

Dr. Kirti Satish Agashe

Ex Director , VPM's Maharshi Parshuram College of Engineering, Velneshwar

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
Sangeet Vishaarad (Classical Vocal)

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Linked in

 $https://www.linkedin.com/comm/profile/view?id=AAsAABBpNIMB9TZ-XxkrtAxFCkiGcdbahZa9MNE\&midToken=AQFsxuEz08txPg\&trk=eml-network_updates_digest-header-931-profile\&trkEmail=eml-network_updates_digest-header-931-profile-null-4jxa4j~ik7ynkbi~gl$

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

2 Patents , Published 23 research papers at National and International level journals and conferences.

PROFESSIONAL SUMMARY

- Presently working as Head of Industrial Electronics Department
- ✓ 33 years of teaching experience in the field of Electronics and 1 year Industrial experience and 6 year Research experience.

Research Experience

- ✓ 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.
- 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(MSBTE)

Interest and contribution in Art, Culture and social work

RESEARCHPUBLICATION

- 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) 1st issue, Volume 2, 10th April 2013
- 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, 6th 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.
- 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.
- 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)
- 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/TiO2 /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 10th January 2009.
- 3. Kirti Agashe, "Non conventional energy "presented and published in "ITECH09" conference organized by Amrutwahini college of Engineering Warna Nagar on 4th 5th March 2009.
- **4.** Kirti Agashe, Non conventional energy Sources presented and published "THINKQUEST 2009" Baba sahib Gawade Institute of Technology, Mumbai Central on **14**th **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" 3rd july 2010.
- 6. Kirti S.Agashe , Dr. Nisha V. Sarwade , "Future non-volatile memory option in VLSI memristor", ZENITH 2012 Father Agnel, Vashi , 14th October 2012.

- 7. "Memristor: the advancement in fundamental circuit elements" ICEAT-2013 International conference, Sinhagad Institute of technology, Lonavala, 2013
- 8. Kirti Agashe, Dr. Nisha Sarwade, Dr. Sangeeta Joshi, "Simulated Resistive Switching Behavior of Memristor", Vision 14- BVIT, Navi Mumbai, Vision 14 Proceedings, 2014.
- 9. 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, 5th June 2014.
- 10. 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, 5th June 2014.
- 11. 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),

 12. Kirti Agashe, Nisha Sarwade, Sangeeta Joshi, "Fabrication and Characterization of TiO₂ thin film Resistive Switching Devices (Memristor)", INUP familiarization workshop on nanofabrication technologies, November 28 – 30, 2014, IIT Bombay, India
- 13. 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
- 14. Kirti Agashe , Nisha Sarwade, Sangeeta Joshi , "Next generation non volatile ReRAM", Next Generation Electronics Conference, January 2015, India
- 15. Anita S.Goswami-Giri, Monali Katkar-Torne, Kirti Agashe and M.K.Pejaver "The facilitation of technology for advancement women economy" available online www.vpmthane.org, J.B.N. Bandodkar College of Science, on line Journal (page 113-
- 16. Kirti Agashe, Nisha Sarwade, Sangeeta Joshi "Resistive switching of Nano scale Rareearth thin films" Recent Trends in Spectroscopic and Microscopic Techniques, Birla College, Kalyan, 2nd July, 2016
- 17. Kirti Agashe , Nisha Sarwade, Sangeeta Joshi "Effect of Plasma Growth Temperature on Resistive switching behavior of Pt/TiO₂/n+SiReRAM" 3rd International Conference on Emerging Electronics, IIT Bombay, 27th -30th December 2016
- 18. 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, 30th Dec.2017

Research / Projects Undertaken / Patent

- 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)
- 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.
- 6. Patent no 1: Title-Artificial Intelligence-Powered Candidate Screening and Selection System And Method. app no 202311027398; ref no 1/31188/2023-DEL; cbr no 16990
- 7. Patent no 2 Title-A System For Resource Management In Blockchain Based Internet Of Things (Iot) Network. app no 202331042621; ref no TEMP/1/48908/2023-KOL; cbr no 8889

