SASWAT KUMAR PARIJA

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EDUCATION

National Institute of Science Education and Research

November 2020 - Present Overall score: 7.16/10

4th Year, Int. M.Sc.

School of Chemical Science

2017-2019

Mother's Public School Higher Secondary Education

Overall score: 94.83/100

Central Board of Secondary Education

Niali High School, Niali

2015-2017

Secondary Education

Overall Score 91.68/100

Board of Secondary Education, Odisha

RESEARCH EXPERIENCE

• Summer Research fellowship

May 2022- July 2022

Prof. A. Srinivasan's lab

Synthesis and coordination of (m-o-m)-terphenyl embedded carbahomoporphyrinoid dimer.

Abstract

Research on expanded porphyrins in the past two decades has focused on their various applications, including PDT sensitizers, MRI contrast agents, NLO materials, radiation therapy enhancers, and models for studying different types of aromaticity. Modified versions with more coordinating atoms and larger cavities have attracted attention, despite being challenging to create due to synthesis and separation difficulties.

• Summer Research fellowship

May 2023- July 2023

Prof. Soumen De's Lab

Synthesis and operation of light-responsive Azo BINOL Bipyridine chiral switches.

Abstract

the synthesis and helicate formation of a new family of BINOL-based bis(bipyridine) Ligands. The ligands are designed based on BINOL, with bipyridine metal binding sites connected to the 3- and 3'-positions of the BINOL core through ethynylene spacers. This study investigates these ligands' self-assembly properties and helicate formation when coordinated with late-transition metal ions.

• Chemistry Major Project

August 2023- Present

Prof. A. Srinivasan's lab

Synthesis of Azo-bridged (o-p-o)-terphenyl embedded calixphyrin dimer(In Progress).

AWARDS, HONOURS AND SCHOLARSHIPS

- 1. Recipient of **DISHA** Scholarship for Higher Education awarded by DAE.
- 2. Recipient of NRTS Scholarship by Odisha Board of secondary education for session 2015-17.
- 3. Recipient of **Pathani Samanta Mathematics Scolarship** by Board of secondary education, Odisha for session **2016-17**.
- 4. **AIR 328** in NEST 2020.
- 5. Runner up at **IGNITE Biology Quiz** (National level inter-college quiz competition organised by NISER)
- 6. Presented a Paper on Gold Nanoparticles at SCS student seminar, NISER, Bhubaneswar.
- 7. Presented my Summer Research findings at School of chemistry, IISER TVM.

SKILLS

Programming skills:

C, Python, LaTex

Sports:

Badminton, Chess

Languages:

English, Hindi, Odia.

EXTRACURRICULAR ACTIVITIES

- 1. Attended Virtual Winter School on Computational Chemistry-2022 (CECAM) in Feb 2022.
- 2. Attended the International Conference on Main Group Molecules to Materials (NISER) in Dec 2021
- 3. Attended the HBNI Interaction meeting in Jan 2023.
- 4. Member of Astronomy Club and Robotics Club, NISER.
- 5. Published a Robotic project in Yantriki magazine(published by Robo Club NISER).