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***Work Experience:***

I. Assistant Professor, Dept.of Physics, A.N.College (Magadh University), Patna,India, Teaching: Postgraduate and Graduate level,05-11-1996 –04-11-2000.
II. Assistant Professor, Department of Physics and Warden, Girls Hostel, BITS-Pilani Goa Campus, Goa, India, 15-04-2004 to 15-05-2006 (On lien from Magadh University, Bodh Gaya).
III. Assistant Professor (Senior Scale), Dept. of Physics, A. N. College (Magadh University), Patna, India, Teaching:Postgraduate and Graduate level, 05-11-2000 – 04-11-2005.
IV. Associate Professor, Dept. of Physics, A. N. College (Pataliputra University), Patna, India, Teaching: Postgraduate and Graduate level, 05-11-2005 – till-date.

***Academic Resource Person:***

Department of Environmental Sciences, A N College, Patna 800010, India

***Membership of the Professional Bodies:***

American Ceramics Society, USA; Materials Research Society of India; Indian Physical Society; Indian Association of Cultivation of Science; Magnetic Society of India, Indian Laser Association.

***Research Interests:***

**Electroceramics and Thin Films, Solar cells, Multiferroic and Ferrite materials, Nanofibers, Bionanocomposites, Aquananotechnology, Ceramic/Polymer composites, Bioofiber composites, Water Remediation, Borosilicate glass modified biofibres composites for regenerative medicines.**

***Research Project Completed:***

- **Synthesis and characterization of some Lead based Ferroelectrics for devices,** UGC, India, 1998- 2001 (Principal Investigator).
- **Preparation and characterization of nanosized $TiO_2$ and studies on its photodegradation capability of model organic pollutants**, DST, India, 2006-2009 (Co-Investigator).
- **Biosynthesis of nanomaterials (metals, semiconductors and composites) and their structural and electrical characterizations**, UGC, India, 2007-2010 (Principal Investigator).
- **Development of Lead Free Ferroelctric Materials for Device Applications**, 2008-2011, DST, India (Principal Investigator).
- **Synthesis and Characterization of Lead Free Ferroelectric-Piezoelectric Systems for Sensor Applications**, 2009-12, DRDO, India (Co-Investigator).
- **Preparation of metal oxide nanofibers via Electrospinning**, 2011-14, UGC, India (Principal Investigator).
- **Green Synthesis of Nanoparticles from the unexploited weed and biowaste resources**, 2012-15, UGC, India (Co-Investigator).
- **Lead free Sodium Potassium Niobate thin films: Synthesis and Characterization**, 2015-19, UGC-DAE Consortium Indore, India (Principal Investigator).

***Ongoing Research Projects:***

1. **Development of Lead-free high temperature ceramics for capacitor applications**, 2019-2022, Council of Scientific and Industrial Research (CSIR), India (PI).
2. **Investigation of the structure, magnetic, and electrical properties of double perovskite ceramics**, 2020-2023, UGC-DAE Consortium Indore, India (PI).

***Industrial Collaboration:***

MOU signed (2021) between French Company / Industry, SAS 3D-Oxides hereafter re ferred to as 3D-Oxides, Pouilly, France and A N College Patna, India on R&D on multi-el ement oxide thin film materials . Bilateral research collaboration led to the employment of a Post Doctoral fellow and inland travel sponsored by the French company.

***Recent Achievements:***

1. Research Proposal entitled ***The investigation of the potential of integrating ferroelectric ceramics in organic photodetectors*** granted by German Research Foundation (DFG) for International Cooperation Initiation with Prof. Dr. Louisa Reissig, Institute of Experimental Physics, Freie Universität Berlin, Berlin, Germany, 2020-2021.
2. Indian National Science Academy (INSA) Visiting Scientist award for 2020-2021 to work on ***Flexible Solar Cells*** at Plastic Electronics and Energy Laboratory (PEEL), Dept of Metallurgical and Mechanical Engineering (MEMS), IIT Bombay, Mumbai, India.
3. National Coordinator of Online AICTE Training and Learning (ATAL) Faculty Development Program (FDP), Govt of India on the topic ***EMERGING TRENDS IN NOVEL MATERIALS*** from August 23 to August 27, 2021.

***Invited Lecture:***
Delivered an invited colloquium lecture at Institute of Experimental Physics, Freie university Berlin, Germany on **Smart Material Based Systems (SMBS) for functional devices** on Nov 01, 2019.

