

# CURRICULUM VITAE

- **Name:** **Dr. Vinod Namdeo Dhage**  
Assistant Professor, Department of Physics,  
Abasaheb Garware College, Pune -411 004.
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## EDUCATIONAL QUALIFICATION

- **Ph.D. (Physics) 2011.**  
Dr. Babasaheb Ambedkar Marathwada University, Aurangabad.  
The topic entitled as “**Synthesis, Structural, Electrical and Magnetic Characterization of Hexagonal Ferrite**”
- **B.Ed. (2008)**  
Dr. Babasaheb Ambedkar Marathwada University,  
Aurangabad,  
Grade: First Class.
- **M.Sc (Physics) (2007)**  
Department of Physics,  
Dr. Babasaheb Ambedkar Marathwada University,  
Aurangabad,  
Grade: First Class with distinction (**III<sup>rd</sup> rank in University**)
- **B.Sc. (Phys., Chem., Math.) (2005)**  
Dr. Babasaheb Ambedkar Marathwada University,  
Aurangabad,  
Grade: First Class.
- **H.S.C. (2000)**  
Latur Divisional Board,  
Grade: Second Class.
- **S.S.C. (1998)**  
Aurangabad Divisional Board,  
Grade: First Class.

## Teaching Experience:

Working as Full Time Assistant Professor in Physics at Maharashtra Education Society's Abasaheb Garware College, Pune since 18<sup>th</sup> November 2011.

## RESEARCH INTEREST

- Magnetic Nanomaterials
- Ferrite thin Films

## PAPERS PUBLISHED IN NATIONAL/INTERNATIONAL JOURNALS

- 1. Structural and magnetic behaviour of aluminium doped barium hexaferrite nanoparticles synthesized by solution combustion technique**  
Vinod N. Dhage, M. L. Mane, A. P. Keche, C. T. Birajdar, K. M. Jadhav  
Physica B: Condensed matter, 406 (2010) 789 - 794.
- 2. Influence of chromium substitution on structural and magnetic properties of BaFe<sub>12</sub>O<sub>19</sub> powder prepared by sol-gel auto combustion method**  
Vinod N. Dhage, M. L. Mane, M. K. Babrekar, C. M. Kale, K. M. Jadhav  
J. Alloys and compounds, 509 (2011) 4394-4398
- 3. Effect of Fuel ratio on the structural and magnetic properties of hexagonal ferrite.**  
Vinod N. Dhage, M.K. Babrekar, S. D. More, U. B. Dindore, K.M.Jadhav.  
Bionano front NCANDT (spl), 1 (2010) 226.
- 4. Influence of laser irradiation on ac impedance and dielectric properties of lithium ferrite**  
Maheshkumar L. Mane, V. N. Dhage, K. Ranganathan, S. M. Oak, K. M. Jadhav  
Radiation Effects and Defects in Solids 166 (6)(2011) 435-444.
- 5. Synthesis, structural and magnetic properties of magnesium ferrite nano-particles**  
C. T. Birajdar, M. L. Mane, V. N. Dhage, M. K. Babrekar, S. P. Jadhav, K. M. Jadhav,  
Bionano front NCANDT (spl), (2010) 176.
- 6. Synthesis and structural properties of nanosized cobalt ferrite thin film grown by spray pyrolysis technique**  
M. K. Babrerkar, M. L. Mane, V. N. Dhage, S. J. Shukla, K. M. Jadhav  
Bionano front ICLAM (spl) (2010) 108.
- 7. Effect of Nd:YAG laser irradiation on structural, cation distribution and magnetic properties of nanocrystalline CoFe<sub>2</sub>O<sub>4</sub>**  
Maheshkumar L. Mane, Vinod N. Dhage, R. Sundar, K. Ranganathan, S. M. Oak,  
D. R. Shengule, K. M. Jadhav  
Journal of applied surface science 257 (2011) 8511-8517.
- 8. Frequency, temperature and In<sup>3+</sup> dependent electrical conduction in NiFe<sub>2</sub>O<sub>4</sub> powder.**  
Sagar E. Shirsath , , B.G. Toksha, Maheshkumar L. Mane, V.N. Dhage, D.R. Shengule,  
K.M. Jadhav  
J. Powder technology 212 (1) (2011) 218-223.

