

Personal Information	
Name	Dr. Satyam Kumar
Date of Birth	1 st August 1989
Gender	Male
Nationality	Indian
E-mail:	satyamkumar@hrc.du.ac.in
Mailing Address	C/o Dr. Indrasen Ram, A-316, Asha Apartment railway road, Bazaria opposite bank of baroda, Ghaziabad, U.P.-201001
Permanent Address	Village- Jagdishpur, Post- Mawaiya, District- Mirzapur (U.P.), Pin code- 231312, India
Phone/Mobile	+91-9452924644,



Fellowships awarded	UGC-BHU Research Fellowship National Fellowship by UGC
Research Interests	<ul style="list-style-type: none"> ❖ Manganites based nanocomposites, Spintronics, photovoltaic ❖ Perovskite Multiferroic Materials ❖ Energy materials, thin film Solar Cell, Perovskite Solar Cell

Academic details

Course	Year	University/Board	Subject (s)
Ph.D.	2015	Banaras Hindu University, Varanasi (U.P.), India	Physics <i>Thesis Topic "Study of Physical Properties of Some Manganite Perovskites"</i>
Post-Graduation (M.Sc.)	2011	Banaras Hindu University, Varanasi (U.P.), India	Physics
Graduation (B.Sc.)	2009	V.B.S. Purvanchal University, Jaunpur, (U.P.), India	Physics, Mathematics
Intermediate (12 th)	2006	U.P. Board, Prayagraj, India	Physics, Chemistry, Mathematics, General Hindi, English
High school (10 th)	2004	U.P. Board, Prayagraj, India	Science

Experience: Working as an Assistant Professor in the Department of Physics, Hansraj College, University of Delhi, Delhi-110007 since 1st January 2019 till day.

Subject Taught:

- ❖ Mechanics,
- ❖ Thermal Physics and statistical mechanics,
- ❖ Waves and Optics.

Administrative Assignments:

- ❖ worked as departmental admission for caste verification (2020-2021, 2021-2022).
- ❖ worked as departmental nominee for helpdesk (2021-2022)
- ❖ worked as departmental nominee for OBE examination (Nov-Dec-2021), (May-June 2021)
- ❖ Working as Departmental nominee for Students Welfare Committee (July 2022-till)
- ❖ Working as Departmental nominee for NAAC work in Criteria -5.
- ❖ Working as a Convenor for Connecting Dreams Foundation (CDF) society in the College.
- ❖ Working on a project on Solar LED with faculty members and students.
- ❖ Working as an Academic Counsellor at IGNOU Centre.
- ❖ Working as a member in research development committee.

List of Publications:

- ❖ “Structural, transport and optical properties of $(\text{La}_{0.6}\text{Pr}_{0.4})_{0.65}\text{Ca}_{0.35}\text{MnO}_3$ nanocrystals: a wide band-gap magnetic semiconductor”, **Satyam Kumar**, G. D. Dwivedi, Shiv Kumar, R. B. Mathur, U. Saxena, A. K. Ghosh, Amish G. Joshi, H. D. Yang and Sandip Chatterjee. **Dalton Transactions** **44**, **3109 (2015)**. [SCI/ Scopus Indexed, IF-4.39]
- ❖ “Particle size dependence on the structural, transport and optical properties of charge-ordered $\text{Pr}_{0.6}\text{Ca}_{0.4}\text{MnO}_3$ ”, **Satyam Kumar**, G. D. Dwivedi, J. Lourembam, Shiv Kumar, U. Saxena, A. K. Ghosh, H. Chou, and Sandip Chatterjee. **Journal of Alloys and Compounds** **649**, **1094-1101 (2015)**. [SCI/ Scopus Indexed, IF-5.316]
- ❖ “Structural, magnetic, magneto-transport properties, and electronic structure study of charge-ordered $(\text{La}_{0.4}\text{Pr}_{0.6})_{0.65}\text{Ca}_{0.35}\text{MnO}_3$ ”, G.D. Dwivedi, **Satyam Kumar**, Amish G. Joshi, Shiv Kumar, A.K. Ghosh, H. Chou, H.D. Yang, Sandip Chatterjee, **Journal of Alloys and Compounds** **699**, **31-37 (2017)**. [SCI/ Scopus Indexed, IF-5.316]