***Bilateral Research Collaboration:***
1. **Hydrothermal growth of multicomponent $BaTiO_3$ based ferroelectric oxides for multilayer capacitors**, University of Leeds, UK sponsored by UK-India Education and Research Initiative (UKIERI), duration 2013-16.

***Peer Journals:***
- Elsevier, Springer, Wiley-VCH, VBRI, IRJ, SAGE-Hindawi

***Research Collaborations:***
UGC-DAE Consortium-Indore Center, Indore, India, School of Materials, Manchester University, Manchester, UK, Departmento de Engenharia Ceramica e do Vidro, Aveiro University, Aveiro, Portugal, Institute of Nanoscience and Nanotechnology, University of Porto, Portugal, School of Chemical and Process Engg, Leeds University, UK, Institute of Experimental Physics, Freie University of Berlin, Germany.

***Experimental expertise:***
Thermal vapour deposition technique, Electroceramics through solid state reaction, Hydrothermal technique, SEM, TEM, XRD, AAS, PL, UV-Vis, and Raman spectroscopy, AFM, FTIR, XRF, XPS, SQUID, Sol-gel technology, Pulsed Laser Deposition of thin films, Biosynthesis of nanomaterials, Nanofibers via electrospinning, Spark Plasma Sintering, Electrophoretic deposition of materials.

***Teaching Interests:***
Condensed Matter Physics,Analogue and Digital Electronics, Materials Science, Fiber optics, Electrodynamics, General properties of matter, Biophysics, Bioinstrumentations.

***Student education:***
I am a passionate educator and have contributed widely at all levels of undergraduate and postgraduate teaching and learning activities since 1997 at Patna, India. In order to deliver my teaching programme effectively and efficiently I have employed different types of electronic media in my teaching and learning methods. My teaching has encompassed areas such as biophysics, functional materials, biomaterials, high frequency dielectrics and ferroelectric materials performance in aggressive environments and, green synthesis protocol for metals, semiconductors, composites.

***Software Knowledge:*** Python, Linux,Windows, MS office, Unix, Programming in C and C ++, COBOL, Foxpro, Microcal Origin, Xpert Plus, Labview, POWD, XFIT, Celref, Python.

***Academic Qualifications:***

- **PhD**: Dept. of Physics, Indian Institute of Technology, Kharagpur, (India) (Dec.1993), Preparation and Characterisation of some Relaxor Ferroelectric Ceramics
- **PGDCA:** Post Graduate Diploma in Computer Applications, Patna University, Patna, India in 1995 with 88.4% marks.
- **M.Sc.:** Physics, ***specialization in radio physics and electronics,*** Bhagalpur University, Bhagalpur,
  India in 1986 with 78.3% marks.
- **B.Sc.***:* Hons. Physics, Bhagalpur University, Bhagalpur, India in 1983 with 80.2% marks.

***Research Experience:***

- **Pyroelectric Materials for Catheter End Temperature Probe,** Department of Physics, Indian Institute of Technology Delhi, NewDelhi, India, September 2003 - 2004.
- **Preparation & Characterization of Ferroelectric Thin Films for Sensor And Actuators,** Dept of Physics, Indian Institute of Technology Delhi, New Delhi,India, August 2002-Sept 17, 2003.
- **Synthesis and Characterization of Some Lead Based Ferroelectrics for Devices,** National Physical Laboratory and A N College, Patna, India, October 1998- June2002.
- **Successive Phase Transition (Commensurate-Incommensurate) in ferroelectric materials,** Dept of Physics, Indian Institute of Technology Delhi, Kharagpur andA.N.College, Patna, India, Nov 1996-July1998.
- **Varistor and PTCR Bbehavior in Pb Based Ferroelectric Ceramics,** Dept of Physics, Indian Institute of Technology Delhi, Kharagpur andWomen's College,Patna University, Patna, India, March 1993-July1996.

***PhD Supervision:***

**1. Awarded: Sept 2003, Radheshyam Rai,** Synthesis and Characterization of Fe, Sb, Al and Bi modified PLZT Ceramics
**2. Awarded: Oct 2011, NKP Sinha,** Development of less Lead containing ferroelectric compounds for device applications
3. **Awarded: June 2015, Rashmi Rani,** Development of Lead free Sodium Potassium Niobate based ferroelectric materials for real devices
4. **Awarded: September 2020, Kashif Shamim**, Growth and Optimization of Lead Free Sodium Potassium Niobate Thin Films for Practical Device Applications
5. **Ongoing: June 2018, Sayema Anwar,** Biodegradable and biocompatible electrospun nanofibers from Punica granatum L.

