

Curriculum Vitae

Sujoy Kumar Das Gupta, Ph.D.

Emeritus Scientist
Dept. Of Microbiology
Bose Institute, Kolkata



Address:

Office:

Dept. Of Microbiology
Bose Institute
P1/12 C.I.T . Scheme VIIM
Kolkata 700054

Residence:

T3/10/2 Ruchira Residency
369, Purbachal Kalitala Main Road
Kolkata 700078

E. mail: sujoy@jcbose.ac.in; sujoy50@hotmail.com, sujoydasgupta6@gmail.com

URLs:

<http://www.boseinst.ernet.in/sujoy/>

https://scholar.google.co.in/scholar?hl=en&as_sdt=0%2C5&q=sujoy+k+das+gupta&oq

≡

ORCID ID:

<https://orcid.org/0000-0002-7200-3652>

Telephone / Fax no.

91-33- 23559544 (O), 91-33-24843966 (R), 91-33 -23553886 (Fax), 9830227751(M)

Personal details:

Date of Birth: 10th July 1961

Family : Maitrayee (Spouse) and Rahul (Son)

Education :

PhD. (Biochemistry), Bose Institute, Calcutta University (1989)

MSc. (Biochemistry), Calcutta University (1979)

BSc. (Chemistry), St. Xavier's College, Calcutta University (1977)

Honors and Recognition

Awarded silver medal for ranking second in First Class at the Calcutta University M.Sc. (Biochemistry) exam of 1981.

Elected member, West Bengal Academy of Science and Technology (WAST)

Career summary:

S.No.	Positions Held	Name of the Institute	From	To
1.	JRF/SRF	Bose Institute	1982	1987
2.	Post-doctoral fellow	Univ. of Texas Health Center at Tyler, Texas	1987	1990
3.	Post-doctoral fellow	University of Delhi, South Campus	1991	1994
4.	Lecturer	Bose Institute (Dept. Of Microbiology)	1994	1997
5.	Senior Lecturer	Bose Institute (Dept. of Microbiology)	1997	2002
6.	Reader	Bose Institute (Dept. of Microbiology)	2002	2005
7	Associate Professor	Bose Institute (Dept. of Microbiology)	2005	2008
8.	Professor (level 13A)	Bose Institute (Dept. of Microbiology)	2008	2012
9.	Professor (level 14)	Bose Institute (Dept. of Microbiology)	2012	2021
10.	Emeritus Scientist	Bose Institute (Dept. of Microbiology)	2022 onwards	

Research highlights

1982 - 1987: Doctoral research at Bose Institute

Prof Sujoy K. Das Gupta started his research career in the year 1982 as a research fellow at Bose Institute. His mentor was the reputed molecular biologist and biochemist, Late Prof. R.K. Mandal of the institute's Biochemistry department. Prof. Mandal's laboratory was interested in how ribosomal RNA (rRNA) gene expression is controlled during embryonic development using catfish, *Heteropneustes fossilis* as a model. To facilitate the investigations, the need of the hour was cloning its rRNA genes. Dr. Das Gupta achieved this goal using basic recombinant DNA techniques that were available then, mapping the cloned DNA using restriction enzymes. The title of his Ph.D. thesis reads: "Cloning and Characterization of the rRNA genes of the Catfish *Heteropneustes fossilis*."

1987 - 1990: Post-doctoral research at the UT Health Centre At Tyler, Texas, USA with Dr. G.C. Das.

During this period, Prof. Das Gupta was interested in understanding how the mouse Polyoma virus, a relative of the oncogenic virus SV40, regulates the expression of its genes. Many viruses including Polyoma are unable to grow in undifferentiated embryonal carcinoma cells. Using molecular techniques, he studied gene regulatory region of the virus and found that it weakly binds certain transcriptional factors present in the embryonic stem cells. In contrast, a permissive mutant of the virus known as F441 did so efficiently. This investigation thus led to new insight into why viruses such as Polyoma cannot multiply in stem cells.

1991 - 1994: Post-doctoral research associate at the Department of Biochemistry, University Of Delhi South Campus with Prof. Anil K. Tyagi.

