

## BIO-DATA

### A. Personal Information

1. **Name** : Rajendra Devidas Kale
2. **Educational Qualification** : M. Sc. Ph. D.
3. **Area of Research** : Materials Science
4. **Date of Birth** : **02<sup>nd</sup> July 1968**
5. **Religion & Caste** : Hindu ( Leva Patidar)
6. **Gender** : Male
7. **Contact number** : Office : 02112-222405      Mobile : 9860687791
8. **Email ID** : **rajendra\_kale@yahoo.com**
9. **Address** : 'Madhuram' Dudh Sangh Society, Bhigvan Road, Baramati
10. **Name of the college** : Tuljaram Chaturchand College (autonomous),  
Baramati, website – www.tccollege.org
11. **Department** : Physics
12. **Designation** : Associate Professor
13. **Date of Appointment** : 15<sup>th</sup> February, 2005

### B. Educational Qualification:

Sr. No	Degree/Certificate	University	Year of passing	Subject	Class / Grade obtained
1	B.Sc.	Pune	1988	Electronics, Physics, Mathematics	First
2	M.Sc.	M. S. University, Baroda	1991	Applied Physics	Distinction
4	Ph.D.*	Indian Institute of Technology, Bombay	2000	Materials Science	
6	GATE		1993		

\***Title of Thesis** : Oxygenation and Texturing Studies of  $Y_1Ba_2Cu_3O_{7-d}$  Superconductors.

**C. Details of past experience :**

Sr. No	Designation	Name of the Institute/college	Period of service	Total period
1	Research Assistant	University of Pune	July 1991-March 1992	9Months
2	JRF/SRF	Indian Institute of Technology, Bombay	April 1992 – March 2000	8 Years
3	Research Associate	Indian Institute of Technology, Bombay	July 2000 – March 2001	9Months
4	Post-Doctoral Fellow	Mie University, Japan	March 2001-March 2002	13 months
5	Post Doctoral Fellow	Tata Institute of Fundamental Research, Mumbai	October 2002 – March 2003	6Months
6	Post Doctoral Fellow	POSTECH, South Korea	March 2003-August 2003	6 Months
7	Assistant Professor	Godavari College of Engineering	October 2003 – July 2004	10 Months
8	Assistant Professor	Tuljaram Chaturchand College, Baramati	July 2004 – January 2017	13 Years 6 Months
9	Associate Professor	Tuljaram Chaturchand College, Baramati	February 2017-till date	

**D. Orientation /Refresher/ Short Term / Other course Attended:**

Sr. No.	Orientation /Refresher course	Name of Institution/ University	No. of Days	Dates From-To	Subject
1	Orientation	SPPU	28	20/02/2008 – 18/03/2008	Teaching, Learning and Communication
2	Refresher	SPPU	21	16/11/2010 – 06/12/2010	Experimental Physics
3	Refresher	Academy of Science, Bangalore and T. C. College, Baramati	15	08/10/2012-23/10/2012	Experimental Physics
4	Short Term Course	IIT, Bombay	10		Solar Photovoltaic
5	Short Term Course	DAE and T. C. College, Baramati	06		Nuclear Chemistry
6	Winter School in Physics	SPPU and T. C. College, Baramati	21	09/09/2017 – 29/09/2017	Use of ICT in Teaching, Learning and Research

