# DR. RUPA CHAKRABORTY

**Current Designation**: Assistant Professor

**Department**: Botany

**Date of Joining**: 07.12.2016

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### 1. Academic Qualifications

Degree	Institution	Year	Subject/Discipline
M. Sc	University of Calcutta	1995	Botany
Ph. D	Jadavpur University	2015	Phytoremediation

#### 2. Thesis Title

**Ph.D. Thesis Title**: "Bacterial and plant uptake kinetics with stress response evaluation in water lettuce for cleaning urban liquid waste containing chromium".

## 3. Specialization and Area of Interests

Specialization: Mycology and Plant Pathology

Area of Interests: Environment, Phytoremediation, Mycology, Plant Pathology and Ethnobotany .

#### 4. Teaching Responsibilities:

A. Teacher (conducting lecture, tutorial, practical, remedial classes on Mycology, Phytopathology, Plant Diversity, Archegoniate, Ecology, Cell Biology, Genetics, Plant physiology, Medicinal and Ethnobotany etc).

B. Examiner (Framing Questions, Invigilation, Evaluation, Internal/Continuous Assessment work as allotted).

#### 5. Publications

#### a. Research Papers in Journals

1. Chakrabarti, R. and Purkayastha, R.P. (1999) Heavy metals uptake and disease susceptibility of maize. Indian Phytopathology, 52 (4): 381-384

- 2. Chakraborty, R., Mitra, A. K., Sinha Roy, K., Mukherjee, S. and Kumar, S. (2012) "Isolation and characterization of Cr (VI) tolerant bacteria from tannery waste and its bioremediation potential ". Journal of Environmental Science and Engineering .Vol. 54, No. 2, pp. 294-305. (ISSN)
- 3. Das, R., Saha, I., Mitra, E., Bhowmik, D., Chakraborty, A., Sengupta, D., Roy, S., Shyamchowdhury, S., Mitra, A.K., Chakraborty, R. Mukherjee, S.N. (2012) "Bioaccumulation of Chromium by Aquatic Hyrophyte Lemna and its Associated Rhizosphere Bacteria". Aviskaar: A Xaverian Journal of Research. St. Xavier's College. Vol. IV. pp. 32-36. (ISSN).
- 4. Chakrabarti, R. and Mukherjee, S. (2012) Bioadsorptive Removal of Chromium and Lead by Aquatic Macrophyte. Journal of Institute of Public Health, vol.2012-13, no.2,p 43-48.
- 5. Chakraborty,R. and Mukherjee, S. (2013) Kinetic studies of chromium phytoremediation for polishing treated tannery effluent by Water lettuce (*Pistia stratiotes*) Asian Journal of Experimental Biological Sciences, 4(2):179-184 (ISSN).
- 6. Chakraborty, R. Mitra, A. K. and Mukherjee, S. (2013) Synergistic Chromium Bioremediation by Water lettuce (*Pistia*) and Bacteria (*Bacillus cereus* GXBC-1) Interaction. J. Biol. Chem. Research. Vol. 30, No. 2: 421-431 (ISSN).
- 7. Chakraborty, R., Mitra, A. K. and Mukherjee, S. (2013) Polishing of Chromium containing treated tannery effluent by *Pistia* and evaluation of some consequent stress effects. Poll Res. 32 (2): 425-431 (ISSN).
- 8. Chakraborty, R., Mukherjee, S. and Kumar, S. (2014) Screening of few aquatic floating plants for chromium phytoremediation . International Journal of Environmental Technology and Management. Vol. 17, No. 2/3/4, pp.191–198.
- 9. Chakraborty, R., Karmakar, S., Mukherjee, S. and Kumar, S. (2014) Kinetic evaluation of chromium (VI) sorption by water lettuce (*Pistia*), Water Science and Technology, Vol. 69, No. 1, pp.195 201. [Impact factor 1.102].
- 10. Chakraborty, R. and Pyne, A. (2020) "Zinc enrichment in maize grown in soil dressed with neem fertilizer". Journal of Emerging Technologies and Innovative Research; Vol:7; Issue: 6; Page No.1515-1518. ;ISSN: 2349-5162.
- 11. Chakraborty R. (2020) "Effect of foliar spray of fungicides on development of leaf blight disease of maize (Zea mays L.)". Research Journal of Agricultural Sciences; Vol :11; Issue: 5; Page No. 1128-1131. ISSN: 0976-1675; E-ISSN: 2249-4538.
- 12. Chakraborty, R. and Mitra, A.K. (2023) "Calocybe indica cultivation: potential and benefits". The management accountant; Vol : 58; Issue: 5; Page No. 42-46. ISSN: 0972-3528.