Here he was introduced to the area of the molecular biology of mycobacteria by Prof. Anil K. Tyagi. Various species belonging to the genus mycobacteria, *Mycobacterium tuberculosis* (Mtb) for example, are deadly pathogens, and therefore understanding their molecular biology was extremely important. However, the tools available to genetically engineer mycobacteria were sparse in those days. Prof. Das Gupta took up the initiative to study the mechanism by which mycobacterial promoters functioned. He used the information obtained from his studies to develop vectors that could be used to transform mycobacteria and express foreign genes in them efficiently. The development of these vectors provided a firm platform for the Indian molecular biologists working in TB to genetically engineer mycobacteria, for studying their molecular biology and vaccine development.

1994 onwards: Faculty member at Bose Institute

His lab investigated the replication mechanism of pAL5000, a plasmid used to manipulate mycobacteria genetically. While investigating this aspect, Prof. Das Gupta's research group came out with the novel finding that the replication proteins of this plasmid are evolutionarily ancient and are related to factors such as sigma that are known to function in gene transcription, but not replication.

In the area of Mycobacteriophage research, Prof. Das Gupta has investigated mycobacteriophages-mycobacteria interaction mechanisms. His group's research has given new insight into how mycobacteriophages infect mycobacteria, inactivating them. Recently his lab demonstrated that Mycobacteriophage mediated cell death involves apoptosis-like processes.

Apart from the programs mentioned above, Prof. Das Gupta has been one of the investigators involved in the multi-centric program project "New Millennium Indian Technology Leadership Initiative (NMITLI)" on Latent tuberculosis, New Targets, Drug Delivery Systems, and bio-enhancers and Therapeutics (Multicentric project) CSIR (2001 – 2005). While executing this project, Prof. Das Gupta led a team of scientists at the Bose Institute to perform research on drug development against TB. Their collective efforts led to the discovery of several peptide inhibitors of the chaperon protein Hsp16.3 that is necessary for the bug's survival during the latent phase of growth.

In drug development against *Mycobacterium tuberculosis*, Prof. Das Gupta's lab has demonstrated the mechanism behind the antimycobacterial activity of plumbagin, a medicinal plant-derived compound used in natural medicine.

2022 onwards: Emeritus Scientist at Bose Institute

Prof. Das Gupta re-joined Bose Institute as Emeritus Scientist in July 2022 following his superannuation as a faculty member. He is presently investigating aspects of Mycobacterial metabolism related to growth and resistance to oxidative stress. He is currently engaged in understanding how mycobacteria and mycobacteriophages express their genes in a regulated and differential manner. To perform these experiments, Dr. Das Gupta's lab uses CRISPR-Cas9 technology and transcriptomics and proteomics-based tools. These investigations have revealed unique features about mycobacterial growth and metabolism. The lab has unveiled that menaquinone, a component of the respiratory chain of mycobacteria, functions as an inducer of gene

expression. Among the genes induced are those encoding proteins that could be linked to handling oxidative stress.

Publications.

