

ARATRIKA BHADRA

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🌐 www.linkedin.com/in/aratrika-bhadra ♀ Female

Education

06/2022 – 2025
Bengaluru, India

Doctorate of Philosophy (PhD) Botany

School of Life Sciences, Christ University, Bangalore ✎

Teaching Assistant, PhD Research Scholar

06/2020 – 06/2022
Bengaluru, India

M.Sc. (Honour School) Botany

Christ University, Bangalore ✎

General Strategies for isolation of genomic & plasmid DNA and RNA, Procedures for Isolation of gene of interest (restriction digestion, PCR), Computational & statistical methods like Molecular docking, Phytochemical Analysis, genetics, programming languages like C++, Bioinformatics Software like Pyrx, BIOVIA, Rasmol.

Master thesis: Gc-Ms profiling of Curcuma longa L. (turmeric) and in-silico molecular docking study of identified compounds against breast cancer proteins

05/2017 – 05/2020
Kolkata, India

B.Sc. (Honour School) Botany

Bethune College Kolkata, West Bengal, India (Under the University of Calcutta) ✎

Publications

In-vitro antioxidant analysis of Aristolochia indica, Ipomoea obscura, Tylophora indica, Glinus oppositifolius, Abroma augustum from Bankura District, West Bengal ✎

Journal of Integrated Science and Technology, Volume-13, Issue-4 (2025)

10.62110/sciencein.jist.2025.v13.1075

Herbal Healing Traditions: A Study of Folk Medicines Used by Traditional Healers of Sonamukhi Block, Bankura District, West Bengal, India ✎

Plant Science Today, Horizon ePublishing Group, Volume-11 (special issue 1) (2024): 01-09, ISSN: 2348-1900

Ethnobotanical Analysis of Antibacterial and Antifungal Activity in Five Medicinal Plants from Sonamukhi Block, Bankura District ✎

African Journal of Biological Sciences. Volume-6, Issue-14 (2024)

ISSN: 2663-2187. DOI: <https://doi.org/10.48047/AFJBS.6.14.2024.8667-8680> ✎

"Investigating Indigenous Medicine and Traditional Healers in the Heart of West Bengal" Book Chapter

Biodiversity at Crossroads in book: (pp 109-118), Bharti Publications ISBN: 978-81-19079-96-4


"FORGOTTEN WISDOM: REVIVING THE LEGACY OF ETHNOMEDICINE THROUGH PLANT-BASED REMEDIES" Book Chapter ✎

HandBook of Medicinal Plants in Health and Diseases in book: (pp. 20-24) Edition: 1st; BlueRose Publishers

ISBN : 978-93-5819-234-6

Role of IAA in plant Growth, Development, and interaction with other phytohormones.

European Chemical Bulletin. 2023, 12 (Special Issue 5), 5293-5297; ISSN: 2063-5346

DOI: 10.48047/ecb/2023.12.si5a.0448 

Wild Indian Medicinal Plants and their Biological Studies

BioGecko/ A Journal for New Zealand Herpetology, ISSN: 2230-5807

DOI: <http://biogecko.co.nz/.2023.v12.i03.pp7006-7011>

“GC-MS Profiling of Curcuma longa (Turmeric) and an in-silico evaluation of Phytochemicals as Potential Drug Options for targeting Breast Cancer Protein”, Aratrika Bhadra, Dr. Anish Nag

Indian Biologist-Official Organ of association of Biological Sciences.” ISSN No: 0302-7554

“A Philosophical Perspective Identifying a Person’s Relationship with their Environment” Book Chapter

Environmental Philosophy In book: (pp. 234-238) Edition: 1st; Ilsheguri Publication; ISBN- 978-93-92979-10-1

Phytoremediation- A promising approach for pollution management.

European Chemical Bulletin. Volume-12, Special issue-10 (2023)

DOI: 10.48047/ecb/2023.12.si10.0045

Screening and production of cold-active xylanase from Truncatella angustata (BPF5) under submerged fermentation

European Chemical Bulletin, Volume-12, Special Issue-10 (2023), ISSN- 2063-5346

DOI: 10.48047/ecb/2023.12.si10.0046

Projects

06/2022 – present

Study of Traditional Healing Practices and Folk Medicines of Sonamukhi Block, Bankura District, West Bengal, India and Assessing Antioxidant Properties of Selected Medicinal Plants (PhD Defense Completed)

Centre for Research, Christ (Deemed to be University), Bangalore
PhD Research

11/2021 – 03/2022


Master thesis: Gc-Ms profiling of Curcuma longa L. (turmeric) and in-silico molecular docking study of identified compounds against breast cancer proteins

- Main objectives were to conduct phytochemical analysis, molecular docking analysis, phenolic tests, and flavonoid tests to identify the various concentrations of Gallic acid and quercetin in the chosen phytochemicals.
- Molecular docking techniques were tested, and process efficiency was improved.
- The Result was the product of the molecular ligand-protein docking. It was formed by the breakdown of larger protein molecules and the ligand binding the protein will inhibit it from forming clusters.

