**Ayushi Rastogi**

**Residential Address:**

149/283, Manohar batika hari nagar,

Dugawana Lucknow near Rajendra nagar,

Lucknow - 226004

India

**Email:** **sweetayushi19@gmail.com****;**

**rastogiayu19@gmail.com Nationality: *Indian***

**Mobile: +91- 8052251329; 7905821273 Date of Birth: *19/09/1991***

**Gender: *Female***

* **Ph.D.:** in **Physics**
* **Assistant Professor at School of management Sciences, College of Engineering Lucknow**

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| **SL.****No** | **EXAMS****PASSED** | **UNIVERSITY****/****INSTITUTION****/ BOARD** | **YEAR OF****PASSING** | **MAIN****SUBJECTS****TAKEN** | **SUBJECT OF****SPECIALISATION** | **DIV. /****CLASS****& % OF****MARKS** |
| **1** | Secondary | ICSE, City Montessori School | 2007 | English, Hindi, Environmental education, Social Science, Mathematics, Science, Computer  |  | 85%1st Division |
| **2** | Senior Secondary | ISC, City Montessori School | 2009 | English, Environmental education, Mathematics, Physics, Chemistry, Computer  |  | 88%1st Division |
| 3 | Graduation | University of Lucknow | 2012 | Physics, Chemistry, Mathematics |  | 70%1st Division |
| 4.  | Post-Graduation | University of Lucknow | 2014 | Physics | Electronics | 69%1st Division |
| 5. | Diploma in Financial accounting | Near Infotech institute | 2011 | Financial accounting | Tally | Grade A |

**Title of Ph.D.: Electro - optical and Photoluminescence Study of Nanoparticle Dispersed Liquid Crystal System.**

* **Masters of Science (M.Sc.) in Physics(2014); Specialization: Electronics**
* **Area of Research: Material Characterization results of pristine and nanomaterials doped liquid crystal system and their significance in modernized technologies.**
* **Nanomaterials: Nanoparticles, Quantum dots**
* **Methodology: Fabrication of Sample Cell, Electro optical measurements, Dielectric Spectroscopy, UV- VIS absorbance Spectroscopy, Photoluminescence Spectroscopy, FTIR Spectroscopy, DSC measurements, Zeta measurement, TEM, SEM, AFM and XRD measurements.**

 I have started my work in the soft condensed matter physics in Department of Physics, University of Lucknow, 2014. The aim of research has been to harvest the immense commercial technological potential and modifying the electro-optical, optical and dielectric properties of liquid crystals by using different nanoparticles, quantum dots of various shape, size and composition.

I have worked on **DST funded INDO-POLISH** project and published various international research articles in reputed journals. My research background includes; (a) interface physics of functional materials, (b) field effects and photonics in nano dopants and liquid crystals, (c) device fabrication and characterization. I have hands-on experience on state-of-art research techniques for growing thin films using nanosculpture deposition under high resolution-transmission electron monitoring, structuring devices in nano-scale using the photolithographic technique, temperature dependent electrical and optical transports.

* **Total Published Research Articles:** **18**
* **National/International Conferences/Workshop/Webinar attended:** **40**

***Equipments Expertise***

I have the experience of handling the following experimental equipments:

* **Optical Birefringence Instrument** for birefringence measurment
* **UV–visible Spectrophotometer** (ELICO, SL 210) for optical absorbance study
* **Cary eclipse fluorescence spectrophotometer** (Agilent technologies) for photoluminescence study
* **Fourier Transform Infrared Spectrophotometer** (FTIR) (IR affinity-1 Shimadzu) for functional group study
* **Impedence gain/phase analyser** (HP4194A) for dieletric measurments
* **Differencial Scanning Calorimeter** (DSC) for the thermodynamical stududies
* **Polarizing Optical Microscope** (POM) (progress CT3, Radical) for texture analysis
* **Function Generator** (Tektronix AFG-3021B), **digital storage oscilloscope** (Tektronix TDS-2024C) and **photo detector** (Instec-PD02-L1) for electro-optical measurments

***Honours, Awards and Achievements***

* **Certificate of merit** in Annual sports day at Lucknow, Nov’2004 organized by City Montessori School (CMS)
* **Awarded 1st Prize** in Annual sports day organized by City Montessori School at Lucknow, Nov’2004
* **Full attendance award** in Academic session 2005-2006 by CMS.
* **Certificate of Appreciation** for full attendance award in Academic session 2005-2006 by City Montessori School (CMS) .
* **Certificate of Diploma** in Financial Accounting from NEARinfotech, Mumbai, Oct’2011
* Qualified **Graduate aptitude test for Engineering (GATE)** in the year **2015**
* **BSR Fellowship – UGC** (from 2015-2020) [Fellowship award]
* Received **Young Achievement Award**, for my research paper entitled with “**Cd1-X ZnXS/ZnS Core/Shell quantum dots in nematic liquid crystals to improve material parameter for better performance of liquid crystal based devices**” from the Institute of Scholars **InSc**, Bengaluru, Karnataka, India in the year 2019.
* Received **Research excellence award** for my research paper entitled with “**Effect of graphene oxide dispersion in nematic mesogen and their characterization results**” from the Institute of Scholars **InSc**, Bengaluru, Karnataka, India in the year 2019.
* Received **Academic Excellence award** from the Institute of Scholars **InSc**, Bengaluru, Karnataka, India in the year 2019.
* Received **Young Scientist Award** certification for the presentation of paper entitled “**Effect of doping Cd1-xZnxS/ZnS core/shell quantum dots in negative dielectric anisotropy nematic liquid crystal p- methoxybenzilidene p- decylaniline**” at 107th Indian Science Congress Association organized by University of Agricultural Sciences, Banglore, 3 January - 7 January, 2020.
* Awarded with **Education Excellence Award** **2020** under the category of contribution to Education Community 2020, New Delhi.
* Awarded Cash Prize for my **Research Publication award** for papers entitled **(1)** **Study of an interesting physical mechanism of memory effect in nematic liquid crystal dispersed with quantum dotsLiquid Crystals, (2018) 1- 11. (2) Effect of graphene oxide dispersion in nematic mesogen and their characterization results. Applied Physics A, 3 (2019), 125. (3) Time- resolved fluorescence and UV absorbance study on Elaeis guineensis/ oil palm leaf based carbon nanoparticles doped in nematic liquid crystals. Journal of Molecular Liquids, 2020** organized by University of Lucknow, Lucknow India.

***Membership***

* Member of Society For Information Display **(SID)**
* Life time member of Institute of Scholars **(InSc)**
* Life time member of The Indian Science Congress Association **(ISCA)**
* Member of International Liquid CrystalSociety **(ILCS)**
* Life time member of Alumni University of Lucknow

***More details can be found at the following links:***

**Research gate Profile:**

[**https://www.researchgate.net/profile/Ayushi\_Rastogi9**](https://www.researchgate.net/profile/Ayushi_Rastogi9)

**Google Scholar:**

[**https://scholar.google.com/citations?user=YCVkQzkAAAAJ&hl=en**](https://scholar.google.com/citations?user=YCVkQzkAAAAJ&hl=en)

**Orcid Profile: orcid.org/0000-0003-3953-8548**