1. **Das Gupta, S. K.** and Mandal, R.K. (1988). Cloning and Characterization of ribosomal RNA genes of the Catfish *Heteropneustes fossilis*. *Ind. J. Biochem. Biophys.* **25**: 518-522.
2. **Das Gupta, S. K.** , Datta, U and Mandal, R.K. (1989). Organization and size class homogeneity of rRNA genes of Catfish *Heteropneustes fossilis*. *Ind. J. Biochem. and Biophys.* **26**: 1-4.
3. **Das Gupta, S. K.**, Shivakumar, C. V. and Das, G.C. (1993). Identification of proteins that bind to the F441 locus of polyoma virus -B enhancer that are required for its activity in Embryonal Carcinoma cells. *J. Gen .Virol.* **74**: 597-606.
4. **Das Gupta, S. K.**, Bashyam, M. D. and Tyagi, A. K. (1993). Cloning and assessment of mycobacterial promoters by using a plasmid shuttle vector. *J. Bacteriol.* **175**: 5186-5192.
5. Bashyam, M.D., Kaushal, D., **Das Gupta, S. K.** and Tyagi A. K. (1996) A study of the mycobacterial transcriptional apparatus : Identification of novel features in promoter elements. *J. Bacteriol* **178**: 4847 - 4853.
6. Jain, S., Kaushal, D., **Das Gupta, S. K.** and Tyagi A. K. (1997). Construction of shuttle vectors for genetic manipulation and molecular analysis of mycobacteria. *Gene*.**190**: 37 - 44.
7. Ghosh, C., Nandy, R.K., **Das Gupta, S. K.**, Balakrishna N., Hall, R. H. and Ghose, A.C. (1997). A search for cholera toxin (CT) , Toxin regulated pilus (TCP), the regulatory element ToxR and other virulence factors in Non OI / Non-O139 Vibrio Cholera. *Microbial Pathogenesis.* **22**: 199-208.
8. **Das Gupta, S. K.**, Kaushal, D and Tyagi, A. K. (1998). Expression systems for study of mycobacterial gene regulation and development of recombinant BCG vaccines. *Biochem Biophys Res Commun.* **246**: 797-804
9. Ghosh, S., Pal, S., **Das Gupta, S. K.** and Majumder, S (1998). Lipoarabinomannan induced cytotoxicity effects in human mononuclear cells. *FEMS Immunology and Medical Microbiology* **2**: 181-188.
10. Chawla, M., and. **Das Gupta, S. K.** (1999). Transposition induced instability in E. coli - Mycobacteria shuttle vectors. *Plasmid.* **41**: 135-140.
11. Chatterjee, S., Mahasweta, M and **Das Gupta, S. K.** (2000). A high yielding mutant of mycobacteriophage L1 and its application as a diagnostic tool. *FEMS Microbiol letts.* **188**: 47 - 53.
12. Tyagi, A. K., **Das Gupta, S. K.** and Jain, S. (2000). Gene expression: reporter technologies. In *Molecular Genetics of Mycobacteria* (ed. Hatfull, G. F. and Jacobs, W. R.). ASM press, Washington D. C. p 131-147.

13. Basu, A., Chawla-Sarkar, M., Chakrabarti, S. and **Das Gupta, S. K.** (2002). Origin binding activity of the mycobacterial plasmid pAL5000 replication protein RepB is stimulated through interactions with host factors and coupled expression of *repA*. *J. Bacteriol.* **184**: 2204-14.
14. Basu, A., Chakrabarty, S., and **Das Gupta, S. K.** (2004). Translational coupling to an upstream gene promotes folding of the mycobacterial plasmid pAL5000 replication protein RepB, into an active structure resulting in increased origin binding activity. *J. Bacteriol.* 186: 335-342.
15. Abhik Saha, Archana Sharma, Amlanjyoti Dhar, Bhabatarak Bhattacharyya, Siddhartha Roy, and **Sujoy K. Das Gupta** (2005). Antagonists of Hsp16.3, a small molecular weight mycobacterial chaperon and virulence factor, derived from phage-displayed peptide libraries. *Applied and Environmental Microbiology* 71(11):7334-44
16. Sharma, S., Saha, A., Bhattacharjee, S., Majumdar, S. and **Das Gupta S. K.** (2006). Specific and randomly derived immunoactive peptide mimotopes of mycobacterial antigens. *Clin. Vaccine Immunol.* 13 (10): 1143-54.
17. Mandal S, Chatterjee S, Dam B, Roy P, and Das Gupta S K. (2007). The dimeric repressor SoxR binds cooperatively to the promoter(s) regulating expression of the sulfur oxidation (*sox*) operon of *Pseudaminobacter salicylatoxidans* KCT001. *Microbiology*, **153**: 80-91.
18. Mitra G, Saha A, Gupta TD, Poddar A, Das KP, **Das Gupta SK**, Bhattacharyya B. (2007). Chaperone-mediated inhibition of tubulin self-assembly. *Proteins.* **7**, 112-20.
19. Dam B, Mandal S, Ghosh W, Das Gupta S K, and Roy P. (2007). The S4-intermediate pathway for the oxidation of thiosulfate by the chemolithoautotroph *Tetrathibacter kashmirensis* and inhibition of tetrathionate oxidation by sulfite. *Research in Microbiology*, **158**: 330-338.
20. Chatterjee S, Basu A, Basu A, **Das Gupta SK.** (2007) DNA bending in the mycobacterial plasmid pAL5000 origin-RepB complex. *J Bacteriol.* 189(23):8584-92
21. Das Gupta, T., Bandyopadhyay B. and **Das Gupta S. K.** (2008) Modulation of DNA-binding activity of Mycobacterium tuberculosis HspR by chaperones. *Microbiology* ; 154: 484-490.
22. Bhattacharya B., Giri N., Mahasweta M. and **Das Gupta, S. K.** (2008). Cloning, characterization and expression analysis of nucleotide metabolism-related genes of mycobacteriophage L5. *FEMS Microbiology letters* 2008, 280(1):64-72.
23. Giri N, Bhowmik P, Bhattacharya B, Mitra M, **Das Gupta S. K.** Mycobacteriophage D29 gene 65 encodes an early expressed protein that functions as a structure specific nuclease. *J. Bacteriol.* (2009), 191, 958-967
24. Dam B, Ghosh W, and **Das Gupta S K.** (2009) Conjugative Type 4 Secretion System of a novel large plasmid from the chemoautotroph *Tetrathibacter kashmirensis* and construction of shuttle vectors for *Alcaligenaceae*. *Applied and Environmental Microbiology*, **75(13)**: 4362-4373.
25. Ghosh, W., S. Mallick, and **S. K. Das Gupta.** (2009). Origin of the Sox multienzyme complex system in ancient thermophilic bacteria and coevolution of its constituent proteins. *Res Microbiol* **160**:409-20.

