




Shivaji College Faculty Details Proforma

Title	First Name	Last Name	Photograph
Dr.	Surendra	Kumar	
Designation	Assistant Professor		
Address	Second Floor, A-18, Tagore Garden Ext., New Delhi-110027		
Office Phone No.	011-25116644		
Residence			
Mobile			
Email	surendrakumar@shivaji.du.ac.in		
Web-Page			
Educational Qualifications	PhD (Physics)		
Degree	University/Institute	Year	
Ph.D.	Central University of Rajasthan	2019	
M.Phil./M.Tech.			
PG	Central University of Rajasthan	2014	
UG	University of Kota	2012	
Any Other Qualification			
Career Profile			
<ul style="list-style-type: none"> ➤ Assistant Professor, Shivaji College (November 2023 – till date) ➤ Assistant Professor, Sri Venkateswara College (August 2021 – April 2023) ➤ Assistant Professor, Gargi College, (February 2020 – February 2021) 			
Administrative Assignments			

- Member of Media Cell
- Member of Examination Centre

Areas of Interest/Specialisation

- Multiferroics
- Orthochromites
- Magnetic refrigeration
- Magneto-Electro caloric Materials

Subjects Taught

- Electrical Circuit Analysis
- Mechanics
- Electricity and magnetism
- Quantum Mechanics
- Waves and optics

Innovation Project/Research Projects (Major Grants/Research Collaboration)

Publications Profile (Research Papers/Books)

1. Vartika Khandelwal, Piyush Siroha, S. Satapathy, Sonali Pradhan, **Surendra Kumar**, Narender Kumar, Jitendra Gangwar, S.K. Majumder, Ramovatar, Neeraj Panwar, "A comprehensive analysis of the structural, microstructural, optical, and piezocatalytic activity of $Ba_{0.92}Ca_{0.08}Zr_{0.09}Ti_{0.91}O_3$ and $Ba_{0.98}Ca_{0.02}Zr_{0.07}Ti_{0.93}O_3$ lead-free ceramics", *J. Alloys Compd.* **983** (2024) 173785
2. Neeraj Panwar, Kuldeep Singh, Komal Kanwar, Yugandhar Bitla, **Surendra Kumar** and Venkata Sreenivas Puli, "Low-Temperature Magnetic and Magnetocaloric Properties of Manganese-Substituted $Gd_{0.5}Er_{0.5}CrO_3$ Orthochromites", *Crystals* **12** (2022) 263
3. Neeraj Panwar, Indrani Coondoo, **Surendra Kumar**, Sandeep Kumar, M. Vasundhara and Ashok Rao, "Structural, Electrical, Optical and Magnetic Properties of $SmCrO_3$ chromites: Influence of Gd and Mn co-doping", *J. Alloys Compd.* **792** (2019) 1122
4. Neeraj Panwar, **Surendra Kumar**, Indrani Coondoo, M. Vasundhara, Nitu Kumar, "Low temperature magnetic and magnetocaloric studies in $YCr_{0.85}Mn_{0.15}O_3$ ceramic", *Physica B* **545** (2018) 352
5. Neeraj Panwar, Jostin P. Joby, **Surendra Kumar**, Indrani Coondoo, M. Vasundhara, Nitu Kumar, Ratnakar Palai, Rahul Singhal, Ram S. Katiyar, "Observation of magnetization reversal behavior in $Sm_{0.9}Gd_{0.1}Cr_{0.85}Mn_{0.15}O_3$ orthochromites", *AIP Advance* **8** (2018) 055818
6. **Surendra Kumar**, Indrani Coondoo, M. Vasundhara, Venkata S. Puli, Neeraj Panwar, "Observation of magnetization reversal and magnetocaloric effect in manganese modified $EuCrO_3$ orthochromites", *Physica B* **519** (2017) 69

