

## SUMIT BERA

Egra, Purba Medinipur, West Bengal  
India

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Mobile No.:- +918018420040



### EDUCATION

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#### **Materials Science Centre, Indian Institute of Technology (IIT) Kharagpur, India**

2020- Present

Doctor of Philosophy (Ph.D.) in Materials Science

Advisor: Dr. Hemakesh Mohapatra

Thesis: Enhancing polymer material properties through force induced chemical reaction in polymer

#### **Materials Science Centre, Indian Institute of Technology (IIT) Kharagpur, India**

2018 - 2020

Master of Technology (M.Tech.) in Materials Science and Engineering

Advisor: Dr. Rajat Kumar Das

Dissertation: Self-healing elastomer through Metal Ligand interaction

CGPA: 8.31

#### **Central Institute of Plastics Engineering and Technology (CIPET), Bhubaneswar, India**

2014- 2016

Master of Science (M.Sc.) in Polymer Science

Advisor: Dr. Lakshmi Unnikrishnan

Dissertation: Development of Biosensor for cholesterol sensing

CGPA: 8.17

#### **University of Calcutta, India**

2010- 2014

Bachelor of Science (B.Sc. Hons) in Chemistry (Honors)

Percentage: 56

#### **West Bengal Council of Higher Secondary Education, India**

2008- 2010

Higher Secondary Examination (H.S.) in science

Percentage: 66.66

#### **West Bengal Board of Secondary Education, India**

2008

Secondary Examination (MP)

Percentage: 78

### WORK EXPERIENCE

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#### **Innocule Materials and Additives Pvt Ltd, BBSR, India, *Researcher-Product development***

May 2017 to April 2018

Job Responsibilities:

- Planning and executing research activities for development of new product lines.
- Should be able to read research papers, analyze and conduct experiments independently.
- Visiting client sites for product trial and other technical services, overall monitoring and supervision of plant trials.

#### **Career Development Centre, IIT-Kharagpur, India, *Departmental student placement Representative***

May 2019 - April 2020.

## **TEACHING EXPERIENCE**

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### **Materials Science Centre, IIT-Kharagpur, India, Teaching Assistant**

2021- Present

- Conducted laboratory classes for postgraduate ‘Polymer Synthesis and characterization Laboratory’ (MS69005) – I was a one of instructor for one class of 30 students.

### **IIT-Kharagpur, India, Teaching Assistant**

November 2022 – June 2023

- Conducted laboratory classes for undergraduate ‘Do it yourself laboratory’ (DY17003) – I was a one of instructor for one class of 96 students.

## **SKILLS**

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Software: MS Office tools

Chemistry Software: Chem Draw, Origin, Mestre Nova, Gauss View, Gaussian

Material Characterizations Tool: SEM, EDAX, TGA, DMA, DSC, GPC, Universal Testing Machine (UTM).

## **AWARDS AND ACHIEVEMENTS**

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GATE 2017: RANK- 488 Engineering Science (XE)

GATE 2018: RANK- 206 Engineering Science (XE)

## **LANGUAGE SKILLS**

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- Bengali: Native
- Hindi: Write, Read, Speak
- English: Write, Read, Speak
- Oriya: Speak

## **PUBLICATIONS**

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1. Jana, G.K., **Bera, S.**, Maity, R., Maity, T., Mahato, A., Roy, S., Mohapatra, H., *et al.*, “Effect of an amine-aldehyde condensate modifier on the thermal and mechanical properties of fiber-reinforced epoxy composites”, *Pigment and Resin Technology*, September 2023, doi: 10.1108/PRT-01-2023-0009.

## **INTERNATIONAL CONFERENCES**

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1. International Conference on Functional Materials (ICFM - 2020), Materials Science Centre, IIT Kharagpur, January 6 – January 8, 2020 (As volunteer).
2. International Conference on Functional Materials (ICFM - 2024), Materials Science Centre, IIT Kharagpur, January 9 – January 11, 2024 (Poster presentation) “Enhancing polymer material properties through force induced chemical reaction in polymer”.
3. International Workshop on Functional Polymers and Its Nanocomposites (FPN 2024), Rubber Technology Centre, IIT Kharagpur, February 9-10, 2024 (Participated).