26. Ghosh, W., A. George, A. Agarwal, P. Raj, M. Alam, P. Pyne, and **S. K. Das Gupta** (2011). Whole-genome shotgun sequencing of the sulfur-oxidizing chemoautotroph *Tetrathiodibacter kashmirensis*. *J Bacteriol* **193**:5553-4.
27. Basu, A., S. Chatterjee, S. Chatterjee, and **S. K. Das Gupta**. (2012). An Evolutionary link between the mycobacterial plasmid pAL5000 replication protein RepB and Extra Cytoplasmic Function (ECF) family of sigma factors. *J Bacteriol*. **194**: 1331-1341
28. Bandyopadhyay, B., Das Gupta, T., Roy, D., and **S. K. Das Gupta**. DnaK Dependence of the Mycobacterial Stress-Responsive Regulator HspR Is Mediated through Its Hydrophobic C-Terminal Tail. *J. Bacteriol* 194, no. 17 (2012): 4688-4697.
29. Kirtania P, Bhattacharya B, **Das Gupta SK**. (2014). Mycobacteriophage L5Gp56, a novel member of the NrdH family of redoxins. *FEMS Microbiol Lett* 357:16-22.
30. Dutta S, Bhawsinghka N, **Das Gupta SK**. (2014). Gp66, a calcineurin family phosphatase encoded by mycobacteriophage D29, is a 2', 3' cyclic nucleotide phosphodiesterase that negatively regulates phage growth. *FEMS Microbiol Lett* doi:10.1111/1574-6968.12625.
31. Bhowmik P, Das Gupta SK. (2015). Biochemical Characterization of a Mycobacteriophage Derived DnaB Ortholog Reveals New Insight into the Evolutionary Origin of DnaB Helicases. *PLoS One* 10:e0134762.
32. Samaddar, S., R. K. Grewal, S. Sinha, S. Ghosh, S. Roy, and S. K. Das Gupta. (2016). Dynamics of Mycobacteriophage-Mycobacterial Host Interaction: Evidence for Secondary Mechanisms for Host Lethality. *Applied and environmental microbiology* 82:124-133. **Selected as spotlight article.**
33. Ghosh, S., S. Samaddar, P. Kirtania, and S. K. Das Gupta. (2016). A DinB Ortholog Enables Mycobacterial Growth under dTTP-Limiting Conditions Induced by the Expression of a Mycobacteriophage-Derived Ribonucleotide Reductase Gene. *Journal of bacteriology* 198:352-362. **Selected as spotlight article.**
34. Kirtania P, Ghosh S, Bhawsinghka N, Chakladar M, Das Gupta SK. (2016). Vitamin C induced DevR-dependent synchronization of *Mycobacterium smegmatis* growth and its effect on the proliferation of mycobacteriophage D29. *FEMS Microbiol Lett.* 363, fnw097.
35. Chatterjee, S., Patra, M. M., Samaddar, S., Basu, A. & Gupta, S. K. D (2017) Mutual interaction enables the mycobacterial plasmid pAL5000 origin binding protein RepB to recruit RepA, the plasmid replicase, to the origin. *Microbiology* 163 (4), 595-610.
36. Bhawsinghka N, Dutta A, Mukhopadhyay J, Das Gupta SK. (2018) A transcriptomic analysis of the mycobacteriophage D29 genome reveals the presence of novel stoperator-associated promoters in its right arm. *Microbiology* ;164(9):1168-79.
37. Madhurima Roy Anirban Kundu Anirban Bhunia Sujoy Das Gupta Soumya De Amit Kumar Das. Structural characterization of VapB46 antitoxin from *Mycobacterium tuberculosis*: insights into VapB46–DNA binding. 2019: **The FEBS Journal**. 286: 1174-1190.