CONSULTANCY/MEMBEROFBOARD/COMMITT

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- ✓ 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.
- ✓ Worked as Advisory Committee member and consultant for Development of Laboratory at Wamanrao Muranjan Junior College of science and Commerce Mulund, Mumbai 2011-2018.
- ✓ Working as Trustee "Creative Foundation", an NGO working for development of High School Students since 2016
- ✓ Worked as Member of State Level Subject Core Group Of Electronic Discipline at MSBTE,Mumbai during 1996-2000.
- ✓ Consultancy for SPARK Electro systems since 2019

Extracurricular Activities

Social Activities:-

- ✓ Working as President "Sanskaar Bharati Thane Sameeti" since 2018
- ✓ BJP Industry Cell Thane, committee member

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.

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.

Activities for Entrepreneurship Development & Education Program

Coordination of 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

Awards and Recognition Received

Sl. No.	Name of the Award / Patent etc.	Organisation	Year
1	Gold Medal for 'Best student of Wallchand Engineering College' Sangli in the year 1986	Wallchand Engineering College	1986
2	'Best Artist Award ' 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		
6	Sudhir Phadake Smruti Appreciation award for contribution in music Chaturang dombivali 20		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
9	Woman's Day Award 2023	TJSB Thane Janata Sahakari Bank and Prajapita Bramha Kumari	2023

Dr.Kirti Agashe Research work at different institutes and funding

Sr.	Research Details	Photos	
No 1	Organization TIFR, Mumbai Glass substrate MIM devices by vapour deposition during 2011-2013	TiO2	
2	IIT Bombay CEN lab. Funding under (INUP) Indian Nanoelectronics User Program Total 7 proposals were completed during 2013-16		
3	IUAC (Inter University Accelerator Centre), New Delhi Gamma Irradiation of Resistive Switching Nano scale devices fabricated at IIT Bombay during 2014- 16		
4	International Collaborative research on "Artificial Heart" with Aston University, Birmingham. Funded by UKIERI(United Kingdom and India Research Initiative		

Dr.Kirti Agashe: Contribution in social, cultural & community services



Working as the organizing committee member of NGO, 'Creative Foundation' (since 2017) which works for the personality development of school students studying in 8th and 9th std

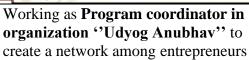


In association with the NGO 'Sanskar Bharati' since 1998 which works for the art and cultural development of society. Presently Working as **President of Thane District**

उद्योग अनुभव प्रतिष्ठानचे पदाधिकारी



Working as **organizing Committee** Member of Raambhau Mhalagi Wyaakhyanmala of Thane City (Since 2012)



Global Society For Basic And Applied Sciences Ngo Information



Working as mentor for the NGO "Vidyarthi Vikas Yojana" of Seva Sahayog Foundation since 2010.

Global Society for Basic and Applied Sciences No Global Society for Basic and Applied Sciences Not Governmental Organization is located in Thane West MAHARASHTRA. Global Society for Basic and Applied Sciences is registered as a Registere Societies (Non-Government) at Thane West of State MAHARASHTRA with Ngo unique registration ID 'MH/2018/0211880'. The NGO registration is done by Charity Commissioner with registration number 420/2016/Thane on the date of 26-02-2016 and the Global Society for Basic and Applied Sciences Members are Kirtl Satish Agashe Sciences Members are Kirti Satish Agashe (Founder), Anita Sachinkumar GoswamiGiri (President), Minakshi Narendra Gurav (Joint Secretary), Ramesh Shriranga Yamgar (Founder), Ravindra Vasant Kshirsagar (Secretary), Umesh Bhauraoji Kakde (Executive Member),

Working as a Founder member of GSBAS since 2016



Woman of Substance Award by Thane Vaibhav & Kalanidhi



Association with

Laksha Foundation



Invitation as Jurie for the 'Speak for India' Award by TOI group & Federal Bank of India

