Curriculum Vitae

☎: 9433778493

Soumen Bhattacharjee, Ph.D.

Present position & Contact

Professor & Coordinator UGC Centre for Advanced Study, Department of Botany, The University of Burdwan &
Director, Internal Quality Assurance Cell (Additional charge), The University of Burdwan, West Bengal, PIN-713104
E-mail: sbhattacharjee@bot.buruniv.ac.in / soumen1995@yahoo.com.

Contact no.: 9433778493 / 9230272650

Academic Background

Teaching background: ***Total 29 years with more than 10 years as University Professor.***

Research Background*:* ***Environmental Stress Biology of Plants, Agricultural Phytochemistry. Total 32 years.***

Research Interests*: Plant Redox Biology, Redox Omics, Phytochemistry of plant bioactive compounds*.

Administrative exposure

- Director, Internal Quality Assurance Cell, The University of Burdwan, West Bengal, from May, 2024 to continuing.
- Coordinator, UGC Center for Advanced Study in Botany, The University of Burdwan since 2015 to continuing.
- Head of the Department, Department of Botany, The University of Burdwan West Bengal (2014-2016).
- Member, Court of The University of Burdwan (two terms).
- Member, Board of Research Studies, PGBS, faculty Council of Science, UGBS in Botany, The University of Burdwan since 2013 to till date.
- Head of the Department Krishnanagore Government college (West Bengal Education Service) (2012-2013).
- Coordinator NAAC (2007) & Secretary Teacher Council (two years) Hooghly Mohsin College (West Bengal Education Service).

