

Curriculum Vitae



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Dr. Dipayan Das (M.Sc., Ph.D.)				
	15 January 1990		Male	
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Teaching Experience

PG + UG Level	Department of Microbiology, The Assam Royal Global University Since 11 th September 2023.
UG Level	Faculty in Centre of Innovative Studies; University of North Bengal since 2 nd August 2021 to 4 th August 2023.
NET Level	Teaching aspirants of CSIR-UGC-NET Examination (Life Science) since 2016

Academic Career

Degree	Year	Board/ University	Percentage	Division
Ph.D. (Botany)	2022	University of North Bengal		
M.Sc. (Botany)	2014	University of North Bengal	80.625	I (1 st Class First) Received Gold Medal
B.Sc. (H.) (Botany)	2012	University of North Bengal	65.875	I (1 st Class Second) Received Silver Medal
Higher Secondary	2009	West Bengal Council of Higher Secondary Education	80.5	I*
Secondary	2007	West Bengal Board of Secondary Education	79.75	I*

Patent

Patent No.	461102	Application No.	201931046198
Date of Filing	13 November 2019	Grant Date	20 October 2023
Title	Enhancement of shelf life of mulberry leaves by the implementation of phytosynthesized silver nanoparticles at post harvest stage.		

Specialization			
Category	Botany		
Sub-category	Plant Physiology	Biochemistry	Microbiology

Subject Teaching					
Botany	Plant Physiology	Biochemistry	Plant Metabolism	Stress Biology	Microbiology
Genetics	Ecology	Cell Biology	Molecular Biology	Development Biology	Environmental Science

National Level Competition				
Qualified Exam	Subject	Year	Roll No.	Rank
CSIR-UGC NET	Life Science	June, 2016	365932	AIR 41 (JRF)
CSIR-UGC NET	Life Science	December, 2016	332431	AIR 78 (JRF)
CSIR-UGC NET	Life Science	June, 2017	329614	AIR 31 (LS)
CSIR-UGC NET	Life Science	December, 2017	337159	AIR 38 (LS)
CSIR-UGC NET	Life Science	December, 2018	340303	AIR 18 (LS)
WB SET	Life Science	2018	1854719	Qualified
GATE 2017	Life Science	2017	XL17S84051089	AIR1248

Fellowship Awarded			
Fellowship	Year	Letter No.	Status
DST-INSPIRE Fellowship	2016	DST/INSPIRE/03/2015/004515	Not obtained
UGC NET-JRF Fellowship	2016 (June)	19/06/2016 (i) EU-V	Fellowship Received (2017 to 2022)
CSIR NET-JRF Fellowship	2016 (December)	18/12/2016 (ii) EU-V	Not obtained

Ph.D. Details			
Title	Application of Nano Silver and Silver Ions in Preservation of Mulberry Leaves and Their Utilization in Silkworm Rearing System		
Date of Award	11 th March 2022		
Supervisor	Late Dr. Palash Mandal (Associate Professor)		
Laboratory	Plant Physiology and Pharmacognosy Research Laboratory	Nanobiology and Phytotherapy Laboratory	
Department	Botany	University	University of North Bengal
Research Experience	7 years		

Paper Published (Total Thomson Reuter Impact Factor = ~ 45.8)