## **E. Publications :**

### **International Journal**

1. High Temperature Magnetic ordering in La<sub>2</sub>RuO<sub>5</sub>, S. K. Malik, D. C. Kundalia and R. D. Kale, Solid State Comm., 135, pp 166-169, 2005.
2. Degradation of Methylene Blue Dye Using activated carbon obtained from Bio-waste, S. S. Nardekar and R. D. Kale, International Journal for Research in Applied Science & Engineering pp 2050 -2054 Nov. 2017
3. Need of Introduction of Nanoscience and nanotechnology in the High School Curriculum in Indian School System, Rajendra D. Kale, International Journal of Creative Research Thoughts pp 3769-71 December 2017.
4. Environmental Aspects of Nano Materials : A Review, R. D. Kale, International Journal for Research in Applied Science & Engineering , pp 4000 -4001 Nov. 2017
5. Fabrication and Characterization of Nano sized ZnSe Thin films by Chemical Bath Deposition, P. C. Pingale, R. D. Kale and A. E. Kalange, International Research Journal of Science and Engineering, pp 35-38, December 2017.
6. Synthesis and Characterization of Nano crystalline CuNiZn Ferrite Powder Through Sol-Gel Auto Combustion Method, B. S. Mahanavar and R. D. Kale, International Journal for Research in Applied Science & Engineering Technology , pp 316-323 Vol.6, May 2018

### **National Journals :**

1. Mechanism of Electrical Conductivity in Sugarcane Juice, S. B. Madake, R. D. Kale, C. B. Kulkarni , R. S. Borgave, The Research View, Vol.2, 2014 pp 16-18.
2. Synthesis of NiO thin films on simple glass substrate B. C. patil, R. T. Sapkal and R. D. Kale Proc. 18<sup>th</sup> National Seminar on Physics and technology of Sensors, 2014 pp 129-30.
3. Risk Management in Nanomaterials Industries , R. D. Kale Proc. National Conference on Science, Technology and Management: New Horizons pp 36-38, 2015

### **Books/Book Chapters : NIL**

## **F. Papers presented in International conference:**

1. Characterization of citrate gel auto combustion synthesised nano crystalline CoNiFe<sub>2</sub>O<sub>4</sub> ferrites, M. K. Kokare, R. D. Kale, S. B. Kulkarni, S. M. Ratod, ICNM 2015.
2. Chemical Bath deposited PbS/CdS multilayer thin film for gas and humidity sensing applications, S. A. Khalate, S. T. Patil, S. C. Patil and R. D. Kale, ICNM2015.
3. Environmental perspectives of nanomaterials, R. D. Kale, ICNM 2015.
4. Synthesis of Cu(OH)<sub>2</sub> vertical nano slabs by SILAR method for supercapacitor applications, S. B. Kulkarni, R. D. Kale, R. T. Sapkal, A. E. Kalange, P. C. Pingale and M. K. Kokare, ICNM 2015.
5. Bio synthesis of TiO<sub>2</sub> nano particles using Murraya Koenigii extract, R. D. Kale, ICNM 2015.

6. Studies on Al doped ZnO thin films deposited by electrodeposition technique, A. M. Kambale, P. U. Londhe, R. D. Kale, N. B. Chaurse ICANN 2017.
7. Synthesis and Characterization of TiO<sub>2</sub> Thin Films prepared using thermal Evaporation, S. H. Supekar, A. S. Nalawade, S. B. Kakade, A. E. Kalange and R. D. Kale ICANN2017.
8. Degradation of methylene blue dye using activated carbon, S. S. Nardekar and R. D. Kale, ICANN 2017
9. Photocatalytic degradation of Methylene blue using ZnO nanoparticles synthesized by hydrothermal method, N. S. Mahankale, R. D. Kale and R. T. Sapkal, ICANN 2017
10. Compositional effect on growth and surface properties of chemically deposited CuNi hydroxide thin films, S. B. Kulkarni, V. S. Mohite, R. T. Sapkal, A. E. Kalange and R. D. Kale, ICANN 2017.
11. Need of introduction of nano science and nano technology in the high school curriculum, R. D. Kale , ICANN 2017.

