

# Swarna Naidu

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Date of Birth: 11<sup>th</sup> November 1998

Nationality: India



## Education

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### Master of Science

August 2019-Present

Institute: [Indian Institute of Science Education and Research Bhopal](#)

Department of Chemistry

CPI: 8.3/10 (4<sup>th</sup> semester)

### Bachelor of Science

2016-2019

Institute: [RTM Nagpur University, Nagpur](#)

Subjects: Physics, Chemistry, Mathematics

CPI: 7.6/10

### Higher Secondary Education

2014-2016

Board: Maharashtra State Board of Secondary & Higher Secondary Education

Institute: [D B Science College, Gondia](#)

Percentage: 90.3%

### Secondary Education

2014

Board: Central Board of Secondary Education

Institute: St. Xavier's High School, Gondia

CPI: 10/10

## Experience

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### Master's Thesis

January 2021– Present

Topic: *Porous Organic Polymers: Viable Approaches Toward Efficient Micropollutant Separation from Water*

Supervisor: Dr. Abhijit Patra

Functional Materials Laboratory (IISER Bhopal)

### Lab Rotation

December 2019

Organic and Bioconjugate Chemistry Laboratory (IISER Bhopal)

Supervisor: Dr. Vishal Rai

### Lab Rotation

January 2021

Computational and Experimental Biophysics (IISER Bhopal)

Supervisor: Dr. Rati Sharma

# Skills

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## Organic Chemistry Skill

Setting up inert atmosphere reactions, photochemical reactions, handling transition metal catalysts, crystallization. Basic lab skills, e.g., thin layer chromatography, column chromatography, solvent drying, Soxhlet extraction

## Instruments Handling

FT-IR (solid and liquid state), UV-Visible absorption spectroscopy, fluorescence emission spectroscopy, solution-state NMR ( $^1\text{H}$  and  $^{13}\text{C}$ ), Mass spectrometry (HRMS), BET surface area analysis ( $\text{N}_2$  adsorption-desorption studies), FESEM and HRTEM analysis

## Polymer Synthesis and Study

Moisture sensitive hypercrosslinked polymer (HCP) synthesis employing cheap precursors, soluble-HCP synthesis, and thin-film fabrication for micropollutants removal, oil-water separation

## Programming and Software

Microsoft Office (Word, PowerPoint, Excel), Origin Pro 2018, MestreNova, ChemDraw, Adobe Photoshop, Adobe Illustrator, Quantachrome ASiQwin

## Soft Skills

Able to curate and interpret data efficiently, hold written as well as verbal communications, proficient in scientific writing and presentation.

# Achievements and examinations qualified

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## INSPIRE Fellowship

Conducting Agency: Department of Science and Technology (DST), Government of India

Duration: 2016-2019

## IIT-JAM 2019

Conducting Agency: Indian Institute of Technology Kharagpur (IIT Kgp)

Year of qualification: 2019

Rank: AIR - 318

## IISER I-PhD Interview

Conducting Agency: IISER Bhopal

Year of qualification: 2019

## TOEFL

Conducting Agency: Educational Testing Service (ETS)

Year of appearing: 2021

Score: Reading 29/30, Listening 30/30 (writing and speaking results awaited)

# Extracurriculars

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- ▶ Founder member of UDAAN book and Literary Club in D B Science College (RTM Nagpur University); contributor for content and design in Udaan Yearly College Magazine

- ▶ Member of Fine Arts and Literary Council (FALC) at IISER Bhopal
- ▶ Part of Alumni Talks for D B Science College, Gondia, Maharashtra, India
- ▶ Attended workshop organized by the Dean, Alumni and International Relations on Placement & Soft Skills Development Workshop (15<sup>th</sup> -19<sup>th</sup> February 2021), IISER Bhopal

## Publications and Experience

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- ▶ Paper titled “Disposal of Absorbent Hygiene Products: Are We Doing Enough?” accepted in First International Conference on Sustainability in Built Environment (SIEB-2020) organized by Aurora Group of Architecture Colleges Hyderabad Telangana, India held on 3<sup>rd</sup>- 4<sup>th</sup> January 2020 at Hotel Taj Deccan Hyderabad (Second author)
- ▶ Paper titled “Sanitary Waste Management” submitted and accepted for International Conference on Revisiting Sir Patrick Geddes (RSPG-2019) organized by Vigyan Bharti School of Architecture IPS Academy Indore and Nagar Nigam Indore, India on 26<sup>th</sup>- 28<sup>th</sup> September 2019 (Second author)
- ▶ Field experience: Training from 2016-2019 on affordable water purification technology for rural Maharashtra with exposure to various ground level hurdles and practical solutions to these issues
- ▶ Study of Parboiling Rice Mill effluent water for characterization of its pollutant and devising strategies for treatment of biohazardous rice mill effluent water to get clean water
- ▶ Teaching experience for 11<sup>th</sup> -12<sup>th</sup> Chemistry for underprivileged girl students

## Languages known

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- ▶ English, Hindi, Telugu

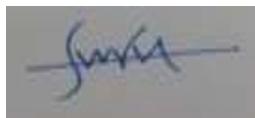
## Hobbies

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- ▶ Reading, Writing, Amateur photography, Bird Watching, Drawing

I hereby declare that all statements made here in above are true, complete and correct and are not false or misleading.

Signature:



Place: Bhopal, Madhya Pradesh, India

Date: 27.10.2021

## Academic References

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Dr. Abhijit Patra

Associate Professor, Department of Chemistry

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