Curriculum Vitae (As on 23.10.25)

Name: Dr. Sourav Chakraborty, W.B.E.S.
Designation: Assistant Professor in Botany under West Bengal Education Service

Highest qualification: M.Sc. (Botany), Ph.D. (Tea Science)
Contact details/ Office address: Plant Biochemistry and Molecular Biology Laboratory,
U.G. & P.G. Department of Botany,
Darjeeling Government College,
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Vidwan ID: 392939
Email id: srvbioinfonbu@gmail.com
srvjalac@gmail.com

Date of joining to this institution: 01.09.2021
Date of joining W.B.E.S.: 01.09.2021

Previous position(s) held:

1. Senior Research Assistant (SRA) in Department of Biotechnology, West Bengal (WBDBT) sponsored Project entitled 'A Bioinformatics Perspective to impede the tubercle bacillus (TB) devastation in West Bengal' (January, 2016 – July, 2016) [Full-time].
2. Guest Teacher in Botany at Parimal Mitra Smriti Mahavidyalaya, Malbazar, Jalpaiguri (August, 2016 – July, 2017) [Part-time].
3. Assistant Master in Life Science under W.B.Sub.E.S. at Government Model School, Old Malda, Malda (August, 2017 – August, 2021) [Permanent].

Teaching experience: 9 years +
Administrative experience: 3 years + as Teacher-in-Charge of Government Model School, Old Malda, Malda (July, 2018 - July, 2021)

Awards, Recognition and Honours:

1. Gold medal for B.Sc. 1st Class first position in Botany Honours under University of North Bengal (2012).
2. Qualified Eighteenth West Bengal State Eligibility Test (SET-2014) in Life Sciences.
3. Qualified Joint CSIR-UGC NET-LS (2016) with AIR-44 in Life Sciences.
4. Qualified Graduate Aptitude Test in Engineering (GATE-2017) with AIR-28 in Life Sciences.
5. Ranked 4th in Assistant Master recommendation panel in Life Science (English Medium) under W.B.Sub.E.S. by P.S.C., W.B. (Advt. 10/2015).
6. Ranked 1st in Assistant Professor recommendation panel in Botany under W.B.E.S. by P.S.C., W.B. (Advt. 19/2017).
7. Best oral presentation award for presenting a paper in 2-day National seminar (online mode) on 'Advancement of Plant Sciences for Food Diversity and Nutritional Security' (30th September and 1st October, 2021) organized by DST (FIST) & UGC-SAP assisted DRS Department of Botany, University of North Bengal and UGC-HRDC, University of North Bengal.
8. Received outstanding paper award at 5th Regional Science & Technology Congress, 2022-2023 [Region-1] (17th and 18th January, 2023) organized by Cooch Behar Panchanan Barma University & Department of Science and Technology and Biotechnology, Government of West Bengal.
9. Received outstanding paper award at 30th West Bengal Science & Technology Congress, 2022-2023 (28th February and 1st March, 2023) organized by Department of Science and Technology and Biotechnology, Government of West Bengal.
10. Received best oral presentation award at 7th International Conference (Kathmandu Chapter 2.0) on Global Approaches in Agricultural, Biological, Environment and Life Sciences for sustainable future (GABELS-

2024); Venue: Buddha Hall, D.A.V. College, Lalitpur, Kathmandu, Nepal; Date: 08th – 10th June, 2024) organized by Agricultural Technology Development Society (ATDS) Ghaziabad, Uttar Pradesh, India.

Courses taught: B.Sc. (Honours/Major and Programme/Minor under CBCS & FYUGP curricula) & **M.Sc.** (New CBCS curriculum) in Botany

1. **U.G.** (Genetics, Plant Breeding, Molecular Biology, Biostatistics & Plant Biotechnology).
2. **P.G.** (Microbiology, Plant Physiology, Cytogenetics, Himalayan Tea Science) & **Special Paper** on **Plant Biochemistry & Molecular Biology**.

Research area/ interest: Plant Biochemistry, Cytogenetics, Molecular Biology & Tissue Culture

Title of Ph.D. Thesis: Exploring bioactivity, isolation of potential biomolecules and *in vitro* regeneration of *Herpetospermum darjeelingense* (C.B.Clarke) H.Schaef. & S.S.Renner- an endemic and endangered Cucurbit collected from Tea growing regions of Darjeeling hills [Awarded the Degree of Doctor of Philosophy in Tea Science (Faculty of Science) of University of North Bengal on **16.10.23**]

Total number of Publications- 50

***Peer reviewed journals:** 47

***Conference proceedings:** 00

***Chapters in books:** 03

Nucleotide sequences submitted to NCBI GenBank/DDBJ: 03 (Accession Numbers- MZ613346; LC713403 & OM095378)

