


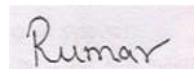


DEPARTMENT OF PHYSICS
DYAL SINGH COLLEGE, UNIVERSITY OF DELHI
FACULTY DETAIL



Title	Dr.	First Name	ROHTASH	Last Name	KUMAR	Photograph
Designation	ASSISTANT PROFESSOR					
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Web-Page						
Educational Qualifications						
Degree	Institution				Year	
B. Sc.	Govt. Post Graduate College, Hisar (Affiliated to Kurukshetra University) Haryana				2007	
M. Sc.	Guru Jambheshwar University of Science & Technology, Hisar-125001 (Haryana)				2011	
Ph. D.	Jawaharlal Nehru University (JNU), New Delhi-110067				2018	
Career Profile						
<ol style="list-style-type: none"> 6 July 2023 - Present, Assistant Professor at Dyal Singh College, University of Delhi, New Delhi. 14 August 2019 - 4 July 2023, Assistant Professor (Ad-hoc) at Dyal Singh College, University of Delhi, New Delhi. 1 August 2019 to 13 August 2019, Assistant Professor (Ad-hoc) at Keshav Mahavidyalaya, University of Delhi, New Delhi. 8 May 2019 to 24 May 2019, Counselor for B. Sc. students (IGNOU) at Gargi College, University of Delhi, New Delhi. 11 January 2019 to 24 April 2019, Assistant Professor (Guest) at Keshav Mahavidyalaya, University of Delhi, New Delhi. 						
Administrative Assignments (From 1st July 2019 onwards)						
<ol style="list-style-type: none"> Admission committee member for physical science, UG level at Dyal Singh College academic session 2021-22. Student mentor-mentee member for physical science, UG level at Dyal Singh College academic session 2021-22. Environmental club member, UG level at Dyal Singh College academic session 2022-23. Co-coordinator physical science with chemistry, UG level at Dyal Singh College academic session 2022-23. Member physics society, UG level at Dyal Singh College academic session 2022-23. Member IQAC, UG level at Dyal Singh College academic session 2022-23. Admission committee member for physical science, UG level at Dyal Singh College academic session 2024-25. Student mentor-mentee member for physical science, UG level at Dyal Singh College academic session 2024-25. 						
Areas of Interest / Specialization						
<ol style="list-style-type: none"> Material synthesis: solid-state reaction route, and sol-gel method. Thin film deposition using RF sputtering & Pulse Laser Deposition (PLD). Processing, characterization and applications of ferroelectric materials. Dielectric, ferroelectric and energy storage properties. Structure-property correlation in functional materials. Microstructure-physical property relationship in ferroelectric ceramics. Ions irradiation of thick and thin film samples. TEM sample preparation (plan-view & cross-sectional view). 						
Subjects Taught						
Elements of modern physics, Solid state physics, Mechanics, Basic instrumentation skills, and Quantum mechanics						
Research Guidance-UG students						
<ol style="list-style-type: none"> Swasti Agarwal, Structural and optical properties in La-doped BTS ceramics, 14 June 2024 to 31 July 2024. Mansi Gupta, Structural and optical properties in Ba doped TiO₂ nanoparticle, 14 June 2024 to 31 July 2024. Kaushiki Sinha, Structural and optical properties in Ba doped TiO₂ nanoparticle, 14 June 2024 to 31 July 2024. Radhika Pandey, Effect of Ca substitution on the microstructure, dielectric, and energy storage properties of Ba[Zr_{0.2}Ti_{0.8}]O₃ ceramics Harshit Miglani, Effect of yttrium substitution on the microstructure, optical, dielectric, and energy storage properties of BLT ceramics 						
Publications Profile (From 1st July 2019 onwards)						

<p>1. Effect of La-doping on dielectric properties and energy storage density of lead-free Ba(Ti_{0.95}Sn_{0.05})O₃ ceramics, R. Kumar, I. Singh, R. Meena, K. Asokan, B. Birajdar, S. Patnaik, Materials Research Bulletin, (2019) 110694.</p> <p>2. A. Bhardwaj, A. Bairva, S. Dhakla, P. K. Deendyal, H. Singh, M. Misra, R. Kumar, and M. K. Kashyap "Structural and Morphological investigation of Copper (I) Iodide utilized as a Hole Transport Layer in Perovskite Solar Cells, Indian Journal of pure & applied Science, 62, 48-50, (2024).</p> <p>3. Sonia Rani, Sujata Sanghi, Ashish Agarwal, R. Kumar, Ompal Singh, Crystal structure, magnetic and dielectric properties of Er-doped BiFeO₃ ceramics, Applied Physics A (2022) 128:576.</p>
Conference Organization/ Presentations (From 1 st July 2019 onwards)
<p>1. Poster presented titled Influence of Sn-doping on structural, optical, dielectric and energy storage properties of ferroelectric BaTiO₃ ceramics, School of Physical Sciences, MESD-2023, JNU, Delhi-110067.</p>
Research Projects (Major Grants/Research Collaboration) (From 1 st July 2019 onwards)
NA
Awards and Distinctions (From 1 st July 2019 onwards)
NA
Association With Professional Bodies
NA
Other Activities like MOOCs/ Patents etc. (From 1 st July 2019 onwards)
NA



Signature of Faculty Member