

**Dr. Deepak V. Nighot**

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### **Educational Qualification:**

Degree	University	Year of Passing	Rank
B.Sc.	University of Pune	1992	First class with Distinction.
M.Sc.	University of Pune	1994	First class
B.Ed.	University of Pune	1995	First class
Ph.D.	University of Pune	Awarded July 2011	

### **Teaching Experience:**

Sr. No.	Institute / College	Period	Total Years
1.	Modern college, Ganeshkhind, Pune - 53	July 1996 to December 1998	2.5 yrs
2.	AISSMS College of Engineering, Kennedy Rd, Pune - 1	January 1999 to till date	17.5 yrs

### **List of Publications:**

1. Chemical synthesis and characterization of nanosized pyrochlore oxides,  $\text{Ln}_2\text{Zr}_2\text{O}_7$ .  
A. K. Nikumbh, R. A. Pawar, M. D. Sangale and D. V. Nighot.  
Proc. Solid State Physics 49 (2005)295.
2. Preparation and characterization of anatase  $\text{TiO}_2$  nanopowders.  
A. K. Nikumbh, P. V. Adhyapak, M. D. Sangale and D. V. Nighot.  
J. Chem. Sci. (2007) P 79.
3. Thermal Decomposition Study of Mixed Metal Y-Ba-Cu Oxalate and Tartarates  
Coprecipitation Leading to Superconducting  $\text{YBa}_2\text{Cu}_3\text{O}_{7-\delta}$   
G. S. Gugale, R. A. Pawar, D. V. Nighot and A. K. Nikumbh  
Bionao-frontier, Vol.6 (4) (2013) 191-193
4. Structural, electrical, magnetic and dielectric properties of rare-earth substituted cobalt ferrites nanoparticles synthesized by co-precipitation method  
A. K. Nikumbh, R. A. Pawar, D. V. Nighot, G. S. Gugale, M. D. Sangale, M. B. Khanvilkar, A. V. Nagawade  
J. Magn. Magn. Material, 355 (2014) 201-209

5. Synthesis and properties of cobalt substituted strontium cadmium W- type hexaferrites nanoparticles  
A.K. Nikumbh , S.B. Misal, D.V. Nighot, P.A. Nagawade, N.J. Karale, A.S. Deshpande, G.S. Gugale, A.V. Nagawade  
J. Alloys and Compd., 683 (2016) 346 - 356
6. Study of the thermal decomposition of rare - earth ruthenium dicarboxylato complexes using direct current electrical conductivity measurements  
A. K. Nikumbh and D. V. Nighot  
J. Therm. Anal. (2016) sent for publication.
7. Investigation on solid state pyrolytic decomposition of bimetallic fumarate and tartarate precursors of Co(II), Ni(II) and Zn(II) with manganese  
A. K. Nikumbh and D. V. Nighot  
J. Inorg. Nucl. Chem. (2016) communicated.

## **Symposia**

8. Synthesis and characterization of nanosized pyrochlore oxides  
R. A. Pawar, M. D. Sangale, D. V. Nighot and A. K. Nikumbh  
Proceeding DAE Solid-State Physics Symposium, (2004), (Amritsar), CP21, P.35
9. The formation, structural, electrical and dielectric properties of transition metal stannates.  
D. V. Nighot, D. S. Patil, S. K. Pardeshi and A. K. Nikumbh  
Proc. 24<sup>th</sup> National conference of Indian Council of Chemists (2005) (Ranchi) AO36, P.195
10. Simple chemical route for the preparation of anatase titanium dioxide nanoparticles  
P. V. Adhyapak, M. D. Sangale, D. V. Nighot and A. K. Nikumbh  
Proc. International Symposium on Recent development in Chemistry, Pune University (Feb. 2007) OP.5
11. Effects of Nd<sup>3+</sup>, Sm<sup>3+</sup> and Gd<sup>3+</sup> substitution on cobalt ferrite nanoparticles prepared by the tartarate coprecipitation  
R. A. Pawar, D. V. Nighot, M. D. Sangale, G. S. Gugale and A. K. Nikumbh  
Proc. International Conf. on Emerging Trends in Chem. Sci., Mumbai (2007) P-26
12. Preparation and characterization of anatase TiO<sub>2</sub> nanopowders.  
P. V. Adhyapak, M. D. Sangale, D. V. Nighot and A. K. Nikumbh  
AVISHKAR-2007, Dept. Phys., Pune University, (2007).

