# Prerna Shukla

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**OBJECTIVE**

A self- motivated and hardworking individual, seeking a challenging position in a reputed organization where I can learn new skills, expand my knowledge, and leverage my learnings.

**TECHNICAL SKILLS**

* **PROGRAMMING SKILLS**

# Languages: (Proficient)Python, (Advanced)SQL, JavaScript

* + **IDE:** PyCharm, MQSQL Workbench, VS Code, Eclipse
* **BIOTECH SKILLS**
  + **Instrumental:** SDS-PAGE, PCR, Centrifuge, Soxhlet Extraction Unit
  + **Practical**: Microbiology and Mio biology Techniques, Bioinformatics Tools, ELISA

**INTERNSHIP**

**Helix Biogenesis Pvt. Ltd (**Jan 2022- June 2022**)**

Preparation of mouthwash which shows antimicrobial activity using nanoparticles.

* Characterize antimicrobial property of different extracted plant samples against oral microorganism.
* Characterize prepared plant nanoparticles using scanning electron microscopy.
* Comprehend the properties and mechanism of action of generated different mouth wash.

**ACADEMIC PROJECTS**

1. Extraction of Caffeine from tea waste to evaluate its antimicrobial activity
   * Tea is used as the source of caffeine.

Thin Layer Chromatography is used for the qualitative analysis of extracted caffeine.

* + Assays that had been used to test the antimicrobial activity of extract is agar well diffusion method and Minimum inhibitory concentration (MIC).

1. DNA extraction
2. Plant DNA isolation
   * *Azadirachta indica* is used as the source for the DNA extraction.
   * Phenol chloroform method is used to extract DNA from plant source.
   * Agarose gel electrophoresis method is performed and observer under UV light.
3. Animal DNA isolation

* Restriction enzyme digestion is performed using EcoRI, BamHI, HindIII.
* Agarose gel electrophoresis method is performed and observer under UV light.

1. Culturing of micro-organisms

* Samples are collected from different places
* Different media plate & slant prepared and quadrant streaking method is performed.
* Different staining techniques are performed.
* Antimicrobial activity of bacteria (Bacillus subtilis and Pseudomonas aeruginosa) is tested using essential oil and agar disk diffusion method

**EDUCATION DETAILS**

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| --- | --- | --- | --- | --- |
| Undergraduate | DPU | DYPBBI- India | 2022 | 9.25/10 |
| Intermediate | CBSE | Modi Public School, Kota | 2018 | 67% |
| Matriculation | CBSE | St. Mary’s Inter College, Etawah | 2015 | 8.8/10 |

# Qualification University Institute Year CGPA/Aggregate%

**ACADEMIC ACHIEVEMENTS**

1. Summer Online internship at CSIR- Central Mechanical Engineering Research Institute from July 2021 – August 2021.
2. Received ELITE certificate after successfully completing Industrial Biotechnology course offered by IIT Kharagpur from September 2020- December 2020.
3. Received certificate for Training and Internship Program 2020 in IIT Kharagpur on “effective role of PARP inhibitors drugs in cancer caused by defective HR pathways”.
4. Completed Food Microbiology and Food Safety course offered by Central University of Haryana (Swayam) from July 2020- December 2020.
5. Among top 20 students for BTech Biotech department in DPU University.
6. Complete online workshop on “Bioprocess Engineering & Mathematical Approaches”.

**CO-CURRICULAR ACTIVITIES**

1. Member of university sports & cultural committee
2. Organized a webinar for “Guidelines for competitive examination” in my college
3. Volunteer for NSS team science day function
4. Vice- captain of women’s cricket team