Detailed list of publications

1. Ghosh, A., Majumder, S., **Chakraborty, Sourav**, & Bhattacharya, M. (2025). Metabolomic exploration of volatile organic compounds from barks of *Albizia* spp., with special reference to styrene derivatives. *International Wood Products Journal*, 20426445251376487. https://doi.org/10.1177/20426445251376487 [IF 0.9]
2. **Chakraborty, Sourav**, & Bhattacharya, M. (2025). DNA barcoding and comparative bioinformatic analysis of the endangered genus *Herpetospermum* with special reference to *Herpetospermum darjeelingense*. *Biology Bulletin*, 52(1), 22. https://doi.org/10.1134/S1062359024608693 [IF 0.5]
3. Bhattacharya, M., Nandi, S., Aich, A., & **Chakraborty, Sourav**. (2025). An overview of caffeine: The wonder molecule of non-alcoholic beverage. *Journal of Pharmacognosy and Phytochemistry*, 14(2), 115-120. https://doi.org/10.22271/phyto.2025.v14.i2b.15282 [Peer reviewed]
4. Majumder, S., Gurung, D., Sarkar, S., Nandi, S., Ghosh, A., Subba, P., ……, **Chakraborty, Sourav** & Bhattacharya, M. (2024). The success of the small tea growers of Sittong evolving rural Darjeeling into a model small-scale organic tea cultivation center. *Rural Sustainability Research: Scientific Journal of Latvia University of Life Sciences and Technologies*, 52(347), 78-94. https://doi.org/10.2478/plua-2024-0016 [Scopus indexed]
5. Bhattacharya, M., Majumder, S., Nandi, S., Ghosh, A., Subba, P., Acharyya, S., & **Chakraborty, Sourav***. (2024). Comprehensive analysis of water and sediment from holy water body 'Pokhri' reveals presence of biomolecules that may educe skin, gastroenterological and neurological dysfunction. *Science of the Total Environment*, *956*, 177373. https://doi.org/10.1016/j.scitotenv.2024.177373 [IF-8.0]
6. S Majumder, **Sourav Chakraborty**, A Ghosh, S Subba, M Bhattacharya. Pain healing potential of famous traditional fermented *Rhododendron* (Lali-Guras) beverages from Indo-Nepal Himalaya: *In vitro* and *in silico* evaluation (2024). *Maso International* 1.2024: 001–011; https://10.2478/mjfst-2024-0001 [Peer reviewed]
7. A Ghosh, **Sourav Chakraborty**, S Majumder, S Sarkar and M Bhattacharya (2024). Natural alkanes from *Senna siamea* as possible contenders against inflammatory disorders: an *in silico* and metabolomics perspective *Khulna University Studies* 21(1):162-177. https://doi.org/10.53808/KUS.2024.21.01.1109-ls [Peer reviewed]
8. A Ghosh, A Nag, S Acharyya, S Saha, S Majumder, **Sourav Chakraborty**, M Bhattacharya. Tea plantation shade tree leaf influences the susceptibility of rhizosphere microbial consortium: A comprehensive study on their leaf extract cross tolerance (2024). *Eurasian Journal of Soil Science* 2024, 13(3), 234-246. https://doi.org/10.18393/ejss.1476125 [IF-1.6]

