

CURRICULUM VITAE



NAME: Dr. DIPTENDU SARKAR, **M.Sc (Biotechnology), M.Phil. (Biotechnology), Ph.D. (Science), CSIR-UGC NET, SET.**

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PERMANENT ADDRESS: 27/1, (#64), J.N.Gupta Lane, Goalapara, P.O.-Baidyabati, Dist. - Hoogly, Pin- 712222, State-West Bengal, India.

OFFICIAL ADDRESS: Dept of Microbiology, Ramakrishna Mission Vidyamandira, (Autonomous), Affiliated to University of Calcutta, Belur Math, Howrah-711202, West Bengal, India.

<https://www.researchgate.net/profile/Diptendu-Sarkar>

<https://scholar.google.co.in/citations?user=4gsletIAAAJ&hl=en>

CURRENT STATUS:

Asst. Professor (WBCSC), Department of Microbiology at Ramakrishna Mission Vidyamandira (A Residential Autonomous College ; affiliated to University of Calcutta with CPE status, DBT STAR college), Belur Math, Howrah-711202, WB, India.

At present actively involved in teaching and research in various field of Microbiology, Biotechnology and Bioinformatics.

PERSONAL INFORMATIONS:

- a. **DATE OF BIRTH:** August 18, 1981
- b. **FATHER'S NAME:** Late Mr.K.P. Sarkar
- c. **MOTHER'S NAME:** Mrs. Bharoti Rani Sarkar
- d. **BLOOD GROUP:** B⁺
- e. **NATIONALITY:** Indian
- f. **RELIGION:** Hindu
- g. **MERITORIAL STATUS:** Married
- h. **LANGUAGE KNOWN:** English, Hindi, Kanada, Bengali

DETAILED EDUCATIONAL QUALIFICATION:

NAME OF EXAMINATION	UNIVERSITY/BOARD	YEAR OF PASSING
Ph.D in Science (Physiology; Thesis on Environmental Microbiology)	Kalyani University, Nadia, West Bengal, India	2015

M.Phil in Bio-Technology	Global Open University, Nagaland	2009
National Eligibility Test (NET- Life Science-LS)	JOINT CSIR-UGC	2010
State Eligibility Test in Karnataka (KSET- Life Science)	UGC & Karnataka Govt.	2006
M.Sc – Bio-Technology	Bangalore University, Karnataka, India	2006
B.Sc (Hons.) in Human Physiology	University of Burdwan, West Bengal, India	2003
Higher Secondary (10+2)	W.B.C.H.S. E	2000
Secondary Examination	W.B.B.S. E	1998

AREA OF SPECIALIZATION AND RESEARCH INTEREST:

- A. Structural Biology, Drug designing and Bioinformatics
- B. Microbial Biotechnology
- C. Microbial Physiology, Cell Biology and Metabolism
- D. Fermentation Technology
- E. Environmental Microbiology and Biotechnology

REVIEWER AND EDITORIAL BOARD MEMBER FOR JOURNALS:

1. Biointerface research in Applied Chemistry
2. Soudi journal of Biological sciences
3. King Soud journal of Sciences
4. Environmental Toxicology, Wiley & Sons
5. Indian Journal of pharmaceutical science
6. Asian Journal of Research in Pharmaceutical Sciences and Biotechnology
7. International Journal of Engineering Research and Technology.
8. Journal of Physical Science and Environmental Studies.
9. International Journal of Microbiology.
10. African Journal of Microbiology Research
11. World journal of Pharmaceutical Research.
12. Biocatalysis and Agricultural Biotechnology.
13. Journal of Applied Pharmaceutical Science

PROFESSIONAL EXPERIENCES:

Having teaching experience both in UG and PG level of education:

1. Assistant Professor, Dept of Microbiology, Ramakrishna Mission Vidyamandira, Belur Math, (joined through WBCSC, Date of Appointment:11/02/17)
2. Guest Faculty, Dept of Microbiology, Uluberia College, Uluberia, Howrah.

