

Appendix-I

BIO-DATA



Name : Dr. Vikas Laxman Mathe

Designation : Assistant professor

Address for Correspondence : Department of Physics,
University of Pune,
Pune 411 007 India .
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Date Of Birth : 11/6/1977

Educational Qualification : M. Sc.; Ph. D.

Research Experience

Post Held	Name of the organisation & Supervisor	Period From To	Service in years/months
1. CSIR Senior Research Fellow (Direct Selection)	Physics Department, Shivaji University, Kolhapur. Supervisor: Dr. C. D. Lokhande	Jan. 2003- July 2003	6 months
2. Dr. K. S. Krishnan Research Associate (KSKRA)	Novel Materials & Structural Chemistry Division, Bhabha Atomic Research Center, Mumbai. Supervisor: Dr. S. K. Kulshreshtha.	Aug. 2003 to March 2004.	8 months
BOYSCAST fellow	Department of Physics, Oakland University, Rochester, Michigan, USA. 48309-4401. Supervisor: Prof. G. Srinivasan	May 2007-April 2008	One year
Lecturer	Department of Physics, University of Pune, Pune 07, (M. S.), India.	Since April 2004	

Teaching Experience :

Name of the Institute	Designation	Period
University of Pune, Pune, M. S., India.	Lecturer	Presently working since April 2004

Present Research Projects

i) Title:- “Magnetolectric effect in piezomagnetic-piezoelectric composites”
(Project started from Feb. 2006)

P. I. :- Dr. V. L. Mathe,
Co P.I. :- Prof. S. I. Patil,
Co P. I. :- Prof. S. V. Bhoraskar,
Funding agency :- DST, New Delhi.

ii) Title :- Synthesis, Characterization and magneto-transport properties of
nano-crystalline Ni-Co ferrites’ (Project started from May 2006)

P. I. :- Dr. V. L. Mathe,
Co- P. I. :- Prof. S. I. Patil

Funding agency : UGC, New Delhi.

iii) Title:- “ Multifunctional $\text{Bi}_{1-x}\text{RE}_x\text{FeO}_3$: synthesis, Characterization and
magnetolectric studies” (Project started from April 2006)

Submitted to DST, New Delhi, under ‘*Fast Track Scheme for Young Scientists*’
by Dr. V. L. Mathe

iv)Title:- ‘Neutron diffraction studies on $\text{Bi}_{1-x}\text{Nd}_x\text{FeO}_3$ Magnetolectrics’ (Project started
from Jan. 2006).

P. I. :- Dr. V. L. Mathe,
Co- P. I. :- Prof. S. V. Bhoraskar.

Funding agency :- UGC-DAE-CSR, Mumbai.

v) Title:- Study of nano materials for camouflaging effects in the IR range of 3-5 μm and
8-14 μm range. (Project Completed.)

P. I. :- Prof. S. V. Bhoraskar,
Co. P. I. :- Dr. Vikas L. Mathe

Funding agency :- DRDO

vi) Title:- Synthesis of nano particles of metal & metal oxide using transfer dark thermal plasma. (Project Completed.)

P. I. :- Prof. S. V. Bhoraskar,
Co. P. I. :- Dr. Vikas L. Mathe

Funding agency :- BRNS, Mumbai

vii) Title “ Synthesis of nano energetic materials and investigation on their oxidation behavior” (Project started from Dec. 2006)

P. I. :- Prof. S. V. Bhoraskar,
P. I. :- Dr. V. L. Mathe
Funding agency : HEMRL, Pune.

viii) Title: Synthesis, charaterisation of nanocrystalline oxides using plasma technique and their sensor application.((Project Completed.)

P. I. :- Dr. V. L. Mathe,
P. I. :- Prof. S. V. Bhoraskar
Funding agency : University of Pune, Pune -07.

ix) “Synthesis of nanostructured ternary oxides and magnetic materials using multi-torch transferred DC thermal plasma route” (Project Started from March 2009).

P. I. Dr. V. L. Mathe
Co. P. I. : Prof. S. V. Bhoraskar

Funding agency: BRNS, Mumbai.

x) Feasibility studies on passivation of nano aluminium (Project Started from Sept. 2010)

P. I. Dr. V. L. Mathe
Co. P. I. : Prof. S. V. Bhoraskar

Funding agency: HEMRL, Pune.

