



Arnab Bera

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Address

Abasbari | Ward No. 6 | Tamluk | 721636 |
Purba Medinipur | West Bengal | India

Skills

Technical

- Chromatographic Techniques (HPLC, Phytochemical Analysis (Isolation, Purification, Characterization).
- Biological Assays (Antimicrobial, Antioxidant, Cytotoxicity).
- Data Analysis and Interpretation.

Laboratory

- Laboratory Safety Protocol.
- Equipment Operation (e.g. Rotary Evaporator, Lyophilizer).
- Chemical Handling & Storage.

Computational

- MS office efficiency.

About Me

I am a dedicated and detail-oriented researcher. My doctoral research focused on the phytochemistry and antibacterial screening of invasive weeds, exploring their potential application. With a strong foundation in natural product chemistry, microbiology, and data analysis, I aim to advance knowledge and contribute to innovative solutions in the field of phytochemistry and drug discovery.

Educational Qualifications

Ph.D. (Botany) Vidyasagar University, Submitted in 2024

- Thesis title: Phytochemical analysis and antibacterial screening of selected invasive weeds of Asteraceae in Paschim Medinipur.
- Supervisor: **Dr. Nilanjana Banerjee**

M.Sc (Botany) 1st class (83.08%), Vidyasagar University, 2018

- Special Paper Plant physiology, Biochemistry, and , Molecular Biology.

B.Sc (Botany) 1st class (70.75%), Tamralipta Mahavidyalaya, 2016

Special Achievements

| Examination | Year | All India Rank |
|-------------|------------|----------------|
| CSIR NET | 2022 | 36 |
| GATE | 2018 | 78 |
| SET | 2018, 2023 | - |

Awards

| Examination | Year | Medal | Institute |
|-------------|------|--------|-----------------------|
| M.Sc. | 2018 | Silver | Vidyasagar University |
| B.Sc. | 2016 | Silver | Vidyasagar University |

Educational Qualifications

Research experience

- Guided 30+ M.Sc. students in thesis completion, focusing on phytochemistry and pharmacology.

Teaching Experience

- Guest Teacher in Botany (Ramnagar College): Delivered lectures and practicals on key topics, guided students in academics and research.

Research Interests

Phytochemistry and pharmacology of medicinal plants, focusing on isolation and characterization of bioactive compounds. Expertise in evaluating pharmacological activities such as antioxidant, antimicrobial, and cytotoxic effects. Also interested in traditional medicine, sustainable plant resource utilization, and integrating advanced analytical techniques for drug discovery and therapeutic applications.

Research Papers

- I. **Bera. A** and Banerjee. N. (2019). Studies on the antibacterial potential of two common Weeds of Asteraceae from Paschim Medinipur District of West Bengal, India. *Journal of Biodiversity and Conservation*, 3(1), 203-206.
- II. **Bera. A**, Maity S and Banerjee. N. (2020). A review on the antibacterial potential of invasive weeds used for the treatment of carbuncle in Purulia District of West Bengal, *IJPSR*, 11(11), 5425-33.
- III. Hansda. B, Mahato G, **Bera. A** and Banerjee. N. (2022). Identification and characterization of phenolic compounds in root extract of two ethnomedicinal plants *Curculigo orchioides* and *Asparagus racemosus*. *IJLPR*, 12(1), L-138-147.
- IV. **Bera. A** and Banerjee. N. (2023). Estimation of total phenolic and flavonoid content, antibacterial and antioxidant potential of *Tridax procumbens* Linn. From Paschim Medinipur District of West Bengal, India. *Biological Forum- An International Journal*, 15(5), 933-936.
- V. **Bera. A**, Maity S and Banerjee. N. (2023). A comparative evaluation of antioxidant and antibacterial potential of leaves & flowers of *Mikania micrantha* Kunth from Paschim Medinipur District of West Bengal, India. *Scopus, IJPSR*, 14(8), 4003-08.
- VI. **Bera. A** and Banerjee. N. (2023). Physicochemical and antistaphylococcal evaluation of two herbal ointments from *Mikania micrantha* Kunth and *Tridax procumbens* Linn. *Pharmacognosy Journal*, 15(6), 1042-46.
- VII. **Bera. A**, Samanta. AK and Panda. S. (2023). Status of tree diversity in Digha, West Bengal, India with special reference to their phytochemical constituents. *Pharmacognosy Research*, 16(2), 347-356.

Workshops

| | Name | Date | Organiser | Status | Activity Done |
|-------|---|----------------------|---|---------------|-----------------|
| I. | Biodiversity Conservation and Sustainable Urban Development | April 26, 2023 | Ramnagar College. Depal | National | Paper Presented |
| II. | International Conference on Life and Environment: Issues and Concern. | March 09, 2023 | Vivekananda Mahavidyalaya, Burdwan | International | Paper Presented |
| III. | Progress of Plant Science in Post Independence Era. | August 04, 2022 | Vidyasagar University. Midnapore | National | Paper Presented |
| IV. | Interdisciplinary Approach of Research in Medicinal Plants | March 12-13, 2019 | Vidyasagar University. Midnapore | National | Paper Presented |
| V. | Trends in Contemporary Research in Plant Science | March 29-30, 2018 | Vidyasagar University. Midnapore | National | Participated |
| VI. | Bioinformatics – from Basic to Advance | March 11-12, 2022 | P.K. College. Contai in collaboration with HIT. | National | Participated |
| VII. | Gas Chromatography (GC-MS) and High-Performance Liquid Chromatography (HPLC) | November 13-15, 2019 | Vidyasagar University. Midnapore | National | Participated |
| VIII. | Modern Chemistry and Biology | November 5-7, 2016 | Raja N.L. Khan College | National | Participated |

References

- **Dr. Nilanjana Banerjee**
 - Assistant Professor
 - Department of Botany and Forestry, Vidyasagar University
 - Phone No.: +91 9836709946
 - Email: nilanjana75@gmail.com
- **Dr. Achintya Kumar Samanta**
 - Associate Professor
 - Department of Botany, Ramnagar College
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