9. S Majumder, A Ghosh, **Sourav Chakraborty** & M Bhattacharya. Zooming into CTC black-tea wine metabolites: A GC-MS-based study (2024) *Acta Univ. Sapientiae, Alimentaria*, 17, 15–38. https://doi.org/10.47745/ausal-2024-0002 [IF-1.0]
10. **Sourav Chakraborty*** and M Bhattacharya. PAS: the versatile domain. *North Face* Vol.2. No.1 2024: ISSN 2455-5002. https://www.researchgate.net/publication/382113317_PAS_The_versatile_domain [Peer reviewed]
11. S Majumder, A Ghosh, S Saha, S Acharyya, **Sourav Chakraborty**, P Subba, S Nandi, S Sarkar and M Bhattacharya. *In vitro* bioactivities and gastrointestinal simulation validate ethnomedicinal efficacy of five fermented *kodo*-based Himalayan traditional drinks and bioaccessibility of bioactive components (2024). *Food Production, Processing and Nutrition* 6:4. https://doi.org/10.1186/s43014-023-00184-7 [IF 5.7]
12. S Majumder, **Sourav Chakraborty**, A Ghosh and M Bhattacharya. *In silico* insights into the efficacy of Darjeeling Himalaya's traditional fermented beverages to combat various high-altitude sicknesses (2024). *Acta Universitatis Cibiniensis Series E: Food Technology* Vol. XXVII, No. 2. https://doi.org/10.2478/aucft-2023-0022 [IF 0.375]
13. D Das, S Majumder, S Sarkar, A Ghosh, S Nandi, P Subba, S Saha, S Acharyya, B Ghosh, **Sourav Chakraborty** and M Bhattacharya. Conversion of potato fields into small tea plantations at Bhotepatty, Mainaguri: consequences of this shifting agriculture through survey and soil analysis. *Contemporary Agriculture* Vol. 72, No. 3 (2023): 98-106 https://doi.org10.2478/contagri-2023-0013 [Peer reviewed]
14. **Sourav Chakraborty**, S Saha and M Bhattacharya. Synthesized green silver nano particles of *Herpetospermum darjeelingense* shows enhanced *in vitro* antimicrobial, antioxidant and hepatoprotective activity. *Research Journal of Pharmacognosy and Phytochemistry*. Vol 15, Issue 4 2023. https://doi.org/10.52711/0975-4385.2023.00044 [Peer reviewed]
15. A Ghosh, S Majumder, R Samadder, S Sarkar, S Nandi, P Subba, **Sourav Chakraborty**, S Acharyya, S Saha, M Bhattacharya. Study of *in vitro* antioxidant and antibacterial potential of different tea clones. *Pharmacological Research- Modern Chinese Medicine*. (2023) https://doi.org/10.1016/j.prmcm.2023.100312 [Scopus indexed]
16. **Sourav Chakraborty**, S Majumder, A Ghosh and M Bhattacharya Endemic and endangered ethno-herbal medicinal climber of Darjeeling Hills (*Edgaria darjeelingensis* C.B.Clarke) is a treasure of anti-cancer molecules: a study on GC-MS analysis and probable biosynthetic pathways. *Indian Journal of Traditional Knowledge*, Vol 22(2), April 2023, pp. 371-380. 10.56042/ijtk.v22i2.38484 [IF 0.7]
17. A Ghosh, S Saha, S Majumder, **Sourav Chakraborty** and M Bhattacharya. *In vitro* assessment of the antioxidant and antibacterial activities of some shade tree barks from tea plantation of Terai region of West Bengal. 2023. *Journal of Pharmacognosy and Phytochemistry*. 12(1): 556-561. https://doi.org/10.22271/23957476.2023.v9.i1b.1405 [Peer reviewed]
18. A Ghosh, Sourav Chakraborty, S Majumder, M Bhattacharya. Comprehensive *In silico* investigation validates two flavonoid compounds of *Derris robusta* (Roxb. ex DC.) Benth. to supplant Remdesivir as natural therapeutic remedy against a range of Coronaviruses. *Letters in Applied NanoBioScience*. Volume 12, Issue 4, 2023, 108 https://doi.org/10.33263/LIANBS124.108 [Scopus indexed]
19. S Majumder, A Ghosh, **Sourav Chakraborty** and M Bhattacharya. The Himalayan ethnic beverage Tongba with therapeutic properties in high-altitude illness and metabolic similarities to Japanese Sake. 2022. *Acta Universitatis Sapientiae, Alimantaria* 15:67-83. https://doi.org/10.2478/ausal-2022-0006 [IF-1.0]
20. S Sarkar, S Majumder, A Ghosh, S Saha, S Acharyya, **Sourav Chakraborty**, M Bhattacharya. Metabolomic exploration of CTC tea manufacturing waste validates its potentiality as organic fertilizer (2022). *Turk J. Food Agric. Sci*. 2022, 4(2). 10.53663/turjfas.1164579 [IF-0.42]
21. S Majumder, A Ghosh, **Sourav Chakraborty** and M Bhattacharya. Brewing and biochemical characterization of *Camellia japonica* petal wine with comprehensive discussion on metabolomics. (2022). *Food Production, Processing and Nutrition*, 4:29. https://doi.org/10.1186/s43014-022-00109-w [IF 5.7]
22. B Ghosh, S Majumder, S Acharyya, A Ghosh, S Saha, S Sarkar, **Sourav Chakraborty**, M Bhattacharya. Comparative phytochemical analysis of mature mango leaves from nineteen cultivars of Murshidabad district, India. *Asian J Natural Product Biochemistry*. Vol. 20, Number 2, December 2022: 48-55. https://doi.org/10.13057/biofar/f200202 [Scopus indexed]