**Supervision of Department of Science and Technology Women Scientist Programme Fellow, India (2009-2012)**

**Post Doctoral Fellow:** Dr Kashif Shamim

**Supervision of Postgraduate and undergraduate students research projects.**

***Invited Talk*:**

1. ***Fluoride Contamination in Ground Water - The Problem and Materials Management,*** UGC-DAE-CSR Workshop on environmental themes, May 25-26, 2017, University of Pune, India.
2. ***Fabrication and characterization of Ferroelectric Relaxor Compounds,*** Condensed Matter Days, August 26-28 1999, Department of Physics, Jadavpur University, Kolkata, India.

***Visiting Researcher***:

1. Visited National Research University of Electronic Technology "MIET", Moscow, Russia, in Aug 2018 to attend kick off meeting of the bilateral Indo Russia research project on **Functional properties of electro- and magnetostrictive materials based on transition metal oxides synthesized by hydrothermal sol-gel method.**
2. Collaborative research work with School of Materials, Manchester University, Manchester, UK, Sept 25 -Oct 17, 2013 on **Production of novel nano fibrous scaffolds for water remediation for clean drinking water in developing countries.**

***International Fellowship:***

- Commonwealth Professional Fellowship on the **Development of Tissue Engineering for the new technologies in Regenerative Medicines** at Manchester Univ, UK, 01.08.2015 to 31.10.2015.
- Visiting Academic fellow under India4eu Erasmus Mundus Program on the **Raman spectroscopy and Multiferroic characterisation of BiFeO3 based ceramics** at Institute of Nanoscience and Nanotechnology, University of Porto, Portugal, 01.10.2014 to 30.10.2014.
- Visiting Scientist at Department of Metallurgy and Materials Engineering, Katholieke Universiteit of Leuven, Belgium on **Electrophoretic deposition of materials and Spark Plasma Sintering** in Erasmus Mundus EU sponsored research scheme, 1.12.2011 to 30.09.2012.
- Visiting research fellowship awarded by **British Council** and worked at Materials Science Center, School of Materials, Manchester University, UK, 01.06.2008 to 31.05.2009.
- **Indo-UK Networking Fellowship-** Royal Society London, UK and DST, New Delhi, India worked at Materials Research Center, School of Materials, Manchester University, Manchester, UK, 07.05.05 to 07.08.05.

***Visiting Fellowship:***

Awarded by DST, India and worked with Prof S.B.Krupanidhi at Materials Research Center, Indian Institute of Science,Bangalore, India on **Development of Non Lead Ferroelectric Materials by Pulsed Laser Deposition Technique**, 25.09.2006 to 26.12.2006.

***Workshop:***

Tutorial workshop: 'Characterization Techniques' on the collection, processing and interpretation of X ray diffraction, HRTEM and Impedance Spectroscopy data at Materials Science Center, University of Manchester, organized by aixCCT Systems GmbH, Germany, Sept 2008.

***Professional Training:***

- Short Term Certificate Training Course (under Faculty Development Programme) on **Python Programming** organised by A N College Patna, India, January 06-11, 2020.
- 2-Day Short-Term Course on **Perovskite Solar Cells** organised by National Centre for Photovoltaic Research and Education (NCPRE), Indian Institute of Bombay (IITB), India, October 15-16, 2019.
- Presented research report in Indus Synchrotrons Users' Meeting (ISUM 2019) March 27-29, 2019 organised by Raja Ramanna Centre for Advanced Technology (RRCAT) Indore and UGC DAE CSR, Indore, India.
- Three day National Workshop on **Ethical Issues and Use of Anti-Plagiarism for Research Integrity** organised by Information and Library Network Centre (INFLIBNET), Gandhinagar, Gujrat, India, March 26-28, 2018.
- Refresher course in Physics, University Grants Commission, Dept. of Physics, Calcutta University, Kolkata, India, Sep 05-25, 2007.
- UNESCO Regional training course in **Fibre Optics**, IIT Kharagpur, India, Feb 12– 24, 2001.
- Refresher course in Physics, University Grants Commission, Dept. of Physics, Patna University, Patna, India, March 17 - 06 April, 2001.
- Orientation course, University Grants Commission, Patna University, Patna, India, Sept 09–30, 1997.
- SERC School on **Ferroic Materials**, Institute of Technology, BHU, Varanasi, India, March 15-04 April, 1993.