13. Structural, Electrical and Dielectric properties of fine-particle Ruthenium pyrochlores,  $R_2Ru_2O_7$ .  
A. K. Nikumbh, R. A. Pawar, D. V. Nighot and M. D. Sangale  
Proc. 5<sup>th</sup> Internat. Conf. Inorg. Mater. Dresden, Germany (2008).
14. Thermal and electrical studies of alkaline-earth-zirconyl tartarates  
D. V. Nighot, V. B. Tadke, R. A. Pawar, P. V. Adhyapak, M. B. Khanvilkar and  
A. K. Nikumbh  
Proc. National seminar on "Advances in Chemistry", Pune University, (March 2008)  
OP-7
15. Synthesis and characterization of ruthenium pyrochlore oxide  
Neeta Karale, D. V. Nighot, R. A. Pawar and A. K. Nikumbh  
Proc. National seminar on "Recent trends in Chemistry", Pune University, (March 2009)  
P-32
16. Preparation and study of physical properties of metal ruthenate nanoparticles.  
R. A. Pawar, Neeta Karale, D. V. Nighot, M. B. Khanvilkar and A. K. Nikumbh  
Proc. International Conf. on Emerging Trends in Chemistry, Jan.2010, Pune, P. 87
17. Studies on thermal decomposition of transition metal (II)-manganese tartarate complexes  
in the solid state  
D. V. Nighot, A. E. Athare and A. K. Nikumbh  
Proc. International Conference on Global Challenges - The Role of Chemistry in giving  
their solutions, June 2011, Bangkok, P.124
18. Thermolysis of mixed metal dicarboxylato complexes in the solid state  
D. V. Nighot, A. E. Athare and A. K. Nikumbh  
Proc. 2<sup>nd</sup> International Conference on Trends in Chemical Sciences Going Beyond  
Frontiers at Kuala Lumpur (Malaysia), June 2012, P.132
19. Direct current electrical conductivity study of the thermal decomposition of copper (II)  
monohydrate and Zn (II) oxalate dehydrate  
A. E. Athare, A. K. Nikumbh and D. V. Nighot  
Proc. 2<sup>nd</sup> International Conference on Emerging Trends in Chemical Sciences at Solapur  
University, Solapur (Maharashtra), November 2012, P.127
20. Thermal Decomposition Study of Mixed Metal Y-Ba-Cu Oxalate and Tartarates  
Coprecipitation Leading to Superconducting  $YBa_2Cu_3O_{7-\delta}$   
G. S. Gugale, R. A. Pawar, D. V. Nighot and A. K. Nikumbh  
Proc. National Conference on Emerging Trends in Lasers and Advanced Materials at  
Department of Physics, M.E.S. Abasaheb Garware College, Pune, (2013), P-191

21. Synthesis, characterization and electrothermal analysis of rare-earth zirconyl fumarate  
D. V. Nighot, R. A. Pawar, G. S. Gugale and A. K. Nikumbh  
Proc. 32<sup>nd</sup> Indian coun. Chem., Dharwad (2013), P-60
22. Studies on thermal decomposition of strontium-iron and barium- iron tartarate in the solid state  
D. V. Nighot and S. P. Danao  
Proc. Research Conference (BCUD, Pune) Innovation – 2014 at B. G. College, Sangavi, Pune, April 2014, P 79
23. Synthesis, Characterization and photocatalysis of rare-earth doped ZnO nanoparticles  
P. A. Nagawade, D. V. Nighot and A. K. Nikumbh  
Proc. 3<sup>rd</sup> International Conference on Chemistry for sustainable development: Indian perspective at Dubai, June 2014, P.39
24. Study of structural and electrical conduction behavior of Ru-based pyrochlores  
Neeta Karale, R. A. Pawar, D. V. Nighot and A. K. Nikumbh  
Proc. National Conf. on Advances in Chemical Sciences with special Reference to Molecular Spectroscopy, Material Sciences & Organic Electronics (NCACS-2014) at Department of Chemistry, F. C. College, Pune, Dec.2014, P. 14
25. Study of electrical and magnetic properties of rare-earth substituted pyrochlore oxides.  
M. B. Khanvilkar, D. V. Nighot, P V Adhyapak and A. K. Nikumbh  
Proc. National Conf. on Frontiers in Chemical and material Sciences at Department of Chemistry, Shivaji University, Kolhapur, Jan.2015, P. 101
26. Synthesis and characterization of M- and W-types Nano-ferrites  
D. V. Nighot  
Proc. Regional Research Conference for Engineering Teachers (BCUD, SPPU Pune) Innovation – 2015 at Padmashree Dr. D. Y. Patil IEMR, Akurdi, Pune, July 2015, P 77
27. Preparation and study of physical properties of rare-earth substituted pyrochlore oxides.  
M. B. Khanvilkar, D. V. Nighot, G. S. Gugale, Neeta Karale and A. K. Nikumbh  
Proc. International Conf. on Functional Eco-friendly Smart Emerging Materials, at PDEA B. G. College, Sangavi, Pune, March 2016, Pune, P. 61

### **Book Published:**

1. A Text Book of Chemistry I  
**D. V. Nighot** and et. al.  
For Second year degree course in Chemical, Polymer, Petroleum and Petrochemical Engineering (Publisher: Nirali Prakashan, Pune, 2004)

