Dr. M. P. Sharma, Associate Professor

School of Physical Sciences

Department of Pure & Applied Physics

Phone: 07752-260159

Email: mps.phy@gmail.com

Qualifications

M.Sc. (Physics), Ph.D (Physics) – University of Rajasthan, Jaipur, (Awarded 2009)

Area of Interest/Specialization

1. Materials Science
2. Multiferroics and Magnetic Oxide materials

Experience

1. Working as **Associate Professor** in Department of Pure & Applied Physics, Guru Ghasidas Vishwavidyalaya, Bilaspur (C.G.), since Jan. 2025.
2. Worked as **Assistant Professor** in Department of Pure & Applied Physics, Guru Ghasidas Vishwavidyalaya, Bilaspur (C.G.), from July 2011 to Dec. 2024.
3. Worked as **Assistant Professor** (ad-hoc) in Department of Pure & Applied Physics, Guru Ghasidas Vishwavidyalaya, Bilaspur (C.G.), from July 2010 to June 2011.

Awards and Honors

1. Life Member: Indian Society for Particle Accelerator (ISPA)
2. Life member of Nuclear Track Society of India
3. Life member of Indian Physics Association

Best Peer Reviewed Publication

1. 'Structural, Magnetization and UV-Visible Study of Mn-Co-Ni Ferrite System', Vijay Sharma, Anjali Oudhia and **M.P. Sharma**, Indian J. of Pure & Applied Physics, 62 (2024) 19.
2. 'Magnetic and ^{57}Fe Mössbauer Studies of $Fe_{1-x}Mn_xSb_2$ system ($0 \leq x \leq 0.2$)', Vijay Sharma, Anjali Oudhia and **M.P. Sharma**, Hyperfine Interaction, 244 (2023) 12.
3. 'Effects of interfacial interactions on structural, optical, thermal degradation properties and photocatalytic activity of low-density polyethylene/$BaTiO_3$ nanocomposite', Ayan Roy, Sambit Panda, Jaya Gupta, Anu, Ravi Pratap Singh, Deeksha,Pawanpreet Kour, **M.P. Sharma**, Kamlesh Yada, Polymer, 276 (2023) 125932.
4. 'Mechanistic insights into the structure and Raman spectroscopic phonon modes in Ni site Ca doped $Mg_{0.4}Ni_{0.6-x}Ca_xFe_2O_4$ spinel ferrites prepared by sol-gel auto-combustion method', Anirban Panda, Ayan Roy, Hitendra Sahu, Sanand Pradhan, **M.P. Sharma**, Chhattisgarh Journal of Science and Technology, 19(2) (2022) 319.
5. 'Effects of Chromium (III) ion doping on the Crystal chemistry and Raman phonon modes in sol-gel synthesized $CoFe_{2-x}Cr_xO_4$ spinel ferrites', Ayan Roy, Anirban Panda, Hitendra

Sahu, Neeraj Jaiswal and **M.P. Sharma**, Chhattisgarh Journal of Science and Technology, 19(1) (2022) 399.

6. 'EPR Study of CeO_2 Nanoparticles', Dinesh Uthra and **M.P. Sharma**, Materials Sc. Forum, 1048 (2022) 130.
7. 'Synthesis and characterization of CeO_2 nano particles', Dinesh Uthra, **M.P. Sharma** and H S Tewari, AIP Conf. Proc., 2352, (2021) 040028.
8. 'Synthesis and characterization of cerium substituted cobalt ferrite', **M.P. Sharma**, Dinesh Uthra and H S Tewari, AIP Conf. Proc., 2352, (2021) 020058.
9. 'EPR study of Mn site substituted Pr based Doped Rare Earth Manganites', Dinesh Uthra and **M.P. Sharma**, J. Phys.: Conf. Ser. 2070 (2021) 012035.
10. Comparative study between microwave and infrared assisted peeling of ginger', Dinesh Uthra, **M.P. Sharma** and Natasha Mendiratta, Materials Today: Proc, 46 (6), (2021) 2183.
11. 'Synthesis and Characterization of TiO_2 Thin Films for Optoelectronics Applications'', R.K. Pandey, Swati Mishra, Avik Karmakar, **M.P. Sharma** and P.K. Bajpai, J. of Pure Applied and Ind. Phy., **5**(10), (2015) 289-297.
12. 'Raman Analysis of Ni Doped ZnO (Ni:ZnO) Thin Films by Sol-Gel Spin Coating System for Device Applications', R.K. Pandey, Swati Mishra, Rashmi Tiwari, **M.P. Sharma** and P.K. Bajpai, Int. J. Elect. & Electr. Research**,** 3 (4), (2015) 27-31.
13. 'Effects of swift heavy ion irradiation on dielectric relaxation and conduction mechanism in $Ba_{0.90}Sr_{0.10}TiO_3$', C.R.K. Mohan, Ranajit Dey, Shiv P. Patel, **M.P. Sharma**, R. K. Pandey and P.K. Bajpai, Nucl. Instr. Meth. Phys. Res. B, 372 (2016) 50-57.
14. 'Transport properties of the layer manganite $La_{1.5}Ca_{1.5}Mn_{2-x}Fe_xO_7$' **M.P. Sharma**, Anjali Krishnamurthy and Bipin K. Srivstava, World J. of Condens. Matter Physics, **1** (2011) 152-156.
15. 'Magnetic and electrical transport properties of Ce substituted perovskite oxides $La_{1-x}Ce_xMnO_3$' **M.P. Sharma**, Anjali Krishnamurthy, Bipin K. Srivastava, Swati Pandya and V. Ganesan, Indian Journal of Cryogenic, **33**, (2008) 22.

Papers/ Talk Delivered in Conferences/ Seminars

(a) International: **10**

(b) National: **25**

Research Supervision

1. **Ph.D.** : 03 in process
2. **M.Sc. (Physics and Electronic)**: more than 50 Students completed.

Administrative Responsibilities

1. NSS Program Officer, Physical Sciences Unit, GGV, Bilaspur

Additional Information

None