3. Guest Faculty, Dept of Physiology, University of Kalyani, Nadia, West Bengal.
4. Former Full time Assistant Professor in the Dept of Biotechnology in Brindavan College, Bangalore. (Both for UG & PG).
5. Former Full time Assistant Professor, Dept of BE Biotechnology, New Horizzon College of Engineering, Autonomous Institute, Bangalore.
6. Former Full time Asst. Prof in the Dept of Life Sciences, Garden City College, Bangalore. (For UG & PG)
7. Former Full time Assistant Professor in the Dept of Biotechnology in Acharya Institution, Bangalore. (Both for UG & PG).
8. Former Full-time lecturer of Genetics and Biotechnology in S.R.N, Adarsh College , Bangalore . (For UG)
9. Former Part-time lecturer of Environmental Science in S.R.N. Adarsha college, Bangalore , (For UG)
10. Former Part- time lecturer of Biochemistry in Don Bosco college, Bangalore . (For PG)
11. Former Guest faculty of Physiology Dept in Krishnanath College , Berhampore, Murshidabad, west Bengal , (For PG)
12. Former Part time lecturer at Behala College, Zoology Dept. , University of Calcutta.(For UG hons)
13. Having experience to work in Pathological Laboratory.

OTHER ACTIVITIES:

- a) Paper evaluator in Biotechnology (UG & PG - Bangalore University, Bangalore, India)
- b) Paper setter and evaluator in BE Biotechnology, VTU, Bellgum, Karnataka, India
- c) Paper setter and evaluator in Microbiology (UG), RKMV, Belur, Under Calcutta University, West Bengal
- d) Paper setter and evaluator in Microbiology (UG), Midnapore College, Under Vidyasagar University, West Bengal
- e) Paper setter and evaluator in Nutrition special paper in Physiology (PG), University of Kalyani, West Bengal
- f) Paper setter and evaluator in Environmental Physiology (PG), University of Kalyani, West Bengal
- g) Paper setter and evaluator in Microbiology Hons., University of Kalyani, West Bengal
- h) Paper setter and evaluator in Microbiology [Physiology (PG)], University of Kalyani, West Bengal
- i) Paper setter cum evaluator Netaji Subhas Open University, Kolkata.
- j) Paper setter cum evaluator in Microbiology, St Xavier's College, Kolkata

ADMINISTRATIVE EXPERIENCE:

- Certificate course coordinator of Structural Biology and Bioinformatics.
- DBT STAR scheme Departmental coordinator.

- Preparation and demonstration of lectures using Audio Visual Aids taking reference from Reference books, Internet, Journals etc.
- Arranging for visiting Faculty on recent trends and latest developments in Biological Sciences.
- Arrange for industrial visits to various labs and industries.
- Actively participated in conducting seminars, debates, symposium in biological sciences.
- Member of Examination committee at RKMV, Belur Math
- Member of Library committee at RKMV, Belur Math
- Co-ordinator of Seminar committee at RKMV, Belur Math (2018-2019, 2019-2020)

LIST OF PAPER PUBLISHED IN VARIOUS PEER REVIEWED INTERNATIONAL & NATIONAL JOURNALS:

1. Sarkar Diptendu, Mandal Gopal Dev, Kolar Amzad Basha, Roy Tapan Kumar, Jahirhussain G. and Sarasa D. Understanding the xenoestrogenic activity of BPA involves molecular docking study with a few chosen nuclear receptors and toxicodynamics analysis: An *in silico* research. **Intern. J. Zool. Invest.** **10(1): 783-790, 2024.** research. <https://doi.org/10.33745/ijzi.2024.v10i01.085> IF:6.05
2. **Diptendu Sarkar**, Gopal Dev Mandal, Amzad Basha Kolar, Mousumi Dutta and Dipankar Majumdar. Repurposing glut4 antidiabetic natural compounds against the insulin receptor: An in silico analysis. **Biochem. Cell. Arch (2024) Vol. 24, No. 1, pp. 1183-1191.** <https://connectjournals.com/03896.2024.24.1183>
3. **Diptendu Sarkar** and Kamalesh Das. A review on involvement of gut microbiota in insulin dependent diabetes. **Science Archives (2023) Vol. 4 (4), 255-263.** <https://doi.org/10.47587/SA.2023.4403>
4. **Diptendu Sarkar** and Gopal Dev Mondal. Molecular docking and dynamic study with polyphenolic constituents as inhibitors of human tyrosinase enzyme for hyperpigmentation therapy and skin complexion management. **Science Archives, Vol. 4 (2), 119-129. (ISSN:2582-6697)** <https://doi.org/10.47587/SA.2023.4209>
5. **Diptendu Sarkar** and Sk Murtaj. Mesenchymal stem cells have a crucial role in liver fibrosis treatment: An overview. **Science Archives (2023), Vol. 4 (2), 92-98. (ISSN:2582-6697)** <https://doi.org/10.47587/SA.2023.4204>
6. **Diptendu Sarkar** and Sk Murtaj Ahamed. Finding antagonist for the VP24 protein of the Ebola virus to treat infections using molecular docking and molecular dynamics studies. **Science Archives (2022) Vol. 3 (4), 289-300. (ISSN:2582-6697)** <https://doi.org/10.47587/SA.2022.3408>

