

BIODATA

NAME : Prof. Dada Ramnath Shengule
DESIGNATION : Professor
DEPARTMENT : Physics
QUALIFICATION : M.Sc., Ph.D
E-MAIL : drShengule@vivekanandcollege.edu.in

TEACHING EXPERIENCE : 28 years

RESEARCH EXPERIENCE : 20 years

RESEARCH ARTICLES PUBLISHED : 44

- 1] Effect of 100 kGy γ -irradiation on the structural, electrical and magnetic properties of CoFe₂O₄ NPs
A.V. Raut a, *, D.V. Kurmude b, S.A. Jadhav c, **D.R. Shengule** a, K.M. Jadhav d
Journal of Alloys and Compounds 676 (2016) 326-336
- 2] Effect of aluminium substitution on the structural and magnetic properties of cobalt ferrite synthesized by sol-gel auto combustion process
P.S. Aghav a, Vinod N.Dhage b, Mahesh kumar L.Mane b, **D.R.Shengule** a,
R.G.Dorik a, K.M. Jadhav
Physica B 406 (2011) 4350–4354
- 3] morphological, cation distribution and magnetic properties of nanocrystalline CoFe₂O₄
Maheshkumar L. Mane a, , , Vinod N. Dhage a, R. Sundar b, K. Ranganathan b, S.M. Oak b, **D.R. Shengule**, K.M. Jadhav
Applied Surface Science Volume 257, Issue 20, 1 August 2011, Pages 8511–8517
- 4] Structural and electric properties of zinc substituted NiFe₂O₄ nanoparticles prepared by coprecipitation method
Santosh S. Jadhav, Sagar E. Shirsath, B.G. Toksha, S.M. Patange, **D.R. Shengule**, K.M. Jadhav
Physica B: Condensed Matter, Volume 405, Issue 12, Pages 26102614
- 5] Measurement of mass and linear attenuation coefficients of gamma rays of (Au) for 360, 511, 662, 1170, 1280, 1330 KeV photons
Tupe Vandana A. Pawar P.P.; Jadhav, K.M, **D.R.Shengule**
Proceedings of the DAE-BRNS symposium on nuclear and radiochemistry
- 6] Frequency, temperature and In³⁺ dependent electrical conduction in NiFe₂O₄ powder

- Sagar E. Shirsath a,b,*, B.G. Toksha b, Maheshkumar L. Mane b, V.N. Dhage b, **D.R. Shengule** a, K.M. Jadhav b
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- 7] Gamma Ray Photon Interaction Studies of Zn in the Energy Range 360-1330 keV photons.
Vandana A. Tupe¹, P. P. Pawar², **D.R. Shengule** and K M Jadhav²
Archives of Applied Science Research, 2012, 4 (5):2191-2196
- 8] Ion-solvent interactions studies in aqueous manganous chloride solution by ultrasonic velocity measurement at different temperatures.
B. R Shinde, Suresh S. Jadhav, Sangita U. Shinde, **D.R. Shengule**, K. M. Jadhav
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- 9] Acoustical study of aqueous manganese chloride solutions at varying temperatures by ultrasonic technique
B. R Shinde., Suresh S. Jadhav, Sangita U. Shinde, **D.R. Shengule** and K. M. Jadhav
J. Chem. Pharm. Res., 2011, 3(3):432-438
- 10] Measurements of mass and linear attenuation coefficients of γ - rays of photons for Ni in the energy range 360-1330 keV
Vandana A. Tupe¹, P. P. Pawar², **D.R. Shengule** and K. M. Jadhav²
Journal of Chemical and Pharmaceutical Research, 2012, 4(8):4032-4037
- 11] Studies on Mass & linear attenuation coefficients of γ - rays of photons for Ag in the energy range 360-1330 keV
Vandana A. Tupe¹, P. P. Pawar², **D.R. Shengule** and K M Jadhav²
Journal of Chemical and Pharmaceutical Research, 2012, 4(9):4185-4191
- 12] X-Ray Diffraction and Cation Distribution Studies in Zinc-Substituted Nickel Ferrite Nanoparticles
D.V. Kurmude, R.S. Barkule, A.V. Raut, **D.R. Shengule**, K.M. Jadhav
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- 13] Magnetic and dielectric properties of $Mg_{1+x}Mn_xFe_{2-2x}O_4$ ferrite system
A.A. Pandit A.R. Shitre **D.R. Shengule** K.M. Jadhav
Journal of Materials Science 12/2004; 40(2):423428. DOI: 10.1007/s108530056099x
- 14] Magnetic and electrical properties of lanthanum substituted yttrium iron garnets
S. R. Nimbore, **D.R. Shengule**, S. J. Shukla, G. K. Bichile, K. M. Jadhav
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V. D. Murumkar, **D.R. Shengule**, G. K. Bichile, K. M. Jadhav
Hyperfine Interactions July 2009, Volume 192, Issue 1, pp 93-100
- 17] Effect of zinc substitution on particle size, saturation magnetization