7. **Surendra Kumar**, Indrani Coondoo, M Vasundhara, Sandeep Kumar, A L Kholkin and Neeraj Panwar, "Structural, magnetic, magnetocaloric and specific heat investigations on Mn doped PrCrO_3 orthochromites", *J. Phys.: Condens. Matter* **29** (2017) 19580
8. **Surendra Kumar**, Indrani Coondoo, M. Vasundhara, Ajit K. Patra, Andrei L. Kholkin and Neeraj Panwar, "Magnetization reversal behavior and magnetocaloric effect in $\text{SmCr}_{0.85}\text{Mn}_{0.15}\text{O}_3$ chromites", *J. Appl. Phys.*, **121** (2017) 043907
9. **Surendra Kumar**, Indrani Coondoo, Ashok Rao, Bo-Han Lu, Yung-Kang Kuo, Andrei L. Kholkin, Neeraj Panwar, "Impact of low level praseodymium substitution on the magnetic properties of YCrO_3 orthochromites", *Physica B* **510** (2017) 104

Conference/Seminar/Faculty Development Programme/Workshop

- Participated in International Conference on Resurgent Bharat on the Global Canvas, Shaikshik Foundation in collaboration with Shivaji College, University of Delhi, India, February 25-26, 2024.
- Participated in 4 – Week online Faculty Induction/ Orientation Programme for "Faculty in Universities/ Colleges/ Institutions of Higher Education", Teaching – Learning Centre Ramanujan College, University of Delhi, 22 January – 20 February, 2024
- Participated in online Faculty Induction Programme for "Short term Course on Research Methodology", CPDHE, University of Delhi, October 14 – 20, 2022.
- Presented poster in **29th Annual General Meeting of Materials Research Society of India and National Symposium on Advances in Functional and Exotic Materials**, Bharathidasan University, Tiruchirappali, India, February 14-16, 2018.
- Presented oral talk in **National Symposium on Technologically Advanced Functional Materials (NSTAFM-2017)**, Central University of Rajasthan, Rajasthan, India, March 16-17, 2017.
- Presented poster in **National Symposium on Materials for Advanced Technologies (MAT 2017)**, DIT University, Dehradun, India, February 20-21, 2017.
- Presented poster in **International Conference on Magnetic Materials and Applications (ICMAGMA - 2017)**, Defence Metallurgical Research Laboratory (DMRL), Hyderabad, India, February 1-3, 2017.
- Presented poster in **Third National Hindi Science Conference -2016**, University of Rajasthan, Jaipur, India, December 16-17, 2016.
- Presented poster in **2nd National Conference on Physics of Engineering Materials (NCPPEM-2016)**, Deenbandhu Chhotu Ram University of Science and Technology, Haryana, India, March 10-11, 2016.
- Participated in **National Workshop on Electron Microscopy and Allied Techniques (NWEMAT-2015)**, University of Delhi, Delhi, India, December 21-23, 2015.
- Participated in **National Conference on Advance Functional Materials & Their Applications (AFMA-2015)**, Govt. Women Engineering College Ajmer, Rajasthan, India, December 11-12, 2015.
- Participated in **Science Academies Refresher Course in Experimental Physics**, Central University of Rajasthan, Rajasthan, India, March 10-25, 2015.

Research Guidance (Supervision of Doctoral Thesis/Dissertations)

Awards and Distinctions

- Best poster award in 2nd National Conference on Physics of Engineering Materials (NCPem-2016), Deenbandhu Chhotu Ram University of Science and Technology, Haryana, March 10-11, 2016.
- Best poster award in International Conference on Magnetic Materials and Applications (ICMAGMA-2017), Defence Metallurgical Research Laboratory (DMRL), Hyderabad, February 1-3, 2017.
- Awarded Rajiv Gandhi National Fellowship (RGNF) provided by UGC, April 2016.

Memberships

Other Academic Activities

Cultural/Extracurricular Activities

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Signature of Faculty Member