ISBN 81-88-513-65-2) , 2015.
11. K. Agashe, N. Sarwade, S. Joshi, M. Thakurdesai, S. Survase and T. Tirmali, "Effect of Gamma Irradiation on Resistive Switching of Al/TiO<sub>2</sub>/n+Si ReRAM," Nuclear Instruments and Methods in Physics Research Section B: Beam Interactions with Materials and atoms, vol.403,pp. 38–44,2017.

## CONFERENCE PUBLICATION

1. Kirti Agashe , Mr. Rahul kulkarni ,” Global Positioning System “**Geoinformatics**” V.P.M.’s Polytechnic, Thane , December 2006
2. Kirti Agashe , Mr. Rahul kulkarni “**Automatic Identification Techniques (Frequency Ranges Radio Licensing Regulations)**” Biometrics, RFID and emerging technologies for Automatic Identification V.P.M.” s Polytechnic, Thane on **10<sup>th</sup> January 2009**.
3. Kirti Agashe, “Non conventional energy “presented and published in “ITECH09” conference organized by Amrutwahini college of Engineering Warna Nagar on **4<sup>th</sup> – 5<sup>th</sup> March 2009**.
4. Kirti Agashe, Non conventional energy Sources presented and published “THINKQUEST 2009”Baba sahib Gawade Institute of Technology, Mumbai Central on **14<sup>th</sup> March 2009**
5. Kirti Agashe, Dr.ulka .A.Natu , Yogacharya Shri.shrikrishna Wyavahare, “**The journey of thoughts from Nano to Yoga**”,National conference on “Broader perspectives of Languages Thinking and technology” 3<sup>rd</sup> july 2010.
6. Kirti S.Agashe , Dr. Nisha V. Sarwade ,“**Future non-volatile memory option in VLSI memristor**”, ZENITH 2012 Father Agnel,Vashi , 14<sup>th</sup> October 2012.

7. “Memristor: the advancement in fundamental circuit elements” ICEAT-2013 International conference, Sinhad Institute of technology, Lonavala,2013
12. Kirti Agashe , Dr.Nisha Sarwade, Dr.Sangeeta Joshi , “**Simulated Resistive Switching Behavior of Memristor**” , Vision 14- BVIT, Navi Mumbai, Vision 14 Proceedings, 2014.
13. Kirti Agashe , Nisha Sarwade, Sangeeta Joshi, “**Versatile Memristor and research Novelty**”, Abstract Proceedings IEEE Engineering in Medicine and Biology Society of Malaysia(EMBS) student conference,Malaysia, 5<sup>th</sup> June 2014.
14. Omkar S. Joshi, Kirti S. Agashe , Mark Prince , Geoff D. Tansley,“**An ECG delay unit for the testing of the BiVAD system with an IABP (Co-Author)**”, Proceedings IEEE Engineering in Medicine and Biology Society of Malaysia(EMBS) student conference, 5<sup>th</sup> June 2014.
8. Amisha A. Mestry , Pravin U.Dere , Sanjay Hundiwale, Kirti Agashe ,“**SPICE Modeling of Memristor and memristive systems: A review**” , International Conference on Knowledge, Analysis And Research In Engineering, Technology And Science-2014 (IC-KAR-ETS-2014),
9. Kirti Agashe , Nisha Sarwade, Sangeeta Joshi , **Fabrication and Characterization of TiO<sub>2</sub> thin film Resistive Switching Devices (Memristor)**,INUP familiarization workshop on nanofabrication technologies, November 28 – 30, 2014, IIT Bombay, India
10. Amisha A. Mestry , Pravin U.Dere , Sanjay Hundiwale, Kirti Agashe “**Implementation of Memristor circuits using LT spice**”, International research journal of management science and technology, ISSN-2250-1959(0) 2348-9367(P) , Volume 5 ,Issue 8 .2014
11. Kirti Agashe , Nisha Sarwade, Sangeeta Joshi , “**Next generation non volatile ReRAM**”, Next Generation Electronics Conference, January 2015,India
12. Anita S.Goswami-Giri , Monali Katkar-Torne , Kirti Agashe and M.K.Pejaver “**The facilitation of echnology for advancement women economy**” available online www.vpmthane.org, J.B.N. Bandonkar College of Science, on line Journal (page 113-117)
13. Kirti Agashe , Nisha Sarwade, Sangeeta Joshi “**Resistive switching of Nano scale Rare-earth thin films**” Recent Trends in Spectroscopic and Microscopic Techniques, Birla College,Kalyan, 2<sup>nd</sup> July, 2016
14. Kirti Agashe , Nisha Sarwade, Sangeeta Joshi “**Effect of Plasma Growth Temperature on Resistive switching behavior of Pt/TiO<sub>2</sub>/n+SiReRAM**” 3<sup>rd</sup> International Conference on Emerging Electronics, IIT Bombay, 27<sup>th</sup> -30<sup>th</sup> December 2016
15. Kirti Agashe , Nisha Sarwade, Sangeeta Joshi “**Performance Optimization of Memristor: A Nano scale Resistive switching Device**” Government of India Bhabha Atomic Research Centre Solid State Physics division, 30<sup>th</sup> Dec,2017

### Research / Development Projects Undertaken

1.Reserch projects funded by Ministry of Information Technology under Indian Nano

Electronics user program. 7 projects completed (Link : [http://www.inup.iitb.ac.in/inup/map\\_institute.php](http://www.inup.iitb.ac.in/inup/map_institute.php))

2. Research project funded by Inter university Accelerator centre(IUAC), New Delhi.

3.Research project developed at TIFR.