Fellowships and Awards:

- 1) CSIR – Senior Research Fellow: 2001
- 2) Tata Institute of Fundamental Research (TIFR) Visiting Scientist : 2003 (Selected).
- 3) Dr. K. S. Krishnan Research Associate, BARC, Mumbai : 2003.
- 4) ‘DST award to young researchers to attend The meeting of Nobel Laureates and Students in Physics’ held in Lindau, Germany during June 28 – July 2, 2004.
- 5) DST Fast track fellow: 2006-09
- 6) DST BOYSCAST fellow 2007-08 to work at ‘Department of Physics, Oakland University, Rochester (MI), USA.

Experimental facilities available:

Facilities in our group:

- i) Synthesis of nanomaterials using chemical methods.
- ii) Synthesis of nano metals and metal oxides using high temperature Thermal Plasma set up.
- iii) Work function measurements set up.
- iv) Measurements of photo catalytic activity set up.
- v) ECR Plasma for polymer surface engineering.
- vi) LCR meter (42 Hz – 5 MHz) at and well above room temperature
- vii) Ferroelectric hysteresis (at and well above room temperature)
- viii) Two probe resistivity measurements set-up (at and well above room temperature).
- ix) Thermoelectric power measurements set up (at and well above room temperature).
- x) Gas sensing measurement set up (at and well above room temperature).
- xi) Magnetoelectric measurement set up.
- xii) BET.
- xiii) Spin coating set-up.
- xiv) Electric poling set up etc.

Research Work Supervised

M. Sc. Students: 15

M. Phil.: -3 (1 Presently working)

Ph. D.: 3 (Presently working).

Research Publications cited in Journals :

Sr. No.		
1	"Photoelectrochemical investigation on spray deposited n-CdIn ₂ S ₄ thin films" K. Y. RAJPURE, V. L. MATHE and C. H. BHOSALE	<i>Bull. Mater. Sci.</i> Vol. 22 No. 5, (1999) 927.
2.	"Properties of photoelectrochemical cells formed with sprayed CdIn ₂ S ₄ thin films" K. Y. RAJPURE, V. L. MATHE and C. H. BHOSALE	<i>Trans. Of SAEST,</i> Vol.35 No.2 (2000) 64.
3.	"Conduction Mechanism in Cu _x Fe _{3-x} O ₄ ." A. N. Patil, R. P. Mahajan, K. K. Patankar, A. K. Ghatage, V. L. Mathe, & S. A. Patil.	<i>India Journal of Pure and Applied Physics,</i> Vol. 38 (2000)651.
4	"Dielectric behaviour and AC conductivity in Cu _x Fe _{3-x} O ₄ ferrite" A. N. Patil, M. G. Patil, K. K. Patankar, V. L. Mathe, R. P. Mahajan And S. A. Patil.,	<i>Bull.Mater. Sci.,</i> Vol.23, No.5, (2000) 447.
5	"Studies on structural , dielectric and magnetoelectric properties in CuFe _{1.8} Cr _{0.2} O ₄ - Pb(Mg _{1/3} V _{2/3})O ₃ Composites." V. L. Mathe, K. K. Patankar, U. V. Jadhav, A. N. Patil, S. A. Patil.	<i>Ceramic International</i> 27 (2001) 531.
6	"Preparation and characterization of SiO ₂ based nano particle size Lead Titanate" V. L. Mathe, K. K. Patankar, N. M. Burange, R. P. Mahajan, A. N. Patil, P. B. Wagh, S. A. Patil.	<i>Indian Journal Of Engineering & Materials Science</i> Vol.7 (2000) 426.
7	"Electrical conduction and magnetoelectric effect in Cu _{1.8} Cr _{0.2} Fe ₂ O ₄ - Ba _{0.2} Pb _{0.8} TiO ₃ composites" K. K. Patankar, V. L. Mathe, A. N. Patil, S. A. Patil, S. D. Lotake, Y. D. Kolekar, P. B. Joshi ,	<i>Journal of Electroceramics</i> 6:2 (2001) 115.
8.	"AC conductivity and magnetoelectric effect in MnFe _{1.8} Cr _{0.2} O ₄ - BaTiO ₃ composites" K. K. Patankar, P. D. Dombale, V. L. Mathe, S. A. Patil, R. N. Patil,	<i>Journal of Materials Science and Engineering</i> B87 (2001) 53.
9.	" Role of sintering on magnetoelectric effect in CuFe _{1.8} Cr _{0.2} O ₄ - Ba _{0.8} Pb _{0.2} Ti _{0.8} Zr _{0.2} O ₃ composite ceramics" K. K. Patankar, R. P. Nipankar, V. L. Mathe, R. P. Mahajan, S. A. Patil	<i>Ceramic International</i> 27 (2001) 853.