7. **Diptendu Sarkar** and Souvik Mitra. Involvement of gastrointestinal tract associated microbiota in direct and indirect immunomodulation: An overview. **Science Archives (2022) Vol. 3 (4), 268-279. (ISSN:2582-6697). <https://doi.org/10.47587/SA.2022.3405>**
8. **Diptendu Sarkar**. Molecular docking of putative phytochemicals in aqueous *Moringa oleifera* leaf extracts with three cytochrome P450 enzyme involved in xenobiotic metabolism. **Science Archives (2022) Vol. 3 (4), 255-262 <https://doi.org/10.47587/SA.2022.3403>**
9. Jyoti Bharamgoud Marigoudar, **Diptendu Sarkar et al.**, Role of vitamin D in targeting cancer and cancer stem cell populations and its therapeutic implications. **Medical Oncology (2023) 40:2 <https://doi.org/10.1007/s12032-022-01855-0> IF 3.710**
10. **Diptendu Sarkar**, Atanu Mondal and Subha Roy. An In silico approach to investigating the anti-breast cancer activity of the plant genus *Spatholobus*. **Science Archives (2022) Vol. 3 (3), 228-234. <https://doi.org/10.47587/SA.2022.3314>. (ISSN:2582-6697)**
11. **Diptendu Sarkar**, Shubham Dutta, Kamalesh Das and Gopal Dev Mandal. The pathophysiological effect of SARS-CoV 2 infection During woman's child bearing age and pregnancy. **World Journal of Pharmaceutical Research. Volume 11, Issue 12, 380-400, 2022, ISSN 2277– 7105. DOI :10.20959/wjpr202212-25246. IF 8.084**
12. **Diptendu Sarkar**. Reactive Oxygen Species Effects on Mitochondrial Dynamicity that may Lead to Parkinson's Disease: A Review. **International Journal of Zoological Investigations. Volume 8, Issue 2, 237-244, 2022, ISSN: 2454-3055. <https://doi.org/10.33745/ijzi.2022.v08i02.030>. IF 6.379**
13. Priyajit Banerjee, Ishita Saha, **Diptendu Sarkar** and Arpan Kumar Maiti. Contributions and Limitations of Mitochondria-Targeted and Non-Targeted Antioxidants in the Treatment of Parkinsonism: An Updated Review. **Neurotoxicity Research. Volume 40, Issue 1, 2022, ISSN:1476-3524. <https://doi.org/10.1007/s12640-022-00501-x>. IF 3.91**
14. **Diptendu Sarkar**. In silico research to screen various phytochemical as potential therapeutics against beta glucan synthase enzyme from black fungus endangering covid patients in India. **International Journal of Zoological Investigations. Volume 8, Issue 1, 2022, ISSN: 2454-3055. <https://doi.org/10.33745/ijzi.2022.v08i01.035>. IF 6.379**
15. **Diptendu Sarkar** and Amritendu Ganguly. Molecular Docking Studies with Garlic Phytochemical Constituents to Inhibit the Human EGFR Protein For Lung Cancer Therapy. **International Journal of Pharma and Bio Sciences. ISSN: 0975-6299. 13(2), B1-14 , 2022. <http://dx.doi.org/10.22376/Ijpbs.2022.13.2.b1-14> IF 7.291.**
16. **Diptendu Sarkar** and Arpan Kumar Maiti. Virtual Screening and Molecular Docking Studies with Organosulfur and Flavonoid Compounds of Garlic Targeting the Estrogen Receptor Protein for the Therapy of Breast Cancer. **Biointerface Research in Applied Chemistry. Volume 13, Issue 1, 2023, 49, ISSN: 2069-5837. IF 1.949**