Sl. No.	Title of Research Manuscript	Year	Journal	Volume / DOI	Impact Factor
1.	Transcriptome analysis of mulberry (<i>Morus alba</i> L.) leaves to identify differentially expressed genes associated with post-harvest shelf-life elongation	2022	<i>Scientific Reports</i> (Nature)	https://doi.org/10.1038/s41598-022-21828-7	4.9
2.	Green chemistry inspired formation of bioactive stable colloidal nanosilver and its wide-spectrum functionalised properties for sustainable industrial escalation	2022	<i>Results in Chemistry</i> (Elsevier)	https://doi.org/10.1016/j.rechem.2022.100533	2.3
3	Intrinsic Light-Activated Oxidase Mimicking Activity of Conductive Polyaniline Nanofibers: A Class of Metal-Free Nanozyme	2022	<i>ACS Applied Bio Materials</i> (ACS Publication)	https://doi.org/10.1021/acsabm.2c00491	4.7
4.	Light and scanning electron microscopic characterization of pollen grains of some wetland angiosperms from India	2022	<i>Microscopy Research & Technique</i> (Wiley)	https://doi.org/10.1002/jemt.24118	2.9
5.	Implementation of mature tea leaves extract in bioinspired synthesis of ironoxide nanoparticles: preparation, process optimization, characterization, and assessment of therapeutic potential	2021	<i>Chemical Papers</i> (Springer)	https://doi.org/10.1007/s11696-021-01872-9	2.1
6.	Preservative potential of biosynthesized silver nanoparticles: prevention of xylem occlusion and microbial proliferation at postharvest stage of preservation.	2021	<i>Environmental Science and Pollution Research</i> (Springer)	https://doi.org/10.1007/s11356-020-11832-7	5.4
7.	Impact of physical attributes on proficient phytosynthesis of silver nanoparticles using extract of fresh mulberry leaves: characterization, stability and bioactivity assessment	2020	<i>Journal of Inorganic and Organometallic Polymers and Materials</i> (Springer)	https://doi.org/10.1007/s10904-020-01794-1	3.5
8.	Use of biogenic silver nanoparticles in enhancing shelf life of <i>Morus alba</i> L. at post harvest stage	2020	<i>Scientific Reports</i> (Nature)	https://doi.org/10.1038/s41598-020-65953-7	4.9
9.	Investigation of protein profile of nano-silver preserved mulberry leaves and silkworm larvae fed with the same leaves	2020	<i>Applied Nanoscience</i> (Springer)	https://doi.org/10.1007/s13204-020-01416-9	4.3

10.	Improvisation of salinity stress response in mung bean through solid matrix priming with normal and nano-sized chitosan	2020	<i>International Journal of Biological Macromolecules</i> (Elsevier)	https://doi.org/10.1016/j.ijbiomac.2019.12.170	8.2
11.	Biogenic synthesis of silver nanoparticles using S1 genotype of <i>Morus alba</i> leaf extract: characterization, antimicrobial and antioxidant potential assessment	2019	<i>Springer Nature Applied Sciences</i> (Springer Nature)	https://doi.org/10.1007/s42452-019-0527-z	2.6
12.	Understanding the role of calcium elicitors and their cross-talk with hormones on growth form, biochemical and antioxidant attributes of <i>Drosera burmanni</i> Vahl under <i>insitu</i> condition.	2018	<i>Biochemical & Cellular Archive</i> (Connect Journal)	18(2): 1661 – 1670	0.05
13.	A comparative study of foliar micro-morphology of six Genotypes of <i>Morus alba</i> L. from Darjeeling district, West Bengal, India	2018	<i>Plant Archives</i>	18 (2): 1471 – 1478	0.1
14.	Evaluating the effect of silver ions in preservation of mulberry leaves and its impact over silk worm rearing system	2018	<i>International Journal of Recent Scientific Research</i>	9 (4E): 25833 – 25839.	-

Published Book

Sl. No.	Title of Book	Author	Year	Publisher	ISBN
1.	BASIC BIO-CHEMISTRY: A fundamental concept for the Beginners	Das D, Paul P & Mandal P	2020	H.S.R.A PUBLICATIONS	978-81-946759-5-2
2.	Handbook on Bio-Staining Procedures: A Quick Practical Approach	Das D, D Ghosh, Paul P & Mandal P	2020	OrangeBooks Publication	978-93-90169-51-1
3.	Herbarium Technique: Evolution from Conventional to Digitization	Paul P, Dhar S, Das D & Chowdhury M	2020	OrangeBooks Publication	978-93-90169-61-0
4.	Electrophoretic Separation: A Laboratory Handbook	Das D, Haydar S, Mandal P, Ghosh S, Mandal P	2021	Palok Publishers	978-81-949644-1-4

Published Book Chapter

Sl. No.	Title of Book Chapter	Title of Book	Author	Year	Publisher	ISBN
1.	A brief review on common laboratory based Gel Electrophoresis Technique	Research in Emerging Fields of Biological Science	Roy SS, Das D, Mandal P	2023	Astitva Prakashan	9789358380002

Awards

Awarded	Cause of Award	Year	Organization
University Medal (Gold)	1 st Class 1 st in M. Sc (Botany) Examination	2014	University of North Bengal
University Medal (Silver)	1 st Class 2 nd in B.Sc. (Honors in Botany) Examination	2012	University of North Bengal
Young Scientist award	Research publication	2020	Institute of Scholars
Research Excellence award	Research publication	2020	Institute of Scholars