23. S Majumder, A Ghosh, S Saha, S Acharyya, **Sourav Chakraborty**, S Sarkar, M Bhattacharya. Valorization of CTC tea waste through Kombucha production and insight into GC-MS based metabolomics. *Canrea Journal: Food Technology, Nutritions, and Culinary*, (2022); 5 (1): 38–56 https://doi.org/10.20956/canrea.v5i1.594 [Scopus indexed]
24. S Majumder, S Saha, A Ghosh, **Sourav Chakraborty**, S Acharyya, S Sarkar and M Bhattacharya Comparative *in vitro* biological characterization of black and green tea infusions fermented with brewer's yeast and SCOBY with special emphasis on antioxidant activity. *Nutrafoods* (2022) 1:357-369. https://doi.org/10.17470/NF-022-0045 [IF 0.574]
25. S Majumder, S Saha, A Ghosh, **Sourav Chakraborty**, S Acharyya, S Sarkar and M Bhattacharya Fusion of tea infusion and bakhar (starter of ethnic liquor haria) to develop "Tea haria": a novel approach to ferment tea with insight into *in vitro* biochemical attributes and metabolomics. *Journal of Food Technology Research* (2022). 9:1, 1-17. https://doi.org/10.18488/jftr.v9i1.2909 [IF 0.83]
26. S Sarkar, S Saha, S Majumder, A Ghosh, **Sourav Chakraborty**, S Acharyya and M Bhattacharya (2021). *In vitro* antioxidant and antibacterial potential of tea leaves harvested from small tea plantations of sub-Himalayan Terai region. *Nutrafoods* 2:300-312. https://doi.org/10.17470/NF-021-0039 [IF 0.574]
27. S Majumder, S Saha, A Ghosh, S Acharyya, S Sarkar, **Sourav Chakraborty** and M Bhattacharya (2021). Production of fermented tea petal decoction with insights into *in vitro* biochemical tests, antioxidant assay and GC-MS analysis. *Food Production, Processing and Nutrition*; (2021) 3:32 1-10. https://doi.org/10.1186/s43014-021-00075-9 [IF 5.7]
28. A Ghosh, S Majumder, S Saha, **Sourav Chakraborty**, M Bhattacharya (2021). Leaves and barks of *Albizia* shade trees in tea plantation shows both insect attractant and pesticidal properties: a GC-MS based investigation. *Asian Journal of Agriculture*, 5:2; 84-89. https://doi.org/10.13057/asianjagric/g050205 [Scopus indexed]
29. S Sarkar, **Sourav Chakraborty**, M Mukherjee, A Ghosh, S Majumder, S Saha, M Bhattacharya (2021). Soil physicochemical characterization of supervised and unsupervised plantations in terai region of Sub-Himalayan West Bengal, India. *European Journal of Biotechnology and Bioscience*, 9:4; 19-21. https://www.researchgate.net/publication/356413023_Soil_physicochemical_characterization_of_supervised_and_unsupervised_plantations_in_terai_region_of_Sub-Himalayan_West_Bengal_India [Peer reviewed]
30. **Sourav Chakraborty**, S Sarkar, Malay Bhattacharya. GC-MS profiling of petroleum benzene extracts of *Herpetospermum darjeelingense* displays distinct metabolic profile from 'tea' and 'non-tea' growing habitat of Darjeeling hills (2021). *Multi-Disciplinary Approaches for Development of Agriculture and Allied Sectors in Global Scenario*, ISBN: 978-93-92403-14-9. https://www.researchgate.net/publication/356412686_GC-MS_profiling_of_Petroleum_benzene_extracts_of_Herpetospermum_darjeelingense_displays_distinct_metabolic_profile_from_'tea'_and_'non-tea'_growing_habitat_of_Darjeeling_hills [Book Chapter]
31. S Majumder, A Ghosh, **Sourav Chakraborty**, S Saha, & M Bhattacharya (2021). Metabolomics affirms traditional alcoholic beverage Raksi as a remedy for high-altitude sickness. *Journal of Ethnic Foods*, 8(1), 1-10. https://doi.org/10.1186/s42779-021-00094-4 [IF-1.282]
32. **Sourav Chakraborty**, S Majumder, A Ghosh & M Bhattacharya. Comprehensive profiling of aroma imparting biomolecules in foliar extract of *Hibiscus fragrans* Roxburgh: a metabologenesis perspective. (2021). *Journal of Biomolecular Structure and Dynamics*. 10.1080/07391102.2021.1943525 [IF-2.4]
33. Majumder, A Ghosh, **Sourav Chakraborty** and M Bhattacharya. The rhythmic growth pattern of microbes is antithetical to antioxidant activity of Kombucha: A new finding. Food Biochemistry. (2021) *Asian Journal of Biochemistry, Genetics and Molecular Biology* 8(2): 1-7. 10.9734/AJBGMB/2021/v8i230188 [Peer reviewed]
34. S Majumder, S Acharyya, A Ghosh, **Sourav Chakraborty**, S Sarkar, S Saha, and M Bhattacharya. Insights into low biological activity of wax apple (*Syzygium samarangense*) juice by *in vitro* phytochemical investigation with special reference to metabolomics. (2021). *Asian Journal of Natural Product Chemistry*. 19:1; 30-38. 10.13057/biofar/f190106 [Scopus indexed]
35. R Samanta, **Sourav Chakraborty**, M Mukherjee & M Bhattacharya. Withdrawal of nutrients by weed biomass aggravates soil nutritional deficiencies in young tea plantations of Sub Himalayan West Bengal (2021). *European Journal of Biotechnology and Bioscience* 9:2; 22-24.

