

## Curriculum Vitae

**Name: Dipsikha Bhattacharya, Ph.D**

**Current Designation: Associate Professor (1.10.2022 to till date)**

**Previous Designation: Assistant Professor (Date of Joining 14.06.2017 to 30.09.2022)**

**Department of Chemistry**

**School of Basic and Applied Science**

**Adamas University**

**Email: dipsikha.chem@gmail.com**

**Phone no:+917044566448, +918910552936**



### ACADEMIC QUALIFICATIONS

2017 CSIR-SRA from CSIR-CGCRI, Kolkata.

2015 DST Nano Mission PDF Experience from CSIR-IITR Lucknow

2012 Ph.D. Indian Institute of Technology, Kharagpur, India

2006 M. Sc. Jadavpur University, Kolkata, India, 75%

2004 B. Sc. Jadavpur University, Kolkata, India, 60%

2001 Higher Secondary Examination, Kamrabad Uchcha Vidyalaya, 87.5%

1999 Secondary Examination, Jadavpur Sammilita Balika Vidyalaya, 86.12%

### AWARDS AND HONOURS

- Awarded CSIR-Senior Research Associateship by Council of Scientific and Industrial Research-HRDG (Pool Section) from 2016-2017.
- Awarded DST-NanoMission PDF Fellowship by Department of Science and Technology, 2013-2015.
- CSIR-UGC National Eligibility Test for the award of SRF in 2010.
- CSIR-UGC National Eligibility Test for the award of JRF in 2007.
- Graduate Aptitude Test in Engineering (GATE) AIR 28, with Percentile 99.4 in 2007.
- Ranked First Among Girls in District in Higher Secondary Examination 2001.

### TEACHING EXPERIENCE

Teaching experience: I have taught undergraduate chemistry courses and inorganic chemistry courses at both undergraduate and post graduate (Lectures/Tutorials/ Laboratories) - B. Sc. theses advising: Completed – 3. I have also taken elective chemistry, engineering chemistry and core chemistry courses assigned to the syllabus of the undergraduate students in the department of Life Sciences, Engineering and Law.

### ADMINISTRATIVE EXPERIENCE

From last for months, I am serving the role as school level planning and monitoring coordinators for executing all the time table and regulation related documents. I am working as a departmental representative for executing all the administrative helps for applying NAAC from our University from the last two years. I have prepared and collated all the supporting documents from our department required for the eligibility criteria in NAAC accreditation.

I along with my fellow colleagues have organized several webinars and one day and two-day national symposiums in the last two years. We have organized different student teachers meet throughout a year from our department for the betterment of our students.

### **RESEARCH EXPERIENCE**

**October 2017 to Till Date: Associate Professor in the Department of Chemistry at Adamas University.**

**June 2017 to Till Date: Assistant Professor in the Department of Chemistry at Adamas University.**

**November 2016-13<sup>th</sup> June 2017: Working as CSIR-SRA (pool section) awarded from CSIR- Pool Section**

Project Advisor: Dr Goutam De, Chief Scientist & Head,  
CSIR-Central Glass and Ceramic Research Institute.

**December 2015- September 2016: Worked as a Project Expert in CSIR-CGCRI (ESC 0202)**

**Mar 2013 – July 2015 Worked as a Post Doctoral Research Scholar: DST-Nano Mission Post doctoral Fellow the project was completed in July 2015.**

Project Advisor: Dr. K. C. Gupta, Director, CSIR-Indian Institute of Toxicology Research.

**2007– 2012 (Ph.D) Doctoral Fellow**

Department of Chemistry, Indian Institute of Technology, Kharagpur,

**Title of the Thesis: “Fabrication and Characterization of Functionalized Magnetic Nanoparticles for Theranostics and Biodetection”.**

Thesis Advisor: **Prof. Panchanan Pramanik** and **Prof. Tapas K Maiti**

### **BROAD RESEARCH INTEREST/EXPERIENCE**

- Synthesis of **various tailored nanomaterials** [Both metallic, metal oxide and polymeric].
- Development of magnetic nanohybrids with tailored size and surface morphology and evaluation for cancer specific targeting and multimodal imaging (**Optical and Magnetic resonance imaging**) applications using *in vitro* cell studies.
- Preparation of stimuli responsive magneto-polymer nanohybrids **for therapeutic as well as diagnostic** applications.
- Development of **nanobiosensors** using targeted gold-magnetic nanocomposites for ultrasensitive detection as well as magnetic separation of food borne pathogens.
- Designing of cheap, reusable, artificial mixed ferrite peroxidase mimetics for the specific and sensitive detection of biomolecules at ultra low scale.
- Developed a **novel nanogel scaffold with anti-inflammatory, anti-oxidant, anti-bacterial and anti-cancer modalities** and applied in Skin wound healing in Wistar Rat Model.
- Fabrication of **functionalized carbon dot-silica matrix with multicolor light emitting efficacies for light emitting devices** as well as bioimaging applications.
- Synthesis of **doped carbon dot-based nanoparticles incorporated silica matrices for bioimaging as well as super capacitor applications.**
- Handled FT-IR, ATR-IR, XRD, HPLC, DLS, UV-Vis, Fluorimeter, Zeta Seizer apparatus and well acquainted with <sup>1</sup>H NMR, TEM, SEM, XPS techniques.
- Learnt the expertise of *in vitro* animal cell culture techniques and acquainted with the intricate techniques (Western Blot, Fluorescence imaging) involved in the molecular biology of Nanoparticles to cancer cells.