9. **Modifications in structural, cation distribution and magnetic properties of 60Co gammairradiated Li-ferrite**  
Maheshkumar L. Mane, Sagar E. Shirsath, **Vinod N. Dhage**, K. M. Jadhav  
J. Nuclear instrumentation and method in physics research B 269 (2011)2026-2031.
10. **Structural and Magnetic Characterization of BaFe<sub>12</sub>O<sub>19</sub> Nanoparticles.**  
**Vinod N. Dhage**, M. L. Mane, S. E. Shirsath, S.P. Jadhav, R.P. Gunjal, K. M. Jadhav  
Proceeding of the DAE-Solid State Physics Symposium 55 (2010).
11. **Effect of Gamma Irradiation on the Physical Properties of Nanocrystalline Li<sub>0.5</sub>Fe<sub>2.5</sub>O<sub>4</sub>**  
Maheshkumar L. Mane, **V. N. Dhage**, P. S. Aghav, M. K. Babrekar, K. M. Jadhav  
Proceeding of the DAE-Solid State Physics Symposium 55 (2010).
12. **Effect of Al<sup>3+</sup>-Cr<sup>3+</sup> Substitution on Structural, Cation Distribution and Magnetic Properties of MgFe<sub>2</sub>O<sub>4</sub> Prepared by Chemical Co-precipitation Method**  
S. P. Jadhav, J. B. Mote, **V. N. Dhage**, M. L. Mane, N. D. Shinde.  
Proceeding of the DAE-Solid State Physics Symposium 55 (2010).
13. **Effect of aluminium substitution on the structural and magnetic properties of cobalt ferrite synthesized by sol-gel auto combustion processes.**  
P.S. Aghav, **Vinod N. Dhage**, Maheshkumar L. Mane, D.R. Shengule, R.G. Dorik, K.M. Jadhav.  
Physica B : Condensed Matter, 406 (2011) 4350-4354.
14. **Nd:YAG laser irradiation effects on electrical properties of polycrystalline Li<sub>0.5</sub>Fe<sub>2.5</sub>O<sub>4</sub>**  
Maheshkumar L. Mane, **V.N. Dhage**, Sagar E. Shirsath, R. Sunder, K. Ranganathan, S.M. Oak, K.M. Jadhav.  
J. Alloys and compounds 511(1) (2012 ) 31-34 .
15. **Nd: YAG laser irradiation effects on the structural and magnetic properties of polycrystalline cobalt ferrite.**  
Maheshkumar L. Mane, **V.N. Dhage**, Sagar E. Shirsath, R. Sunder, K. Ranganathan, S.M. Oak, K.M. Jadhav.  
J. Molecular Structure, 1035 (2013) 27-30.
16. **Structural and Magnetic properties of indium substituted cobalt ferrite nanoparticles synthesized by sol-gel auto combustion technique.**  
A.B. Shinde, **V.N. Dhage**, K.M. Jadhav, Inter. J. Eng. Adv. Tech. 2(2013) 413-416.
17. **Structural properties and dielectric behavior in piezomagnetic and piezoelectric rich composites.**  
S.S. Sawant, P.K. Gaikwad, **V.N. Dhage**  
J. Bionano frontier Vol.6 (4) (2013)91-94.

