



Maansi Aggarwal

Research Scholar, IIT Patna

Objective: To contribute to the ever expanding field of biochemistry with carbon dot conjugation for biomedical applications that brings out the best of creativity and imagination.

<https://maansi-aggarwal.vercel.app/>

maansi_2121ch12@iitp.ac.in

+91 9736126334

#206, Department of Chemistry, IIT Patna

ACADEMIC BACKGROUND

Ph.D. in Chemistry 2021-Present

Indian Institute of Technology, Patna

CGPA: 8.79/10

M.Sc. in Chemistry 2018-2020

Thapar Institute of Engineering and Technology, Patiala

CGPA: 9.74/10

B.Sc. Non Medical 2015-2018

M.C.M DAV College for Women, Chandigarh, Punjab University

Percentage: 83.25%

12th Class (CBSE) 2014-2015

Holy Heart Senior Secondary School, Nahan, Himachal Pradesh

Percentage: 92%

10th Class (CBSE) 2012-2013

Holy Heart Senior Secondary School, Nahan, Himachal Pradesh

CGPA: 9.80

PUBLICATIONS

- "Photocatalytic carbon dioxide reduction: Exploring the role of ultrathin 2D graphitic carbon nitride ($g-C_3N_4$)" by **Maansi Aggarwal**, Soumen Basu, Nagaraj P.Shetti, Mallikarjuna, N.Nadagouda, Eilhann, E.Kwon, Young-Kwon Park, Tejraj M.Aminabhavi ([Chemical Engineering Journal, 2021](#)).
- "Photocatalytic conversion of CO_2 into valuable products using emerging two-dimensional graphene-based nanomaterials: A step towards sustainability" by **Maansi Aggarwal**, Soumen Basu, Nagaraj P Shetti, Mallikarjuna N Nadagouda, Tejraj M Aminabhavi ([Chemical Engineering Journal, 2021](#)).
- "Two-dimensional ultrathin metal-based nanosheets for photocatalytic CO_2 conversion to solar fuels" by **Maansi Aggarwal**, Nagaraj P Shetti, Soumen Basu, Tejraj M Aminabhavi ([Journal of Environmental Management, 2022](#)).

INSTRUMENTAL SKILLS

FTIR

HPLC

AFM

UV

Circular
Dichroism

Photo
luminescence

Gel
Electrophoresis

REFERENCES

Prof. Prolay Das
Professor, Department of Chemistry
Indian Institute of Technology Patna

prolay@iitp.ac.in
+ 91-8210047572

Prof. Soumen Basu
Professor, School of Chemistry and Biochemistry
Thapar Institute of Engineering and Technology

soumen.basu@thapar.edu
+ 91-8727001158

RESEARCH EXPERIENCE

Dec'19-July'20: Research Fellow: Exploring the Role of Ultrathin 2D-Graphitic Layer in the Composites of $g-C_3N_4$ & GO for Photocatalytic CO_2 Reduction.

(Thapar Institute of Engineering and Technology, Patiala)

May'19-July'19: Summer Research Fellow: Characterization of new interstellar molecules by First Principle studies.

(Indian Institute of Technology, Ropar)

LANGUAGES

English

Hindi

EXAM QUALIFIED

- GATE (Chemistry) 2021
- IIT JAM (Chemistry) 2018

CERTIFICATES

- Summer Internship fellowship programme- by [IAS-NASI-INSA](#) (Assigned IIT Ropar) (2019)
- Student **Head of CaRe society**, Thapar Institute of Engineering and Technology, Patiala

EXTRA-CURRICULAR ACTIVITIES

- Tutored the students in the **Canada market** for 6 months.
- Performed poetry in **5+ open mic** events.
- Managed various **departmental events** consisted of 100+ people.