38. Apurba Sarkar, Shreya Ghosh, Rahul Shaw, Madhu Manti Patra, Fatema Calcuttawala, Noyonika Mukherjee, **Sujoy K. Das Gupta**. *Mycobacterium tuberculosis* thymidylate synthase (ThyX) is a target for plumbagin, a natural product with antimycobacterial activity. *PlosOne* 2020. <https://doi.org/10.1371/journal.pone.0228657>.
39. Shrestha Ghosh, Rahul Shaw, Apurba Sarkar, **Sujoy K Das Gupta**. Evidence of positive regulation of mycobacteriophage D29 early gene expression obtained from an investigation using a temperature-sensitive mutant of the phage. *FEMS Microbiology letters*. *FEMS Microbiol Lett.* 2020 Nov 23;367(21):fnaa176. doi: 10.1093/femsle/fnaa176. PMID: 33119086.
40. Saptarshi Sinha, Sourabh Samaddar, Sujoy K Das Gupta, Soumen Roy, Network approach to mutagenesis sheds insight on phage resistance in mycobacteria, *Bioinformatics*, Volume 37, Issue 2, 15 January 2021, Pages 213–220, <https://doi.org/10.1093/bioinformatics/btaa1103>.
41. Ghosh P, Barman A, Gupta SK. Induced expression of the *zwf* gene in the presence of glucose contributes to lowering of glucose 6-phosphate level and consequently reduction of growth rate of *Mycobacterium smegmatis*. *Microbiology*. 2021 Jul 8;167(7):001067.
42. Patra, Madhu Manti, Poulami Ghosh, Shreya Sengupta, and Sujoy K. Das Gupta. "DNA binding and gene regulatory functions of MSMEG_2295, a repressor encoded by the *dinB2* operon of *Mycobacterium smegmatis*." *Microbiology* 167, no. 10 (2021): 001097.
43. Sengupta, Shreya, Niketa Bhawsinghka, Rahul Shaw, Madhu Manti Patra, and Sujoy K. Das Gupta. "Mycobacteriophage D29 induced association of Mycobacterial RNA polymerase with ancillary factors leads to increased transcriptional activity." *Microbiology* 168, no. 3 (2022): 001158.
44. Calcuttawala F, Shaw R, Sarbajna A, Dutta M, Sinha S, K. Das Gupta S. Apoptosis like symptoms associated with abortive infection of *Mycobacterium smegmatis* by mycobacteriophage D29. *Plos one*. 2022 May 17;17(5):e0259480.
45. Barman, Anik, Madhu Manti Patra, and Sujoy K. Das Gupta. "The respiratory lipoquinone, menaquinone, functions as an inducer of genes regulated by the *Mycobacterium smegmatis* repressor MSMEG_2295." *Microbiology* 168, no. 5 (2022): 001192.

Research Grants:

- Investigations into the mechanism of replication of the mycobacterial plasmid pAL5000. (CSIR 1994-1998)

