
Dr. Anrini Majumder

Designation: Assistant Professor

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Harimohan Ghose College,
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West Bengal.

Email: anrini2002@yahoo.co.in

Date of birth: October 01, 1978

Gender: Female

Marital status: Married

Nationality: Indian

Category: General

ACADEMIC QUALIFICATIONS

Degree awarded	Year	Institution/University	Field of study
Bachelor of Science (B. Sc.)	2000	Presidency College, University of Calcutta	Botany (Honours) with Chemistry and Zoology (Pass)
Master of Science (M. Sc.)	2002	University of Calcutta	Botany with specialization in cell biology, molecular genetics and plant tissue culture
Doctor of Philosophy (Ph.D)	2009	University of Calcutta	“Biotechnological approaches for the production of cytotoxic anticancerous compounds”

RESEARCH EXPERIENCE

- **Junior Research Fellow** in the project entitled “Production of Pharmaceuticals through Genetic Transformation” (project no. 2503-2) funded by Indo-French Centre for Promotion of Advanced Research in the Centre of Advanced Study, Department of Botany, University of Calcutta, India (2003 to 2006)
- **Senior Research Fellow** (CSIR-SRF, sanction no. 09/28(0685)/2006-EMR-I, dated 20.3.07) in the Centre of Advanced Study, Department of Botany, University of Calcutta, India (2007 to 2008)
- **Research Associate** in the project entitled “Development of chromosome database for plants” funded by DBT (sanction no. BT/PR8955/NDB/52/75/2007, dated 06.12.07) in the Centre of Advanced Study, Department of Botany, University of Calcutta, India (2009 to 2011)
- **Principal Investigator** in the project entitled “*Agrobacterium rhizogenes* mediated transformation of *Podophyllum hexandrum* for the production of podophyllotoxin” under the Women Scientists Scheme (WOS-A) for Research in Basic/Applied Sciences, funded by Department of Science & Technology (DST), Govt. of India (sanction no. SR/WOS-A/LS-175/2010, dated 14.2.2011) in the Centre of Advanced Study, Department of Botany, University of Calcutta, India (2011 to 2014)

TEACHING EXPERIENCE

- Guest Lecturer in the Department of Botany (UG and PG), Jogamaya Devi College, Kolkata from 2017 to 2019.
- Assistant Professor in the Department of Botany, Harimohan Ghose College, Kolkata from 2019 till date.

PUBLICATIONS

1. BOOK CHAPTERS

- **Anrini Majumder** (2022) Plant *in vitro* cultures for phytoremediation of heavy metals. In: K. K. Ghosh et al. (eds.) Back to basics: A multidisciplinary approach to organic living and waste management/Jogamaya Devi College Interdisciplinary Volume 3, ISBN: 999-99-999999-9-9, pp. 24-44
- Mihir Halder, **Anrini Majumder**, Smita Ray, Sumita Jha (2021) Medicinal plant research at crossroads: Biotechnological approaches for conservation, production and stability in tissue cultures and regenerated plants. In: H. M. Ekiert et al. (eds.), Medicinal Plants, Sustainable Development and Biodiversity 28, DOI 10.1007/978-3-030-74779-4_16, pp. 459-544, © Springer Nature Switzerland AG
- **Anrini Majumder**, Smita Ray, Sumita Jha (2016) Hairy roots and phytoremediation. In: A. Pavlov, T. Bley (eds.) Bioprocessing of Plant In Vitro Systems, Reference Series in Phytochemistry. DOI 10.1007/978-3-319-32004-5_22-1, pp. 1-24, © Springer International Publishing AG
- Dipasree Roychowdhury, **Anrini Majumder** and Sumita Jha (2013) *Agrobacterium rhizogenes* mediated transformation in medicinal plants: prospects and challenges. In: S. Chandra et al. (eds.), Biotechnology for Medicinal Plants, DOI: 10.1007/978-3-642-29974-2-2, pp. 29-68, © Springer-Verlag Berlin Heidelberg
- **Anrini Majumder** and Sumita Jha (2012) Hairy Roots: A Promising Tool for Phytoremediation. In: T. Satyanarayana, Bhavdish Narain Johri, Anil Prakash (eds.) Microorganisms in Environmental Management: Microbes and Environment. DOI: 10.1007/978-94-007-2229-3_27, pp. 607-629, Springer Netherlands

2. JOURNALS, CONFERENCE VOLUMES

- Smita Ray, **Anrini Majumder**, Maumita Bandyopadhyay, Sumita Jha (2014) Genetic transformation of sarpagandha (*Rauvolfia serpentina*) with *Agrobacterium rhizogenes* for identification of high alkaloid yielding lines. *Acta Physiologiae Plantarum* 36:1599-1605. Springer Berlin Heidelberg (ISSN: 0137-5881-print; 1861-1664-online)
- Smita Ray, Tundra Samanta, **Anrini Majumder**, Maumita Bandyopadhyay, Sumita Jha (2014) Cytogenetic characterization of *Agrobacterium rhizogenes* transformed root lines of *Rauvolfia serpentina*. *The Nucleus*, 57(2):105-112. Springer India (ISSN: 0029-568X-print; 0976-7975-online)
- **Anrini Majumder** (2012) Influence of an indirect precursor on podophyllotoxin accumulation in cell suspension cultures of *Podophyllum hexandrum*. *Plant Tissue Culture & Biotechnology* 22(2): 171-177. (ISSN: 1817-3721-print; 1818-8745-Online)