**G. Papers presented in National/State/ University Level conference:**

1. Thermal ZnO nanoparticles used in synthesized photocatalytic degradation of Methylene blue, N. S. Mahankale, R. D. Kale and R. T. Sapkal, National Seminar on Physics and Technology of Sensors. 2014
2. Effect of substrate temperature on the structure and optical properties of spray deposited ZnO thin films, S. S. Patil, S. J. Khomane, P. C. Pingale R. D. Kale and R. T. Sapkal , National Seminar on Physics and Technology of Sensors. 2014
3. Synthesis of Fe<sub>2</sub>O<sub>3</sub>/carbon composite by combustion method and its use in photocatalysis, T. M. Khanvalkar, R. D. Kale and R. T. Sapkal , National Seminar on Physics and Technology of Sensors. 2014
4. Green Synthesis of silver nanoparticles using plant extract, R. P. Mane, R. T. Sapkal, P. N. Jadhav, S. B. Kulkarni and R. D. Kale, NCFCM 2015
5. CuZnNiFe<sub>2</sub>O<sub>4</sub> nano structured soft ferrites synthesized by sol-gel auto combustion method, B. S. Mahanavar, R. D. Kale, P. M. Shipalkar, R. M. Mhaisale and R. T. Sapkal NCFCM 2015
6. Structural and optical properties of PbS thin films deposited by chemical bath deposition, S. S. Patil, R. D. Kale, S. A. Khalate and S. C. Patil, NCFCM 2015.
7. PbS thin layer coating over spray deposited ZnO nano wires by chemical bath deposition, P. D. Shinde, R. D. Kale, M. G. Bagal, R. T. Sapkal, P. C. Pingale, M. K. Kokare, NCFCM 2015.
8. Chemical growth of Cu(OH)<sub>2</sub> thin film electrodes for supercapacitor, S. B. Kulkarni, R. T. Sapkal, R. D. Kale, A. E. Kalange, P. C. Pingale, M. K. Kokare, NCFCM 2015.
9. Synthesis and Characterization of ZnO-TiO<sub>2</sub> nano composite thin films using spray pyrolysis, M. G. Bagal, S. G. Bhosale, R. T. Sapkal, R. D. Kale, P. C. Pingale and M. K. Kokare NCFCM 2015
10. Synthesis and Characterization of Al doped NiCo Ferrites using auto ignition method , R. A. Mhaisale, R. D. Kale, B. S. Mahanavar and R. T. Sapkal , NCFCM 2015
11. Synthesis and characterization of PbS thin films by SILAR method, P. P. Gatkul, R. D. Kale, M. R. Rajput and R. T. Sapkal , NCFCM 2015.
12. Nano carbon synthesis from Teak leaves and its application for water treatment, S. S. Nardekar, R. D. Kale and S. B. Kulkarni NCAMA-2016.

**H. Organization of International/National/State/University Level Conference/ Seminar/ Workshop:**

NIL

**I. International/ National/State/ University Level Conference/Seminar/Workshop Attended:**

NIL

**J . Research Project :**

<b>Sr No</b>	<b>Title of Project</b>	<b>Major/ Minor</b>	<b>Funding Agency</b>	<b>Duration</b>	<b>Sanction Amount</b>	<b>Completed / Ongoing</b>
1	Microwave Assisted rapid synthesis of oxide nano powders	Minor	BCUD, SPPU, Pune	2009 to 2011	2,50,000/-	Completed

**K. Research Guidance : M.Phil. / Ph.D. :**

<b>Sr. No</b>	<b>Name of student</b>	<b>Research Topic</b>	<b>Date of Registration</b>	<b>M.Phil./ Ph.D.</b>	<b>Research Centre</b>	<b>Awarded / Working</b>
1	<b>Kambale Ashok Manohar</b>	Graphene oxide composites	13/03/2018	Ph. D.	T. C. College Baramati	Working
2	<b>Kakade Sandip Bhimrao</b>	Oxide thin films for sensor applications	13/03/2018	Ph. D.	T. C. College Baramati	Working
3	<b>Pardeshi Nileshkumar Mahadu</b>	Graphene composites for sensor application	February 2020	Ph. D.	T. C. College Baramati	Working
4	<b>More Tushar Balu</b>	Plasma modification of textile	February 2020	Ph. D.	T. C. College Baramati	Working

**Dr. Rajendra D. Kale**