### b. Book

1. An Introduction to Environmental Studies: Arup Kumar Mitra and Rupa

Chakraborty. Publisher: Book Syndicate Private Ltd., Kolkata-73. Published on 28th July, 2016. ISBN. 978-81-89019-90-7.

2. An Introduction to Mycology and Phytopathology: Dr. Arup Kumar Mitra and Dr. Rupa Chakraborty. Publisher: Taurean Publications, New Delhi-110053. Published on  $1^{\rm st}$  September, 2021. ISBN 978-93-91074-31-9.

## 6. Invited Lectures

Title of Lecture	Event	Organizing Institution	Date
Different topics on Botany	Live Interactive Radio Counselling Programme in Gyan- Vani FM Radio (105.4 MHz)	Netaji Subhas Open University, WB, India	Periodic session between March, 2012 to October, 2013
Water Food Chain	All India UGC National Channel for E content development and Educational lecture on Microbiology at UG level	Educational Multi Media Research Centre (EMMRC), St. Xavier's College, Kolkata, WB, India	Recorded in 2014
" Use of green technology for polishing tannery wastewater"	International seminar on " Relooking at Nations: Reenergizing and reframing strategies for sustainable development"	Institute of Management Study, Mukundapur, WB, Kolkata.	18 <sup>th</sup> &19 <sup>th</sup> July, 2015
"Biodegradation of Toxic Azodye"	International conference on "Trends, Issues, Challenges and Opportunities; CoMtico – 2015"	Shree Ambaji Arts & Commerce College, Ambaji, Gujrat, India	27 <sup>th</sup> & 28 <sup>th</sup> December, 2015

## 7. Oral/Poster Presentations

S/	Title	Event	Туре	Date	Venue
N			(Oral/Poster		
			)		
1	" Metal induced	National	Oral	2 <sup>nd</sup> to 4 <sup>th</sup>	Department
	susceptibility of	symposium on		December	of Botany,
	Maize to Leaf	"Frontiers of		, 1999	University of
	Blight"	Research in			Calcutta,
		Plant Sciences"			Kolkata, WB,
					India.

2	"Bioadsorptive removal of Chromium, Lead and Arsenic by aquatic macrophytes"	International Conference On Frontiers In Biologcal Sciences (InCoFIBS- 2010), Rourkela.	Oral	1-3 Oct, 2010	NIT, Rourkela. Odisha, India.
3	"Potential of water lettuce for polishing of tannery effluent"	Fourth International Conference on Plants and Environmental Pollution (ICPEP-4), NBRI, Lucknow.	Poster	8-11 December , 2010.	NBRI, Lucknow
4	"Bioremediation of Chromium Using Water Lettuce"	8th All India Peoples' Technology Congress, Forum of Scientists, Engineers & Technologists (FOSET),Kolkat a	Oral	11-12 Feb , 2011	Science City & Energy Education Park, Kolkata, WB, India
5	"Synergistic action of floating hydrophyte and rhizosphere bacteria in the removal of Cr <sup>6+</sup> from tannery waste effluents"	UGC sponsored national seminar on "Microbiology: Development and challenges in basic and applied research"	Poster	6 th & & 7 th April, 2011	Department of Microbiology, Ramakrishna Mission Vidyamandira , Belur math, Howrah- 711202, WB, India
6	"Chromium uptake ability of a bacterial strain isolated from	National conference on "Biodiversity- green strategies	Oral	22 – 23 rd Jan , 2013	Department of Advanced Zoology and Biotechnology