## **PUBLICATIONS IN PEER REVIEWED JOURNALS**

1. **Dipsikha Bhattacharya**, Manasmita Das, Debashis Mishra, Indranil Banerjee, Sumanta K Sahu, Tapas KMaiti and Panchanan Pramanik\*. **Nanoscale** **2011**, **3**, **1653-1662**.
2. **Dipsikha Bhattacharya**, Sumanta K Sahu , Indranil Banerjee, Manasmita Das, Tapas K Maiti and Panchanan Pramanik\*. **Journal of nanoparticle Research** **2011**, **13**, **4173-4188**.
3. **Dipsikha Bhattacharya**, Subhankari Prasad Chakraborty, Arindam Pramanik, Ananya Baksi, Somenath Roy, Tapas K Maiti, Sudip K Ghosh and Panchanan Pramanik\*. **Journal of Materials Chemistry**. **2011**, **21**, **17273-17282**.
4. **Dipsikha Bhattacharya**, Ananya Baksi, Indranil Banerjee, Rajakumar Ananthkrishnan, Tapas K Maiti, Panchanan Pramanik\*. **Talanta**. **2011**, **86**, **337-348**.
5. **Dipsikha Bhattacharya\***, Birendra Behera, Sumanta Kumar Sahu, Ananya Bakshi, Rajakumar Ananthkrishnan, Tapas Kumar Maity and Panchanan Pramanik\* **New J. Chem.**, **2016**, **40**, **545-557**.
6. Sumanta Kumar Sahu, Arindam Chakrabarty, **Dipsikha Bhattacharya**, Sudip K. Ghosh and Panchanan Pramanik\*. *Journal of nanoparticle Research*. 2011, 13, 2475.
7. Sourov Chandra, Sourav Bag, Pradip Das, **Dipsikha Bhattacharya** and Panchanan Pramanik\*. *Chemical physical letters*. 2012, 519, 59.
8. Banalata Sahoo, Sumanta Kumar Sahu, **Dipsikha Bhattacharya**, Dibakar Dhara, and Panchanan Pramanik\*. *Colloids and Surface B. Biointerfaces*, 2012, 280, 101C.
9. Anshuman Ray Chowdhuri, **Dipsikha Bhattacharya** and Sumanta kumar Sahu. *Dalton Transactions*. 2016, 46, 2963-2973.
10. **Dipsikha Bhattacharya**, Tejaswi Bhatia, Ratnakar Tiwari, Anu Pal, Pankaj Jagdale, Mohana Krishna Reddy Mudiam, Bhushan Pradosh Chaudhari, Kausar Mahmood Ansari , Vikas Srivastava, and Kailash Chand Gupta. *Drug Delivery and Translational Research* 2019, 1-16.
11. **Dipsikha Bhattacharya**, Manish Kr Mishra and Goutam De. *J. Phys. Chem. C* 2017, 121, 50, 28106-28116.
12. **Dipsikha Bhattacharya**, Lipika Ray, Panchanan Pramanik and Jitendra K Pandey. *Current Nanomedicine*, 2023, 13, 75-90.
13. **Dipsikha Bhattacharya**. *Materials Protection*. Accepted. 2023. *Zastita Materijala* 65, 63 -72.

## **PAPERS PRESENTED IN CONFERENCES/ SEMINARS**

1. **D. Bhattacharya** and P. Pramanik, One day National Symposium in Chemistry, Department of Chemistry, IIT Kharagpur, Kharagpur, India, November, 2008.
2. **D. Bhattacharya** and P. Pramanik, ISMC-2008, International Conference on Materials Chemistry, Bhaba Atomic Research Centre (BARC), Trombay, Mumbai, India, December, 2008.
3. **D. Bhattacharya**, P. Pramanik, 3rd Summer school on nanotechnology in advanced drug delivery- National Institute of Pharmaceutical Education and Research (NIPER). 2010, Chandigarh, India.
4. **D. Bhattacharya**, I. Banerjee, P. Pramanik, 3rd Winter school on nanotechnology in advanced drug delivery- National Institute of Pharmaceutical Education and Research (NIPER). 2010, Chandigarh, India.

5. **D. Bhattacharya, P. Pramanik.** Diamond jubilee Symposium on Recent Trends in Chemistry (DJSRTC-2011)- Department of Chemistry-Indian Institute of Technology Kharagpur, India.
6. **D. Bhattacharya, P. Pramanik.** Participant for 2011 Women in Technology and Science Meet GE, Bangalore at GE's GE's John F Welch Technology Center (JFWTC).
7. **D. Bhattacharya** and G. De. Participated in an International Conference and presented Oral presentation in International Society of Engineers and Researchers, Toronto, Canada April 28-29<sup>th</sup> 2019.

## **REFERENCES**

### **Prof. Panchanan Pramanik**

Past Senior Professor  
Department of Chemistry  
Indian Institute of Technology, Kharagpur, India  
Mail id:pramanik1946@gmail.com  
Contact Number: +919434016995

### **Dr Goutam De**

Chief Scientist & Head  
Nano Structured Materials Division  
CSIR-Central Glass & Ceramic Research Institute  
Raja S.C.Mallick Road. Kol-700032.  
Mail id:gde@cgcricri.res.in

### **Prof. Kailash. C. Gupta**

ICMR Distinguished Professor in Department of  
Biotechnology, IIT Kanpur.  
Past Director of CSIR-Indian Institute of Toxicology  
Research, Lucknow  
Mail id: kcgupta@iitr.res.in  
Contact Number: +918800994239

### **Prof. Tapas K Maity**

Senior Professor (Ex HOD)  
Department of Biotechnology  
Indian Institute of Technology, Kharagpur, India  
Mail id:tkmaiti@hijli.iitkgp.ernet.in  
Contact Number:09474597751

## **DECLARATION**

I, hereby, declare that the above-furnished particulars are true to the best of my knowledge.

*Dipsikha Bhattacharya*

Dipsikha Bhattacharya