- ❖ “Structural, optical, and low-temperature resistivity of Ca-doped PrMnO₃ nanoparticles”, **Satyam Kumar**, Indrasen Ram, Aditya Kumar, Upendra Kumar. **Emergent Materials** 3(5),1-10, (2020). [Scopus Indexed, IF-NA]
- ❖ “Synthesis and physical properties of nanopowder and electrical properties of bulk samples of ZnFe_{2-x}Ni_xO₄ (x: 0, 0.05, 0.10)” Harshpreet Cheema, **Satyam Kumar**, Parvez Ahmad Alvi, Banwari Lal Choudhary, Upendra Kumar. **Advanced Powder Technology** 31,4241-4252, (2020). [SCI/ Scopus Indexed, IF-4.833]
- ❖ “Study of structural, microstructure, impedance, and DC conductivity of Gd-doped SrCeO₃ ceramics”: Upendra Kumar; Dharmendra Yadav; Gurudeo Nirala; Sushma Yadav; Shail Upadhyay; **Satyam Kumar**; **Applied Physics A** ,127, 964 (2021). [SCI/ Scopus Indexed, IF-2.584]
- ❖ “Dielectric and Photoconductivity Dependence Study of Four-Wave Mixing Process in Photorefractive Materials”; Mahendra Kumar Maurya; T. K. Yadav; R. A. Yadav; **Satyam Kumar**; **Indian Journal of Physics** 96, 3289–3296 (2022). [Scopus Indexed, IF-1.947]
- ❖ “Analysis of Correlation based Threshold Networks of Dow Jones stocks of USA: An Econophysics Approach”: Sushil Kumar, **Satyam Kumar**, Upendra Kumar, Sunil Kumar, Pawan Kumar, and Narinder Verma; **Journal of Engineering Science and Technology Review** 15 (2) 198 – 207, (2022). [Scopus Indexed, IF-0.698]
- ❖ “Structural confirmation and spectroscopic signature of N-Allyl-2-hydroxy-5-methyl-3-oxo-2, 3-dihydrobenzofuran-2-carboxamide and its monohydrate cluster”; T. Yadav, A.K. Vishwkarma, G. Brahmachari, I. Karmakar, P. Yadav, **S. Kumar**, C. Mahapatra, J. Chowdhury, R. Kumar, G.N. Pandey, P.K. Tripathi, A. Pathak; **Journal of Molecular Structure** 1267, 133566, (2022) [SCI/ Scopus Indexed, IF-3.841]
- ❖ “Studies on the physical properties of BaTi_{1-x}Sn_xO₃ (x = 0, 0.04, 0.08, 0.12, 0.16, 0.20) synthesized using solid state ceramic route”; Harshpreet Cheema, Vedika Yadav, Ram Sunder Maurya, **Satyam Kumar**, P.A. Alvi, Upendra Kumar; **Materials Today: Proceedings** DOI:10.1016/j.matpr.2022.06.349. [Scopus Indexed, IF-1.46].
- ❖ “Study of structural, optical, dielectric, and electric properties of homovalently substituted Ce in SrTiO₃ perovskite oxide”; Vedika Yadav, Harshpreet Cheema, Ram Sunder Maurya, **Satyam Kumar**, P. A. Alvi, Minakshi Sharma, Upendra Kumar; **Ionics** DOI: <https://doi.org/10.1007/s11581-022-04782-2> [Scopus Indexed, IF-2.817]
- ❖ “A Comparative Study of the Structural, Magnetic and Electrical Properties of Ni₅₀Mn₂₀(Ni/Co)₅Ga₂₅”; Durgesh Singh; Akhilesh Kumar Patel; Manju Mishra Patidar; **Satyam Kumar**, KG Suresh; [Under Review in Current Applied Physics].
- ❖ “An Ab Initio Analysis of Structural, optical, Electronic, and Thermal Properties of Cubic SrSnO₃ using Wein2k” Arya, Aditya Kumar, Varsha Yadav, Hari Prasad Bhaskar, Sushil Kumar, **Satyam Kumar**, and Upendra Kumar [Under Review in European journal physics]

Book Chapter:

Edited Book Entitled “Sustainability of Green and Eco-friendly Composites”

Chapter Name: Lead-free multiferroic BiFeO₃ based sustainable green composites: Applications, opportunities, and future challenges
Full author list: Manish Kumar, Arvind Kumar, **Satyam Kumar**, Ziaul Khan
Publisher: CRC Press (Taylor and Francis) [**Accepted for Publication**]

Patent Details:

TITLE OF INVENTION: A Novel Cost Effective Composite Air Quality Monitoring System with Machine Learning Based Visualization and Analysis Tool.

APPLICATION NUMBER: 202231025795

Roll: Inventor

Status: Published on 10/06/2022

Reviewer Detail: Worked as Reviewer in Materials Today: Proceedings (Scopus Indexes)

ORAL/POSTER PRESENTATION

- ❖ Attended “**Conference on Neutron Scattering 2014**” organized by IISER, Pune on dated: February 10-12, 2014, at IISER Pune (**Poster Presentation**).
- ❖ Attended **International Conference on “Nanomaterials with Special Reference to Energy Security”** organized by Department of Physics on dated: 12-14 March 2014 (**Poster Presentation**).
- ❖ Attended **International Conference on “Electron microscope society of India (EMSI-2014)”** at University of Delhi, New Delhi on dated: 09-11 July 2014 (**Poster Presentation**).
- ❖ Attended **International Conference on “Recent Advances in Nanoscience & Nanotechnology-2014(ICRANN-2014)”** at Jawaharlal Nehru University, New Delhi on dated: 15-16 Dec 2014 (**Poster Presentation**).
- ❖ Attended “**International Conference on Frontiers of Spectroscopy (ICFS-2015)**” at BHU, Varanasi on dated: 10-12 January 2015. (**Poster Presentation**).
- ❖ Attended “**8th one day conference on Recent Trend in Research**” organized by physics department, BHU, Varanasi on dated 7th Feb 2015. (Poster Presentation).
- ❖ Attended **International Conference on “Electron microscope society of India (EMSI-2016)”** at IIT(BHU) on dated: 02-04 June 2016 (**Poster Presentation**).
- ❖ Attended **National Conference on “Advanced Materials: Theory and Application (NCAMTA-2019)”** at Hansraj College, University of Delhi on dated: 26-28, September 2019 (**Poster Presentation**).
- ❖ Attended **International Conference on “Recent Advances in Functional Materials (RAFM-2022)”** at Atma Ram Sanatan Dharma College, University of Delhi, New Delhi on dated: 14-16 March 2022 (**Oral Presentation**).