Seminar Oral Presentation

Sl. No.	Title of the Presentation	Details of Conference / Seminar	Type of Seminar	Date of Presentation
1.	In-silico Assessment of Differentially Expressed Genes Associated with Shelf life Extension of Mulberry Leaves at Post-harvest Stage	Advances in Plants, Microbes and Agricultural Sciences held at Department of Botany, University of North Bengal, West Bengal, India	International Seminar	2 nd to 4 th March, 2023
2.	Preservative prospective of phytosynthesized nanosilver: avoidance of xylem occlusion and microbial proliferation at post harvest stage of preservation	Young Scientists' Conference, India International Science Festival	International Seminar	22 th to 25 th December, 2020
3.	Nanosilver Mediated Postharvest Preservation of Mulberry Leaves and Silkworm Feeding	New Horizon in Botanical Research held at Department of Botany, University of North Bengal, West Bengal, India	National Seminar	20 th to 21 th February, 2020
4.	Green Synthesis of Silver Nanoparticles using Mulberry Leaf Extract and it's Antioxidant,	Advanced Material Science and Nanotechnology (NANOMAT -2020)	International Web Conference	20 th to 21 st June, 2020.

	Antimicrobial, Preservative aspect Assessment	organized by Department of Physics, Vinayak Vidnyan Mahavidyalaya, Nandgaon Khandeshwar, Maharashtra, India		
5.	Biogenic Synthesis of Nano Silver using Mulberry Leaf Extract and its Antioxidant, Antimicrobial, Preservative aspect Evaluation	Current Avenues in Microbial and Plant Sciences held at Department of Botany, University of Gour Banga, West Bengal, India	International Seminar	23 rd to 25 th February, 2019
6.	Oxidative Stress Management of Post Harvest Preserved Mulberry Leaves with Phytosynthesized Silver Nanoparticles	Young Scientists' Conference in India International Science Festival at Biswa Bangla Convention Centre, Kolkata	International Seminar	5 th to 8 th November, 2019






Poster Presentation

Sl. No.	Title of the Presentation	Details of Conference / Seminar	Type of Seminar	Date of Presentation
1.	Green Synthesis Silver Nano Particles using Mulberry Leaf Extract and its Antioxidant and Antimicrobial Activity Assessment	Young Scientists' Conference in India International Science Festival at Indira Gandhi Pratishthan, Lucknow	International Seminar	5 th to 8 th October, 2018
2.	In silico assessment of differentially expressed genes associated with shelf life extension of mulberry leaves at post-harvest stage using green synthesized silver nanoparticles	Young Scientists' Conference in India International Science Festival at DBT THSTI - RCB Campus, Faridabad, Haryana	International Seminar	17 th to 20 th January, 2024










Workshop Attended

Sl. No.	Title of Workshop	Type of Workshop	Date of Workshop
1.	Genomics and Bioinformatics in High throughput Era” organized by Bioinformatics Facility Center, University of North Bengal	National Seminar cum Workshop	26 th and 27 th March, 2022
2.	#BluePlanet by Indian National Young Academy of Sciences and Department of Geology, Central University of Punjab, Bathinda, India in connection with World Oceans Day	Virtual Workshop	7 th to 9 th June, 2020
3.	‘#ZeroWaste’ by DAV College, Bathinda, Central University of Punjab, Bathinda and Indian National Young Academy of Sciences, New Delhi	Lecture Workshop	16 th to 18 th June, 2020
4.	Resolution Liquid Chromatography Mass Spectrometer-Orbitrap Biopharma at IIT Bombay	National Seminar cum Workshop	23 rd May, 2018
5.	600 MHz Nuclear Magnetic Resonance Spectroscopy at IIT Bombay held from	National Seminar cum Workshop	24 th to 25 th May, 2018
6.	Plant and Wildlife’s Photography at University of North Bengal held from	National Workshop	9 th to 10 th August, 2018
7.	National Seminar cum Workshop on Bioinformatics	National Seminar cum Workshop	12 th to 14 th March, 2015
8.	Cultivation of Medicinal and Aromatic Plants at University of North Bengal	National Workshop	10 th March, 2015
9.	Cultivation and Post Harvest Processing of Edible Mushroom at University of North Bengal	National Workshop	29 th December, 2014

Seminars, and Symposium Participated

-  Participated in National Seminar on Advances in Plant Biology at University of North Bengal held on 18th March, 2018
-  Participated in National Seminar cum Workshop on Bioinformatics at University of North Bengal held from 12th to 14th March, 2015.
-  Participated in 22nd West Bengal State Science and Technology Congress on 28th February and 1st March, 2015.
-  Participated in National Symposium organized by Department of Botany (University of North Bengal) on 12th and 13th December, 2014.
-  Participated in National Symposium organized by Department of Botany (University of North Bengal) on 22nd and 23rd March, 2013.

