

**SURAJ KUMAR RATHA**

**Burla, Sambalpur**

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**Career Objective:**

To work in an organization where my capabilities are recognized and provide me with ample scope of growth so that I can get holistic perspective about the world.

**Educational Qualification:**

Course	School / College	Board / University	Year Of Passing
<b>M.Phil. in Biotechnology</b>	Department of BT&BI	Sambalpur University	2021
<b>M.Sc. In Bioinformatics</b>	Department of BT&BI	Sambalpur University	2019
<b>B.Sc. in Chemistry</b>	TF DEGREE COLLEGE, BARGARH, ODISHA	Sambalpur University	2016
<b>12<sup>th</sup></b>	AIMS COLLEGE OF +2 SCIENCE, SAMBALPUR, ODISHA	C.H.S.E ODISHA	2013
<b>10<sup>th</sup></b>	GOVT. HIGH SCHOOL BURLA, SAMBALPUR, ODISHA	B.S.E ODISHA	2011

**Job Experience:**

- Currently working as DPM- District Program Manager (Fisheries), (UNDP) under OIIPCRA project from Jan 2023.

- Worked as Research Scholar at Department of Biotechnology & Bio-Informatics, Sambalpur University under the supervision of Dr Bhawani Prasad Bag from Aug 2021 to Dec 2022.
- Worked at CIFA as field Assistant (Central Institute Of Fresh water Aquaculture), Bhubaneswar, Odisha from March **2020** to **2021**.
- Employed at Delhi Public School , Banarpal,Angul,Odisha.

### **Job Expertise:**

Leveraging my project management experience and technical ability, I succeeded as a District Project Manager and Technical Assistance provider, with a focus on project monitoring and data management. I led project implementation within a certain district, ensuring that timetables, budgets, and quality requirements were met. My ability to translate difficult technical concepts into concrete strategies was extremely useful in delivering effective technical help to stakeholders. This resulted in successful project completion and increased capacity within the area.

### **Academic Research:**

#### **At Post Graduation (Brief description)**

**Project Title:** Molecular Modeling evolution of Noscapine and Bromo-Noscapin as potent anti-BacterialCompound

At: Department of BT & BI, **Sambalpur University, Odisha.**

#### **Description:**

- The goal of this project is to model a protein in order to estimate the 3D structure of an unknown protein based on homology and then execute the Docking procedure. We predicted protein 3D structures using structural-based software (PDB), multiple alignment, and MODELLER software, which were then validated using the Ramachandran plot and Verify3D tool. The energy reduction approach was used to achieve a flawless protein structure. My targeted protein is FtsZ.
- The FtsZ protein in bacteria is necessary for cell division.
- Inhibiting the FtsZ protein prevents bacteria from dividing. Thus, we can control the bacterial sickness.

- Noscapin and bromo-noscapin can bind tubulin.
- Tubulin and FtsZ are very similar proteins. Hence, noscapin and bromo-noscapin may bind with FtsZ.

### **Project includes:**

- Homology Modeling.
- Target selection and Template Alignment Model building and evaluation Verification of Protein Model validation by Ligand docking.

### **Bioinformatics and IT software skills and Tools used:**

- **Structure preparation software:** ISIS Draw, Chem Sketch, modular, chem drow, marvinescatatch, gaussian
- **Alignment Tools:** BLAST, PSI-BLAST, manually
- **InsightII Tools:** Homology modeling & docking.( , discovery studio, auto dock, moe)
- **Operating System:** Windows XP/2007/2008/2010, Linux
- **Language:** Python, R, Perl, HTML
- **MS Office:** Excel, Word, Power Point

### **WET Lab Skills:**

- PCR Techniques
- Blotting Techniques
- Electrophoresis Techniques
- Chromatography Techniques
- Tissue culture Techniques
- RNA isolation
- DNA isolation
- Embryological work

### **Strength:**

- Can work under deadlines and extreme pressure
- Sincere
- Confident
- Activeness

## Personal Details:

Name : Suraj Kumar Ratha  
Date of Birth : July, 12<sup>th</sup>, 1996  
Sex : Male  
Marital Status : Single  
Nationality : Indian  
Language Known : English, Hindi, Oriya  
Hobby : Traveling, Watching Film, Listening Music

### Declaration:

I hereby declare that the information furnished above is true to the best of my knowledge.

**Place:** Sambalpur

Suraj Kumar Ratha