SASWAT KUMAR PARIJA

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EDUCATION

National Institute of Science Education and Research *November 2020 - Present*
4th Year, Int. M.Sc. Overall CGPA: 7.3/10
School of Chemical Science

Mother's Public School *2017-2019*
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.

- **Summer Research fellowship** **May 2024- July 2024**

  Prof. Masaaki Ohba's Lab
  Synthesis of Guest Responsivity in a One-dimensional Re(V)Cd(II) Coordination Polymer.

  Abstract
  Luminescence sensing for chemicals is one of the promising applicative properties of metal-organic frameworks (MOFs) and coordination polymers (CPs). Several efforts have been reported to achieve luminescent change with guest-adsorption; however, selective and notable luminescent response for gaseous molecules remain largely unexplored thus far.

- **Chemistry Major Project** **August 2023- Present**

  Prof. A. Srinivasan's lab
  Synthesis of Azo-bridged 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 **PSMS** 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).