

Curriculum vitae

PERSONAL INFORMATION

Ankita Singh



📍 Ankita Photo Estate, Chandpur Industrial Estate Varanasi, Uttar Pradesh, 221106 Varanasi (India)

☎ +91 8840502726, +91 9582613158

✉ asingh@cy.iitr.ac.in

🌐 www.linkedin.com/in/ankita-singh-09

💬 Skype [asingh@cy.iitr.ac.in](https://www.skype.com/people/asingh@cy.iitr.ac.in)

STUDIES APPLIED FOR

Doctorate of Philosophy

WORK EXPERIENCE

1 April 2020 – 28 Feb 2021

Subject Matter Expert and Content Writer

Preparing higher education students for various competitive and academic examinations by building the core foundation of chemistry, providing insights and helping them sail a rough journey and in the process learning through.

21 Nov 2019–31 Mar 2020

Project Assistant, Chemistry

Indian Institute of Science Education and Research, Tirupati (IISER), Tirupati (India)

Involved in the catalytic reactions of chromium and cobalt complexes together with studying the mechanistic insights of nitric oxide, optimizing the reaction conditions and preparation of Salen Carbon Quantum Dots for sensing together with presenting the work and writing the manuscript.

EDUCATION AND TRAINING

13 Jul 2017–8 May 2019

Master of Science, Chemistry

EQF level 7

Indian Institute of Technology Roorkee (IIT Roorkee), Roorkee (India)

Main Subjects: Inorganic Chemistry, Organic Chemistry, Physical Chemistry, and Analytical Chemistry, Advanced NMR, Nanoscale materials and synthesis

Occupational Skills: Material, Inorganic, and Organic Synthesis, Catalysis, Characterization and Electroanalytical Techniques, Mixture Analysis, Titrations, and Solvent Extraction.

Total CGPA of **7.263** on a scale of 10 with **First Division**.

21 Jul 2014–10 Jun 2017

Bachelor of Science, Chemistry

EQF level 6

Ramjas College, University of Delhi, Delhi (India)

Main Subjects: Chemistry, Physics, Mathematics, Biology, Biochemistry, Environmental Chemistry, Application of Computers in Chemistry and Technical Writing.

Secured **81.04** percentage in total with **First Division**.

Curriculum vitae

THESIS PROJECT

1 Jan 2019–3 May 2019 Master of Science Thesis Project on "Synthesis of Gold Zinc Oxide Nanocomposites and its Application"
Indian Institute of Technology Roorkee (IIT Roorkee), Roorkee (India)
Prepared **Au-ZnO_x** Nanocomposites with different modification together with their complete characterization and studying its application in the uptake and release of **doxorubicin** (Cancer Drug) at various conditions.

INTERNSHIPS

26 May 2018–10 Jul 2018 Certificate of Internship in "Protein Overexpression, Isolation and Purification".
Tata Institute of Fundamental Research (TIFR), Mumbai (India)
Involved in protein overexpression, Isolation, and purification by affinity chromatography along with analysis by SDS-PAGE and NMR.

1 Jun 2016–8 Jul 2016 Certificate of Internship in "Study of Human Resource Best Practices Across the Industry"
Bank of Baroda, Varanasi (India)
Studied and researched the human resource best practices across the banking industry and proposed methods to manage the workforce.

27 May 2015–9 Jun 2015 Certificate of Vocational Training in "Chemical and Metallurgical Testing Laboratory"
Diesel Locomotive Works, Varanasi (India)
Learned quality check and purity of steel and other materials.

PERSONAL SKILLS

Mother tongue(s) Hindi

Foreign language(s)	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
TOEFL Score	30/30	23/30	22/30	22/30	20/30
	95/120				

Communication skills

- Good communication skills gained through my experience as a volunteer for college (MOSAIC) and department fest (REFLUX) by contacting the sponsors and raising funds.
- Effective outreach as I organized with others, the celebration of hundred years of Ramjas college, conducted various events and represented the college on various platforms.

Curriculum vitae

Organizational/ managerial skills

- Good leadership quality acquired as Joint Secretary of the chemistry department for cognizance and coordinated a team of seven people.
- Good organization skill gained as Campus Ambassador, responsible for promoting the events and bringing mass participation.

Job-related skills

Decent amount of theoretical and experimental expertise on:

- SPECTROSCOPIC METHODS: UV-Visible, IR, XPS, NMR, Fluorescence, AFM, DLS.
- SPECTROMETRIC METHODS: MALDI, GC-MS.
- MICROSCOPIC METHODS: SEM, TEM, HR-TEM.
- ELECTROANALYTICAL METHODS: Potentiometry, Voltammetry, Coulometry, Polarography.
- SEPARATION TECHNIQUES: HPLC, TLC, Column Chromatography, Paper Chromatography, Fractional Distillation.
- TITRATIONS: Redox, Complexometric, Conductometric, Potentiometric, pH metric.

Digital skills

SELF-ASSESSMENT

Information processing	Communication	Content creation	Safety	Problem-solving
Independent user	Proficient user	Proficient user	Independent user	Proficient user

Digital skills - Self-assessment grid

- Stronghold of software packages (Origin, Multipak, ChemDraw, Experhigh score, Nova, Mestrenova, SPSS, MathType).
- Good command of office suits (Word processor, powerpoint, spreadsheet) and computer languages GW-BASIC, HTML, **Python**).

Other skills

Yoga: Passionate practitioner, I actively participated in the yoga camps and in international yoga day.

ADDITIONAL INFORMATION

Publications

Green synthesis of luminescent gold-zinc oxide nanocomposites: cell imaging and visible light induced dye-degradation

April 2021 Frontiers in Chemistry.

<https://www.frontiersin.org/articles/10.3389/fchem.2021.639090/full>

Honors and awards

- Scholarship: Cleared CSIR-NET 2018 with All India Rank 84, in Chemical Sciences, which provides research grant for five years in India.
- Award: Second runner up of an innovative challenge for fabricating a method to clean pesticides off the vegetables.
- Honour: Secured national rank ten in international level science talent

Curriculum vitae

examination.

Conferences

- Various applications of organic molecules on the topic of an organic molecule as synthons and reagents for innovation(OMSRI), IITR.
- How to make productive research, ACS on campus, IITR.

Seminars

- National seminar on the application of radioisotopes and radiation technology in food environment health.

Presentations

Presented poster in the seminar on environment and health on the occasion of international ozone day.

REFERENCES

Dr. Dharmendra K. Gupta

Director/ Scientist "F"

Ministry of Environment, Forest and Climate Change, New Delhi, India.

gupta.dharmendra@gov.in

+91-11-24695393

Dr. Kalyan K. Sadhu

Assistant Professor

Indian Institute of Technology Roorkee, (IIT Roorkee) India.

sadhufcy@iitr.ac.in

+91-01332-284811

Dr. Pankaj Kumar Koli

Assistant Professor

Indian Institute of Science Education and Rerearch Tirupati, (IISER, Tirupati) India.

pankaj@iisertirupati.ac.in

+918772500240