2. A Text Book of Chemistry II  
**D. V. Nighot** and et. al.  
For Second year degree course in Chemical, Polymer, Petroleum and Petrochemical Engineering (Publisher: Nirali Prakashan, Pune, 2004)
3. Practical Handbook of Chemistry I  
**D. V. Nighot** and et. al.  
For Second year degree course in Chemical, Polymer, Petroleum and Petrochemical Engineering (Publisher: Nirali Prakashan, Pune, 2004)
4. Practical Handbook of Chemistry II  
**D. V. Nighot** and et. al.  
For Second year degree course in Chemical, Polymer, Petroleum and Petrochemical Engineering (Publisher: Nirali Prakashan, Pune, 2004)
5. A Text Book of Engineering Chemistry  
**D. V. Nighot** and et. al.  
For First year degree course in Engineering (Publisher: Nirali Prakashan, Pune, 2012)

### **Memberships:**

- Life Member: Indian Society for Technical Education (LM /29694)
- Life Member: Indian Council of Chemist (LF/1021)
- Life Member: Marathi Vidnyan Parishad, Pune Division

### **Seminar / Workshop attended:**

1. Making Teaching – Learning Process Effective at AISSMS, College of Engineering, Pune (20<sup>th</sup> to 25<sup>th</sup> Dec.1999)
2. Total Quality Management in Engineering Education at AISSMS, College of Engineering, Pune (15<sup>th</sup> to 27<sup>th</sup> May 2000)
3. Towards Institutional Competitiveness at Symbiosis Institute of Business and Management, Pune (9<sup>th</sup> to 10<sup>th</sup> April, 2004)
4. District level Seminar on “Recent Trends in Catalysis” at Waghire College, Saswad, Pune (16<sup>th</sup> Dec. 2008)
5. International workshop and Symposium on the Synthesis and Characterization of Glass/Glass-ceramics (IWSSCGGC-2010) at Yashada MD Center, Pune (7<sup>th</sup> to 10<sup>th</sup> July, 2010)

6. The National Level Seminar on “Nanoscience and Technology: Frontiers in Science and Technology” at Department of Chemistry and Physics, Baburaoji Gholap College, Sangvi, Pune - 27 (7<sup>th</sup> to 9<sup>th</sup> Feb. 2011)
7. one day work shop on “Next Two Decades of Chemical Sciences & Technology” at National Chemical Laboratory (NCL), Pune (23<sup>rd</sup> September,2011)
8. The National level seminar on “Emerging Trends in Material Science” at S. P. College, Pune (18<sup>th</sup> October, 2011)
9. One day workshop on “Safety in chemistry Laboratory” at Department of Chemistry, Baburaoji Gholap College, Sangvi, Pune - 27 (31<sup>st</sup> December, 2011)
10. One day workshop on “Syllabus Implementation – Engineering Chemistry for First Year Engineering” at D. Y. Patil College of Engineering, Akurdi, Pune (30<sup>th</sup> July,2012)

### **Extracurricular Activities:**

1. Member - Local Management Committee : 2005 to 2010
2. Incharge- College Magazine : 2003 to 2006  
(Shivdarpan 2003 to 2006)
3. Chairman- Printing and Publicity Committee : 2003 to 2006  
(Shivanjali 2003 to 2006)
4. Assistant Director- SE – CAP : May 2007  
(University of Pune Theory Examination)
5. Chairman- Prize Distribution Committee : March 2008  
(Shivanjali 2008)
6. Member- Anti-Ragging Committee : July 2009 to till date
7. Chairman- Prize Distribution Committee : March 2010  
(Shivanjali 2010)
8. Departmental Subject Coordinator : June 2012 to May 2013  
(Engineering Chemistry)
9. Incharge- Cultural Activities : August 2012 to December  
2015
10. Member - FE Admission Committee : Every Year

11. Coordinator- Department First Year Engineering : June 2013 to till date
12. Member Secretary: Grievance Redressal Committee: June 2012 to till date
13. Member- Grievance Redressal Committee : February 2016 to till date

### **Extension Activities:**

1. Participated in “Pune Saksharta Abhiyan” organized by Pune Municipal Corporation, Pune in July 1997
2. Organized a motivational speech of Dr. Anil Awchat, and a voluntary Blood Donation Camp on 29th March, 2004, to create an awareness among the engineering student towards their social responsibilities.
3. Organized a voluntary Blood Donation Camp on 5<sup>th</sup> September, 2012 on the eve of ‘Teachers Day’

### **Research Project Completed:**

Project Title: Synthesis and characterization of M-and W- types Nano-ferrites  
Funding Agency: BCUD, Pune  
Funding Amount: Rs. 2, 00,000.00  
Duration: Two Years (2013- 2016)

(Dr Deepak V Nighot)