- 18. Synthesis and characterizations of Cr<sup>3+</sup> substituted barium hexaferrite nanoparticles.**  
 Vinod.N. Dhage, M.L. Mane, S.S. Sawant, A.B. Shinde, K.M. Jadhav  
 J. Bionano frontier Vol.6 (4) (2013)201-204.
- 19. Synthesis and characterizations of Zn<sup>2+</sup>-Ti<sup>4+</sup> co-substituted magnesium ferrite.**  
 S.V. Kshirsagar, Vinod N.Dhage, N.N. Waghule, S.J.Shukla, K.M.Jadhav  
 J. Bionano frontier Vol.6 (4) (2013) 174-177.
- 20. Influence of Mn-Zn co substitution on the structural and magnetic properties of magnesium ferrite.**  
 S.V. Kshirsagar, V.N. Dhage, S.J. Shukla, K.M. Jadhav,  
 Int. J. Eng. Adv. Tech. 2 (5) (2013) 451-454.
- 21. Synthesis, Characterization and Magnetic Properties of Cobalt Ferrite Nanoparticles Prepared by Glycine Assisted Sol-Gel Auto-Combustion Technique**  
 A.B.Shinde,G.H.Kale,V.N.Dhage,P.K.Gaikwad,K.M.Jadhav,  
 Solid State Phenomena 209 (2014) 31-34
- 22. Electrical and dielectric properties of chromium substituted barium hexaferrites,**  
 Vinod N.Dhage, M.L.Mane,S.M. Rathod, A.B.Shinde, K.M.Jadhav,Research Journey-  
 International Multidisciplinary Journal,Spl.Issue 168 B, March 2019 ,93-96.

#### PAPERS PUBLISHED IN NATIONAL/INTERNATIONAL CONFERENCES

- 1] Role of Zn substitution in the matrix of CoFe<sub>2</sub>O<sub>4</sub> nanoparticles.**  
 S.S. Jadhav, S. M. Patange, V. N. Dhage, A. B. Kadam, K.M.Jadhav,  
 International conference on “Magnetic materials and their applications for 21<sup>st</sup> Century” at NPL, Delhi, Oct-21-23, 2008.
- 2] Magnetic properties of Cd substituted Nickel ferrite prepared by wet chemical co-precipitation method.**  
 S.P. Jadhav, V.N. Dhage, V.S. Shinde, B.G. Toksha, S.S. Jadhav, K.M. Jadhav  
 2<sup>nd</sup> DAE-BRNS International Symposium on Materials Chemistry, held at BARC, Mumbai, during 2-6 December, 2008.
- 3] Structural and magnetic studies of nanosized nickel ferrite prepared by sol-gel method.**  
 A.P. Keche, V. N. Dhage, M.L. Mane, B. G. Toksha, K.M.Jadhav  
 53<sup>rd</sup>DAE-Solid State Physics Symposium held at BARC, Mumbai, during 16-20 December, 2008.
- 4] Laser irradiation induced modifications in structural and magnetic behaviour of nanocrystalline lithium ferrite**  
 Maheshkumar L. Mane, V. N. Dhage, M. K. Babrekar, M. R. Patil, K. M. Jadhav