17. **Diptendu Sarkar**, Arpan Kumar Maiti, Rawaf Alenazy, Babu Joseph. *In silico* Approach to Identify Potent Bioactive Compounds as Inhibitors against the Enoyl-acyl Carrier Protein (acp) Reductase Enzyme of *Mycobacterium tuberculosis*. **Biointerface Research in Applied Chemistry**. Volume 12, Issue 5, 2022, 7023 – 7039. ISSN: 2069-5837. IF 1.949
18. **Diptendu Sarkar**. Molecular docking with different phytochemicals from the *Spatholobus* genus plant as medications against acetylcholinesterase enzyme that induces Alzheimer's disease in human. **International Journal of Botany Studies**. Volume 6, Issue 6, 2021, Page No. 603-615. ISSN: 2455-541X.
19. **Diptendu Sarkar**. Effectiveness of various phytochemicals as quorum sensing and microbial biofilm inhibitors: An evidence-based study. **International Journal of Botany Studies**. Volume 6, Issue 6, 2021, Page No. 634-646. ISSN: 2455-541X
20. **Diptendu Sarkar**. Molecular docking study to identify potent Fungal metabolites as inhibitors against SARS-CoV-2 main protease enzyme. **International Journal of Pharma and Bio Sciences**. ISSN: 0975-6299. IF 7.291.
21. **Diptendu Sarkar** and Goutram Paul. Isolation of soil born fungi for production of natural lovastatin in submerged and solid-state fermentation process. **International Journal of Biology, Pharmacy and Allied Sciences**. Volume 10(6) ,June 2021. ISSN:2277-4998. IF: 1.318.
22. Shubham Dutta, Yatish Ravindra Thakare, Avinash Kshirsagar and **Diptendu Sarkar**. A Review on Host Genetic Susceptibility to SARS CoV-2 Related Pneumonia. **International Journal of Pharma and Bio Sciences**. Volume12., No 2 (April) 2021, pp b42-49. ISSN: 0975-6299. DOI: 10.22376/ijpbs.2021.12.2.b42-49. IF 7.291.
23. **Diptendu Sarkar**. A Review on the Emerging Epidemic of Novel Coronavirus (nCoV- SARS CoV-2): Present Combating Strategies. **International Journal of Pharma and Bio Sciences**. Volume12., No 2 (April) 2021, pp b33-41. ISSN: 0975-6299. ijpbs 2021; DOI: 10.22376/ijpbs.2021.12.2.b33-41. IF 7.291.
24. **Diptendu Sarkar** and Goutam Paul. A study on optimization of lactic acid production from whey by *Lactobacillus* sp isolated form curd sample. **Research journal of life Sciences, Bioinformatics, Pharmaceutical and Chemical Sciences**. Vol. 5, Issue, 02, 816-824 (2019). ISSN: 2454-6348. DOI: 10.26479/2019.0502.6. IF 0.896.
25. **Diptendu Sarkar** and Kamalesh Das. Optimization of citric acid production from *Aspergillus niger* using pineapple waste as feedstock in submerged fermentation. **World journal of pharmaceutical research**. Vol. 6, Issue 17, 810-818 (2017). ISSN: 2277-7105. IF 7.523.