10.	"Dielectric behaviour and magnetoelectric effect in $\text{CuFe}_2\text{O}_4 - \text{Ba}_{0.8}\text{Pb}_{0.2}\text{TiO}_3$ composites" K. K. Patankar, V. L. Mathe , R. P. Mahajan, S. A. Patil, RamManohar Reddy, K. V. Shivkumar	<i>Materials Chemistry and Physics</i> 72 (2001) 23.
11.	"Structural, dielectric and transport properties of $\text{Pb}(\text{Mn}_{0.5}\text{W}_{0.5})\text{O}_3$ " V L Mathe , K K Patankar, S D Lotke, P B Joshi And S A Patil	<i>Bull. Mater. Sci.</i> , 25 (2002) 347.
12.	"Dielectric behavior and magnetoelectric effect in copper-cobalt ferrite + barium lead titanate composites" M.B. Kothale, K.K. Patankar, S.L. Kadam, V.L. Mathe , A.V. Rao, B.K. Chougale	<i>Materials Chemistry and Physics</i> ,77 (2002) 691.
13.	"Preparation, structural analysis and dielectric properties of $\text{Bi}_x\text{La}_{1-x}\text{FeO}_3$ perovskite" V. L. Mathe , K. K. Patankar, M. B. Kothale, S. B. Kulkarni, P. B. Joshi, S. A. Patil	<i>Pramana-Journal of Physics</i> , 58 (2002) 1105.
14.	"Magnetoelectric effect in cobalt ferrite- Barium titanate composites and their electrical properties" R.P. Mahajan , K.K.Patankar, M. B. Kothale, S.C. Chaudhari, V. L. Mathe , S.A.Patil.	<i>Pramana-Journal of Physics</i> , 58 (2002) 1115.
15.	Electrical properties and magnetoelectric effect in $\text{Ni}_{0.75}\text{Co}_{0.25}\text{Fe}_2\text{O}_4 + \text{Ba}_{0.8}\text{Pb}_{0.2}\text{TiO}_3$ composites" S. L. Kadam, K. K. Patankar, V. L. Mathe , M. B. Kothale, R. B. Kale, B. K. Chougale	<i>Mater. Chem. Phys.</i> 78 (2003) 684 .
16.	"Dielectric behavior and magnetoelectric effect in $\text{Ni}_{0.75}\text{Co}_{0.25}\text{Fe}_2\text{O}_4 + \text{Ba}_{0.8}\text{Pb}_{0.2}\text{TiO}_3$ ceramic composite" K. K. Patankar, S. L. Kadam, V. L. Mathe , C. M. Kanamadi, V. P. Kothawale and B. K. Chougale,	<i>British Ceram. Transaction</i> ,102 (2003) 19.
17.	"Preparation and characterization of $\text{Nd}_x\text{Bi}_{1-x}\text{FeO}_3$ perovskites" V. L. Mathe , K. K. Patankar, R. N. Patil, C. D. Lokhande	<i>J. Magn. & Mag. Mater.</i> , 270 (2004) 380.
18.	" Structural, dielectric and electrical properties of $\text{Sm}_x\text{Bi}_{1-x}\text{FeO}_3$ ceramics." V. L. Mathe.	<i>J. Magn. & Mag. Mater.</i> , 263 (2003) 344.
19.	"Studies on structural, dielectric and electrical properties of $\text{Dy}_x\text{Bi}_{1-x}\text{FeO}_3$ perovskites" V. L. Mathe , K.K. Patankar	<i>Journal of Mater. Sci.</i> 42(2007)136.