- “UGC sponsored One Day State Level Seminars on Nanoscience and Nanotechnology Present Scenario” Organized by Department of physics, Karmaveer mamasahab Jagdale Mahavidyalaya, Washi on 21<sup>st</sup> November, 2009.
- 5] **Electrical and optical characterization of NiFe<sub>2</sub>O<sub>4</sub> thin film prepared by spray pyrolysis technique.**  
M. K. Babrekar, **V. N. Dhage**, M. L. Mane, A. P. Keche, S.M. Chavan, K. M. Jadhav  
National Seminar on Advanced Materials (NSAM-2010)", Kolhapur.
- 6] **Investigations of Magnetic Properties of Nanosized Cobalt Ferrite**  
P. S. Aghav, V. Surase, **V. N. Dhage**, S. S. Sawant, K. M. Jadhav, R. G. Dorik.  
“97<sup>th</sup> Indian Science Congress” held at University of Kerala, Thiruvananthapuram.  
from 3-7 January, 2010.
- 7] **Some physical properties of Co-Zn ferrite.**  
V. G. Patil, M. K. Babrekar, **V. N. Dhage**, B. G. Toksha, S. D. More, K. M. Jadhav.  
“97<sup>th</sup> Indian Science Congress” held at University of Kerala, Thiruvananthapuram,  
from 3-7 January 2010.
- 8] **“Effect of Ti<sup>4+</sup> substitution on structural and electrical properties of nickel ferrite”**  
C. M. Kale, S. D. More, R. B. Kawade, **V.N. Dhage**, S.J.Shukla, K. M. Jadhav  
National Conference on Material science trends and future 2010 (NCMS – 2010)  
organized by department of Physics, Vidhyabharti Mahavidyalaya, Amravati.
- 9] **Structural and Magnetic properties of BaFe<sub>12</sub>O<sub>19</sub> prepared by sol-gel auto-combustion technique,**  
**Vinod N. Dhage**, M. L. Mane, M. K. Babrekar, U.B. Dindore, K. M. Jadhav  
International Conference on “Recent Trends in Nano and Bio-Sciences” Organized by  
the department of Physics, P.G. college of science, Saifabad, Osmania university,  
Hyderabad from 24-26 February, 2010.
- 10] **Effect of Cr<sup>3+</sup> substitution on the physical properties of barium hexaferrite nanoparticles.”**  
**Vinod N. Dhage**, A.B. Shinde, S.S Sawant, V.K. Barote, A.A. Pandit, K.M. Jadhav,  
1<sup>st</sup> International conference on physics of materials and materials based device  
fabrication, held in Department of physics, Shivaji University, Kolhapur (India) during  
17<sup>th</sup> to 19<sup>th</sup> January, 2012.
- 11] **Synthesis, Characterization, electrical and dielectric properties of cobalt ferrite nanoparticles obtained by sol-gel auto combustion technique.**  
A.B. Shinde, **Vinod N. Dhage**, P.S. Aghav, A.A. Pandit, K.M. Jadhav.  
“Nanocon 012” II International Conference on nanotechnology- Innovative

Materials, Processes, Products and applications organized by Bharati Vidyapeeth University, Pune, on 18<sup>th</sup>, 19<sup>th</sup> October 2012.

**12] Synthesis and characterization of Al substituted NiCuZn ferrite nano-crystalline particles by sol-gel auto combustion technique.**

S.M. Rathod, A.B. Shinde, **V.N. Dhage**, S.S. Jagtap, S.M. Kasabe, P.D.Sonwane, “Nanocon 012” II International Conference on nanotechnology- Innovative Materials, Processes, Products and applications organized by Bharati Vidyapeeth University, Pune, on 18<sup>th</sup>, 19<sup>th</sup> October, 2012.

**13] Synthesis and Characterizations of In<sup>3+</sup> Substituted cobalt ferrite nanoparticles.**

A.B. Shinde, **V.N. Dhage**, S.M. Rathod, K.M. Jadhav, International workshop on nanotechnology and advanced functional materials organised by National chemical labrotary, Pune during 24-25<sup>th</sup> July, 2013.

**14] Effect of Al<sup>3+</sup> substitution on the dielectric properties of barium hexaferrite nanoparticles.**

**Vinod N.Dhage**, M.L.Mane, A.B.Shinde, S.M.Rathod, B.J.Patil, K.M.Jadhav, 8<sup>th</sup> International conference on Advanced Materials Development and Performance, held from July 11 to 15, 2017. Organised by Department of Physics, Savitribai Phule Pune University, Pune.

**15] Aluminum substitution effect on the properties of barium hexaferrite by Sol-gel auto-combustion technique.**

**Vinod N.Dhage**, M.L.Mane, K.M. Jadhav, One Day National Conference Recent trends and Development in Material Science – 2017, held on 16<sup>th</sup> December, 2017 Organised by Indraraj Arts, Commerce and Science College, Sillod, Aurangabad.

**16] Effect of Pb Substitution on the Magnetic and Electrical properties of Cobalt ferrite nanoparticle prepared Via Sol-gel route.**

4<sup>th</sup> International Conference NANOCON018 Nanotechnology : Applications, Advances and Innovations, 25-26<sup>th</sup> October, 2018 Organised by Barti Vidyapeeth (Deemed University) College of Engineering, Pune.