26. **Diptendu Sarkar** and Goutam Paul. Synthesis of plant-mediated silver nanoparticles using *Commiphora wightii* (guggul) extract and study their antibacterial activities against few selected organisms. **World journal of pharmacy and pharmaceutical Sciences. Vol. 6, Issue, 04, 1418-1425 (2017). ISSN: 2278 – 4357. IF 6.647.**
27. **Diptendu Sarkar** and Goutam Paul. Green Synthesis of Silver Nanoparticles using *Mentha asiatica* (Mint) Extract and Evaluation of their Antimicrobial Potential. **International Journal of Current Research in Biosciences and Plant Biology. Vol. 4, Issue, 01, pp. 77-82, January, doi: <http://dx.doi.org/10.20546/ijcrbp.2017.401.009> (2017). ISSN: 2349-8080. IF 1.179.**
28. **Diptendu Sarkar**, Goutam Paul and T.T.S Ramachandra Murthy. Studies on bio-chemical thermodynamics of lead biosorption from aqueous system using corn husk biomass as biosorbant agent. **International Journal of Current Research. Vol. 8, Issue, 09, pp.37592-37598, September, (2016). ISSN: 0975-833X. IF 7.086.**
29. **Diptendu Sarkar**, Goutam Paul, T.T.S Ramachandra Murthy, Parvathy Menon, Nagarjuna V , Geetanjali P and Yamini A.. A study on molecular characterization of crude oil degrading bacteria under *in vitro* conditions. **International Journal of Advances in pharmacy Biology and Chemistry Vol. 5(3), Jul - Sep. (2016). ISSN: 2277 – 4688. IF 5.548.**
30. **Diptendu Sarkar** and Goutam Paul. Extraction and Bio-chemical Characterization of protease enzyme from a Proteolytic bacteria isolated from dry mixed Kitchen waste. **International Journal of Current Microbiology and Applied Sciences. Volume 5 Number 3 pp. 268-276. <http://dx.doi.org/10.20546/ijemas.2016.503.033>. (2016). ISSN: 2319-7706. IF 2.937.**
31. **Diptendu Sarkar**, Girish N Desai, Suresh Kumar and Manikanta GS. Production of bioethanol after hydrolysis of lignocellulosic biomass into sugars using *Zymomonas mobilis* and *Saccharomyces cerevisiae* isolated from wine sample. **International Journal of Current Research. Vol. 8, Issue, 03, pp. 28218-28222, March. (2016). ISSN: 0975-833X. IF 7.086.**
32. **Diptendu Sarkar** and Goutam Paul. Evaluating the antifungal property of *Pseudomonas aeruginosa* DSGPM4 species on some food spoilage fungus. **International Journal of Advances in Pharmacy Biology and Chemistry. Vol. 4(3), Jul – Sep (2015). ISSN: 2277 – 4688. IF 5.548.**
33. **Diptendu Sarkar** and Goutam Paul. Bioremediation of nickel ions from aqueous system by dry cells of *Pseudomonas aeruginosa* DSGPM4 species. **Int. J. of Pharm. Life Sc. 6(1): Jan., 4110-4114 (2015). ISSN: 0976-7126. IF 4.256.**
34. **Diptendu Sarkar** and Goutam Paul. Effect of UV Induced Mutation on Production of Xylinase Enzyme from *Bacillus subtilis*. **Int. J. Pure App. Biosci. 2 (6): 236-240 (2014). ISSN: 2320 – 7051. IF 5.358.**

35. **Diptendu Sarkar**. A study on optimization of *Penicillium chrysogenum* culture media in solid state fermentation process for Pectinase enzyme production. **Int. J. of Pharm. Life Sc.** **5(11): Nov., 3966-39713 (2014) . ISSN: 0976-7126. IF 4.256.**
36. **Diptendu Sarkar** and Goutam Paul. A study on optimization of production and partial characterization of cholesterol oxidase enzyme isolated from *Pseudomonas* sp. **International Journal of Innovative and Applied Research Volume 2, Issue (12):): 23- 30 (2014). ISSN: 2348 – 0319. IF 2.845**
37. **Diptendu Sarkar** and Goutam Paul. A study on involvement of metal-binding protein(s) for the biosorption of some selected heavy metals. **International Journal: Journal of Advances in Biology. Vol. 5, No. 3 : 692-696 (2014). ISSN: 2347-6893. IF 0.632**
38. Soumita Laha, **Diptendu Sarkar** and Soma Chaki. Optimization of production and molecular characterization of pectinase enzyme produced from *Penicillium chrysogenum*. **Sch. Acad. J. Biosci., 2(5): 326-335 (2014). ISSN: 2321-6883. IF 1.87**
39. **Diptendu Sarkar**, Soumita Laha and Kamalesh Das. Studies on the Phytohormone Producing Potential of Agriculturally Beneficial Microbial (ABM), Isolates from Different Rhizosphere Soils of Sunflower in Bangaluru, Karnataka, India. **Global Journal of Applied Environmental Sciences .Volume 4, Number 1 : 45-52 (2014). ISSN:2248-9932**
40. Soumita Laha and **Diptendu Sarkar**. Screening of Inhibitory Effects on Acetylcholinesterase and Butyrylcholinesterase Enzymes By Some Indian Medicinal Plant's Extracts **Indian Res. J. Genet. & Biotech. 6(2) : 406-411 (2014).**
41. **Diptendu Sarkar** and Goutam Paul. A Bio-technological approach on removal of lead ions from aqueous system by dry cells of *Pseudomonas aeruginosa* DSGPM4 species. **International journal of Biotechnology & Bioengineering research. Volume 4, Number: 1 11-19 (2013). ISSN:2231-1238**
42. **Diptendu Sarkar** and Soma Chaki. Studies on antifungal activity of a bacterial strain on some food spoilage fungus, **International journal of Pherma and Biosciences. 4(4): (B) 299 – 303 F, (2013). ISSN: 0975-6299. IF 6.268**
43. **Diptendu Sarkar** and Goutam Paul. Optimization of Bacterial Extra-Cellular Polymeric Substance Production and Application of this Exopolymer in Toxic Metals Biosorption from Aqueous System. **International journal of Biotechnology & Biochemistry. Volume 9, Number 1: 13-21, (2013). ISSN: 0973-2691**
44. **Diptendu Sarkar** and Goutam Paul. Molecular characterization of metal and antibiotic resistance activities in a bacterial population isolated from waste water sample. **International**

