

Curriculum Vitae



Dr. Mukesh Pratap Singh

Associate Professor
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Education:

Ph.D. (Physics)	1993	Delhi University, Delhi, India
M.Sc. (Physics)	1986	Bihar University, Muzaffarpur, India
B.Sc. (Physics)	1983	Bihar University, Muzaffarpur, India
I.Sc.	1980	Bihar University, Muzaffarpur, India
Matric	1978	B. S. Exam. Board, Patna, India

Academic Experience:

2011– till date	Associates Professor Department of Applied Sciences & Humanities, Faculty of Engineering and Technology, Jamia Millia Islamia (Central University), New Delhi -110025, India
2008 - 2011	Reader Department of Applied Sciences & Humanities, Faculty of Engineering and Technology, Jamia Millia Islamia (Central University), New Delhi -110025, India
1996 - 2008	Assistant Professor Department of Applied Sciences & Humanities, Faculty of Engineering and Technology, Jamia Millia Islamia (Central University), New Delhi -110025, India

Foreign visits:

1999	University of Nice, Nice, France
1999	Departmento di Elettronica e Informatica, Università Degli di Padova, Padova, Italy
1991	International Centre for Theoretical Physics, Trieste, Italy
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Research Interests:

His areas of research expertise include conventional and photonic crystal optical fibres, fibre optic sensor, and photovoltaics. Currently he is engaged in the research on photovoltaic cells, design of antireflection coating (ARC) for the solar cell's application and modelling the fibre optic sensors.

Outstanding Achievements:

- h-index 6, i10-index 6, total citations: 303.
- Published many peer-reviewed research articles, books chapters and conference papers.

Last Five Years Publications:

1. Singh, M. P., & Amir, M. (2022). A comparative study of different emitter diffusion profiles on the performance of Si solar cells. *Engineering Research Express*, 4(1), 018001.
2. Singh, M. P., & Chaurasia, S. K. (2018). Design Optimization of Pd-Coated Side-Polished Single Mode Optical Fiber Hydrogen Sensors. *IEEE Sensors Journal*, 18(20), 8389-8396.
3. M, Amir, & Singh, M.P. (2023). Effect of Exciton Dissociation and extraction of localised states parameters for PTB7-Th:PC71BM. *Engineering Research Express*, (Communicated)
4. Singh, M. P., & Chaurasia, S. K. (2020, October). Effect of Teflon buffer on PdY alloy deposited Side Polished Fiber Hydrogen Sensor. In 2020 IEEE International Conference on Electrical Engineering and Photonics (EExPolytech) (pp. 230-233). IEEE.
5. Singh, M. P., & Chaurasia, S. K. (2020, December). Effect of magnesium fluoride buffer on PdY alloy coated Side-Polished Optical Fiber Hydrogen Sensor. In 2020 IEEE 4th Conference on Information & Communication Technology (CICT) (pp. 1-5). IEEE.
6. Singh, M. P., & Chaurasia, S. K. (2021, February). Effect of Calcium Fluoride Buffer on PdY deposited Optical Fiber Hydrogen Sensor. In IOP Conference Series: Materials Science and Engineering (Vol. 1057, No. 1, p. 012001). IOP Publishing.
7. Singh, M. P., & Chaurasia, S. (2018, November). Influence of Buffer Thickness on Sensitivity of Pd-Coated Side Polished Single Mode Optical Fiber Hydrogen Sensor. In *Proceedings* (Vol. 2, No. 13, p. 1078). MDPI.
8. Amir, M., Singh, M. P., & Masood, I. (2023, February). Effect of Exciton Dissociation and Recombination Losses in Perovskite Photovoltaic Cells. In 2023 International Conference on Power, Instrumentation, Energy and Control (PIECON) (pp. 1-6). IEEE.
9. Masood, I., Singh, M. P., & Amir, M. (2023, February). Analysis of Different Layers Thicknesses on the Performance of Organic Solar Cells. In 2023 International Conference on Power, Instrumentation, Energy and Control (PIECON) (pp. 1-5). IEEE.
10. M, Amir, Singh, M.P., M, Masood, (2023). Recombination analysis of CH₃NH₃PbI₃ solar cell for optimised device structure. In international conference, Springer (accepted).
11. M, Masood, Singh, M.P., and M, Amir, (2023). Organic solar cell based on P3HT:PCBM with inorganic transport layers: Performance analysis and optimisation,. In international conference, Springer (accepted).

Book Chapter:

1. Singh, M. P., & Amir, M. (2022). Organic Photovoltaic Cells: Opportunities and Challenges. *Nanomaterials for Innovative Energy Systems and Devices*, 499-550.
2. Ahmad, F., Khan, Z. H., & Singh, S. (2022). Graphitic Carbon Nitrides: Synthesis, Properties, and Applications in Perovskite Solar Cells. In *Nanomaterials for Innovative Energy Systems and Devices* (pp. 45-76). Springer, Singapore.
3. Ahmad, S., Singh, P. K., & Khan, Z. H. (2021). Studies on Dye-Sensitized Solar Cells Incorporated with Perovskite as Sensitizer Dye. In *Emerging Trends in Nanotechnology* (pp. 45-81). Springer, Singapore.

Details of Major R&D Projects:

Title of Project	Funding Agency	Sanctioned Grant	Duration		Status
			From	To	
R & D in Photonic Crystal and Holey Fibres	All India Council of Technical Education (AICTE)	INR 2,75,000/-	2001	2003	Completed