and coercivity of nickel ferrite nanoparticles

*1D. V. Kurmude, 2A. V. Raut, 1 S. R. Godse, 2**D.R. Shengule**

IJARBAS, Vol.2 Issue 1 July 2015 ISSN 2394-4072

- 18] Electrical behaviour of x (CoMn_{0.2}Zn_{0.2}Fe_{1.6}O₄) + $1-x$ (BaTiO₃) composites
1*N.N. Waghule, 2R.G. Vidhate, 3J.M. Bhandari, 1R.B. Kavade, 4**D.R. Shengule**
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- 20] "Effect of gamma irradiation on the structural and magnetic properties of Co-Zn spinel ferrite nanoparticles"
A.V. Raut, D.V. Kurmude, **D.R. Shengule**, K.M. Jadhav
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- 21] "Influence of gamma radiation on the dc-electrical resistivity of cobalt ferrite nanoparticles"
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- 22] "Synthesis, structural investigation and magnetic properties of Zn²⁺ substituted cobalt ferrite nanoparticle prepared by sol-gel auto-combustion technique"
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Journal of Magnetism and Magnetic Materials 358 (2014) 87–92.
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- 23] "Influence of gamma irradiation on the structural, electric and magnetic properties of Co_{1-x}Zn_xFe₂O₄ spinel ferrite nanoparticles"
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- 24] "Effect of 100 kGy γ -irradiation on the structural, electrical and magnetic properties of CoFe₂O₄ NPs"
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- 25] Structural and magnetic characterization of 100-kGy Co₆₀ γ -ray-irradiated ZnFe₂O₄ NPs by XRD, W-H plot and ESR.

- A.V. Raut, S.A. Jadhav, **D.R. Shengule** & K.M. Jadhav.
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- 26] Structural, Electrical, Dielectric and Magnetic Properties of Al³⁺ Substituted Ni-Zn Ferrite.
 A.V. Raut, P. P. Khirade, Ashok Humbe, S.A. Jadhav, **D.R. Shengule**.
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- 27] “X-Ray Diffraction and Cation Distribution Studies in Zinc-Substituted Nickel Ferrite Nanoparticles”
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 Ram S. Barkule, A.V. Raut, R.R. Bhosle, D.V. Kurmude, **D.R. Shengule**, and
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- 30] “Structural and electrical conductivity studies in nickel ferrite nanoparticles” R.S.
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 Solid State Phenomena Vol. 209 (2014) pp 177-181
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 Publisher: Scintific.net Reinhardstrasse 18, CH-8008 Zurich, Switzerland
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- 31] “Effect of zinc substitution on particle size, saturation magnetization and coercivity of nickel ferrite nanoparticles”
 D.V. Kurmude, A.V. Raut, S.R. Godse, **D.R. Shengule**.
 International Journal of Advanced Research in Basic and Applied Science ISSN:
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- 32] Structural, Electrical, Dielectric, and Magnetic Properties of Cd²⁺ Substituted Nickel Ferrite Nanoparticles
 B.H. Devmunde, A.V. Raut, S.D. Birajdar, S.J. Shukla, **D.R. Shengule**, K.M.