20.	Effect of annealing in spray deposited Ni-Zn ferrite thin films V. L. Mathe , C. H. Bhosale.	<i>Indian J. Engin. & Mater. Sci.</i> , 10 (2003) 166.
21.	"Dielectric behavior and magnetoelectric effect in $\text{Ni}_{0.75}\text{Co}_{0.25}\text{Fe}_2\text{O}_4 + \text{Ba}_{0.8}\text{Pb}_{0.2}\text{TiO}_3$ ME composites" S. L. Kadam, K. K. Patankar, V. L. Mathe , M. B. Kothale, R. B. Kale, B. K. Chougule,	<i>J. Electroceram.</i> , 9 (2002) 193.
22.	Dielectric behavior of $\text{Cu}_{0.4}\text{Co}_{0.6}\text{Fe}_2\text{O}_4 - \text{Ba}_{0.8}\text{Pb}_{0.2}\text{TiO}_3$ composite ceramic" M. B. Kothale, K. K. Patankar, V. L. Mathe , S. L. Kadam, A. V. Rao and B. K. Chougule	Proceedings of DAE Solid State Physics Symposium 44 (2001)99.
23.	Structural analysis, magnetic properties and magnetoelectric effect in piezomagnetic– piezoelectric composites K.K. Patankar, V.L. Mathe, R.N. Patil and B.K. Chougule	<i>Materials Chemistry and Physics</i> , 96(2-3) (2006), 197.
24.	Complex impedance spectroscopic analysis of $\text{Bi}_{1-x}\text{Nd}_x\text{FeO}_3$ ceramics. V. L. Mathe , K. K. Patankar, C. D. Lokhande,.	<i>Ferroelectrics</i> 327 (2005) 57-61
25.	Electrical Conduction and Magnetoelectric Effect in $\text{Cu}_{0.4}\text{Co}_{0.6}\text{Fe}_2\text{O}_4\text{-Ba}_{0.8}\text{Pb}_{0.2}\text{TiO}_3$ ME Composites. M. B. Kothale, K. K. Patankar, A. V. Rao, V. L. Mathe , B. K. Chougule.	<i>Ferroelectrics</i> , 325 (2005) 143.
26	Large Scale Synthesis of TiO_2 nano particles required for environment purification. I. Banerjee, N. V. Kulkarni, S. Karmakar, A. D. Sheikh, Manish Shinde, V. L Mathe , A. K. Das, S. V. Bhoraskar	<i>Proceedings of DAE-BRNS-PSI Symposium on Power Beam for Clean Environment and Processes</i> 245
27	Structural and morphological studies of nanocrystalline Ni-Zn ferrite synthesized by co-precipitation method. A. D. Shiekh, R. B. Kamble, V. L. Mathe	<i>Proceedings of DAE Solid State Physics Symposium</i> 51 (2006)253.
28	Plasma Induced Synthesis of TiO_2 nano-particles and its use for degradation of organic compound. I. Banerjee, N. V. Kulkarni, S. Karmakar, A. D. Sheikh, V. L Mathe , S. V. Bhoraskar, A. K. Das.	<i>Proceedings of DAE Solid State Physics Symposium</i> 51 (2006)325.
29	Anomalies in electrical and dielectric properties of nanocrystalline Ni-Co spinel ferrite V. L. Mathe , R. B. Kamble	<i>Materials Research Bulletin</i> 43 (2007) 2160.
30	Nanocrystalline Nickel Ferrite Thick Film as an	<i>Sensor and Actuators</i>