	Lemna rhizosphere in an urban lentic ecosystem."	for sustainable development"			, Women's Christian College, Chennai- 600006, India
7	"Possible biomining by metal tolerant bacteria"	Fourth International Conference on Ecotoxicology and Environmnetal Sciences (ICEES-2014)	Poster	17 -19 th February, 2014	Programme Centre, New Delhi YMCA, Jai Singh Road, New Delhi-110001, India
8	" Bio mining activity by a novel metal- tolerant bacteria in urban industrial backdrop"	National seminar on "Current research in microbiology"	Poster	4 th April, 2014	University of Calcutta, Kolkata- 700019, WB, India
9	" Organic farming: a pathway towards environmental sustainability"	International conference on "Finance, Sustainability, Governance and Development "	Oral	5 -7 th June, 2014	MBA Department, Gaeddu College of Business Studies, Royal University of Bhutan, Gedu, Chukha, Bhutan.
10	"Pathogenecity reduction of Rhizoctonia by phyllosphere modification of Vasaka leaves".	National symposium on "Plant Diversity: Structure, Function, Utilization and Conservation "	Poster	4-6 Dec, 2014	Department of Botany, University of Calcutta, Kolkata- 700019, WB, India

11	"Alluvial MicroFungi: a Repository for Lignolytic Enzyme	State-level seminar on "Environmental Pollution: Causes, Impacts and Control"	Poster	25 th April, 2015	The Bhawanipur Education Society College, Kolkata
12	" Microbial degradation of cellulose – a step towards paper recycling "	International level seminar on " Recent Trends in Microbiology "	Poster	January, 2017	Department of Microbiology, Ramakrishna Mission Vidyamandira , Belur math, Howrah, WB, India
13	"Multidimensiona l role of rhizospheric bacteria in enhancing plant productivity and mitigating pollution "	International seminar on " Frontiers in Biological Science (FIBS)	Poster	30 <sup>th</sup> January, 2018	St Xavier's College, Kolkata, WB, India
14	"A unique interaction of Cyperus sp.and Drechslera sp. in nickel phytoremediation"	"Eco-sustainability and Renewable Energy: Challenges, Prospects and Ethics"	Poster	19th & 20th January, 2019	Dr. A. P. J. Abdul Kalam Government College, Kolkata, WB, India
15	"Formulation of a novel multidimensional biopesticide for increasing plant productivity and reducing disease susceptibility"	National Symposium on "Current Trends and Future Prospects in Plant Science Research ( CTPSR -2019)"	Poster	1 <sup>st</sup> to 3 <sup>rd</sup> February, 2019	Centre of Advanced Study, Department of Botany, Institute of Science, Banaras Hindu University,

					Varanasi , UP, India
16	"Neem, A Natural Therapy"	National seminar on "ADVANCES IN BIOLOGY: Breakthroughs in Microbiology and Cancer Research ( ABMCR -2024 )"	Poster	19 <sup>th</sup> November , 2024	JIS University, Agarpara, Kolkata, WB, India

# 8. Conferences/Seminars/Symposia/Workshops Attended

Name of Event	Role (Participant/Presenter/Organize r)	Date	Venue
State level seminar cum workshop on "Stress Management"	Participant	10 <sup>th</sup> September , 2004	St. Xavier's College, Kolkata, WB, India
National level seminar on " Climate Change and Sustainable Development"	Participant	5 <sup>th</sup> July, 2008	Zoological Survey of India, Kolkata, WB, India
State-level seminar on " History of Public Opinion in India "	Participant	25 <sup>th</sup> & 26 <sup>th</sup> September , 2012	New Alipore College, Kolkata, WB, India
National level Workshop on "Cryptogamic Botany- from curriculum to application"	Participant	19 <sup>th</sup> to 26 <sup>th</sup> November , 2013	Department of Botany , University of Calcutta, West Bengal, India