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- Myo Ma Ma Than, **Anrini Majumder**, Amita Pal, Sumita Jha (2011) Genomic variations among in vitro regenerated *Bulbophyllum auricomum* Lindl. plants. *Nucleus* 54(1): 9-17. Springer-Verlag (ISSN: 0029-568X –print; 0976-7975-electronic).
 - **Anrini Majumder**, Sumita Jha (2009) Characterization of podophyllotoxin yielding cell lines of *Podophyllum hexandrum*. *Caryologia* 62(3): 220-235. Taylor and Francis Group (ISSN: 0008-7114 –print; 2165-5391-electronic)
 - **Anrini Majumder**, Sumita Jha (2009) Biotechnological approaches for the production of potential anticancer leads podophyllotoxin and paclitaxel: an overview. *eJournal of Biological Sciences* 1, Issue 1: 46-69 (ISSN: 2076-9946, EISSN: 2076-9954)
 - **Majumder A**, Jha S (2007) Growth and podophyllotoxin production in callus and cell suspension cultures of *Podophyllum hexandrum*. *Proceeding of National Symposium on Plant Biotechnology: New Frontiers, CIMAP, Lucknow*. pp. 433-438
 - Datta Mukul Manjari, **Majumder Anrini**, Jha Sumita (2006) Organogenesis and plant regeneration in *Taxus wallichiana* (Zucc.). *Plant Cell Reports* 25: 11-18. Springer-Verlag (ISSN: 0721-7714-print; 1432-203X-online)

3. ABSTRACTS

- Smita Ray, **Anrini Majumder**, Maumita Bandyopadhyay, Sumita Jha. Genetic transformation of *Rauvolfia serpentina* with *Agrobacterium rhizogenes*: Effects of Ri T-DNA on growth, phenotype and secondary metabolism in hairy root cultures. International conference on The Green Planet: past, present and future organized by Department of Botany, University of Calcutta, 2016
- **Anrini Majumder**, Sumita Jha. Effect of precursors and coculture on podophyllotoxin accumulation in cell suspension cultures of *Podophyllum hexandrum*. International Conference on Biotechnology Advances: Omics Approaches and Way Forward (ICBA-2012) held at Siksha ‘O’ Anusandhan University, Bhubaneswar, India, in December 2012
- Amrita Basu, **Anrini Majumder**, Sanghamitra Nayak, Raj Kumar Joshi, Sumita Jha. Development of genetically transformed root cultures of medicinally important plants using cryptogein gene of novel elicitor function. International Conference on Biotechnology Advances: Omics Approaches and Way Forward (ICBA-2012) held at Siksha ‘O’ Anusandhan University, Bhubaneswar, India, in December 2012
- Myo Ma Ma Than, **Anrini Majumder**, Amita Pal, Sumita Jha. Clonal propagation, germplasm conservation and DNA fingerprinting pattern in *Bulbophyllum auricomum* Lindl. National Symposium on Plant Cell Tissue and Organ Culture: The Present Scenario organized by Centre of Advanced Study, Department of Botany, University of Calcutta, in March 2010
- Myo Ma Ma Than, **Anrini Majumder**, Amita Pal, Sumita Jha. Analyses of chromosomes and DNA fingerprinting patterns in *in vitro* propagated *Bulbophyllum auricomum* Lindl. 14th All India Congress of Cytology and Genetics organized by Indian Institute of Chemical Biology, Kolkata and Department of Genetics, Calcutta University, Kolkata in December 2009
- **Anrini Majumder**, Sumita Jha. Evaluation of podophyllotoxin producing cell lines of *Podophyllum hexandrum*. Asian Symposium on Medicinal Plants, Spices and other Natural Products (ASOMPS) XIII held at Indian Institute of Chemical Technology, Hyderabad, India, in November 2008

AWARDS/FELLOWSHIPS

- Certificate of Honour for securing the first position in the B.Sc. Part I Examination of the Calcutta University in 1999 among the students of Presidency College in Botany
- Certificate of Merit under National Scholarships Scheme for securing high position in B.Sc. Part II Examination of the Calcutta University in 2000
- Qualified the graduate aptitude test in engineering (GATE) conducted by All India Council of Technical Education (AICTE), Govt. of India, for Technical research/Masters degree in 2003
- Senior Research Fellowship (SRF) by the Council of Scientific and Industrial Research (CSIR), Govt. of India, in 2007
- Awarded the best poster award at Asian Symposium on Medicinal Plants, Spices and other Natural Products (ASOMPS) XIII held at Indian Institute of Chemical Technology, Hyderabad, India, 2008

RESEARCH INTEREST: Plant Biotechnology