**journal of Biotechnology & Bioengineering research. Volume 4, Number 1:21-30, (2013).
ISSN:2231-1238**

45. **Diptendu Sarkar** and Goutam Paul. Optimization of protease enzyme production from heavy metal and antibiotic resistant bacillus species isolated from waste water sample. **International journal of Biotechnology & Biochemistry. Volume 9, Number 1: 49-59, (2013). ISSN:0973-2691**
46. **Diptendu Sarkar**, Soumita Laha and Soma Chaki. Isolation, Purification and Characterization of Xylanase, Produced by a New Soil Born Bacillus Species, **Int J Pharm Bio Sci Oct; 4(4): (B) 571 – 576, (2013). ISSN: 0975-6299. IF 6.268**
47. **Diptendu Sarkar** and Soumita Laha. Production of Phytohormone Auxin (IAA) From Soil Born *Rhizobium* sp, Isolated From Different Leguminous Plant, **International journal of Applied Environmental Science. Volume 8, Number 5: 521-528, (2013). ISSN:0973-6077**
48. **Diptendu Sarkar** and Soumita Laha. Cytotoxic Effects Of Food Colour (Kesar Yellow) In Plant Cell Division, **International Journal of Applied Biotechnology and Biochemistry. Volume 3, Number 2 : 127-134, (2013). ISSN:2248-9886**
49. **Diptendu Sarkar** and Soumita Laha. Optimization of Extracellular Lipase Enzyme Production From *Aspergillus niger* By Submerged and Solid-State Fermentation Process. **Int J Pharm Bio Sci , Oct; 4(4): (B) 978 – 985 , (2013).ISSN: 0975-6299. IF 6.268**
50. **Diptendu Sarkar**, Soma Chaki and DM Mahishi. Cytological Effects of Chromium on Root Tip Cells of *Allium cepa* L. **International Journal of Environmental Engineering and Management. Volume 4, Number 2 : 193-198, (2013). ISSN:2231-1319**
51. **Diptendu Sarkar** and Soumita Laha. Studies on Isolation and Characterization of Antibiotic Producing Microorganisms from Industrial Waste Dump Soil Sample In Bangaluru, Karnataka, India. **International journal of Applied Environmental Science. Volume 8, Number 6 : 697-704, (2013). ISSN:0973-6077**
52. **Diptendu Sarkar**, Soma Chaki and DM Mahishi. Lead mediated Cytogenetic effects on Root Tip Cells of *Allium cepa* L. **International Journal of Biotechnology and Bioengineering Research. Volume 4, Number 6:121-126, (2013). ISSN:2231-1238**
53. **D. Sarkar**, C. Sengupta, S.N. Sinha, S. Sahu, A.K. Maiti and G. Paul, Bacterial degradation of High Molecular weight polycyclic aromatic hydrocarbons: A Novel Approach. **J. Environ. Physiol. 1(1):67-73. (2008). ISSN:0974-7036**

BOOK CHAPTER WRITTEN AND PUBLISHED:

Main author: Dr Diptendu Sarkar

Chapter Name: “Pathogenesis of Viral Infections and Male Reproductive Health: An Evidence Based Study”

Name of The Book: Oxidative Stress and Toxicity in reproductive Biology and Medicine; A comprehensive Update on MALE Infertility- Volume One.