ORGANISED:

- ❖ Member of organizing committee in National Conference on Advanced Materials: Theory and Application, organized by the Department of Physics and electronics, Hansraj College during September 26-28, 2019.
- ❖ Organized a webinar on “Mitigating Global Warming and Climate Change: Need of Hydrogen Energy” organized by Department of Physics and electronics, Hansraj College during September 18, 2021.
- ❖ Organized a webinar on “Power of Positivity in Adversity” organized by Department of Physics and electronics, Hansraj College during September 25, 2021.

FACULTY DEVELOPMENT PROGRAM

- ❖ Attended One Week **Online Faculty Development Program on Emerging Trends in Applied Physics** organized by Department of Physics, SGT University, Gurugram dated 5th July to 9th July 2021.
- ❖ Attended One Week **Online Faculty Development Program on “Materials Characterization: Experimental And theoretical Aspects”** organized by Hansraj College, dated 20th September to 24th September 2021.

SCHOOL/ WORKSHOP

- ❖ Participated Summer School On” *Development And Characterization Of Advanced Materials*” organized by Department of Physics, Banaras Hindu University, India. Dated February 22, 2013, to March 14, 2013.
- ❖ Participated Winter school on “*Practical Crystallography and Structure Solution*” organized by Department of Physics, BHU Varanasi, India dated March 5-11, 2014.
- ❖ Attended Workshop on “**Interface between Natural Sciences and Biosciences**” organized by Department of Physics and Bioinformatics, MMV, BHU, Varanasi. March 25th-26th 2012.
- ❖ Attended Workshop on “*Nano Materials with Particular Reference to Energy Security*” organized by Department of Physics BHU Varanasi, India. March 11-17, 2014.
- ❖ Attended Workshop on “**Supramolecular Chemistry- Concepts And Perspectives**” organized by Department of Chemistry, MMV, BHU, Varanasi. April 4th-5th, 2014.

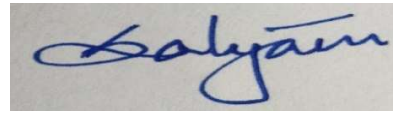
- ❖ Attended Workshop on “*Characterization and Functionalization of Nanomaterials*” organized by Department of Physics BHU Varanasi, India. March 09-13, 2015.
- ❖ Attended Three-day online Workshop on “**Challenges of Teaching Physics Laboratory Courses in Online Mode**” organized by Kalindi College, University of Delhi dated 23-25 Jan-2021.
- ❖ Attended Value Added e-Workshop on “**Energetic Beam Technology: From Materials Engineering to Diagnostics**” organized by Amity Institute of Nanotechnology Amity University UP dated June 21-25, 2021.
- ❖ Attended the online workshop on “**Power of Positivity in Adversity**” organized by Hansraj College dated 25th September 2021.
- ❖ Attended the online workshop on “**Virtual Labs**” organized by Hansraj College dated 4th October 2021.
- ❖ Attended One Day Symposium on “**Road ahead for HEI’s Accreditation under Nep**” organized by Mahatma Hansraj Faculty Development Centre Hansraj College dated 7th April 2022.

OTHERS PARTICIPATION:

- ❖ Attended 5th one day conference on “**New Trends in Research**” organized by Department of Physics BHU dated 25th February-2012.
- ❖ Attended 6th one day conference on “**New Trends in Research**” organized by Department of Physics BHU dated 20th December-2012.
- ❖ Attended conference on “**Condensed Matter and Biological Systems**” organized by BHU dated 11th-14th January-2013.
- ❖ Attended webinar on “**Awareness on Intellectual property Rights (IPR)**” organized by Patent Information Centre, DST Government of Rajasthan dated 21st Jan -2021.
- ❖ Attended Training program under “**National Intellectual Property Awareness Mission**” organized by Intellectual Property Office, India dated 24th January-2022.
- ❖ Attended online lecture entitled “**Not yet finished journey of Hall effect**” organized by Deshabandhu College dated 15th Feb-2022.

Declaration

I hereby declare that all the information given above is true to the best of my knowledge.



(Dr. Satyam Kumar)

Department of Physics
Hansraj College,
University of Delhi
Delhi-110007