- A cosmid vector for cloning genes linked to viability of virulent mycobacteria in macrophages. DBT (1998-2001)
- Understanding the mechanism of replication of the mycobacterial plasmid pAL5000 using an in vitro approach. CSIR (1998 -2002)
- Investigation into the developmental expression of Mycobacteriophage L1/L5 genes during their latent phase of growth using proteome analysis tools. CSIR (2001-2004)
- Generation of Peptide Mimics against the Immunodominant Lipoglycan / Lipopolysaccharide antigens of Mycobacterium tuberculosis and Vibrio Cholerae using phage display libraries and their evaluation as diagnostic and prophylactic agents ICMR (2000 – 2003)
- New Millennium Indian Technology Leadership Initiative (NMITLI)" project on Latent tuberculosis, New Targets, drug Delivery systems and bioenhancers and Therapeutics (Multi centric project) CSIR (2001 – 2005)
- Investigation into the stimulatory effect of host factor on the origin binding activity of a mycobacterial plasmid replication protein. CSIR (2004-2007)
- Discovering mycobacterial drug targets through mycobacteriophage genomics. DBT (2005 -2008)
- Investigating DNA trajectories in DNA protein –complexes of prokaryotic origin. CSIR (2007-2012)
- Investigating the mechanism by which chaperons activate DNA binding activity of the mycobacterial heat shock response regulator HspR. DST(2011-2014).
- Understanding the evolutionary origin and mechanism of action of putative pimsase – polymerase encoded by the Mycobacterial plasmid pAL 5000 CSIR (2014-2017).
- Phage inspired antibiotics for Mycobacteria. DST, SERB (2018 - 2021).
- The central carbon metabolism in mycobacteria and its role in oxidative stress and antibiotic resistance. CSIR, Emeritus Scientist, 2022 to 2025.

Important meetings attended and lectures delivered.

- Sequence requirements for replication of a mycobacterial plasmid pAL5000 Chawla, M and Das Gupta S. K. International Symposium on Trends In Microbiology . Dec 5 - 8 1995 held at Calcutta. Abs no . AC76.
- Presented a paper on “The instability of vector systems - its implications in the area of mycobacterial genetic engineering" at the Indo- French Workshop on Tuberculosis (1st and 2nd December 2000) at Tuberculosis Research Center (ICMR) Chetput, Chennai
- Delegate to the Indo-German Workshop on Bioinformatics and proteomics to be held at the Max Planck Institute of Molecular Genetics, Berlin from the 18th to 20th September 2003, where I presented a talk on mycobacteriophage proteomics.
- Presented a seminar talk, “Evolving Molecular tools to combat TB” at the second Indo-UK Tuberculosis meeting sponsored jointly by the Royal Society, UK and the Department of Science and Technology, New Delhi, held at CDFD, Hyderabad during January 12-13, 2004.

- Delivered a lecture on DNA trajectory in a Mycobacterial plasmid replication origin complex, at a Symposium organized by the Scholar's forum of NICED. 23rd April 2010.
- Delivered a lecture on TB Genomics and Drug Development at the National workshop on TB Genomics, Drug Development and Recent Molecular Diagnosis organized by Assam University and Silchar Medical College and Hospital in Connection with World TB Day. 24th March 2011.
- Delivered a lecture on “Mycobacterial phage and plasmid as evolutionary models” at National workshop on "Luciferase Reporter Phage assay" held between September 7 and 9, 2011 at National Institute for Research in Tuberculosis (*Formerly Tuberculosis Research Centre*), Chennai.
- Attended the meeting on "Meeting on Molecular Microbiology" (M³ or Mcube) held on 10th and 11th February 2017 at CDFD Hyderabad and delivered a lecture on the topic “Mycobacteriophage based platforms to discover novel drug targets for mycobacteria”
- Delivered a seminar talk at the conference on anti-microbial resistance (AMR conference 2018, entitled “ Phage inspired antibiotics for Mycobacteria” at the National Institute of Cholera and enteric diseases held at NICED Kolkata on February 17, 2018
- Attended the meeting on “Targeting phage and antibiotic resistance” held at Florence, Italy (May 17 – 18th 2018) and delivered a lecture on “Mycobacteriophage based platforms to discover drug targets for mycobacteria”
- Delivered key note lecture entitled “ Reconnecting with our viral ancestors” at the National Workshop on Genomics for Microbial diversity and taxonomy (GEMTAX 2019) at NIT Rourkela, Odisha
- Presented a lecture on the topic “Ancient imprints in the genomes of mycobacterial plasmids and phages offer new insight into the evolutionary origin of DNA replication and transcriptional machineries.” at the Meeting on molecular biology, ” (Mcubed) 2019 meeting held at CDFD Hyderabad. 10-12 July 2019.
- Delivered a lecture entitled “an autobiography of the gene” at the ‘Biospectrum 2019’ conference organized by the University of Engineering and Management, Kolkata on the 9th August 2019.
- Delivered a lecture entitled “TB research and drug development” at the ‘B star 19’ symposium organized by Dr. KPC life sciences Pvt Ltd. Kolkata on the 13th of Nov 2019.
- Invited lecture on the topic “Phage inspired antibiotics for mycobacteria” at the 107th Indian Science Congress held at the Bangalore, January 3-7, 2020.
- Invited lecture at the “National Seminar on Advancement of Biotechnology in Human Welfare” organized by the Govt. Of West Bengal Department of Science and Technology and Biotechnology and SHRM biotechnologies limited. February 24th 2020 on the topic “An autobiography of the DNA – the beautiful molecule of life” at the Suresh Neotia Centre for excellence for leadership, Salt Lake, Kolkata.
- Delivered an invited lecture entitled “The DNA story” in connection with the National Science Day Celebration, February 28th 2020 organized by the Sister Nivedita University, New Town, Kolkata.