Jadhav. Journal of Nanoparticles Volume 2016, Article ID 4709687, 8 pages

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Maheshkumar L. Manea,*, Vinod N. Dhagea, R. Sundarb, K. Ranganathanb, S.M. Oakb, **D.R. Shengulea**, K.M. Jadhava
Applied Surface Science 257 (2011) 8511– 8517
- 34] Structural and dielectric properties of NiZn ferrite nano particles prepared by coprecipitation method
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- 35] Studies on attenuation cross sections of several elements at 1.280 and 1.330 KeV.
Vandana A. Tupe1, P.P.Pawar2, **D.R. Shengule** & K M Jadhav4
Journal of Applicable Chemistry, 2012, 1 (4):571-574
- 36] Studies on total attenuation cross sections of several elements at 662 and 1170 KeV.
Vandana A. Tupe1 , P.P.Pawar2, **D.R. Shengule** and K M Jadhav4
Archives of Physics Research, 2012, 3 (5):363-366
- 37] Synthesis, structural, electrical and dielectric properties of Zn–Zr doped strontium hexaferrite nanoparticles
Ravil R. Bhosale • R. S. Barkule • **D.R. Shengule** • K. M. Jadhav
J Mater Sci: Mater Electron (2013) 24:3101–3107
- 38] Thermoelectric power measurement of $x (\text{CoMn}_{0.2}\text{Zn}_{0.2}\text{Fe}_{1.6}\text{O}_4) + (1-x) \text{BaTiO}_3$ composite.
N.N. Waghule, R.B. Kawade, A.V. Dongare, **D.R. Shengule**, K.M. Jadhav
International Journal of Advanced Research in Basic and Applied Science (IJARBAS) Vol. 3 Spl issue. 85 ISSN: 2394-4072
- 39] Structural and electrical properties of magnetoelectrci 25% $(\text{CoMn}_{0.2}\text{Zn}_{0.2}\text{Fe}_{1.6}\text{O}_4) + 75\% \text{BaTiO}_3$ composite
N.N. Waghule, **D.R. Shengule**, K.M. Jadhav
Internation research journal of multidisciplinary studies Vol. IV Spl issue1
ISSN: 2454-8499
- 40] The fourier transforms infrared (FTIR) spectroscopy study of $x \text{CoMn}_{0.2}\text{Zn}_{0.2}\text{Fe}_{1.6}\text{O}_4 + (1-x) \text{BaTiO}_3$ magnetoelectric composite
N.N. Waghule, **D.R. Shengule**, R.G. Vidhate, K.M. Jadhav
Research Journey International multidisciplinary E-research journal Spl. issue 168 (3)
ISSN: 2348-7143 UGC approved no. 40705
- 41] Dielectric behaviour and magnetoelectric effect in $x (\text{CoMn}_{0.2}\text{Zn}_{0.2}\text{Fe}_{1.6}\text{O}_4) + (1-x) \text{BaTiO}_3$ composites

N.N. Waghule, R.G. Vidhate, R.B. Kavade, **D.R. Shengule**, K.M. Jadhav

State level seminar on nanobasics and its applications

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42] Effect of V₂O₅ additives on electrical and dielectrical properties of Ni-Zn ferrite

M.S. Patil, **D.R. Shengule**, K.M. Jadhav

ISSN: (ONLINE) 2393-8021 (PRINT) 2394-1588

IARJSET Vol. 4 Issue. 5 PP 58-62

43] Effect of V₂O₅ additives on structural and magnetic properties of Ni-Zn ferrite

M.S. Patil, **D.R. Shengule**, K.M. Jadhav

ISSN: 2348-7968

IJISSET Vol. 4 Issue. 3 PP 91-95

RESEARCH PAPER PRESENTED : 07

1] D.C. Resistivity & Thermoelectric Power Studies Of Zn Substituted

Co_{1.5}Mn_{0.5}Fe₂O₄ System

Shivaji University Kolhapur Feb 1999

2] Electrical and thermoelectric power studies of tetra valent Mn Substituted Co - Zn Ferrite

NCMRAT DEPT OF Physics DR.B.A.M.U. A'BAD 2007

3] The effect of quenching on structural & magnetic properties of copper ferrite nano particles.

AMST-2012 Dept Of Physics School Of Sciences Gujrat University

Ahemadabad 2011-12

4] Synthesis, X-ray diffraction and cation distribution Studies on cobalt ferrite nano crystals.

ICFMNCC-2015 K.B.P COLLEGE, PANDHARPUR

5] Influence of gamma irradiation on the structural, electrical and magnetic properties of Co_{1-x}Zn_xFe₂O₄ spinel ferrite nanoparticles

NCMS-2014 K.S.K.K. COLLEGE BEED

6] Effect of samarium doping in mixed Ni-Zn spinnel ferrite.

NCINMT-2017 DEPT. PHY. and CHEM. RAJESHREE SHAU COLLEGE, PATHRI

7] Quenching effect on magnetic properties of Co-Ferrite nano particles.

NCRTDMS-2017 INDRARAJ COLLEGE, SILLOD

RESEARCH STUDENTS (Ph.D) : 1) Registered - 00
2) Thesis submitted -00
3) **Awarded -08**

MEMBERSHIP OF PROFESSIONAL BODIES: 02

- 1] Life Member- BAMUCTO
- 2] Life Member- Indian Association of Physics Teachers

(Prof. Dada Ramnath Shengule)