	Efficient Gas Sensor at Room Temperature R. B. Kamble, V. L. Mathe	131(2008)205
31	Anomalous electrical properties of nanocrystalline Ni-Zn ferrite A. D. Sheikh, V. L. Mathe	Journal of Materials Science 43(2008)2018
32	Electrical and Dielectric Properties of Nano Crystalline Ni-Co Spinel Ferrites R. B. Kamble, V. L. Mathe	Communicated
33	Magnetolectric effects in bilayers of lead zirconate titanate and single crystal hexaferrites V. L. Mathe, G. Srinivasan, A. M. Balbashov	App. Phys. Lett. 92(2008) 122505
34	Dielectric and ferroelectric properties of PMN-PT / CoFe ₂ O ₄ composite A D Sheikh, V L Mathe	17th IEEE International Symposium on the Applications of Ferroelectrics, 2 (2008) 1.
35	Effect of piezomagnetic NiFe ₂ O ₄ phase on piezoelectric Pb(Mg _{1/3} Nb _{2/3}) _{0.67} Ti _{0.33} O ₃ phase in magnetolectric composites A. D. Sheikh, V. L. Mathe	Smart materials and Structures, 18(2009)065014
36	Effect of ambient pressure on the crystalline phase of nano TiO ₂ particles synthesized by dc thermal transferred arc plasma reactor I. Banerjee, S. Karmakar, N. V. Kulkarni, A. B. Nawale, V. L. Mathe , A. K. Das. S. V. Bhoraskar.	J. Nanoparticle Res., 12(2010) 581
37	Microwave and MM-wave magnetolectric interactions in ferrite-ferroelectric bilayers G. Srinivasan, A.S. Tatarenko, V. L. Mathe , M.I. Bichurin.	Eur. Phys. J. B, Accepted, 2009
38	Composition dependent phase connectivity, dielectric and magnetolectric properties of magnetolectric composites with Pb(Mg _{1/3} Nb _{2/3}) _{0.67} Ti _{0.33} O ₃ as piezoelectric phase A. D. Sheikh, V L Mathe	Mater. Res. Bull. Accept, 2009.
39	Effect of magneto strictive phase on structural, dielectric and electrical properties of NiFe ₂ O ₄ + □PLZT (7/60/40) composites Abdul Samee Fawzi, A D Sheikh, V L Mathe	Solid State Science, 11(2009)1979.

40	Substrate assisted electrochemical deposition of patterned cobalt thin films M. Samee M. Gadwal, Shrikrishina D. Sartale, Vikas L. Mathe , Habib M. Pathan	Electrochemistry Communications 11 (2009) 1711.
41	<u>Influence of filler size and morphology in controlling the thermal emissivity of aluminium/polymer composites for space applications</u> Harshada A. Babrekar, Naveen V. Kulkarni, Jyoti P. Jog, Vikas L. Mathe , Sudha V. Bhoraskar	<i>Materials Science and Engineering: B</i> In Press, 2009.
42	<u>Multiferroic properties of Ni ferrite—PLZT composites</u> Abdul Samee Fawzi, A.D. Sheikh, V.L. Mathe	<i>Physica B: Condensed Matter</i> , 405(2010)340.
43	<u>Composition dependent electrical, dielectric, magnetic and magnetoelectric properties of (x) $Co_{0.5}Zn_{0.5}Fe_2O_4 + (1-x)$ PLZT composites</u> Abdul Samee Fawzi, A.D. Sheikh, V.L. Mathe	<i>Journal of Alloys and Compounds</i> , In Press, 2010.
44	Optical Emission Spectroscopic Study during the Evaporation of Aluminium in the Thermal Plasma Reactor I.Banerjee, N.V.Kulkarni S. Karmakar, V. L. Mathe , S. V. Bhoraskar, A. K.Das.	Plasma Science and Technology, 12, No.1, Feb. 2010
45	Phase controlled structure formation of the nanocrystalline zirconia using thermal plasma technique, Ashok B. Nawale, Naveen Kulkarni, Soumen Karmakar, A. K. Das, S. V. Bhoraskar and V. L. Mathe	J.Phy.C. 208 (2010) 12121 2010
46	Study on growth of hollow nanoparticles of alumina, N. V. Kulkarni, S. Karmakar, S. N. Asthana, A. B. Nawale, A. D. Sheikh, S. P. Patole, J. B. Yoo, V. L. Mathe, A. K. Das, S. V. Bhoraskar	J. Mater. Sci. In press (2010).
47	Microstructure–property relationship in magnetoelectric bulk composite, A. D. Sheikh, Abdulsamee Fawzi, V.L. Mathe	J. Mag. Mag. Mater, In Press, (2010).

