

BIO-DATA



A. Personal Information

1. **Name** : DR. KALANGE ASHOK EKANATH
2. **Educational Qualification** : M.Sc. PhD
3. **Area of Research** : Material Science, Sensors, Instrumentation
4. **Contact number** : 9420480080
5. **Email ID** : *kalangeashok@gmail.com, AE.Kalange@tccollege.org*
6. **Name of the college** : TULJARAM CHATURCHAND COLLEGE
BARAMATI
7. **Department** : PHYSICS
8. **Designation** : ASSOCIATE PROFESSOR
9. **Date of Appointment** : 01/08/1989
10. **Experience** : 29 Years

- B. Title of Dissertation / Thesis** : DEVELOPMENT OF DATA ACQUISITION SYSTEM AND ANALYSIS OF HUMAN PULSE FOR VATA, PITTA AND KAPHA DOMINANCE IN PAKRUTI (May 2011)

C. Publications :

1. Book: *Nadi Parikshan Yantra* (Pulse Examination system), **Lulu Publication**
3101 Hillsborough St, Raleigh, NC 27607, United States. 2019 ISBN – 978-0-359-35879-3

2. Paper Published:

1. Abhay B. Joshi, Ashok E. Kalange, Dhananjay Bodas and S.A. Gangal “Simulations of piezoelectric pressure sensor for radial artery pulse measurement”, *Materials Science and Engineering: B* Volume 168, Issues 1-3, 15 April 2010, Pages 250-253.
2. A.E. Kalange B.P. Mahale, Aghav S.T. and S.A. Gangal “ Nadi- Parikshan Yantra and Analysis of Radial Pulse” *IEEE Xplore* 7-10 March 2012 , Pages 165-168
3. S. B. Kakade, S. H. Supekar, R.D. Kale, A. E. Kalange “Synthesis and Characterization of Thermally Annealed SnO₂ Thin Film Using Thermal Evaporation Technique” *The Online International Interdisciplinary Research Journal (OIIRJ)*. ISSN 2240-9598, PP 48-54.
4. Pingale PC, Kale RD and Kalange AE. Fabrication and Characteristics of Nano Sized Zn Se Thin Films by Chemical Bath Deposition, *Int. Res. Journal of Science & Engineering*, December 2017; Special Issue A1 : 35-38.
5. A.E. Kalange and S.A. Gangal, “Piezoelectric Sensor for Human Pulse Detection” *Defence Science Journal*, Vol. 57, No. 1, January 2007, pp. 109-114, 2007.
6. A.E. Kalange and S.A. Gangal, “Data Acquisition system for Radial pulse detection using NIDAQ card and Lab VIEW software” *Jr. of Instrum. Soc. Of India*, Vol 38 No. 4
7. Bhoopesh Mahale, A.E. Kalange and S.A. Gangal, “PC based human arterial pulse detection System”, *Jr. of Instrum. Soc. Of India*, Vol 39 No. 4 (2009) pp 298-300.
8. A.E. Kalange, A.S. Jagtap and S. A. Gangal, “ Fast Fourier Transform (FFT)- A useful tool for analysis of Physiological signal”, *Bulletin of the Marathwada Mathematical society* Vol. 14, No.2, December 2013, Pages 35-39
9. Kalange A.E and Sathe SJ. Generation of Electricity from Anaerobic Waste Water Treatment in Microbial Fuel Cell, *Int. Res. Journal of Science & Engineering*, January 2018, Special Issue A4 : 37-40.

3. Papers presented in International conference:

- 1) Abhay B. Joshi, Ashok E. Kalange, Dhananjay Bodas and S.A. Gangal
“Simulations of piezoelectric pressure sensor for radial artery pulse measurement” Second International Conference on advanced Material and polymers for Defence Applications(SAMPADA-2008) 8-12 /12/2008
YASHADA Pune
- 2) Ashok E. Kalange “Synthesis of Electron beam Evaporated Titanium Dioxide Thin Films and their use as Photo catalyst” Third International conference on Nanostructured Materials and Nanocomposites (ICNM 2015) Hindusthan College, of Science and Tech. Farah, Mathura (UP) 12/10/2015 to 14/04/2015)
- 3) S. B. Kakade, S. H. Supekar, R.D. Kale, A. E. Kalange “Synthesis and Characterization of Thermally Annealed SnO₂ Thin Film Using Thermal Evaporation Technique” Second International Conference on Recent Multidisciplinary Research (ICRMR 2018) Asian Institute of Technology Conference Centre , Pathum Thani, Thailand (22-23 November,2018).

4. National Conference:

1. National Symposium on recent trends in molecular &Medical physics, University of Pune 22-25 Jan 2005
2. Kalange A.E. and Gangal S.A, “Radial pulse (nadi) detection system using Lab View”SENSOR-11, 11th National Seminar on Physics and Technology of Sensors, 2006. 27/2 to 1/3/2006
3. Kalange A.E. and Gangal S.A “Piezoelectric Sensor for Human Pulse Detection” Natinal Seminar on Advances in Electro ceramics, 05-06May 2006
4. Kalange A.E. and Gangal S. A “National Seminar on Interdisciplinary Applications of Electronics. 28-29 Jan 2006, ASC college Chopda , Jalgaon
5. Kalange A.E. and Gangal S.A “National Symposium on Instrumentation (NSI-31)” ITM Gwalior (M.P.) 12-15 Oct 2006
6. A.E Kalange, (Mrs), Dr. Phadake A. A., Dr. H.R. Kulkarni and S. A. Gangal,“ Classification of Human pulse on the basis of *Vata*, *Pitta* and *Kapha*, using in-house developed pulse detection system.” SENSORS-12, 12th National Seminar on Physics and Technology of Sensors, 2007.
7. Kalange A E, Mahale B P, Gangal S A "NAdi-PARikshan Yantra:An Instrument for Pulse Examination" SENSORS-13, 13th National Seminar on Physics and Technology of Sensors,2008.
8. Mahale B P, Kalange A E and Gangal S A " Design And Develpoment of An Embedded System For Human Pulse Detection" SENSORS-13, 13th National Seminar on Physics and Technology of Sensors, 2008.