Publisher: Springer Nature.

GENBANK SUBMISSION: (10 in Number)

1. **Sarkar D** and Paul G (2016). *Exiguobacterium aurantiacum DS/GP/BT1*. 16S ribosomal RNA gene, partial sequence. GenBank: **KY082677**. National Centre for Biotechnology Information (NCBI), U.S. National Library of Medicine, 8600 Rockville Pike, Bethesda MD, 20894 USA.
2. **Sarkar D** and Paul G (2016). *Exiguobacterium sp. DS/GP/BT2*. 16S ribosomal RNA gene, partial sequence. GenBank: **KY082678**. National Centre for Biotechnology Information (NCBI), U.S. National Library of Medicine, 8600 Rockville Pike, Bethesda MD, 20894 USA.
3. **Sarkar D** and Paul G (2016). *Aeromonas sp. Strain DS/GP/BT3*. 16S ribosomal RNA gene, partial sequence. GenBank: **KY118920**. National Centre for Biotechnology Information (NCBI), U.S. National Library of Medicine, 8600 Rockville Pike, Bethesda MD, 20894 USA.
4. **Sarkar D** and Paul G (2016). *Aeromonas sp. Strain DS/GP/BT4*. 16S ribosomal RNA gene, partial sequence. GenBank: **KY118921**. National Centre for Biotechnology Information (NCBI), U.S. National Library of Medicine, 8600 Rockville Pike, Bethesda MD, 20894 USA.
5. **Sarkar D** (2013). *Bacillus sp DSbt/abbs/Protease1*. 16S ribosomal RNA gene, partial sequence. GenBank: **JN836943**. National Centre for Biotechnology Information (NCBI), U.S. National Library of Medicine, 8600 Rockville Pike, Bethesda MD, 20894 USA.
6. **Sarkar D** (2013). *Bacillus sp DSbt/abbs/Protease2*. 16S ribosomal RNA gene, partial sequence. GenBank: **JN836944**. National Centre for Biotechnology Information (NCBI), U.S. National Library of Medicine, 8600 Rockville Pike, Bethesda MD, 20894 USA.
7. **Sarkar D** (2013). *Bacillus sp DSbt/abbs/Protease3*. 16S ribosomal RNA gene, partial sequence. GenBank: **JN836945**. National Centre for Biotechnology Information (NCBI), U.S. National Library of Medicine, 8600 Rockville Pike, Bethesda MD, 20894 USA.
8. **Sarkar D** and Paul G (2012). *Pseudomonas auregonasa DSGPM4*. 16S ribosomal RNA gene, partial sequence. GenBank: **JN228116**. National Centre for Biotechnology Information (NCBI), U.S. National Library of Medicine, 8600 Rockville Pike, Bethesda MD, 20894 USA.

9. **Sarkar D** and Paul G (2012). *Pseudomonas putida DSGPM5*. 16S ribosomal RNA gene, partial sequence. GenBank: **JN245880**. National Centre for Biotechnology Information (NCBI), U.S. National Library of Medicine, 8600 Rockville Pike, Bethesda MD, 20894 USA.
10. **Sarkar D** and Paul G (2012). *Bacillus sp DSGPM3*. 16S ribosomal RNA gene, partial sequence. GenBank: **JN245881**. National Centre for Biotechnology Information (NCBI), U.S. National Library of Medicine, 8600 Rockville Pike, Bethesda MD, 20894 USA.

