

CURRICULUM VITAE



Dr. Prakash Chandra Sati

(M.Sc, M.Tech (Gold Medalist), Ph.D (INSPIRE Fellow))

Dr. D.S. Kothari Postdoctoral Fellow

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EDUCATION

Year	Degree / Certificate	Institute/School, City	CGPA/ %
July 2015 - Present	Postdoctoral fellow	University of Delhi	N.A.
2015	Ph.D (Physics and Materials Science & Engg.)	Jaypee Institute of Information Technology, Noida, India	I st (9.3/10) (Course work)
2010	M. Tech (Materials Science and Engg.)	Jaypee Institute of Information Technology, Noida, India	I st (9.3/10)
2007	M. Sc (Physics)	D. S. B. Campus, Nainital (Kumaun Uni.)	II nd (56.3%)
2005	B. Sc (PCM)	P. N. G. G. P. G college, Ramnagar, Nainital (Kumaun Uni.)	I st (61%)
2002	XII	M.P.H. Inter college, Ramnagar, Nainital (U. A. Board)	I st (61%)
2000	X	M.P.H. Inter college, Ramnagar, Nainital (U. P. Board)	I st (68.5%)

Ph.D Thesis Title:

“Study of Isovalent and Aliovalent Ions Substitution Effect on BiFeO₃ Multiferroic Ceramics”

1. **Sati P. C.**, Arora M., Chauhan S., Chhoker S., and Kumar M., “Structural, magnetic, and optical properties of Pr and Zr codoped BiFeO₃ multiferroic ceramics” *Journal of Applied Physics*, vol.112, pp. 094102-6, 2012. **(Impact factor: 2.183) (Cite: 42)**
2. **Sati P. C.**, Arora M., Chauhan S., Kumar M. and Chhoker S., “Rietveld analysis, magnetic, vibrational and impedance properties of (Bi_{1-x}Pr_x)(Fe_{1-x}Zr_x)O₃ ceramics” *Journal of Materials Science: Materials in Electronics* vol.24, pp. 5023-5034, 2013. **(Impact factor: 1.789) (Cite: 8)**
3. **Sati P. C.**, Arora M., Chauhan S., Kumar M. and Chhoker S., “Effect of Dy substitution on structural, magnetic and optical properties of BiFeO₃ ceramics” *Journal of Physics and Chemistry of Solid*, 2013, vol.75, pp. 105-108, 2014. **(Impact factor: 1.853) (Cite: 21)**
4. **Sati P. C.**, Arora M., Chauhan S., Kumar M. and Chhoker S., “Structural, magnetic, vibrational and impedance properties of Pr and Ti codoped BiFeO₃ multiferroic ceramics” *Ceramics International*, vol. 40, pp. 7805-7816, 2014. **(Impact factor: 2.605) (Cite: 12)**
5. **Sati P. C.**, Kumar M., Chhoker S., Influence of Eu substitution on structure, magnetic, optical and dielectric properties of BiFeO₃ multiferroic ceramics, *Ceramic International*, vol. 41, pp. 2389-2398, 2015. **(Impact factor: 2.605) (Cite: 5)**
6. **Sati P. C.**, Kumar M., Chhoker S., Raman spectroscopy and enhanced magnetic and dielectric properties of Pr and Ti codoped BiFeO₃, *Journal of Material Science: Material in electronics*, vol. 26, pp. 530-538, 2015. **(Impact factor: 1.789) (Cite: 1)**
7. **Sati P. C.**, Kumar M., Chhoker S., Low temperature ferromagnetic ordering and dielectric properties of Bi_{1-x}Dy_xFeO₃ ceramics, *Ceramic International*, vol. 41, pp. 3227-3236, 2015. **(Impact factor: 2.605) (Cite: 2)**
8. **Sati P. C.**, Manoj Kumar, Phase evolution, magnetic, optical, and dielectric properties of Zr substituted Bi_{0.9}Gd_{0.1}FeO₃ multiferroics, *Journal of American ceramic Society* vol. 98, pp. 1884-1890, 2015. **(Impact factor: 2.61) (Cite: 3)**
9. Kumar M., **Sati P. C.** and Chhoker S., Electron spin resonance study and improved magnetic and dielectric properties of Gd-Ti co-substituted BiFeO₃ ceramics, *Journal of Materials Science: Materials in Electronics*, vol. 25, pp. 5366-5374, 2014. **(Impact factor: 1.789) (Cite: 6)**
10. Kumar M., **Sati P. C.**, Chhoker S. and Sajal V., Electron spin resonance studies and improved magnetic properties of Gd substituted BiFeO₃ Ceramics, *Ceramic International*, vol. 41, pp. 777-786, 2015. **(Impact factor: 2.605) (Cite: 1)**
11. Arora M., **Sati P. C.**, Chauhan S., Chhoker S., Panwar A. K. and Kumar M., “Structural, optical and multiferroic properties of BiFeO₃ nanoparticles synthesized by soft chemical route” *Journal of Superconductivity and Novel Magnetism*, vol.26, pp. 443-448, 2013. **(Impact factor: 0.93) (Cite: 16)**
12. Arora M., **Sati P. C.**, Chauhan S., Singh H, Yadav K. L., Chhoker S. and Kumar M., “Structural, magnetic and optical properties of Bi_(1-x)Dy_xFeO₃ nanoparticles synthesized by sol-gel method” *Materials Letters*, vol.96, pp. 71-73, 2013. **(Impact factor: 2.489) (Cite: 15)**

