

Resume of Abhijit Chakrabarti

Date of Birth : April 13, 1960.

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Education & Positions: Ph.D in Biochemistry (1990), Indian Institute of Science, Bengaluru
Postdoctoral Research Fellow, The Johns Hopkins University (1990 – 1993)
Ex. Senior Professor, SINP-HBNI
Professor, School of Biological Science, RKMVERI

Positions / Memberships:

Adjunct Professor, Rani Rashmoni Green University, April 2025

Senior Professor, Saha Institute of Nuclear Physics, January 2013 – April 2022.

Senior Professor & Head, Crystallography & Molecular Biology Division, January 1, 2014 – March 31, 2020.

Senior Professor, Life Science in Homi Bhabha National Institute.

Life Member, Indian Biophysical Society.

Life Member, Indian Crystallographic Association.

Life Member, Indian Society for Mass Spectrometry.

Member, Board of Studies (Life Science), Homi Bhabha National Institute, July 2015 – 2022.

Editor, Journal of Proteins and Proteomics (A PSI Journal from 2016).

External Expert, Board of Research Study in the Faculty of Science, Vidyasagar University, September 2016 – June 2024.

President, 4th Governing Body of Midnapore College (Autonomous), from August 2022.

Member, Academic Council, Integrated PhD Program in Physical Sciences in collaboration with University of Calcutta, S N Bose National Centre for Basic Sciences, October 2023.

Teaching :

Part course on Basic Biochemistry (ABT/MBT 101, 3 credit, 24 lecture hours) to the M.Sc. 1st Semester students of both Medical & Agricultural Biotechnology.

Part course on Cell & Developmental Biology (ABT/MBT 103, 3 credit, 12 lecture hours) to the M.Sc. 1st Semester students of both Medical & Agricultural Biotechnology.

Common Laboratory course on Biochemistry (ABT/MBT 104, 3 credit, 36 lecture hours) to the M.Sc. 1st Semester students of both Medical & Agricultural Biotechnology.

Common course on Biophysical Principles & Analytical Techniques (CBT 207, 2 credit, 30 lecture hours) to the M.Sc. 2nd Semester students of both Medical & Agricultural Biotechnology.

Part course on Omics: Proteomics (CBT 202, 3 credit, 12 lecture hours) to the M.Sc. 2nd Semester students of both Medical & Agricultural Biotechnology.

Part course on Clinical Biochemistry & Disease Metabolism (MBT 302, 3 credit, 10 lecture hours) to the M.Sc. 3rd Semester students of Medical Biotechnology.

Area of Interest:

Membrane Biophysics, Membrane Skeleton, Artificial Chaperones, Clinical Proteomics

List of recently published papers :

1. *Abhijit Chakrabarti*, Dulal Senapati & Sushanta Debnath. (2025). Fluorescence study reveals differential interaction of four unrelated proteins with graphene oxide. *Molecular Crystals & Liquid Crystals*. doi.org/ 10.1080/15421406.2025.2543011.
2. Rajendra Giri, Subhadip Chowdhury, Mrinmay Mukhopadhyay, *Abhijit Chakrabarti*, Milan Sanyal. Ganglioside GM1 drives the adsorption of Hemin and Protoporphyrin : A structural study. (2024) *J Phys Chem B*. **128**, 2745 – 2754.
3. Rajendra P Giri, Mrinmay K Mukhopadhyay, Milan K Sanyal, Dipayan Bose, *Abhijit Chakrabarti*, Peiyu Quan, Wei Bu & Binhua Lin. (2022) Structural flexibility in proteins leads to dramatic change in membrane stability – a novel aspect in lipid-protein interactions. *J Phys Chem Letts*. **13**, 11430 – 11437.

4. Sansa Dutta, Dipayan Bose, Semanti Ghosh & *Abhijit Chakrabarti* (2022) Spectrin: An alternate target of cytoskeletal drugs, *J Biomol Struct Dyn*. doi.org/10.1080/07391102.2022.2109063.
5. Dipayan Bose, Santanu Aggarwal, Debashree Das, Chandravar Narayana & *Abhijit Chakrabarti*. (2022). Erythroid spectrin binding modulates peroxidase and catalase activity of heme proteins. *IUBMB Life* **74**, 474 – 487.
6. Sreetama Pal, Dipayan Bose, *Abhijit Chakrabarti* & Amitabha Chattopadhyay (2022) Comparative analysis of tryptophan dynamics in spectrin and its constituent domains : Insights from fluorescence. *J Phys Chem B*. **126**, 1045 – 1053.
7. Akriti Mishra, Kamini Mishra, Dipayan Bose, *Abhijit Chakrabarti* & Puspendu K. Das. (2021) Thermodynamics of adsorption of alcohol dehydrogenase on gold nanoparticle surface: a model based analysis versus direct measurement. *Phys Chem Chem Phys*. **23**, 24365.
8. *Abhijit Chakrabarti* (2021) Phospholipid asymmetry in biological membranes: is the role of phosphatidylethanolamine underappreciated? *The J Membrane Biol*. **254**, 127 – 132.
9. Sushanta Debnath & *Abhijit Chakrabarti* (2021) Effects of free soluble Iron on thermal aggregation of hemoglobin. *Biophys Chem* **269**, 106527.

Average Impact Factor is 3.0 for 126 papers (IF 2020). h-index is 31 as of May 2026. Total citation ~2450.

Attended and presented papers in 121 National / International conferences and delivered 103 invited lectures.