4.Industry collaboration project development with ASHIDA Electronics.

5.Research project undertaken under International collaboration with Aston University

UK.

## CONSULTANCY/MEMBER OF BOARD/COMMITTEE

- ✓ Working as Advisory Committee Member at MSVS, Thane (50 year old Public library for students) since 2007.
- ✓ Worked as Advisory Committee Member for new educational product launching at APLAB, Pvt Ltd, Mumbai during 2007-2008.
- ✓ Working as Advisory Committee member and consultant for Development of Laboratory at Wamanrao Muranjan Junior College of science and Commerce Mulund, Mumbai since 2011.
- ✓ Working as Trustee “Creative Foundation” , an NGO working for development of High School Students since 2016
- ✓ Working as President “ Sanksaar Bharati Thane Sameeti” since 2018
- ✓ Worked as Member of State Level Subject Core Group Of Electronic Discipline at MSBTE, Mumbai during 1996-2000.

## EXTRACURRICULAR ACTIVITIES

### Social Activities:-

- ✓ Life Member of „Sanksaar Bharati” and worked as Head of for „Sangeet kala vibhag” Thane for 4 years 2005-2009
- ✓ Life Member and worked as organizing committee member of „Uttung Sanskritik Parivar Trust” , Vile Parle.
- ✓ Working as member of co ordination committee for “Indra Dhanu” organization.

### Literature:-

- ✓ A text book titled “ELECTRONICS” for Second Year Computer Engineering Diploma students of MSBTE
- ✓ Column Writer “ **AKSHAY URJA**” a weekly Column series on Alternative Energy Sources , in the leading Marathi News paper “LOKSATTA”
- ✓ Column Writer “**Sound of Music**” a weekly column on Music and Art , in the leading Marathi News paper “LOKSATTA” during the year 2009-2011(100 Episodes).
- ✓ Articles on IT., Music program reviews in „Loksatta” Maharashtra Times” and „Sanmitra” Newspaper
- ✓ Articles for „Vivek” „Parammitra” „Disha” Magazine
- ✓ Guest Editor “Vivek Saptahik Mahila Vivhesh” in 2009.
- ✓ Worked in Editorial Board of “ SAMARTH Bharat 2020”, a special issue for Thane city documentation and development.
- ✓ Many articles on Science, Technology and Music in News Papers, Magazines.
- ✓ A text book titled “ELECTRONICS” for Second Year Computer Engineering Diploma students of MSBTE.

### Special Achievements:-

- ✓ Gold Medal for „Best student of Wallchand Engineering College, Sangli in the year 1986.
- ✓ Best Artist Award” of „S.G.G.S Engineering College, Nanded in the year 1989.
- ✓ Live interview on Television on ‘Sahayadri’ channel on 12th Feb.2006 for the contribution in ‘Alternative Energy Sources’ in Loksatta .
- ✓ Live interview on ‘Thane Varta’ for contribution in installation of 1st Automatic Weather Station at Thane city at VPM’s campus.

## Awards and Recognition Received

Sl. No.	Name of the Award / Patent etc.	Organisation	Year
1	Gold Medal for ' <b>Best student of Wallchand Engineering College</b> ' Sangli in the year 1986	Wallchand Engineering College	1986
2	' <b>Best Artist Award</b> ' of 'S.G.G.S Engineering College' Nanded in the year 1989	S.G.G.S Engineering College' Nanded	1989
3	Appreciation Award for contribution in the conduction of management skill development programme for teachers.	Rotary Club of Thane North	2004
4	Appreciation Award by Rotary club of Kalyan for contribution in Renewal Energy.	Rotary club of Kalyan	2012
5	Swatantra Sainik Dattaji Tamane Janmashatabdi Gourav Sohala Appreciation Award	Anand Dhige Yuva Pratishtan Thane	2012
6	Sudhir Phadake Smruti Appreciation award for contribution in music	Chaturang dombivali	2011
7.	"Navdurga" Award, for contribution in Education and Art culture	Anand Charitable Trust, Thane	2018
8	"Woman of Substance " Award, 2019	Thane Vaibhav and Klanidhi, Thane	2019

## ACTIVITIES FOR ENTREPRENEURSHIP DEVELOPMENT & EDUCATION PROGRAM

Coordinating revenue generation activity, Entrepreneurship development and continuing education program since 2003. This activity was undertaken in 2003-04 for revenue generation & for helping the technical institutes for development of laboratories

- ✓ Developed Laboratory Experiment set up for Technical Institutes(50 set up) at Shad Adam Shaikh Polytechnic, Bhiwandi & Navjeevan Polytechnic, Bhandup.
- ✓ Developed 8051 Microcontroller Kit Development kit for Thakur Polytechnic, Kandivali, Terna Polytechnic Koparkhairane, IT Ulhasnager, Navjeevan Polytechnic Bhandup and L&T Institute of Technology Powai.
- ✓ Co ordination of 8051 Microcontroller Training Program for 10 colleges affiliated to M.S.B.T.E.
- ✓ Coordination of Computer Hardware and Maintenance in collaboration with SMP Computers India.
- ✓ Coordination of Sound/Video Engineering in collaboration with Media Vision, India.
- Coordination of Audio Production in collaboration Mix box Studio, India