List of Conference Publications

Sr. No.	Title of the paper	Conference name, Place & Date
1	Accepted a research paper entitled " Studies on structural, dielectric and magnetoelectric properties in $\text{CuFe}_{1.8}\text{Cr}_{0.2}\text{O}_4$ - $\text{Pb}(\text{Mg}_{1/3}\text{V}_{2/3})\text{O}_3$ composites" V. L. Mathe, K. K. Patankar, U. V. Jadhav, A. N. Patil, and S. A. Patil.	3rd Asian Meeting on Ferroelectrics , held at The Hong Kong Polytechnic University hong Kong, China during 12-15 Dec. 2000
2.	Accepted a research paper entitled " Magnetolectric effect in ferrite ferroelectric composites" K. K. Patankar, V. L. Mathe, A. N. Patil, and S. A. Patil.	3rd Asian Meeting on Ferroelectrics ,held at The Hong Kong Polytechnic University hong Kong, China during 12-15 Dec. 2000
3.	Presented a research paper entitled " Synthesis and characterization of spray deposited Ni-Zn ferrite thin films" at V. L. Mathe, C. H. Bhosale, S. A. Patil.	International workshop on preparation and characterisation of technologically important single crystals (PCSC -2001) held at NPL, New Delhi, during Feb. 26 - 28, 2001.
4	Accepted a research paper entitled 'Preparation, characterisation and impedance data analysis of magnetoelectric $\text{Pb}(\text{Co}_{1/2}\text{W}_{1/2})\text{O}_3$. V. L. Mathe, K. K. Patankar, S. L. Kadam, R. B. Kale, S. A. Patil.	'The Second China International Conference on High-Performance Ceramics' held at Dept. of Materials Science & Engineering, Tsinghua University, Kunming, China during Nov. 11 – Nov. 15, 2001.
5	Presented a research paper entitled 'Structural analysis and dielectric properties of $\text{Bi}_x\text{La}_{1-x}\text{FeO}_3$ perovskites' V. L. Mathe, K. K. Patankar, M. B. Kothale, S. B. Kulkarni, P. B. Joshi, S. A. Patil	International symposium on Advances in Superconductivity & Magnetism : Materials, Mechanism & Devices held at Mangalore University, Mangalore during Sept. 25 - 28, 2001.
6	Presented a research paper entitled 'Electrical properties and magnetoelectric effect in cobalt ferrite- Barium titanate composites	International symposium on Advances in Superconductivity & Magnetism : Materials, Mechanism & Devices' held at Mangalore University, Mangalore during Sept. 25 - 28, 2001.

	R. P. Mahajan , K. K. Patankar, M. B. Kothale, S. C. Chaudhari, V. L. Mathe, S. A. Patil.	
7	Accepted a research paper entitled "Preparation and Characterisation of $NdxBi_{1-x}FeO_3$ Perovskites" V. L. Mathe, K. K. Patankar ,R.N.Patil, C. D. Lokhande	'Third International Conference on Inorganic Materials' Konstanz, Germany during 7-10th Sept. 2002.
8.	Accepted a research paper entitled " $BiFeO_3$: Preparation, Characterization and Magnetolectric studies" V. L. Mathe, K. K. Patankar, R. N. Patil and C. D. Lokhande	'3rd Asian Meeting on Electroceramics and ICMAT 2003 & IUMRS - ICA 2003', Singapore during 29 June - 4 July 2003.
9.	Presented a research paper entitled "Complex impedance spectroscopic analysis of $Bi_{1-x}NdxFeO_3$ ceramics" V. L. Mathe, , K. K. Patankar, C. D. Lokhande.	Asian meet on Ferroelectrics (AMF-4) Indian Inst. of Sci. Bangalore during 12-15th Dec. 2003
10.	Electrical Conduction and Magnetolectric Effect in $Cu_{0.4}Co_{0.6}Fe_2O_4$ - $Ba_{0.8}Pb_{0.2}TiO_3$ ME Composites. M. B. Kothale, K. K. Patankar, A. V. Rao, V. L. Mathe, B. K. Chougule.	Asian meet on Ferroelectrics (AMF-4) Indian Inst. of Sci. Bangalore during 12-15th Dec. 2003
11	Structural and Morphological Studies of Nanocrystalline Ni and Zn Ferrites Synthesized by Co-precipitation Method <i>A D Sheikh, R B Kamble and V L Mathe</i>	<i>51st DAE Solid State Physics Symposium, Sponsored by Board of Research in Nuclear Sciences, Department of Atomic Energy, Government of India. India. 26-30 December 2006. (pp 235)</i>
12	Structural and Morphological studies of nanocrystalline Ni ferrite synthesized using microwave sintering technique. <i>A D Sheikh, R B Kamble, S V Bhoraskar and V L Mathe</i>	<i>International workshop on Advanced Materials and Technologies for Nano and Oxide Electronics (AMTNOE) IIT Delhi Feb 19-22, 2007</i>
13	Impedance spectroscopic analysis on $Ni_{1-x}Zn_xFe_2O_4$ ferrite <i>A. D. Sheikh, V. L. Mathe</i>	<i>International Conference on Advanced Materials and Applications (ACAMA-2007), Nov. 2007, Shivaji University, Kolhapur.</i>