Patents

“Peptide antagonists for inhibiting Heat Shock Protein (Hsp16.3) of Mycobacterium tuberculosis” SUJOY K. DAS GUPTA, ABHIK SAHA, ARCHNA PATHAK SHARMA, SIDDHARTHA ROY, BHABATARAK BHATTACHARYA, PINAKPANI CHAKRABARTI. **Applicaton #:** 20070037211 **Class:** 435007100 (USPTO)

Administrative/Teaching

- Member PhD. Committees of Calcutta University, Presidency University
- Member Board of studies Presidency University.
- Member of the Bio-safety Committee, Presidency College.
- Visiting faculty, Calcutta University, Dept. Of Biochemistry
- Visiting faculty, St. Xavier’s College Kolkata, Dept. of Microbiology

Students guided for Ph.D. :

1. Dr. Mamta Chawla , Scientist F at NICED, Kolkata
2. Dr. Shreyasi Chatterjee, Lecturer at Nottingham Trent University Visiting Fellow at University of Southampton
3. Dr. Mahasweta Mitra Lecturer, St. Xavier’s College, Kolkata
4. Dr. Abhijit Basu, Post-Doctoral fellow at Cleveland Clinic foundation
5. Dr. Abhik saha, Assistant Professor, Presidency University, kolkata
6. Dr. Sukhendu Mandal, Assistant Professor, Dept. Of Microbiology, Calcutta University
7. Dr. Archana Sharma, Faculty member, The Feinstein Institute for Medical Research, Manhasset, New York, United States
8. Dr. Sujoy Chatterjee, Post-Doctoral fellow New York Medical Center
9. Dr. Twisashri Das Gupta, Post-Doctoral fellow Cleveland Clinic Foundation
10. Dr. Bidisha Bhattacharyya
11. Dr. Bomba Dam, Humbolt Fellow and Assistant Professor Vishwa Bharati,
12. Dr. Nabanita Giri, Lecturer, APC college Kolkata
13. Dr. Arnab Basu, Assistant Professor, Ramakrishna Mission Vivekananda Educational and Research Institute.
14. Dr. Boudhayan Bandopadhyaya, Assistant Professor, Program Chair, Bio-engineering, VIT, Bhopal University.
15. Dr. Priyanka Bhowmick, Assistant Professor, Biotechnology, Adamas University.

16. Dr. Prithwiraj Kirtania, Researcher – New Tech, Soft flow limited, Pecs, Hungary
17. Dr. Soumita Datta, formerly, Postdoctoral researcher at University of Kansas Medical Center
18. Dr. Shreya Ghosh, Research Scholar at Memorial Sloan Kettering Cancer Center
19. Dr. Soniya Chatterjee, Postdoctoral Fellow at National Institutes of Health (NIH)
20. Dr. Sourav Samaddar, Post-Doctoral fellow at the University of Maryland, School of Medicine.
21. Dr. Niketa Bhawsinghka, Post-Doctoral National Institute of Environmental Health Sciences, USA
22. Shreshta Ghosh, Post-Doctoral fellow at SINP
23. Apurba Sarkar, Visting faculty, Vivekananda group of Institutions
24. Poulami Ghosh, Post-doctoral fellow at UMAass Chan Medical School
25. Madhu Manti Patra

Present Students:

CSIR – NET research fellows: Anik Burman

UGC - NET Research Fellow: Rahul Shaw