13. Arora M., **Sati P. C.**, Chauhan S., Kumar M. and Chokker S. "Structural, magnetic and optical properties of Ho-Co codoped BiFeO₃ nanoparticles", *Materials Letters*, vol. 132, pp. 327-330, 2014. **(Impact factor: 2.489) (Cite: 3)**
14. Chauhan S., Arora M., **Sati P. C.**, Chhoker S., Katyal S. C. and Kumar M., "Structural, vibrational, optical, magnetic and dielectric properties Bi_{1-x}Ba_xFeO₃ nanoparticles" *Ceramics International* vol. 39, pp. 6399-6405, 2013. **(Impact factor: 2.605) (Cite: 38)**
15. Arora M., Chauhan S., **Sati P. C.** and Kumar M., "Effect of Non-magnetic Ions Substitution on Structural, Magnetic and Optical Properties of BiFeO₃ Nanoparticles", *Journal of Superconductivity and Novel Magnetism*, vol. 27, pp. 1867-1871, 2014. **(Impact factor: 0.93) (Cite: 7)**
16. Arora M., Chauhan S., **Sati P. C.**, Kumar M. and Chokker S., "Evidence of spin-two phonon coupling and improved multiferroic behavior of Bi_{1-x}Dy_xFeO₃ nanoparticles", *Ceramic International*, 40, 13347-13356, 2014. **(Impact factor: 2.605) (Cite: 6)**
17. Arora M., Chauhan S., **Sati P. C.**, Kumar M., Chokker S., and Kotnala R. K. "Spin-phonon coupling and improved multiferroic properties of Zr substituted BiFeO₃ nanoparticles", *Journal of Material Science: Material in electronics*, vol. 25, pp. 4286-4299, 2014. **(Impact factor: 1.789) (Cite: 5)**
18. **Sati P. C.**, Arora M., Kumar M., Tomar M., Gupta V., "Effect of Pr substitution on structural, magnetic, and optical properties of Bi_{1-x}Pr_xFe_{0.80}Ti_{0.20}O₃ multiferroic ceramics", *Journal of Material Science: Material in electronics*, vol. 28, pp. 1011-1014, 2017.
19. **Sati P. C.**, Kumar M., Arora M., Tomar M., Gupta V., "Effect of Zr substitution on structural, magnetic, and optical properties of Bi_{0.9}Dy_{0.1}Fe_{1-x}Zr_xO₃ multiferroic ceramics prepared by rapid liquid phase sintering method", *Ceramics International*, <http://dx.doi.org/10.1016/j.ceramint.2016.12.141>. (Accepted)

CONFERENCES

1. **Sati P. C.**, Chauhan S., Arora M., Chhoker S., and Kumar M., "Structural, magnetic and dielectric properties of (Bi_{1-x}Pr_x)(Fe_{1-x}Zr_x)O₃ (x = 0.03, 0.06 and 0.10) multiferroic ceramics" *Indo-Japan Conference on Frontier nanomaterials for Energy (FNE-2012)*, Sharda University, Greater Noida, U.P., VT-17, pp. 96, Jan. 9-11, 2012.
2. **Sati P. C.**, Arora M., Chauhan S., Chhoker S. and Kumar M., "Phase transformation, raman, magnetic and optical properties of Pr, Ti codoped BiFeO₃ multiferroic" *Chemical Constellation Cheminar-2012 (CCC-2012)* (An International Conference), NIT Jalandhar, pp-116, September 10-12, 2012.
3. **Sati P. C.**, Kumar M. and Chhoker S., "Influence of Dy and Zr codoping on structural, magnetic and optical properties of rapid liquid phase sintered BiFeO₃ ceramics", *International Conference on Multifunctional Materials, Energy and Environment (ICMFME 2013)* pp. 48, held at Sharda University, Greater Noida, August 21-23, 2013.
4. Arora M., **Sati P. C.**, Chauhan S., and Kumar M., "Structural and dielectric properties of Zr doped BiFeO₃ nanoparticles" *Indo-Japan Conference on Frontier nanomaterials for Energy (FNE-2012)*, Sharda University, Greater Noida, U.P., VT-15, pp. 94, Jan. 9-11, 2012.