PAPER PRESENTED IN VARIOUS NATIONAL & INTERNATIONAL CONFERENCES:

- a) 108th Indian science Congress: Invited talk (Medical Sciences including Physiology)- January 3 to 7, 2023
- b) Three Day International conference “BIONEXT2” an interface between Biotechnology and Biophysical chemistry – 21-23rd September, 2022.
- c) Two Day National Conference on Sustainable Health Science For Future Generations- 28 and 29th of April, 2022
- d) In the Journal of Environmental Physiology: ‘Air enhanced Bacterial degradation of polycyclic aromatic hydrocarbons: A novel approach’,
- e) In the national level conference at Vijayawada, Andhrapradesh: “A study on antifungal activity of some bacterial strain isolated from organic waste dump site.” [**Best oral paper presentation award**]
- f) In the national level conference at Tamilnadu “A study on isolation, biochemical characterization & heavy metal resistance incidence of endophytic bacteria”. [**Best oral paper presentation award**]
- g) In the national level conference at Bangalore (organize by All India Science Congress)” A study on isolation and optimization of copper bioaccumulation in bacteria”
- h) In the national level conference at Bangalore” Transformation and expression of Staphylococcal plasmid in Escherichia coli’.
- i) A study on isolation and biochemical characterization of heavy metal tolerance Gram-negative bacteria.
- j) Studies on molecular characterization of heavy metals and antibiotic resistance properties of bacteria isolated from waste water sample. (Poster).
- k) Studies on the production of extracellular polymeric substances in metal resistance bacteria and biosorption of toxic heavy metals by exopolymer. (Poster).
- l) Growth analysis and screening of microalgal species as the sustainable feedstock for biodiesel production coupled with waste water treatment (Poster).

SEMINARS/ CONFERENCES ATTENDED:

National level conference: TOPIC:

1. Two Day National Conference on Sustainable Health Science For Future Generations- 28 and 29th of April, 2022
2. Impact of Biotechnology and Human Welfare conducted by S.R.N. Adarsh College, Bangalore.
3. National Symposium- at T.John's college, Bangalore .
4. State level one day seminar on recent trends in molecular biology technique and application on 20th February, 2010. At Acharya's Bangalore B School.
5. National level symposium on molecular diagnostic techniques and application on 15th September, 2012. At Acharya's Bangalore B School.

- International conference:**
1. Frontiers in Biological science, 2010, Orissa, India.
 2. World Congress on Biotechnology 2011, Hyderabad, India
 3. International seminar on Frontiers in Biological Sciences, 2018, St. Xavier's College, Kolkata.

WORKSHOP/ HANDS ON TRAINING ATTENDED:

- A. Attended workshop on NAAC , conducted by Ramakrishna Mission Vidyamandira.
- B. A two day national level workshop on GREEN SYNTHESIS OF NANO PARTICLES, conducted by Uluberia College, sponsored by DBT West Bengal.
- C. A two day workshop on GENETICS conducted by Bangalore University, Bangalore.
- D. Recent trends in Plant Science Research (RFLP, PCR, CHROMATOGRAPHY) conducted by Annamali University, Tamilnadu .
- E. Metagenomic CAPS analysis and multigeneric bacterial detection, at VIT University, Vellore, Tamilnadu.
- F. On HISTOLOGY at Hoogly Mohsin College, Chinsurah, Hoogly, West Bengal .
- G. In industrial purpose Bacterial strain improvement at Bangalore Gene, Bangalore.
- H. Detection and culturing of pathogenic microbes from collected blood samples at Bacterofite, Bangalore. Basic techniques in animal cell culture and its pharmacological application.

TECHNIQUES KNOWN:

PCR, RAPD, RFLP, Gel electrophoresis, Blotting techniques, Chromatography, Animal cell culture, Plant tissue culture, Microbial culture, Nano synthesis and characterization, Biodiesel production,

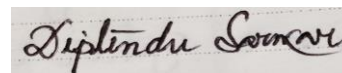
Enzyme technology and Protein chemistry, Histology & Histochemistry, Bioinformatics and Structural Biology tools, Immobilization techniques etc.

MEMBERSHIP OF PROFESSIONAL BODIES:

- a) Life member: Indian Science Congress
- b) Life member: Society for Applied Biotechnology in India.
- c) Life Member: Society of Microbiology, India.
- d) Life Member: Physiological Society of India.

GUIDANCE SUPERVISION OF PG AND BE BIOTECHNOLOGY DISSERTATION:

Guided more than 25 dissertation projects for PG students in the field of Biotechnology, Biochemistry, and Microbiology & Physiology.



(DIPTENDU SARKAR)