***Visits to Foreign Countries:***

1. Electroceramics XI Conference, Materials Science Center, University of Manchester, Manchester, UK , Sept 01-04, 2008.
2. Investigation of Morphotropic Phase Boundary $PbTiO_3$-$Bi(MgZr)O_3$ based Complex Perovskite Ceramics, 2007 IEEE International Ultrasonics Symposium, New York, USA Oct 29-31, 2007.
3. Sol –gel preparation and characterization of Calcium modified Lead titanate (PCT) thin films, International conference on Materials for Advanced Technologies, Singapore, Dec 7-12,2003.
4. Structural and dielectric properties of Sb doped PLZT ceramics, International conference on Materials for Advanced Technologies,Singapore, Dec 7-12,2003.
5. Worked with Prof. Martin P. Harmer, Director, Materials Science Center,Whitaker laboratory, P.C. Rossin College of Engineering, Lehigh University,Pennsylvania (USA), May 4 - June 16, 2001. Special emphasis on liquid phase sintering of Pb based Relaxor (PMN + PT, PZN + PT) materials with alumina. Microstructural study of the materials at the Eutectic compositions.

6. Varistor Behavior in Lead based Perovskite Compounds, Materials Research Society Spring Meeting, SanFrancisco, USA, April 16-20,2001.
7. Successive phase transition in $A_2XO_4$ and $A_1A_2XO_4$ Inorganic compounds, First International conference on Inorganic Materials, Versailles, France, Sept 16-19, 1998.
8. Search for high dielectric constant ceramics, in International Meeting on Ferroelectrics (IMF8), Gaithersburg, Maryland, USA, Aug 8-13, 1993.

***Book Chapters Published:***

1. Smart Material Nanofibers for Day to Day Life, Chapter 1, ISBN: 978-1-53612-269-5, Nova Publishers, USA, 2017.
2. Ferrroelectric and Ferromagnetic Properties of Bi1-x-yDyxCyFe1-yTiyO3 Solid Solution, Chapter 10, ISBN: 978-1-53612-269-5, Nova Publishers, USA, 2017.
3. Aquananotechnology: Global Prospects, Chapter 37, ISBN: 9781466512245, CRC Press, USA, 2014.
4. Synthesis, Characterization and Application of Smart Materials, Chapters 2, 3, 12, ISBN: 978-1-61470-642-7, Nova Publishers, USA, 2011.

***List of Research Papers Published in International Refereed Journals*:**

1. Structural and Dielectric Properties of (La, Bi) modified PZT Ceramics, Seema Sharma and R Rai, Solid State Communications,129, 305, 2004.
2. Sol-gel derived La modified PZT thin films for MEMS applications, R Singh, Seema Sharma, A.K.Tripathi, S Chandra and T.C.Goel, IEEE transaction on Dielectrics and Insulating Materials, 11, 265, 2004.
3. Structural,Dielectric and Pyroelectric studies of $Pb_{1-x}Ca_xTiO_3$ Thin Films, S Chopra, Seema Sharma, T.C.Goel and R.G.Mendiratta, Solid State Communications,127, 4, 299, 2003.
4. Dielectric, Piezoelectric and Pyroelectric Properties of PMN-PT (68:32) System, Pawan Kumar, Seema Sharma,T.C.Goel and Chandra Prakash, Ceramics International, 30,585, 2004.
5. Dielectric behavior of ceramics $Pb_{0.9}(La_{1-y}Sb_y)_{0.1}(Zr_{0.65}Ti_{0.35})_{0.975}O_3$ near the Morphotropic phase boundary, Radheshyam Rai, Seema Sharma and R.N.P. Choudhary, Material Letters 4384, 1, 2003.
6. Ferroelectric phase transition in calcium tellurite ceramics, Radheshyam Rai, Seema Sharma and R.N.P. Choudhary,J. of Material Science Letters, 21, 297, 2002.
7. Structural and electrical properties of Magnesium tellurite Ceramics, Radheshyam Rai, Seema Sharma and R.N.P. Choudhary, Ferroelectrics, 275,11, 2002.
8. Synthesis of single phase perovskite$Pb(Zn_{1/3}Nb_{2/3})O_3$ using $Pb_3Nb_2O_8$ and ZnO, R.N.P. Choudhary, R Palai and Seema Sharma, J. of Material Science Letters, 20, 1237 2001.
9. Ferroelectric phase transition in $Pb(Cd_{1/2}Mo_{1/2})O_3$ ceramics, R.N.P. Choudhary, R Palai and Seema Sharma, Material Letters, 51, 301, 2001.
10. Studies of dielectric and varistor behavior lead manganese tungstate ceramic, R.N.P. Choudhary, R Palai and Seema Sharma, J.of Mat. Science: Materials Electronics.11, 685, 2000.
11. Studies of structural,dielectric and electrical properties of lead cadmium tungstate ceramic,R.N.P. Choudhary, R Palai and Seema Sharma Material Science and Engg B, 235, 2000.

