

# Dr. Pravin Kumar

Assistant Professor

(Physics)

Department of Basic Engineering and Applied Sciences,  
College of Technology,  
Sardar Vallabhbhai Patel University,  
of Agriculture & Technology,  
Meerut-250110 (U.P.) India.

Email: [pravinkumar@svpuat.edu.in](mailto:pravinkumar@svpuat.edu.in)

Mob. No.: 8355098753



## Area of Research Interest

Electrical/Electrochemical Properties of Materials, Materials for Solid oxide Fuel Cells (SOFCs) and Solid Oxide Electrolyser cells (SOECs), Hydrogen Production, Experimental Condensed Matter Physics and Renewable Energy Sources.

## Educational Qualifications

❖ **Ph.D. (2016)**, Indian Institute of Technology (Banaras Hindu University), Varanasi, India, under supervision of **Prof. Prabhakar Singh**

**Thesis Title:** “*Structural and electrical investigations on rare earth doped perovskite and double perovskite systems as an anode for solid oxide fuel cell*”

❖ **M.Sc. (2009)**, Dr. Bhimrao Ambedkar University, Agra, Uttar Pradesh, India.

❖ **B.Sc. (2007)**, Dr. Bhimrao Ambedkar University, Agra, Uttar Pradesh, India.

## Fellowship and Awards

❖ Junior Research Fellowship (JRF) by the UGC, New Delhi, India.

❖ SERB National Post-Doctoral Fellowship, New Delhi, India.

❖ Dr. D. S. Kothari Postdoctoral Fellowship, UGC, New Delhi, India.

## Work Experience

- ❖ Assistant Professor: 23 October 2024 to continue, College of Technology, Sardar Vallabhbhai Patel University of Agriculture & Technology, Meerut-250110 (U.P.) India
- ❖ Research Associate: 10 August 2024 to 22 October 2024, Department of Chemistry, Institute of Science, Banaras Hindu University, Varanasi, India
- ❖ Guest Faculty: 09 November 2022 to 07 July 2023, Department of Physics, Dayal Singh College, Delhi University.
- ❖ Guest Faculty: 15 October 2022 to 08 November 2022, Department of Applied Physics, Mahatma Jyotiba Phule Rohilkhand University, Bareilly, Uttar Pradesh.
- ❖ Guest Faculty: 03 December 2020 to 25 May 2022, Department of Applied Science & Humanities, Faculty of Engineering Lucknow University, Lucknow Uttar Pradesh.
- ❖ Contractual Faculty: 31 July 2019 to 20 May, 2020, Department of Physics and Photonics Sciences, National Institute of Technology, Hamirpur (Himachal Pradesh).
- ❖ National Post-Doctoral Fellow (N-PDF): 3 April 2017 to 2 April 2019, Department of Physics, Institute of Science, Banaras Hindu University, Varanasi, India under mentorship of **Prof. Rajendra Kumar Singh**

## Research Publications

- ❖ Influence of  $\text{La}^{3+}$  doping on structural and optical properties of  $\text{SrCeO}_3$  perovskite, Dharmendra Yadav, **Pravin Kumar**, Alok Kumar Tripathi, Ram Sagar Yadav, Gurudeo Nirala, Sushma Yadav, Ashish Kumar Yadav and Sandip Yadav, Journal of **Physica Scripta**, 99, 115935(2024). **Impact Factor: 2.6**
- ❖ Influence of lanthanum ( $\text{La}^{3+}$ ) doping on structural and electrical/electrochemical properties of double perovskite  $\text{Sr}_2\text{CoMoO}_6$  as anode materials for IT-SOFCs, **Pravin**

**Kumar**, Paramananda Jena, P. K. Patro, R. K. Lenka, A.S.K. Sinha, Prabhakar Singh, Rajendra Kumar Singh, **ACS Applied Materials & Interfaces**, 11, 27, 24659-24667 (2019).

**Impact Factor: 8.5**

Electrical conductivity of NiMo-based double perovskites under SOFC anodic conditions,

**Pravin Kumar**, Sabrina Presto, Salil Varma, Massimo Viviani, Prabhakar Singh, **International Journal of Hydrogen Energy**, 43, 4528-4533 (2018 ). **Impact Factor: 8.1**

Effect of samarium ( $\text{Sm}^{3+}$ ) doping on structure and electrical conductivity of the double perovskite  $\text{Sr}_2\text{NiMoO}_6$  as anode system for SOFC, **Pravin Kumar**, Sabrina Presto, A.S.K. Sinha, Massimo Viviani, Prabhakar Singh, **Journal of Alloys and Compounds**, 725 1123-1129 (2017). **Impact Factor: 5.8**

❖ Structural and electrical characterizations of cerium ( $\text{Ce}^{3+}$ ) doped double perovskite system  $\text{Sr}_2\text{NiMoO}_{6-\delta}$ , **Pravin Kumar**, Nitish Kumar Singh and Prabhakar Singh, **Applied Physics A: Materials Science and Processing**, 122:828 (2016). **Impact Factor: 2.6**

❖ Effect of lanthanum ( $\text{La}^{3+}$ ) doping on structural and the electrical properties of double perovskite  $\text{Sr}_2\text{NiMoO}_6$ , **Pravin Kumar**, Nitish Kumar Singh, Govind Gupta and Prabhakar Singh, **RSC Advances**, 6, 22094-22102 (2016). **Impact Factor: 3.9**

❖ Influence of Ni/Mo ratio on structural and electrical properties of double perovskite system  $\text{Sr}_2\text{Ni}_{1+x}\text{Mo}_{1-x}\text{O}_{6-\delta}$ , **Pravin Kumar**, Nitish Kumar Singh and Prabhakar Singh, **Applied Physics A: Materials Science and Processing**, 121, 635–644 (2015). **Impact Factor: 2.6**

❖ Structural and electrical behavior of double perovskite material  $\text{Sr}_2\text{NiMoO}_{6-\delta}$ , **Pravin Kumar**, Rajesh Kumar Singh and Prabhakar Singh, **Advanced Science Letters**, 20, 647–649, (2014).

❖ Effect of isovalent ion substitution on electrical and dielectric properties of  $\text{LaCrO}_3$ ” **Pravin Kumar**, Rajesh Kumar Singh, A.S.K. Sinha, Prabhakar Singh, **Journal of Alloys and**

**Compounds**, 576, 154–160 (2013). **Impact Factor: 5.8**

❖ Structural and Electrical Characterizations of Lanthanum Chromite: Effect of Synthesis Routes, **Pravin Kumar**, Rajesh Kumar Singh and Prabhakar Singh, **Transactions of the Indian Ceramic Society**, 71, 239-242 (2013). **Impact Factor: 1.5**

❖ Influence of Grain and Grain-Boundary Resistances on Dielectric Properties of  $\text{KNbO}_3$  Under Small DC Bias Field, S.U. Sharath, Rajesh Kumar Singh, Raghvendra Pandey, Bheeshma Pratap Singh, **Pravin Kumar**, and Prabhakar Singh, **Journal of the American Ceramic Society**, 96(10), 3127-3132 (2013). **Impact Factor: 3.5**

### **Book Chapter**

❖ Bioactive glass for biomedical application: an overview, Sushma Yadav, Dharmendra Yadav, Gurudeo Nirala, Ashishkumar Yadav, **Pravin Kumar**, Springer Nature (Defect Engineering in Electroceramic for Energy Applications), 305-327 (2024).

**Corresponding Address:** Department of Basic Engineering and Applied Sciences, College of Technology, Sardar Vallabhbhai Patel University of Agriculture & Technology, Meerut–250110 (U.P.) India.