https://www.researchgate.net/publication/351776716_Withdrawal_of_nutrients_by_weed_biomass_aggravates_soil_nutritional_deficiencies_in_young_tea_plantations_of_Sub_Himalayan_West_Bengal [Peer reviewed]

36. **Sourav Chakraborty**, S Majumder, A Ghosh, S Saha and Malay Bhattacharya. Metabolomics of potential contenders conferring antioxidant property to varied polar and non-polar solvent extracts of *Edgaria darjeelingensis* C.B.Clarke. (2021) *Bulletin of the National Research Centre*. 45:48 https://doi.org/10.1186/s42269-021-00503-3 [Scopus indexed]
37. S Majumder, A Ghosh, **Sourav Chakraborty** and M Bhattacharya. Withdrawal of stimulants from tea infusion by Scoby during Kombucha fermentation: A biochemical investigation (2020). *Int. J. Food Ferment. Technol*., 10(1): 21-26. 10.30954/2277-9396.01.2020.5 [IF-3.3]
38. M Mukherjee, **Sourav Chakraborty**, S Sarkar, S Saha, S Majumder, A Ghosh and M Bhattacharya. Soil Nutritional Status of Tea Plantations in Plains of Sub Himalayan West Bengal, India (2020). *Current Agriculture Research Journal*, 8(3) 239-246. http://dx.doi.org/10.12944/CARJ.8.3.10 [UGC-Care list]
39. S Saha, **Sourav Chakraborty**, S Acharyya, S Sarkar, S Majumder, A Ghosh, M Bhattacharya. Phosphate solubilizing microorganism consortium of virgin Tiger hill forest soil shows high level tolerance to pesticide, antibiotic, antifungal and heavy metals (2020). *Ecobiotech* 3(4) 578-588. 10.31163/2618-964X-2020-3-4-578-588 [Peer reviewed]
40. S Majumder, S Sarkar, A Ghosh, S Acharyya, S Saha, **Sourav Chakraborty** & M Bhattacharya. Photosynthetic organs of wild Indian tea tree are rich in patchouli components: a GC-MS based metabolomics. (2020). *Natural Product Research*. https://doi.org/10.1080/14786419.2020.1851222 [IF-1.6]
41. S Majumder, A Ghosh, **Sourav Chakraborty** and M Bhattacharya. GC-MS analysis reveals *Dendrobium candidum* is a mosquito-attractant orchid with mosquitocidal compounds. (2020), *International Journal of Mosquito Research*; 7(6): 09-12. https://doi.org/10.22271/23487941.2020.v7.i6a.483 [Peer reviewed]
42. A K Das, A Ghosh, S Majumder, S Saha, S Acharyya, S Sarkar, **Sourav Chakraborty**, M Mukherjee and M Bhattacharya. Characterization of tea and tea infusion: A study of marketed black tea samples from some tea growing regions of India. (2020). *Journal of Pharmacognosy and Phytochemistry* 2020; 9(5): 1532-1540. https://doi.org/10.22271/phyto.2020.v9.i5v.12553 [Peer reviewed]
43. M Bhattacharya, A K Roy, S Majumder, A Ghosh, **Sourav Chakraborty**, S Saha, S Acharyya and S Sarkar. Free radical scavenging activity versus flavonoid content in twelve *Dendrobium* orchids collected from Darjeeling Hills of Eastern Himalaya. (2020) *Species*, 21(68), 222-226. https://mail.discoveryjournals.org/Species/current_issue/2020/v21/n68/A2.pdf [Peer reviewed]
44. **Sourav Chakraborty** and Malay Bhattacharya. Phytomolecules in alleviating free radicals for cellular harmony-a short review (2019). *Emerging trends of Bioscience Research*, Ed. A K Sarkar. Educreation Publishing, ISBN: 978-81-933081-7-2. https://www.researchgate.net/publication/353139360_Phytomolecules_in_alleviating_free_radicals_for_cellular_harmony-_a_short_review [Book Chapter]
45. Halder, K., & **Chakraborty, Sourav***. (2018). An account of antioxidant potential in Pteridophytes: a biochemical perspective. *International Journal of Bioinformatics and Biological Science*, 6(1), 15-24. http://dx.doi.org/10.30954/2319-5169.01.2018.3 [UGC-Care list]
46. Roy, A., Sen, A., **Chakraborty, Sourav**, & Sarkar, I. (2018). Comprehensive profiling of functional attributes, virulence potential and evolutionary dynamics in mycobacterial secretomes. *World Journal of Microbiology and Biotechnology*, *34*, 1-19. https://doi.org/10.1007/s11274-017-2388-1 [IF 4.2]
47. **Chakraborty, Sourav**, Sarkar, I., & Sen, A. (2016). Characterization of PAS domain containing genes in selected terrestrial and aquatic Actinobacteria. *Advances in Biology-Eastern Himalayan Perspective*, National Publishers, Siliguri, 48-62. ISBN: 978-9385375057. https://www.researchgate.net/publication/353067827_Characterization_of_PAS_domain_containing_genes_in_selected_terrestrial_and_aquatic_actinobacteria [Book Chapter]
48. M Bhattacharya & **Sourav Chakraborty**. Efficient *in vitro* regeneration of pathogen free mango ginger (*Curcuma amada* Roxb.) from rhizome bud (2015). *Research in Plant Biology*, 5(6): 09-13. https://www.researchgate.net/publication/349728457_Efficient_in_vitro_regeneration_of_pathogen_free_mango_ginger_Curcuma_amada_Roxb_from_rhizome_bud_explants [Peer reviewed]

