

GAURAV PRANSU



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EDUCATION AND ACADEMICS

Birla Institute of Technology Mesra

Integrated MSc in Physics (5yrs)

CGPA-7.6 (Class Rank- 3rd)

DAV Public School, Koyla Nagar (CBSE)

Class XII: Percentage- 84 %

DAV Public School, Koyla Nagar (CBSE)

Class X: CGPA-9.6

Ranchi, Jharkhand

May 2021

Dhanbad, Jharkhand

2016

Dhanbad, Jharkhand

2014

INDUSTRY EXPERIENCE

GRAPHENE LAB

Junior Scientist

- Research focused organization with global presence.

- Synthesis and manufacture of graphene oxide and its derivatives are done. High-performance graphene based nano materials for a wide range of applications is produced and supplied.

Karnataka

July 21- Present

RESEARCH PAPERS and CONFERENCE

Research Paper 1

- ISSN 1023-1935, Russian Journal of Electrochemistry, 2019, Vol. 55, No. 9, pp. 829–840. © Pleiades Publishing, Ltd., 2019- "Evaluation of the Photo Electrode Degradation in Dye Sensitized Solar Cells".

Research Paper 2

- Proceeding published in "17th International Conference on Thin Films" on the topic "Corrosive Behavior of AZO Thin Films under Different Chemical Conditions".

17th International Conference on Thin Films(ICTF-17)

National Physical Laboratory, New Delhi

13th Nov, 17 - 17th Nov, 17

- Attained ICTF-17 as an accompanying person for presenting my research paper, "Corrosive behavior of AZO thin films under different chemical conditions".

INTERNSHIP, PROJECTS and WORKSHOP

Photoresponse behavior of Graphene Oxide

(Master's Thesis)

- Prepared Graphene oxide by Hummer method.

- Various Characterizations was done to study the properties of Graphene oxide.

- Photoresponse behavior was studied using solar simulator

BIT Mesra, Ranchi

Feb, 21- May, 21

CSIR- Summer Research Training Program-2020

CSIR-AMPRI (Online)

June, 20 – August, 20

- Worked on project "Application of surface passivation layer for solar cells".

Graphene based Dye Sensitized Solar Cell (DSSC)

(Stopped due to corona)

- Worked on developing an efficient Graphene based Dye Sensitized Solar Cell with various electrolyte compositions and less degrading property.

BIT Mesra, Ranchi

October, 19- March, 20

Indian Space Research Organization (SAC-ISRO)

(SUMMER INTERNSHIP)

- "Physical Characterization of Gallium Nitride based Semiconductor Heterostructure for RF Applications."

- The project involved working on GaN based heterostructure sample and its characterization.

- Instruments used – Hall Effect Measurement System (HEMS), Photoluminescence Spectroscopy (PLS), Advanced Dicing Techniques (ADT) and HRXRD.

Ahmedabad, Gujarat

10th May, 19- 10th July, 19

Intellectual Property Rights

(Workshop)

- Participated in one day workshop on "Intellectual Property Rights" at BIT Mesra, Ranchi.

Ranchi, Jharkhand

7th September, 2019

Center for ISRO GNSS Studies (CIGS)

(SUMMER INTERNSHIP)

- Worked on a project related to India's own GPS i.e. Indian Regional Navigation Satellite System.

- Collected the data of position, velocity, long-lat coordinates, GDOP, etc and learned analysis methods

Chirala, Andhra Pradesh

13th May, 18- 15th June, 18

Project with Dr. H.C. Verma
(WINTER INTERNSHIP)

IIT Kanpur
8th Dec, 17-26th Dec, 17

- Prepared various experiments and write-up for more than 50 experiments covering various topics of Physics at secondary and higher secondary level which will be used for upcoming workshops.

Dye Sensitized Solar Cell (DSSC)
(INDIA –ISRAEL Govt. Funded Project)

BIT MESRA, Ranchi
May 2017- March 2019

- Worked on DSSC Fabrication, Characterization and Corrosion with the help of various scientific instruments.
- This project was funded by *DST, New Delhi, India and Office of Chief Scientists, Ministry of Science and Technology, Government of Israel under India-Israel Joint research project.*

Deposition of AZO by RF Sputtering and Characterization
(SUMMER INTERNSHIP)

BIT MESRA, Ranchi
5th may- 25th June, 2017

- Prepared coating of AZO on a glass slide with the help of RF Magnetron Sputtering
- Characterization was made with the help of Source Meter, UV Spectroscopy and X-Ray Diffractometer.

Institute of Chemical Technology
(Workshop)

Mumbai, Maharashtra
10th December, 2018

- Participated in a workshop on “Materials on Industry” on behalf of Physics dept, BIT Mesra.

Workshop with Dr. H.C. Verma

IIT Kanpur
12th Jan, 18-14th Jan, 18

- Attained workshop under “Shiksha Sopan” on various experiments of Physics, Chemistry and Biology demonstrated by Dr. H.C. Verma sir.

WORK & LEADERSHIP EXPERIENCE

Environment Protection & Awareness Club
Technical Head

BIT Mesra, Ranchi
October, 16– Present

- Organized “Jharkhand Science & Environment Festival” for consecutive Four years
- Initiated various ideas like plastic ban, cracker free Diwali, Rainwater harvesting, etc in the college campus.

Literary Society

Writer and Speaker

BIT Mesra, Ranchi
September, 16 – March, 18

- Conducted events to enhance the literary awareness in college
- Organized “Rostra”- largest literary fest of East India on March, 18.

DRISTI Charitable Trust

A registered NGO

Panchauli, Ranchi
Jan, 17-Jan, 19

- Organized several events in the village on the occasion of National holidays and festival like ‘Gender Equality’, ‘Demonetization’, and ‘Adult Education’. Worked as regular tuition teacher.

ACHIEVEMENTS AND MEMBERSHIP

- Editor in head (English dept) of annual school magazine “ABHIVYAKTI” IN 2016.
- School **HOUSE CAPTAIN** for the session 2014-15 and 2015-16.
- Received 3rd PRIZE in “**State Level Science Exhibition**” for the model ASTRONAUT in 2013.
- Received 2nd prize in Science exhibition for the model GLOBAL WARMING in 2010.
- Completed THIRD YEAR junior diploma in Tabla in the year 2014.

INSTRUMENTS HANDLED

- Had Exposure of scientific instruments like RF Magnetron Sputtering System, Vander Pauw method, Photoluminescence Spectroscopy, Hall Effect Measurement System, X-Ray Diffractometer, Electrochemical Analyzer, Advanced Dicing Technique, IR Spectroscopy, SEM, TEM, Raman Spectroscopy and UV spectroscopy

SKILLS

- Microsoft Word, Microsoft Excel (Basics), Microsoft PowerPoint, CAD Software (2-D), MATLAB
- Commendable managerial skills, with an innate ability to keep others motivated

LANGUAGES AND INTERESTS

- **Language**- Fluent in English, Hindi, Bhojpuri, German (basic)
- **Interest**- Reading Science fiction books and playing Table Tennis.