14	Structural and Dielectric properties of 0.67 PMN-0.33PT piezoelectric ceramic <i>A. D. Sheikh, V. L. Mathe</i>	<i>52st DAE Solid State Physics Symposium, Sponsored by Board of Research in Nuclear Sciences, Department of Atomic Energy, Government of India. India. 26-30 December 2007 (pp 99)</i>
15	Dielectric and ferroelectric properties of PMN-PT / CoFe ₂ O ₄ composite <i>A. D. Sheikh, V. L. Mathe</i>	<i>17th, International Symposium on Applications of Ferroelectrics (ISAF) Feb 24-27, 2008, USA.</i>
16	Nanocrystalline Co-Ni ferrites as magnetic field sensor <i>A. D. Sheikh, R. B. Kamble, S V Bhoraskar and V. L. Mathe</i>	<i>13th National Seminar on Physics and Technology of Sensors, March 3-5,2008, C-9-1</i>
17	Humidity and gas sensitivity of nanocrystalline Ni and Co ferrites at room temperature <i>Abdul Samee Fawzi, A D Sheikh, R B Kamble, S V Bhoraskar and V L Mathe</i>	<i>13th National Seminar on 8Physics and Technology of Sensors, March 2008 March 3-5,2008, P-49-1</i>
18	Simultaneous observation of ferroelectricity and ferromagnetism in CoFe ₂ O ₄ + Pb(Mg _{1/3} Nb _{2/3}) _{0.67} Ti _{0.33} O ₃ magnetoelectric composites <i>A. D. Sheikh, , S V Bhoraskar, V. L. Mathe</i>	<i>International conference on nanomaterials and applications (ICNAMA-2008) December 9-11, 2008, Shivaji University, Kolhapur.</i>
19	Magnetoelectric Effect in Ni _{0.8} Co _{0.2} Fe ₂ O ₄ / Pb(Mg _{1/3} Nb _{2/3}) _{0.67} Ti _{0.33} O ₃ <i>A. D. Sheikh, V. L. Mathe</i>	<i>53rd DAE Solid State Physics Symposium, Sponsored by Board of Research in Nuclear Sciences, Department of Atomic Energy, Government of India. India. 16-20 December 2008 (pp 1091)</i>
20	Structural and dielectric properties of PLZT ceramic <i>Abdul Samee Fawzi, A. D. Sheikh, V. L. Mathe</i>	<i>53rd DAE Solid State Physics Symposium, Sponsored by Board of Research in Nuclear Sciences, Department of Atomic Energy, Government of India. India. 16-20 December 2008 (pp 965)</i>

21	Dielectric and magnetoelectric properties of NCFO/PMN-P composites A. D. Sheikh, V. L. Mathe	<i>International conference on Active/Smart materials, Thiagarajar college of engineering, Madurai, India pp 119 January 7-9, 2009</i>
22	Structural, Electrical properties and magnetoelectric effect in (x) $\text{Ni}_{0.8}\text{Zn}_{0.2}\text{Fe}_2\text{O}_4+(1-x)$ PLZT composites Abdul Samee Fawzi, A. D. Sheikh, V. L. Mathe	<i>International conference on Active/Smart materials, Thiagarajar college of engineering, Madurai, India pp 119 January 7-9, 2009</i>
23	Effect of synthesis methodology on structural, dielectric and ferroelectric properties of PMN – PT A D. Sheikh, H. H. Kumar, V L Mathe	International workshop on Nanotechnology and Advanced Functional Materials, July 9-11, NCL Pune.
24	Structural and dielectric properties of co-precipitated nano-composites of $\text{Ni}_{0.7}\text{Zn}_{0.3}\text{Fe}_2\text{O}_4$ – PLZT. Abdul Samee Fawzi Abdul Aziz, A. D. Shiekh, V. L. Mathe	International workshop on Nanotechnology and Advanced Functional Materials, July 9-11, NCL Pune.
25	Synthesis of ECR Plasma Induced Ti, Fe nanoparticles A. S. Bansode, V. L. Mathe, S. V. Bhoraskar	International workshop on Nanotechnology and Advanced Functional Materials, July 9-11, NCL Pune.