

MANOJ KUMAR

Rz-8C Rohtas Nagar, Uttam Nagar, New Delhi-110059

Phone No.:- +91-7503237919

E-mail:- manoj.aur@gmail.com

➤ CAREER OBJECTIVE

Seeking a position in an institution which, besides utilizing my knowledge & teaching skills to facilitate learning in students, would also provide for my knowledge enhancement and professional growth

➤ ACADEMIC QUALIFICATION

2024 | Ph.D.

Department of Electronic Science, D.U., New Delhi.

Title: Study of Resonances in Optical Waveguides and its application.

2011 | M.Sc. Electronics

Department of Electronic Science, D.U., New Delhi (Ist Division)

2009 | B. Sc.(H) Electronics

Sri Aurobindo College, D.U. (Ist Division)

2006 | All India Senior School Examination, C.B.S.E (XII) (Ist Division)

2004 | All India Secondary School Examination, C.B.S.E (X) (Ist Division)

UGC NET – June 2013 qualified with JRF.

UGC NET Qualified Dec 2012.

➤ TEACHING EXPERIENCES

- Working as Asst. Professor on Adhoc basis in Dept. of Instrumentation, Bhaskaracharya College of Applied Sciences (University of Delhi) from 24th July 2013 to till date
- Worked as Guest Faculty in Sri Aurobindo College, Delhi University from July 2011 to Dec 2011.

➤ RESEARCH EXPERIENCES

- **Manoj Kumar**, Anil Kumar, Rakesh Saini, Geeta Bhatt and Manoj Kumar khanna, “**High extinction ratio TE-Pass polarizer using the effect of superstrate layer in Ge-Clad optical waveguide**,” Engineering Research Express, vol. 6, pp. 035001, July 2024, DOI: 10.1088/2631-8695/ad5e5e.
- **Manoj Kumar**, Anil Kumar, Shekhar Ghosal, Manju Rani, Rakesh Saini, Geeta Bhatt and Manoj Kumar Khanna, “**Linear Response Refractive Index Sensor Using Lossy Modes of PbSe Thin Film**” Journal of Optics, Springer, Sept. 2024.

- Rakesh Saini, Anil Kumar, Manoj Kumar, Manoj K. Khanna, Avinashi Kapoor, Geeta Bhatt, Analysis of graphene coated optical fiber for visible range refractive index sensing, Optics Communications, Volume 529, 15 February 2023, 129097
- Manoj Kumar, Anil Kumar, Rakesh Saini, Manoj K. Khanna, Geeta Bhatt, Avinashi Kapoor, Effect of High Index Buffer Layer in PbSe Clad Waveguide to Design a Visible Range Polarizer, Optik, Volume 228, February 2021, 166001
- A. Kumar, Rakesh, M. Kumar, G. Bhatt, M.K. Khanna, A. Kapoor, Spectral Interrogation of ZnO Thin Film for Lossy Mode Resonance Sensors, Advanced Science Letters, Vol. 24, No. 2(2018), pp. 796-801(6).
- R. Saini, M. Kumar, A. Kumar, G. Bhatt, M. K. Khanna, A. Kapoor, Analysis of Silicon Clad Optical Waveguide for High Extinction Ratio TE/TM Pass Polarizers using Resonant Coupling between Guided Modes and Lossy Modes, IOSR-JEEE, Volume 12, Issue 3 Ver. III (May – June 2017), PP 59-64.
- A. Kumar, Rakesh, M. Kumar, G. Bhatt, A. Kapoor Analysis of chromium clad optical waveguide for TE pass polarizer using polymer buffer layer, EAAS, Vol. 7. No. 01, 2305-8269, 31-36(2015).
- Participated in 6th International Conference on Recent Trends in Materials and Devices (ICRTMD-2023) organized by Amity Institute of Applied Sciences during Dec 19-20, 2023
- “Analysis of ZnO thin film based refractive index sensor”, International Conference on Advances in Nanomaterials and Nanotechnology, 4 - 5 Nov, 2016, Jamia Millia Islamia, Article No. 298, Page No. 308, Proceeding ISBN : 978-93-85000-94-2. (abstract published).
- Presented poster on “Usefulness of irradiated nanostructure CdO thin films for heterojunction solar cells” in National Conference on Clean & Green Energy: The Chemical & Environmental Aspects 16-17 February 2017 at Bhaskaracharya College of Applied Sciences, University of Delhi on 16-17 February 2017.

➤ **ACADEMIC ACTIVITIES**

- Completed the Faculty Development Program on “Effective Teaching through E-Content development and Online Pedagogy” from 30 May to 3 June 2024 organized by AIU-IU-AADC.
- Organizer in the Academic & Cultural Program "Celebrating Indo-French relations in the wake of India's G20 Presidency" organized by BCAS in collaboration with Shivaji College & Shyama Prasad Mukherji College for Women on 26th Sept. 2023.
- Organizer in Online seminar on Climate change organized by G20 Committee of BCAS on May 25, 2023
- Organized an Online demonstration on ‘Digital Electronics and Microprocessors Practical’s on October 28, 2021
- Participated in the Faculty Development Program on “Applied Physics and Embedded System Design” organized held at Rajdhani College, University of Delhi during December 14-15, 2017.
- Attended Faculty Development Program on “Research Methodology” organized by Internal Quality Assurance Cell held at Bhaskaracharya College of Applied Sciences during December 16-22, 2017.
- Acted as participant in Faculty Development Program on “Administrative Reforms to raise the Quality of education Institutions and e-Procurement” organized by Internal Quality Assurance cell, Bhaskaracharya College of Applied Sciences, University of Delhi on 28 March, 2017.
- Acted as Organizing member in Better Process Control School at Bhaskaracharya College of Applied Sciences, University of Delhi on 18-21 March 2016.
- Have organized a Two Days Workshop on Wireless Robotics (Mar 2015) at Bhaskaracharya College of Applied Sciences.
- Participated in workshop on ‘Virtual learning Environment’ organized jointly by Institute of Informatics and Communications, University of Delhi South Campus & Bhaskaracharya College of Applied Sciences, University of Delhi on September 6, 2014.
- Have organized a Two Days Workshop on Line Follower Robotics (Mar 2014) in collaboration with

➤ TECHNICAL SKILL

- **Software tools** : Matlab, Pspice , Maple.
- **Language Known** : C & C++.
- **Microprocessor** : microprocessor 8085 and 8086.
- **Knowledge** : Window XP/VISTA, Microsoft office 2012, Power point, Excel, Pspice, Matlab, Scilab

➤ PROJECTS

- 6 month project on Study and Designing of low pass filter on microstrip lines using Microwave office and sonnet lite simulation from D.O.E.S, South campus, D.U. in 2011.
- 2 month summer training on (O.T.A) on Applications of Operational transconductance amplifier(O.T.A) from Jamia Millia Islamia, New Delhi 2011.
- Design an Access control system by using 8085 microprocessors in 2009.

PERSONAL DETAILS

Name : MANOJ KUMAR
Father's Name : MUSHAPHIR RAM
Date of Birth : JULY 10, 1988.
Hobbies : Cricket, Chess, Swimming.

DECLARATION

I affirm that the above information is true to the best of my knowledge.

Date :

(Manoj Kumar)