**17] Electrical and dielectric properties of chromium substituted barium hexaferrites,**

**Vinod N.Dhage**, M.L.Mane, S.M. Rathod, A.B.Shinde, K.M.Jadhav, National conference on Recent trends in Materials Science and Nanotechnology (RTMSN-2019) on 17<sup>th</sup> March 2019, Organised by Department of Physics, Anandrao Dhonde Alias Babaji College, Kada, Dist. Beed.

**18] Influence of Pb<sup>2+</sup> substitution on the Structural and Magnetic Properties of Cobalt NanoFerrite Particles. Vinod N.Dhage, S.M.Rathod, 3<sup>rd</sup> International Conference on recent trends in image Processing and Pattern recognition (RTIP2R-2020) held during**

3<sup>rd</sup>-4<sup>th</sup> January, 2020 at Department of Computer Science and Information technology, Dr. Babasaheb Ambedkar Marathwada University, Aurangabad.

#### CONFERENCES /WORKSHOP/ SEMINARS ATTENDED

- 1] **“National Conference on Current Trends in Material Research for Advanced Technology (NCMRAT–2007)”**, Department of Physics Dr. B.A.M.U. Aurangabad On 29-31<sup>st</sup> Jan.2007.
- 2] **“Two Day National Seminar on Recent Advances in nano-sciences”**, Department of chemistry university Sub-centre, Osmanabad, 23-24<sup>th</sup> Feb-2008.
- 3] **“67<sup>th</sup> BARNS-IANCAS National Workshop on Radiochemistry and Application of Radioisotopes”**, organised by department of Physics Dr. B.A.M.U. Aurangabad in collaboration with IANCAS during 11<sup>th</sup> -18<sup>th</sup> Aug-2008.
- 4] **“National seminar on Recent techniques of material characterization”**  
S.S.G.M. College Kopergaon, Ahmednagar-during 29-30<sup>th</sup> January 2010.
- 5] **Science Academies lecture workshop on “Probing electron states in molecules and molecular Materials”** organised by Department of Chemistry, Dr. B.A. M. University, Aurangabad, during 21<sup>st</sup>-25<sup>th</sup> October, 2010.
- 6] **Actively Participated in One day workshop on “Implementation of credit system for PG courses in colleges affiliated to university of Pune”**, organised by Internal Quality Assurance Cell (IQAC), Abasaheb Garware college, Pune, on 13<sup>th</sup> February, 2013.

#### ACHIEVEMENTS AND AWARDS

- **‘Certificate of Merit’** for securing third rank amongst the successful candidates at M.Sc.(Physics), June–2007, Dr. Babasaheb Ambedkar Marathwada University, Aurangabad.
- Award of **“Golden Jubilee University Junior Research Fellowship”** for research by Dr. Babasaheb Ambedkar Marathwada University, Aurangabad For the year Dec. 2008 - Aug. 2010.
- **Best Paper Presentation Award** – (Smart Materials for renewable energy and sensor technology) at **3<sup>rd</sup> International Conference** on recent trends in image Processing and Pattern recognition (RTIP2R-2020) held during 3<sup>rd</sup>-4<sup>th</sup> January, 2020 at Department of Computer Science and Information technology, Dr. Babasaheb Ambedkar Marathwada University, Aurangabad.

#### EXTRA CURRICULAR ACTIVITY

- Participated in the **National Science Day -2007, “More crop per drop” programme** organized by Dr. Babasaheb Ambedkar Marathwada University, Aurangabad during 24-28<sup>th</sup> February 2007.
- Worked as **organizing committee member** at National Conference on Emerging Trends in LASERS and Advanced Materials ( NCETLAM -2013) Organized by Department of Physics, MES Abasaheb Garware College, Pune , 28-29<sup>th</sup> October 2013.
- Worked as **organizing committee member** at International Conference on Globalization and Humanities organized by MES Abasaheb Garware College,Pune, Funded under Quality Improvement Program- SPPU, 14<sup>th</sup>-15<sup>th</sup> March, 2018.
- **Life Member** of Indian Association of Physics Teachers,India.

Dr. Vinod Namdeo Dhage.