National level Workshop on "Chromatography ' - the catapult for unraveling the facts of Nature"	Participant	26 <sup>th</sup> & 27 <sup>th</sup> December, 2013	Department of Botany, University of Calcutta, West Bengal, India
National level Workshop on " Hands – on training on Palaeobotanical and palynological techniques"	Participant	21st to 28th April, 2014	Department of Botany , University of Calcutta, West Bengal, India
International seminar on "Scope of Microbial Biotechnology "	Participant	8 <sup>th</sup> December , 2014	Ramakrishna Mission Vivekananda Centenary College, Rahara, Kolkata, WB, India.
National level workshop on Bioinformatics	Participant	21st December, 2015	St. Xavier's College, Kolkata, WB, India
National level workshop on " Cultivation of Edible Mushrooms: Techniques and Agri-business prospects "	Participant	21st to 24th December, 2015	Sarsuna College, Kolkata, WB, India
International seminar on "Scope of Microbial Biotechnology in Clean Biofuel	Participant	9 <sup>th</sup> June, 2015	Ramakrishna Mission Vivekananda Centenary College, Rahara,

Ethanol Production "			Kolkata, WB, India
International seminar on "Recent trends in Microbiology "	Participant	14 <sup>th</sup> January, 2017	Ramakrishna Mission Vidyamandira, Belur Math, Howrah, WB, India
National Seminar & Workshop on " Scientific Devices , Technology Applications & Community Linkage "	Participant	18 <sup>th</sup> & 19 th March, 2017.	University of Calcutta, WB, India
National workshop on "Vascular Plant Taxonomy: Field skills, Plant identification & Plant nomenclature"	Participant	5 <sup>th</sup> to 12 <sup>th</sup> December, 2018	Department of Botany, University of Calcutta , WB, India
International symposium on "Environment and Climate Crises"	Participant	20 <sup>th</sup> December, 2019	St. Xaviers College, Kolkata, WB, India
National colloquium in observance of World Environment Day	Participant	5 <sup>th</sup> June, 2020	Organised by The Asiatic Society, Kolkata, WB
1st International (Virtual) Symposium on Geoethics	Participant	14 <sup>th</sup> June, 2020	Organized by International Association Promotion of Geoethics (IAPG), India

			Chapter in collaboration with National Institute of Disaster Management (NIDM) and Amity University Haryana, India
National webinar on "The Herbal Resources and their role in boosting immunity against COVID-19"	Participant  Participant	15th June, 2020	Organised by The School of Studies in Botany and S.K. Jain Institute of Ethnobiology, Jiwaji Unoiversity, Gwalior, MP, India organised by
webinar on " Tomorrow's Habit "	T at ticipant	2020	IQAC, Department of Physiology, Department of Economics, Science Innovation Centre, Vijaygarh Jyotish Ray College, Jadavpur, Kolkata, WB, India
National webinar on "COVID-19: FACTS AND FACETS"	Participant	26 <sup>th</sup> June, 2020	Organised by the Internal Quality Assurance Cell of Sarat Centenary College, Dhaniakhali,

			Hooghly, WB, India
National webinar entitled "Disaster vis-à-vis Education: Impact and Effects"	Participant	27th June, 2020	Organised by Internal Quality Assurance Cell of Shimurali Sachinandan College of Education, Shimurali, Nadia, WB, India
National webinar on "Plant Biotechnology and Its Application "	Participant	29th June, 2020	Organised by the Department of Botany in collaboration with IQAC, Gurudas College
International webinar lecture series on the "Recent Advances in Covid-19 Research "	Participant	29th June, 2020	Organised by Research and Guidance Cell, Department of Microbiology and IQAC, Vijaygarh Jyotish Ray College, Jadavpur, Kolkata, WB, India
International webinar on the "Science, Biology and the World's Future"	Organizing Member	25 <sup>th</sup> August, 2020	Organised by the Department of Botany and IQAC, Dinabandhu Andrews College, Garia, Kolkata, WB, India

