

Sweta Choubey

PhD – Centre for Atmospheric Sciences

(III Semester)

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CGPA: 9.5

**Indian Institute of Technology, Delhi**

Educational Qualification	Year	Board/institution	CGPA / %
PhD Atmospheric Sciences	2018 - Present	Indian Institute of Technology, Delhi	9.5
Masters (Environmental Sciences)	2017	Central University of Punjab, Bathinda	8.16
Bachelor of Sciences	2015	Sarojini Naidu Govt. Girls P.G. College, Bhopal	82.51
Senior Secondary	2012	St. Thomas Convent Sr. Sec. School, Bhopal	88.60
Higher Secondary	2010	St. Thomas Convent Sr. Sec. School, Bhopal	9.8

Technical Skills

Weather Research and Forecasting (WRF) Regional Climate model	: Intermediate Proficiency
Analytics and Plotting using NCL	: Intermediate Proficiency
Software Programming using FORTRAN, MATLAB	: Elementary Proficiency

Area of Research – Numerical Modelling of Floods over India*Jan 2018 - Present*

Project Brief:

- Calibration and validation of WRF for dynamical downscaling of precipitation over Mahanadi River Basin, India
- Calibration and validation of SWAT (Soil and Water Assessment Tool) model for hydrological studies in the basin.

Other Research Projects**Electrochemical Detection of Thiol containing Moieties on Different Electrodes and their Application as Copper Biosensor***2016 - 2017*

- Thesis project undertaken during Masters in Environmental Sciences on Oxidation study of Thiol containing Moieties on Pencil Graphite, Glassy Carbon and Indium Tin Oxide electrodes
- Parameters of the study were optimized
- Developed a full-scale biosensor for copper detection. Prototype filed for Patent

Role of Aerosols in Urban Heat Island

2015 - 2016

- Studied the effects of aerosol concentration on formation of Heat Islands
- Specific Case Analysis – Beijing and Ganga River Basin
- Established relationship between aerosol concentration patterns in different geographies and studied mitigation strategies for urban heat lands

Academic Achievements

- Awarded Gold medal for securing highest marks during Master's degree (2017), MSc Environmental Sciences and Technology, Central University of Punjab, Bathinda
- Awarded the Junior Research Fellowship (JRF 2017) under UGC for qualifying UGC-NET with merit (among top 6% of the of the eligible candidates)
- Awarded the highest grade (S: Excellent) in a course on 'Numerical Climate Prediction' organized under Global Initiative of Academic Network - GIAN (2018)
- Awarded JASSO fellowship by Hiroshima University for ILDP student exchange program (2019) and completed the curriculum with highest grade (S: excellent)

Extra - Curricular Activities

- PG Representative - National Service Scheme (NSS) IIT Delhi 2018 – Present
 - Organized talks with NGOs to spread awareness about changing climate
 - Organized Plantation Drives in campus
 - Awarded for significant contribution to NSS for the year 2018-19
- Gold medalist in Discus Throw at Central University of Punjab 2016
- First prize in inter-college essay writing competition organized by Atal Bihari Vajpayee Hindi University 2013
- Member of the School Women's Basketball team