Webinars Attended

-  Participated in National webinar on Think Green, Live Green, Organized by Department of Conservation Biology, Durgapur Government College on 7th July, 2021.
-  Participated in National webinar on Role of Indian Traditional Medicines in COVID-19 Pandemic Situation, Organized by Department of Botany, North Bengal St. Xavier's College on 11th October, 2020
-  Participated in National webinar organized by Bioinformatics facility, University of North Bengal on 30th September, 2020
-  Participated in International webinar on Nanobio Technology Enabled Biomedical Sensor Devices for Point-of-Care Disease Diagnosis & The effectiveness of protected areas in Biodiversity Conservation in Tunisia, Organized by Rajendranath College of Polytechnic, Durgapur, West Bengal, India on 31st July 2020.
-  Participated in National webinar on Concept, Innovations and Methods when Chemistry Meets Biology organized by Department of Chemistry, Kharagpur College in collaboration with National Academy of Science, India on 17th July, 2020.
-  Participated in National webinar on Science Leadership Workshop organized by Central University of Punjab, Bathinda from 22nd – 28th June, 2020.
-  Participated in National webinar on Defect Identification using Machine Vision organized by Raghu Engineering College, Dakamarri, Visakhapatnam on 19th June, 2020.
-  Participated in National webinar on Getting Industry Ready with AI, ML, Robotics & IOT Technologies organized by Dr. M. C. Saxena Group of Colleges Lucknow on 13th June, 2020.
-  Participated in online Botany Quiz and completed the quiz with 76% score organised by Botany Department, Maharshi Dayanand Science College, Porbandar on 12-6-2020.

- ✍ Participated in National webinar on Rain Water Harvesting in Extreme Weather Conditions organized by Department of Physics in association with IQAC, MVN, JS & RVR College of Arts and Science on 12th June, 2020.
- ✍ Participated in National webinar on Covid-19: A rise in new education Practices organized by Bora Institute of Management Sciences on 12th June, 2020.
- ✍ Participated in National webinar on Novel COVID-19 & How to march ahead organized by Department of anatomy, KGM University, Lucknow on 9th June, 2020
- ✍ Participated in National webinar on Changing Economic Scenario & Role of Education Industry Post COVID-19 organized by Dr. M. C. Saxena Group of Colleges Lucknow on 7th June, 2020.
- ✍ Participated in National webinar on Migration and Return Migration in Bihar: In the Age of COVID-19 organized by Department of Geography, Sardar Patel Memorial College, Udantpuri, Bihar Sharif, Nalanda on 7th June, 2020.
- ✍ Participated in National webinar on Techno-Economical feasibility of Zero Liquid discharge projects organized by Shroff S R Rotary Institute of Chemical Technology, Vataria on 31st May, 2020.
- ✍ Participated in International webinar on Relevance of Makerspaces and the Maker Mindset to Higher Education organized by Department of Computer Science and Engineering, Vidyavardhaka College of Engineering, Mysore on 29th May, 2020.
- ✍ Participated in National webinar on New Opportunities in Medicinal Plants Sector for Farmers and Entrepreneurs organized by Department of Life Science, Mansarovar Global University on 24th May, 2020.
- ✍ Participated in National webinar on Molecular Taxonomy and DNA Barcoding: Concepts, Methods and Applications organized by Department of Botany, R.D. & S.H. National College and S.W.A. Science College, Mumbai under the aegis of Internal Quality Assurance Cell (IQAC) on 20th May, 2020.

✍ Additional Achievements

- ✍ Participated in National Service Scheme (N.S.S) Programs under Unit- I of Siliguri College as regular candidate for the year 2011 – 2012.
- ✍ Passed NCC Certificate 'A' Examination in 2005 as a Cadet of 16 Bengal BN NCC, Siliguri.
- ✍ Completed 3 months Basic Compute Course from Siddhi Vinayak Computer Institute in 2014.