12. Phase transition in $Li_2TeO_4$ Ceramics, N.K.Singh, S Sharma, R.N.P. Choudhary, Ferroelectrics, 242, 89, 2000.
13. Studies of X-Ray and electrical properties of Ca-doped Lead Molybdates, N.K.Singh, Seema Sharma and R.N.P. Choudhary, Indian J. of Physics, 74B, 63, 2000.
14. X-Ray and Dielectric properties of Sr-doped Lead Molybdate ceramics, N.K.Singh, Seema Sharma, R.N.P. Choudhary and M Abrar, Bulletin of pure and applied science, 18D, 5, 1999.
15. Phase transition in $K_2CrO_4$ Ceramics, Seema Sharma and R.N.P.Choudhary, Bulletin of pure and applied science, 18D, 41, 1999.
16. Structural and electrical properties of $Tl_2WO_4$ ceramics, Seema Sharma and R.N.P. Choudhary, J. of Phys and Chem. of Solids, 60, 743, 1999.
17. Successive phase transition in $Rb_2TeO_4$ ceramics, Seema Sharma and R.N.P. Choudhary and S.R.Shanigrahi Ferroelectrics, 227, 41, 1999.
18. Structural and dielectric properties of $Pb_{1-x}Ba_xMoO_4$ Ceramics, N.K.Singh, Seema Sharma and R.N.P. Choudhary, Indian J. of Pure and Applied Physics, 318, 9231, 1999.
19. Phase transition in $Tl_2TeO_4$ Ceramics, Seema Sharma, R.N.P. Choudhary, J. of Electroceramics, 443, 3,1999.
20. Phase transition in $Li_2MoO_4$ Ceramics, Seema Sharma and RNP Choudhary, J. of Mat. Sci. Letters, 18, 669, 1999.
21. Structural and Electrical properties of $Na_2WO_4$ ceramics, Seema Sharma, RNP Choudhary and S R Shanigrahi, Material letters, 40, 134, 199.
22. Phase transition in $Li_2WO_4$ Ceramics,Seema Sharma and R.N.P.Choudhary, Ferroelectrics, 234,129, 1999.
23. Synthesis and characterization of $Ba_2DyNb_{10}O_{30}$ ferroelectric Ceramics. T Kar, R.N.P.-Choudhary, Seema Sharma and K.S.Singh, Transaction ofI ndian Ceramic Society, 58, 5, 1999.
24. Structural and electrical properties of $Ba_2Na_3RNb_{10})O_{30}$ (R= Dy and y) Ceramics, T Kar, R.N.P.Choudhary, Seema Sharma and K.S.Singh, Indian J. of Physics, 73A, 453, 1999.
25. Diffuse phase transition in $Ba_3NaYNb_{10}O_{30}$ ferroelectrics, TanikaKar, R.N.P. Choudhary-Seema Sharma and K.S.Singh, Bulletin of pure and applied science, 16, 1997.
26. Structural and dielectric properties of $TlNaMoO_4$, R.N.P.Choudhary M.L.N. Goswami and Seema Sharma , Indian J. of Pure and Applied Physics, 35, 397, 1997.
27. Phase transition in $TlLiMoO_4$ ceramics, R.N.P.Choudhary, M.L.N.Goswami and Seema Sharma, Indian J. of Physics (India),714, 153, 1997.
28. Structural and electrical properties of $TlLiWO_4$ ceramics, RNP Choudhary, Seema Sharma and M L N Goswami,J. of Mat. Science letters,16, 908, 1997.
29. Ferroelectric phase transition in $TlKWO_4$ ceramics, RNP Choudhary, M.L.N. Goswami and Seema Sharma,Ferroelectrics, 200, 13, 1997.
30. Successive phase transition in $TlNaWO_4$ ceramics, RNP Choudhary, Seema Sharma and MLN Goswami, Material letters, 32, 37, 1997.
31. Structural and Dielectric properties of $Pb( Mn_{1/4} X_{1/4} Nb_{1/2})O_3$ (X = Zn , Cd, or Ni) ferroelectric ceramics, Seema Sharma, R.N.P. Choudhary and R. Sati, J.of Mat. Science Letters, 1151, 13, 1994.
32. Structural and Dielectric studies of $Pb(Mn_{1/4} X_{1/4} Nb_{1/2})O_3$, Seema Sharma, R.N.P.Choudhary and R.Sati, JMat. Sc. Letters, 530, 12, 1993.