State level webinar on " Gender Sensitization "	Programme Coordinator	7 <sup>th</sup> February, 2021	Organised by the Kanyashree Committee and IQAC, Dinabandhu Andrews College, Garia, Kolkata, WB, India
State level webinar on " A Tour of Cosmos "	Participant	12 <sup>th</sup> February, 2021	Organised by the Department of Geography and IQAC, Dinabandhu Andrews College, Garia, Kolkata, WB, India
State level workshop on "Commercial Mushroom Cultivation"	Participant	17 <sup>th</sup> to 22 <sup>nd</sup> October, 2022	SAMETI, RKM Ashrama, Narendrapur,W B, India
State level workshop on Basic Cell Biology Techniques	Participant	25 <sup>th</sup> & 26 <sup>th</sup> , November , 2022	City College, Kolkata, WB, India.
"One Day National Seminar, Poster Presentation & Photography Competition"	Organizing Secretary	12 <sup>th</sup> May,	Dinabandhu Andrews College
Online training programme on "Emergency	Participant	21 <sup>st</sup> to 23 <sup>rd</sup> June, 2023	Organized by MANAGE, Hyderabad &

Preparedness & Incursion Management in Agriculture and its allied sectors"			SAMETI, RKM Ashrama, Narendrapur,W B, India
Online training programme on "Empowerment of Women/ Women group through Rural Entrepreneurship"	Participant	24 <sup>th</sup> to 26 <sup>th</sup> July, 2023	Organized by SAMETI & Agricultural Training Centre, RKM Ashrama, Narendrapur,W B, India
State level workshop on Mushroom Cultivation Technique	Participant	10 <sup>th</sup> & 11 <sup>th</sup> , January, 2024	Raja Peary Mohan College, Uttarpara, Hooghly, WB, India
National level  "Two-days  Workshop and  Hands-on  Training in Plant  Taxonomy "	Participant	1st & 2nd March, 2024	Serampore College, Serampore, Hooghly,WB, India
State level "Skill development and entrepreneurship workshop on	Programme Coordinator	22 <sup>nd</sup> & 23 <sup>rd</sup> March, 2024	Department of Botany, Dinabandhu Andrews College ,Kolkata, WB, India

mushroom			
cultivation "			
State level "One-	Participant	12 <sup>th</sup>	Scottish Church
day Workshop for		August,	College
faculties on		2024	
Biofertilizers &			
Biopesticides"			

## 9. Membership in Academic Bodies

A. Life-member of Probir Chatterjee Research Foundation

B. In Dinabandhu Andrews College

- **1.** Kanyasree Sub-Committee
- **2.** Seminar/ Workshop/ Conference Sub-Committee
- 3. Students' Welfare Sub-Committee
- **4.** Green Campus, Green Audit, Energy Audit and Environment Audit Sub-Committee
- **5.** Scholarship Sub-Committee
- **6.** Sports & Cultural Sub-Committee
- 7. Women's Cell

### 10. Awards/Honours

Award	Organization	Year	Description
Best paper	Indian Botanical Society	1998	21st I.B.S conference, Ujjain.
Fourth position in poster presentation	St Xavier's College, Kolkata, WB, India	2018	International seminar on " Frontiers in Biological Science ( FIBS) "

Third position in	Banaras Hindu	2019	National
poster presentation	University, Varanasi,		Symposium on
	UP, India		"Current Trends and
			Future Prospects in
			Plant Science
			Research (CTPSR -
			2019 )"

# 11. Administrative Responsibility:

- a. Management\_In-Charge of Kanyashree Prakalpa in Dinabandhu Andrews College
- b. Convener of Kanyashree Sub-committee (from 27.09.2018 to 12.12.2024).