9. Kalange A.E. and Gangal S.A “An Instrument for Radial Pulse Examination” IAPT Convention at Bangalore, 17-19 Oct 2008
10. Mahale B P, Kalange A E, Gangal S A, “Comparison of responses of the ultrasonic sensors PZT sensors and commercially available pulse sensors for detection of human arterial pulse.” SENSOR-14, 14th National Seminar on Physics and Technology of Sensors, 2009
11. Kalange A E, Mahale B P, Gangal S A “Effect of Contact pressure on Radial pulse.” ICI-2009 & NSI-34, 2010.
12. Mahale B P, Kalange A E, Gangal S A “Non-Invasive Technique to Study Arterial Stiffness Characteristics Using Arterial Pressure Pulse”. SENSOR-15, 15th National Seminar on Physics and Technology of Sensors, 2010. 04-06 Mar 2010
13. National seminar on “ Nano science and Technology: Frontiers in Science and Technology” B.G. College, Sangavi ,PUNE 07-09 Feb 2011
14. A.E Kalange, A. S. Jagtap ,S. A. Gangal “ Fast Fourier Transform (FFT) –A useful tool for analysis of physiological signal” National Conference on Recent Developments in graduate Mathematics 6-8 Feb 2012 at Nashik.
15. Kalange A E, Mahale B P, Gangal S A “ Study of Human Arterial pulse width to evaluate Arterial stiffness” 18th National Seminar on Physics and Technology of Sensors, 2014
16. 18th National Seminar on Physics and Technology of Sensors Dept of Physics and Electronic Science ,T. C. College, Baramati Dist-Pune 06/03/14 to 08/03/2014
17. National conference on “Frontiers of Chemistry and Materials: Post Graduate Dept of Chemistry, T.C. College, Baramati Dist-Pune 12/02/15 to 14/02/2015

5. State/ University Level conference/workshop:

1. Seminar on Material Science “ TC College, Baramati 09 to 10 DEC 1989
2. “Optical Fibre Communication Technology” KTHM college, Nashik, 20-21 Jan 1995
3. Workshop on “Understanding of common Instruments” V P College, Baramati 28/01/2002 to 30/01/2002
4. Workshop on “Awareness and Teaching of New Topics in FY B. Sc Syllabus” S.S.G.M. college, Kopergaon 11-12 Aug 2002
5. “A certificate in Communicative English & Personality Development” 26/11/2009 to 24/11/2011 at T.C. College, Baramati
6. “Workshop on sensor Instrumentation , Dept. of physics , Debrugarh University, Debrugarh (Assam) 20-09-2004 to 1-10-2004
7. Pre-Seminar Workshop on Updates of sensors and instruments and Fabrication and packaging of sensors Organized by National Seminar on Physics & Technology of Sensors, Department of Electronic Science, University of Pune. 25-26th Feb 2006

8. Workshop on Maintenance of Instruments and Devices used in Cardiac Analysis and Treatment, Organized by IEE 10/12/2005
9. Seminar on “Remembaring Einstein” B.G.Gholap College, Sangavi (Pune) 21 Feb 2006
10. Seminar on ‘Medical Instrumentation” T C College, Baramati 27/02/2005
11. Workshop on “Use of C++ in Statistics” T C College, Baramati 04/12/2004
12. Workshop on “Energy Generation and Conservation” B G College, Sangavi PUNE 10-01-2009
13. Pre seminar Technical Workshop on Design of Electronic Equipment CSS PUNE 01 to 02 Mar 2008
14. National Seminar on “New trends in Material Science” ASC College, Indapur, 11-12 Feb 2011
15. Computer Interfaced Physics Experiments for T.Y.B.Sc. Physics Practical” at Ahmednagar College, Ahmednagar 7-8 Jan 2011
16. One day seminar on “Use of ICT in teaching Physics” 12 Feb. 2012 at Dada Patil Mahavidyalaya Karjat Dist: Ahmednagar.
17. Workshop on “Use of computer Aided design tool for development of practical resources in Electronics” Padmashri Vikhe patil college of Arts,Science and Commerce ,Pravaranagar Dist-Ahmednagar 01/03/2013 to 02/03/2013.
18. Workshop on “New Choice based credit system for PG Courses” Baburaoji Gholap College, Sangvi, Pune-27- 29/06/2013.
19. State level seminar on “ Recent trends in Biophysics and Medical Electronics” 10-12 Feb 2012 at K.J. Somaiya college of Arts, Commerce and Science, Kopergaon Dist-Ahmednagar

F. Research Project:

Sr No	Title of Paper	Name of Principal Investigator	Funding Agency	Period	Sanctioned Amount
1	Design and development of hand held embedded system for human pulse detection	Dr. A. E. Kalange	Pune University, Pune	2007 to 2009	2,00,000/-

G. Research Guidance: Ph.D.:

Sr No	Name of Student	Ph. D /M. Phil	Research Topic
1	Mr. Kakade Sandip B	Ph. D	Synthesis and Characterization of metal oxide thin film for Gas sensing Application
2	Mr. Thorat Sopan Muralidhar	Ph. D	Physical and Chemical properties of Bismuth ferrites (BFO) and its applications in Visible Light Induced Photo Catalyses