33. Dielectric studies of Modified Lead Magnesium Niobate Ceramics, Seema Sharma, R. Sati, K.P.Sharma and R.N.P.Choudhary, Indian J of Pure and Appl Phys, 2000,31,1993.
34. Diffuse phase transition in solid solutions $Pb(Mg_{1/4}\ Zn_{1/4}\ Nb_{1/2})O_3$ and $PbTiO_3$, Seema Sharma, R.N.P.Choudhary, R. Sati and T.P.Sinha, Material letters 281,16, 1993.
35. Relaxor behavior of $Pb(Ni_{1/2}Nb_{2/3})\ O_3$ Ceramics, Seema Sharma, R. Sati andR.N.P.Choudhary, Canadian J Phys,71, 1, 1993.
36. Dielectric properties of $Pb(Mg_{1/4}Zn_{1/4}Nb_{1/2})O_3$ ceramics, Seema Sharma, R.N.P.Choudhary and R.Sati, Pramana J Phys, India, 2, 89, 1993.
37. Synthesis and Dielectric properties of Pb $(Mg_{1/4}Cd_{1/4}\ Nb_{1/2})O_3$Relaxor, Seema Sharma, R.N.P.Choudhary, R.Sati , Phys. Stat Sol., 133,491, 1992.
38. Calcium modified lead titanate (PCT) thin films for Pyro Sensors: A Review, S Chopra, Seema Sharma, T.C.Goel and R.G. Mendiratta, Asian J. of Phys, 13, 2004.
39. Sol-gel preparation and characterization of calcium modified lead titanate (PCT)thin films, Sonalee Chopra, Seema Sharma,T.C.Goel and R.G. Mendiratta, Ceramics In ternational, 30, 1477, 2004. .
40. Effect of Annealing temperature on the Microstructure of chemically deposited Ca modified Lead Titanate thin films, S Chopra, Seema Sharma, T.C.Goel and R.G. Mendiratta, Applied Surface Science, 230, 207, 2004.
41. Electroceramics research in India, Malti Goel and Seema Sharma, J. of Electroceramics, 12, 75, 2004.
42. Ca substituted $PbTiO_3$ Thin Films for Infrared Detectors, S.Chopra, Seema Sharma,T.C.-Goel, and R.G.Mendiratta, J. of Electroceramics,13,155,2004.
43. Synthesis and characterization of sol-gel derived $(Pb_{1-x}\ La_x\ )Ti_{1-x/4}\ O_3$ thin films, S.Chopra, Seema Sharma,T.C.Goel and R.G.Mendiratta, Jap J of Applied Physics, 43, 6193, 2004.
44. Electrical and optical properties of sol-gel derived La modified $PbTiO_3$ thin films, S.-Chopra,Seema Sharma,T.C.Goel and R.G. Mendiratta, Applied Surface Science, 236, 321, 2004.
45. Effect of Eu substitution on the microstructure, dielectric, ferroelectric and pyroelectric properties of PZT ceramics, R.Khazanchi, Seema Sharma and T.C.Goel, J. of Electroceramics,12,174,2004 .
46. Effect of La concentration on structural, dielecric and ferroelectric properties of PLZT ceramics, R.Singh, Seema Sharma,T.C.Goel,S.Chandra and O.P.Thakur, Asian J. of Physics, 13,2,2004.
47. Structural and Electrostrictive properties in PMN-PT (68:32) ceramics, P. Kumar, S.Sharma, S. Singh, O. P. Thakur, C. Prakash and T. C. Goel, Ferroelectrics,326,55,2005.
48. Phase stabilization and microstructural studies of Lead Lanthanum Titanate thin films,Sonalee Chopra, Seema Sharma, T.C.Goel and R.G.Mendiratta, Materials Research Bulletin, 50,115, 2005.
49. Structural and dielectric properties of Sb doped PLZT ceramics, Radheshyam Rai, Seema Sharma and R.N.P.Choudhary Ceramics International, 30, 1295, 2004.
50. Ferroelectric Properties of Bulk and Thin Films of PMN-PT System Near MPB, P. Kumar, S. Sharma, O. P. Thakur, C. Prakash and T. C. Goel, Physica B: Condensed Matter, 357, 241, 2005.
51. Structural and Dielectric Properties of Bi modified PLZT Ceramics, Seema Sharma Radheshyam Rai andR.N.P.Choudhary, Solid StateCommunications,133, 635, 2005.