49. M Bhattacharya & **Sourav Chakraborty**. Free Radicals and Naturally Occurring Antioxidants (2015). *Research & Reviews: Journal of Pharmacognosy and Phytochemistry*. 3(3):1-7. https://www.rroij.com/open-access/free-radicals-and-naturally-occurring-antioxidants.php?aid=60279 [IF 2.82]
50. **Sourav Chakraborty** & M Bhattacharya. Associated vegetation of sundew (*Drosera burmannii* Vahl.) in plains of Eastern Himalayan region of West Bengal. (2013). *Environment & Ecology*. 31(2B)840-843. https://www.researchgate.net/publication/349728632_Associated_Vegetation_of_Sundew_Drosera_burmannii_Vahl_in_Plains_of_Eastern_Himalayan_Region_of_West_Bengal [WoS indexed]

Google Scholar link: https://scholar.google.com/citations?hl=en&pli=1&user=6dsWgqoAAAAJ
ResearchGate link: https://www.researchgate.net/profile/Sourav-Chakraborty-22
ORCID ID: 0000-0002-6798-0061

Participation & Presentation in Seminar/Webinar(s)

1. Participated in the UGC sponsored National seminar on 'Recent Advances in Microbial Biotechnology' organized by the Department of Botany, Kabi Nazrul College, Murarai, Birbhum, West Bengal, India in collaboration with Sombhunath College, Labpur, Birbhum, West Bengal, India on January 10 – 11, 2012.
2. Participated in the National Symposium on 'Recent Trends in Plant and Microbial Research' organized by DST (FIST) & UGC-SAP assisted DRS Department of Botany, University of North Bengal on 22nd – 23rd March, 2013.
3. Participated in 22nd West Bengal Science & Technology Congress-2015 on 28th February and 1st March, 2015 organized by the Department of Science and Technology, Government of West Bengal; West Bengal State Council of Science and Technology and University of North Bengal.
4. Presented a paper in the UGC sponsored National seminar on 'Advances in Biology: Eastern Himalayan Perspective' (03rd and 4th October, 2015) organized by the Department of Botany and Department of Zoology, Kalimpong College.
5. Participated in the 1-day Webinar on 'Plant Science in New Era, Part-I' on 19.08.2020 organized by the Department of Botany, Kabi Nazrul College, Murarai, Birbhum, West Bengal, India.
6. Participated in the 1-day National Level Webinar on 'The New Horizon: Omics in Microbial Research' on 22.08.2020 organized by the Department of Botany, Kalimpong College, Kalimpong, West Bengal, India.
7. Participated in the International Webinar on 'Neoteric Approaches in Applied Sciences' jointly organized by the UG & PG Department of Botany and Department of Physics in collaboration with IQAC, Darjeeling Government College, Darjeeling, West Bengal, India on 24th and 25th August, 2020.
8. Participated in the 1-day International Webinar on 'Science, Biology and the World's Future' organized by the Department of Botany in collaboration with IQAC, Dinabandhu Andrews College, Kolkata, West Bengal, India on 25th August, 2020.
9. Participated in the National Webinar on 'Vaccines for COVID-19 & Ahead' on 27.08.2020 organized by the Department of Zoology, Utkal University, Bhubaneswar and Zoological Society of Orissa, India.
10. Participated in the National Webinar on 'Modern History of Botany in India & Role of Botanical Survey of India' on 29.08.2020 organized by the Department of Botany in collaboration with IQAC, Basirhat College, North-24-Parganas, West Bengal, India.
11. Participated in the Webinar on 'National Education Policy 2020: Future of Education' on 05.09.2020 organized by the Universal Briefing, Kolkata, West Bengal, India.
12. Participated in the 'Prof. Asim Bothra Memorial Webinar' on 30.09.2020 organized by Bioinformatics Facility, University of North Bengal.
13. Participated in the 1-day International Webinar on 'Conventional and Advanced Air Sampling Techniques for Airborne Pathogens and Allergens' organized by the Department of Botany in collaboration with IQAC, Durgapur Government College, Durgapur, Paschim Bardhaman, West Bengal, India on 20th September, 2021.
14. Presented a paper in the International Conference (Online) on 'Agriculture, Biological and Life Sciences' (ICABLS-2021) on 25th – 26th September, 2021 organized by Vidya Kutir Foundation, New Delhi.
15. Presented a paper in 2-day National seminar (online mode) on 'Advancement of Plant Sciences for Food Diversity and Nutritional Security' (30th September and 1st October, 2021) organized by DST (FIST) & UGC-