Work Experience

06/2022 – present
Bangalore, India

PhD Research Scholar

Christ University, Bangalore 
Ethnobotany

05/2022 – 06/2022
Hyderabad, India

Internship

Training Internship Program with Ethical Edufabrica Pvt Ltd. in Association With ELAN & NVISION, IIT Hyderabad
Completed a project for the internship on "The Role of Cytokinines and Growth Factors in Tissue Repair"—Review in Molecular Biology & Biochemistry Techniques (MBBT) [↗](#)

02/2022 – 06/2022
Karnataka

Intern- Data Curation

PickMyWork

05/2021 – 06/2021

Research Biologist (Intern): Team Reptiles

FaunaNation (Fauna and Flora Conservation and Development Society) [↗](#)
Data Analyst. Research data entries for rescued reptiles in India and in Exotic Landmark.

Skills

Bioinformatics Software

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Avogadro, PyRx, BIOVIA, AliView, Rasmol,
Phylogenetic Tree Building Using MEGA

Genetic Engineering

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Primer Designing, PCR, RAPD, Gel Electrophoresis

Programming Languages & Software

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C++, Java, Python (Anaconda), MATLAB, OriginPro,
MikTeX

Biochemical Techniques

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Spectrometry (UV-Vis, Infrared, Mass),
Chromatography (Thin Layer, Column)

Plant Tissue Culture

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Micropropagation, Synthetic Seeds Preparation,
Protoplast Isolation, Meristem Tip Culture, Anther
Culture.

Certificates

‘Women In Environmental Biology’ [↗](#)

By Universitat Autònoma de
Barcelona
Completed On: July 17, 2020;
Grade Achieved: 96.42%

‘Bacteria And Chronic Infections’ [↗](#)

By: University Of Copenhagen
Completed On: July 15, 2020;
Grade Achieved: 85.63%


‘Ecology: from cells to Gaia’ [↗](#)

By: National Research Tomsk
State University
Completed On: July 24, 2020;
Grade Achieved: 85.60%


‘Excel Skill For Business: Essentials’ [↗](#)

By: Macquarie University
Completed On: July 28, 2020;
Grade Achieved: 91.51%

Conference & presentation

02/2025 Kerala	"Ethnobotanical Insight of Traditional Medicinal Plants & Traditional Health Practitioners from Sonamukhi Block, Bankura District, West Bengal" <i>Virtual Paper Presentation on the 2-Day National Seminar 'Plant Systemics: Phylogenetic and Biodiversity Aspects' organized by Dept. of Botany, Government College for Women, Thiruvananthapuram</i>
12/2024 Kolkata	"Documentation of Traditional Healing Practices and Medicinal Plants Use in Bankura District, West Bengal" Paper Presentation (Online) <i>Interdisciplinary Approach on 'Plant Animal Science and Microbes' (IAOPAM-2024) A 2-Day Conference-2024</i> Organized by: Dept. of Botany, GGDC Lalgah, Jhargram, W.B. 721516
02/2024 Dubai, UAE	"Traditional Healers and Medicinal Plants of Bankura District, West Bengal" <i>Virtual Paper Presentation at the 'International Conference of Plant Science & Sustainable Agriculture'(ICPSSA-2024)</i>
12/2023 Dubai, UAE	"Ethnomedicine and the Vanishing Wisdom of West Bengal's Traditional Healers" <i>Virtual Paper Presentation at the "International Conference on Traditional & Modern Medicine"</i>
12/2023 West Bengal, India	"Herbal Medicines and Biodiversity: A Natural Approach to Health" Paper Presentation (Online) <i>National Conference on "Biodiversity and Bioprospecting" organized by the Department of Botany, GGDC Lalgah, Jhargram</i>
10/2021 Bangalore	"Phytochemicals Present in Dietary plants: Playing An Important Role in the Drug Development" <i>International Seminar , Christ University, Bangalore.</i>
06/2020 Odisha	Online Training Program  <i>Identification and Characterization of Medicinal Plants"</i> <i>Ambika Prasad Research Foundation (APRF)</i>

Awards

23/05/2025	Patent Application Publication  <i>The Indian Patent Office</i> Herbal Composition For Promoting Bone Fracture Healing and Bone Tissue Regeneration Inventors: Bhadra A, M. B.T., Pratihari S. Application No.: 202541041202 A
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Declaration

I declare that the facts provided above are genuine to the best of my knowledge and belief

Akshita Bhadra.