52. Electrical and Optical properties of Sol-gel derived Ca modified $PbTiO_3$ Thin films, S Chopra, Seema Sharma, T.C.Goel, R.G.Mendiratta, Materials Chem and Phys, 91, 161, 2005.
53. Dielectric and piezoelectric studies of Fe doped PLZT ceramics, R Rai, Seema Sharma, R.N.P. Choudhary, Materials Letters 59, 3921, 2005.
53. Comparison of Ca-doped and La-doped PT films for Pyroelectric Sensors, Sonalee Chopra, Seema Sharma, T.C.Goel and R.G. Mendiratta, J. of Computational Mechanics of Materials,37,134,2006.
54. Synthesis, Structural and Electrical properties of La modified PLZT system, Seema Sharma, R Singh, S Chandra and T C Goel, J. of Computational Mechanics of Materials, 37,86,2006.
55. Structural, dielectric and ferroelectric properties of La doped $PbTiO_3$ sol gel derived thin films, Sonalee Chopra, Seema Sharma, T.C.Goel and R.G.Mendiratta, Ferroelectrics, 327, 97, 2005.
56. Effect of Al doping on structural and dielectric properties of PLZT ceramics,R.Rai, Seema Sharma and R.N.P.Choudhary, J of Materials Sci,41,4259,2006.
57. Dielectirc and Piezoelectric studies of Fe doped PLZT ceramics, R.Rai, Seema Sharma and R.N.P.Choudhary,Materials Letters, 59, 3921,2005.
58. Ca substituted PbTiO3 Thin Films for Infrared Detectors, T.C.Goel, S.Chopra, Seema Sharma and R.G.Mendiratta, J. of Electroceramics,13,155,2004.
59. Structural, dielectric and ferroelectric properties of Lanthanum/Calcium doped Lead Titanate thin films, Sonalee Chopra, Seema Sharma, T.C.Goel and R.G.Mendiratta, Ferroelectrics, 328, 71, 2005.
60. Dielectric, Ferroelectric and Electrical Properties of Sol-Gel Prepared La Modified PZT Thin Films, R Singh, Seema Sharma, S Chandra T C Goel,Ferroelectrics,328, 27, 2005.
61. Investigation of structural and dielectric properties of (La,Fe) doped PZT ceramics,R.Rai, Seema Sharma and R.N.P.Choudhary, Physica B, 382, 252, 2006.
62. Structural studies of $BiFeO_3$ modified BMZ-PT ceramics, Seema Sharma, D.A.Hall, P S.-Mulage, Mat Letters, 61, 3352, 2007.
63. Structural and ferroelectric characterization of BMZ-BF-PT Ceramics,Seema Sharma and-D.A.Hall, J.of Electroceramics,20, 81, 2008.
64. Investigation of structural and electrical properties of (1-x) $Bi_{0.5}Mg_{0.5}TiO_3$-(x)$PbTiO_3$ ceramic system, R Rai, Abhinav Sinha, Seema Sharma and N.K.P Sinha, J. of Alloys and Compounds, 486, 273, 2009.
65. Investigation of $BiFeO_3$ modified $PbTiO_3$-Bi(MgZr)$O_3$ based Complex Perovskite Ceramics, Seema Sharma, D A Hall and Abhinav Sinha, Materials Research Bulletin, 44, 1405, 2009.
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