SAP assisted DRS Department of Botany, University of North Bengal and UGC-HRDC, University of North Bengal.

16. Presented a paper at 5th Regional Science & Technology Congress, 2022-2023 [Region-1] (17th and 18th January, 2023) organized by Cooch Behar Panchanan Barma University & Department of Science and Technology and Biotechnology, Government of West Bengal.
17. Presented a paper at 30th West Bengal Science & Technology Congress, 2022-2023 (28th February and 1st March, 2023) organized by Department of Science and Technology and Biotechnology, Government of West Bengal.
18. Presented a paper at 7th International Conference (Kathmandu Chapter 2.0) on 'Global Approaches in Agricultural, Biological, Environment and Life Sciences for sustainable future' (GABELS-2024); Venue: Buddha Hall, D.A.V. College, Lalitpur, Kathmandu, Nepal; Date: 08th – 10th June, 2024 organized by Agricultural Technology Development Society (ATDS) Ghaziabad, Uttar Pradesh, India.
19. Presented a paper in the India International Science Festival-2024 organized at IIT Guwahati during 30th November – 3rd December, 2024 organized by the Council of Scientific and Industrial Research in collaboration with Vijnana Bharati.
20. Participated and Presented paper (Co-author) at 6th Regional Science & Technology Congress, 2023-2024 [Region-1] (15th and 16th January, 2024) organized by Ananda Chandra College, Jalpaiguri & Department of Science and Technology and Biotechnology, Government of West Bengal.
21. Participated and Presented papers (Corresponding author) at East Kolkata Wetlands Management Authority (EKWMA) sponsored International Seminar on "Protecting Wetlands and its Impact in Biodiversity Conservation" on 26th June, 2025 organized by the U.G. & P.G. Department of Botany, Darjeeling Government College, Darjeeling.
22. Participated and Presented papers (Corresponding author) at the Royal Society of Chemistry Local Section East India and Higher Education Department, Government of West Bengal sponsored International Seminar on "Recent Advancements in Chemistry and Biology" on 14th August, 2025 organized by the Department of Chemistry and P.G. Department of Botany in collaboration with I.Q.A.C., Darjeeling Government College, Darjeeling.

Participation in Workshops/ Training programme/ Certificate course:

1. Diploma in Information Technology and Application (DITA) with Grade-A+ from Jalpaiguri Youth Computer Training Centre (A Joint initiative of the Department of Sports and Youth Services, Government of West Bengal and Excel Infocom Pvt. Ltd. (April, 2011 – March, 2012).
2. 1-day workshop on 'Bioinformatics' jointly organized by the Department of Botany, Kalimpong College and N.B.U. Bioinformatics Facility, University of North Bengal on 29th September, 2012 at Kalimpong College.
3. 2-day National workshop on 'Bioinformatics' organized by the N.B.U. Bioinformatics Facility on 29th – 30th March, 2014 at University of North Bengal.
4. 3-month Certificate course on Plant Tissue Culture organized by Department of Life Long Learning & Extension, Department of Botany and Department of Tea Science, University of North Bengal (January, 2019 – March, 2019).
5. Online Training Course for Orientation Training for the Headmasters/ Headmistresses of the Govt. Model Schools from 21.06.2021 – 26.06.2021 (Batch = 28) organized by Netaji Subhas Administrative Training Institute, Government of West Bengal.
6. 5-day training program on 'Transcriptomic data analysis' organized by National Institute of Electronics & Information Technology, Government of India, Guwahati, India (03.04.2023 – 07.04.2023).
7. 7-day training program on 'Competency development in high-end research equipment's in Biotechnology' organized by Department of Biotechnology, Indian Institute of Technology Kharagpur, Kharagpur-721302, West Bengal, India (25.04.2023 – 01.05.2023).
8. 1-day workshop on 'Bioinformatics' jointly organized by the Department of Zoology, Kalimpong College in collaboration with N.B.U. Bioinformatics Facility and Biswa Bangla Genome Centre, University of North Bengal on 23rd September, 2023 at Kalimpong College.