5. Arora M., **Sati P.C.** and Kumar M., “Enhanced multiferroic properties in Dy doped BiFeO₃ nanoceramics”, *International Conference and Workshop on Nanostructured ceramics and Other nanomaterials* (ICWNC-2012), pp. LC-328, held at Delhi University, New Delhi, March 13-16, 2012.
6. Arora M., **Sati P. C.**, Chauhan S., Chhoker S. and Kumar M., “Compositional driven phase transition and optical and multiferroic properties of Gd substituted BiFeO₃ nanoparticles” *Chemical Constellation Cheminar-2012 (CCC-2012)* (An International Conference), NIT Jalandhar, pp-115, September 10-12, 2012.
7. Arora M., **Sati P.C.** and Kumar M. “Enhanced Magnetic Properties and Band Gap Tuning in Ce Substituted BiFeO₃”, *International Conference on Nanoscience & Nanotechnology (ICNN-2013)*, PP-77, pp. 145, held at Babasaheb Bhimrao Ambedkar University, Lucknow, November 18-20, 2013.

Publications in national conferences proceedings

1. **Sati P. C.**, Arora M., Chauhan S., and Kumar M., “Structural, magnetic and dielectric properties of Dy doped BiFeO₃ multiferroic ceramics” *National Conference on Advances in Physics (NCAP-2012)*, IIT Roorkee, pp., Feb. 25-26, 2012.
2. Arora M., **Sati P. C.** and Kumar M. “Effect of Gd and Zr Co-substitution on Multiferroic Properties of BiFeO₃”, 58th DAE Solid State Physics Symposium K-154, pp. 237, held at Thapar University, Patiala, December 17-21, 2013. *AIP Conf. Proc. (Accepted)*.

Scientific Interest:

- Synthesis of multifunctional bulk and nanostructured materials by solid state and sol gel route.
- Characterization of multifunctional nanostructure materials by XRD (Rietveld refinement of XRD Pattern using ‘FullProf’ and ‘GSAS’), FESEM, TEM, SQUID, VSM, EPR, Raman, FTIR spectroscopy, Impedance spectroscopy, UV-VIS, Luminescence spectrometer, Spin coater, Pulse laser deposition technique, Thermal vacuum coating unit, Controlled muffle & tube Furnaces (1500°C).

Achievements:

- 5 year Teaching experience of B.Tech and M.Sc (Physics) classes.
- **School Topper** in Class X.
- Selected for “**DR. D. S. KOTHARI POSTDOCTORAL FELLOWSHIP SCHEME**” in Science in 2015 conducted by University Grants Commission (UGC), India.
- Awarded through **INNOVATION IN SCIENCE PURSUIT FOR INSPIRED RESEARCH (INSPIRE)**, an innovative programme sponsored and managed by the Department of Science & Technology, Government of India, for attraction of talent to Science, during Ph.D work in Materials Science and Engg.

- Qualified **GRADUATE APTITUDE TEST IN ENGINEERING (GATE)**, jointly conducted by six Indian Institute of Technology(s) and Indian Institute of Science on behalf of Ministry of Human Resource and Development, Government of India, in the year 2011 in **Physics**.
- **GOLD MEDALIST in M.Tech (Materials Science and Engg.)** at Jaypee Institute of Information Technology, Noida, India.
- Worked as **Teaching assistant** in B.Tech Physics lab from **July 2010- Aug 2011**.
- Taking **M.Sc (Physics) Classes** in University of Delhi from **8th july 2015 to till now**.

References:

Dr. Manoj Kumar (Assistant Professor) (Ph. D Supervisor)

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Prof. Vinay Gupta (Postdoc Supervisor)

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University of Delhi, Delhi

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Department of Physics and Materials Science & Engg.

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Personal Profile:

Father's Name : Mr. Bala Dutt Sati

Date of Birth : 25th June 1986

Nationality : Indian

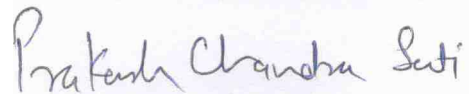
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Ramnagar (Nainital)-244715 Uttarakhand., India.

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Date- 29th May 2017

Place: Noida

A handwritten signature in blue ink that reads "Prakash Chandra Sati". The signature is written in a cursive style with a light blue background.

(Prakash Chandra Sati)