9. 2-day seminar cum workshop on 'Vistas in Biological Sciences' organized by the Biswa Bangla Genome Centre and N.B.U. Bioinformatics Facility from 7th – 8th December, 2023 at University of North Bengal.
10. 15-hour Online Certificate Course on Food Fermentation Technology: Basics and Application (Course Code: MB2327), Organized by Microbiologists Society, India, in collaboration with Dhruba Chand Halder College, Dakshin Barasat and Ramakrishna Mission Vivekananda Centenary College, Rahara, West Bengal, in the academic session 2023-2024 (November – December, 2023).
11. UGC sponsored 2nd Faculty induction programme from 29th January, 2024 – 27th February, 2024 organized by MMTTC, The University of Burdwan.
12. UGC sponsored two-week online Refresher course in Basic Sciences (Interdisciplinary) organized by the MMTTC, Jamia Millia Islamia, New Delhi from 24th October, 2024 – 8th November, 2024.
13. Faculty Development/Training Program on R Programming for budding data analyst from 10th –20th February, 2025 organized by Research Foundation of India.

***Number of M.Sc. Dissertation(s) guided (2021-2024): 12**

Details of M.Sc. Dissertation(s) guided

Sl. No.	Name of Student	Year	Title of Dissertation	Laboratory
1.	Mr. Abhinaba Kundu	**2021**	Evolution of Corona Viruses – A Pathogenomic perspective	UG & PG Department of Botany, Cytogenetics laboratory, Darjeeling Government College
2.	Mr. Maruf Alam	**2022**	Physicochemical Characterization, Molecular Docking and ADMET analysis of two flavonoid biomolecules 4H-Pyran-4-one,2,3-dihydro-3,5-dihydroxy-6-methyl and Flavone 4'-OH,5-OH,7-di-o-glucoside against a range of Coronaviruses, HIV/AIDS and Hepatitis-B virus	UG & PG Department of Botany, Plant Biochemistry and Molecular Biology laboratory, Darjeeling Government College
3.	Mr. Sourav Shome	**2022**	Metabolomic study of potential biomolecules conferring biodiesel property to *Jatropha curcas* (L.) and *Pongamia pinnata* (L.) Pierre	
4.	Ms. Prasikha Thami	**2022**	DNA barcoding and bioinformatic analysis of some selected species of *Phalaenopsis* Blume employing rbcL and matK gene-based sequence data	
5.	Ms. Abiksha Thapa	**2023**	Comparative metabolomics and cardinal biomolecules based molecular docking of cultivated coffee and its wild relative	
6.	Mr. Biswajyoti Ray	**2023**	Metabolomics of potential contenders conferring bioactivity to *Liparis tigerhillensis* A.P. Das & Chanda and evaluation of its drug designing prospects through application of *in silico* techniques	
7.	Ms. Namrata Mukhia	**2023**	Biomolecular profiling, bioactivity scan and exploration of pharmacological significance of metabolites in *Dendrobium candidum* Wall. ex Lindl.: A GC-MS based *in silico* approach	
8.	Ms. Riya Gurung	**2023**	GC-MS analysis of *Dendrobium lituiflorum* Lindl. with insights on its bioactivity and application of molecular docking in identification of potential drug ligands	
9.	Ms. Divya Jyoti Chettri	**2024**	Comparative metabolomics of aroma imparting biomolecules in the Tulaipanji and Masino Rice varieties	
10.	Ms. Neha Kumari Prasad	**2024**	Genomic scanning, mutation analysis and evolutionary trends in Indian strains of SARS-CoV-II: an *in silico* exploration	
11.	Ms. Rita Pradhan	**2024**	A first report on the preparation of Cape Gooseberry wine and exploration of its biomolecular constituents: a metabolomics perspective	
12.	Ms. Sakshi Tamang	**2024**	Comparative metabolomics of flavour associated metabolites in the TS569 and P312 Chinese Tea varieties	