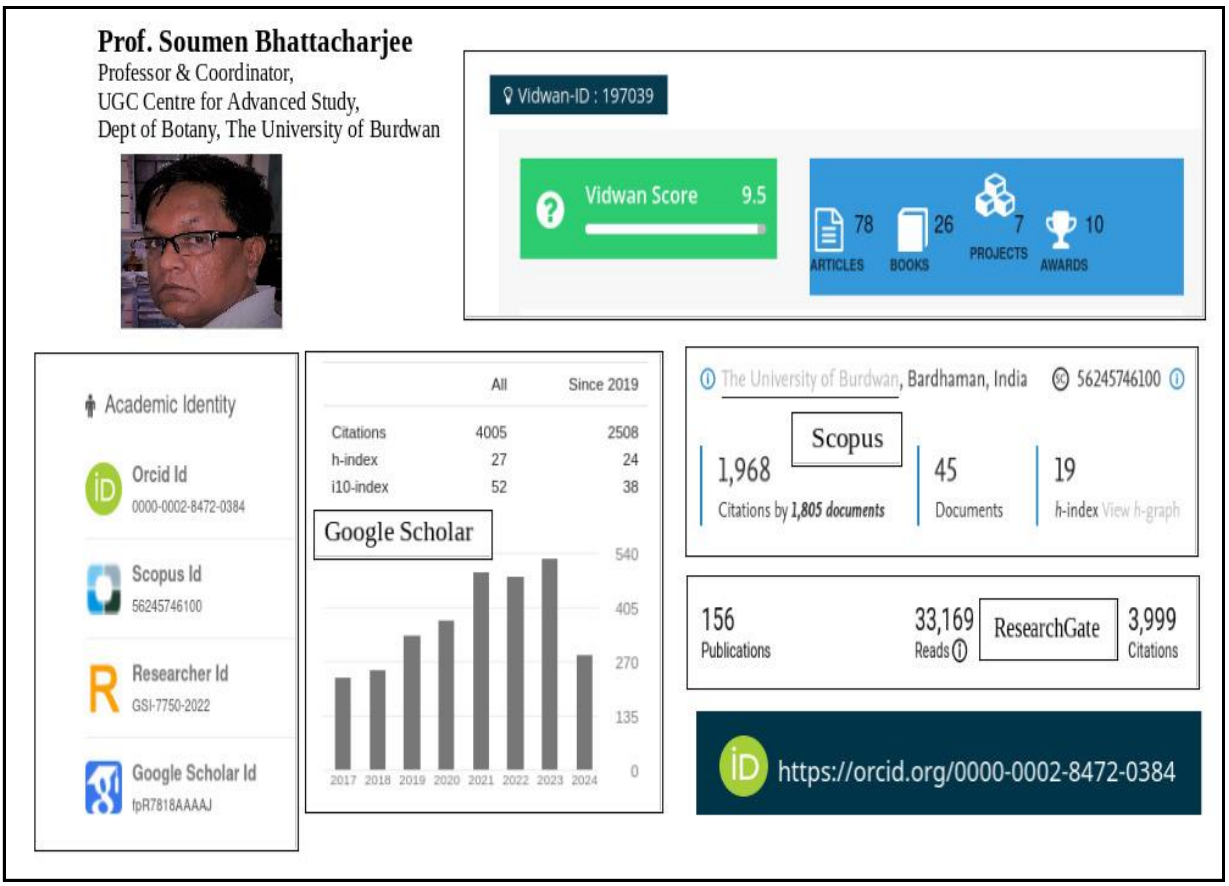
Personal Information

Residential address: 301, Phulpukur lane Chinsurah-712101, District - Hooghly

Soumen Bhattacharjee has teaching and research experience of more than twenty-nine years, while holding the position of Professorship in University of Burdwan for more than ten years. After pursing Ph.D on Plant Physiology & Molecular Biology (with UGC-CSIR Research fellowship and State funded fellowship), Dr. Bhattacharjee joined Sherubtse College, Bhutan ***(a constituent college of University of Delhi under Special act &Colombo plan****) in June 1995. In September 1997, Dr. Bhattacharjee left the job and joined West Bengal Education service (WBES) in Post Graduate Department of Botany, Hooghly Mohsin College and continued in the same service till November, 2013. In between, in 2007, Professor Soumen Bhattacharjee got selected* ***by Agricultural Scientist Recruitment Board (ASRB), Indian Council of Agricultural Research (ICAR) as Senior Scientist*** *and joined Vivekananda Institute of Parvatiya Krishi Anusandhan Sansthan (VPKAS, Almorah, Uttarakhand). In November 2013, Dr, Bhattacharjee got selected by the University of Burdwan, West Bengal, as Professor of Botany. During his entire research career, Dr. Bhattacharjee has pursued ten funded research projects (DST-SERB Govt of India, DSTBT, Govt of West Bengal, UGC, CSIR, DST-FIST, Govt of India, Royal Govt of Bhutan)* ***in the niche area of Plant Redox Biology with a total outlay of money more than Rs. 3.2 Crore****. He has also guided ten research scholars for their Ph.D. and at present 07 research scholars are actively pursuing research projects under his guidance for their Ph.D with funding from different agencies. He is also an active member of several International and National Research bodies, like European Society of Free Radical Biology, Society of Plant Biology, Expert member of AYUSH & Medicinal Plant Board, Government of West Bengal etc. Dr. Bhattacharjee published three books including a monograph with Springer Nature. He has published more than 150 research papers in several International and national peer reviewed Journals with citations more than 4100 and h-index and* 1_{10} *indexes 28 and 54 respectively. Dr Bhattacharjee also got* ***selected as top 2% Scientist of the World by Stanford University*** *ranking for the four successive years (2021,2022,2023, and 2024. He is also selected by* ***Scholar GPS™ (California, USA) as Highly Ranked Scholars™ (11th rank in the World****) based on his lifetime or prior five-year activity in the field* ***REACTIVE OXYGEN SPECIES*** *in the year 2024.*

▣ Academic identity / Links/ Research website

WEBSITE	LINK
VIDYAN Info	19709
VIDYAN Link	http://vidyan.inflibnet.ac.in/profile/197039
Goggle Scholar	**https://scholar.google.co.in/citations?hl=en&user=fpR7818AAAAJ** **Google Scholar Citation: 4100** **I_{10} index: 54** **h-index: 28**
ORCID Info	https://orcid.org/0000-0002-8472-0384
ScholarGPS™	https://scholargps.com/highly-ranked-scholars?year=2022&ranking_duration=LAST_5_YEARS&specialty=Reactive+oxygen+species&p=1&e_ref=dc2a9aef5d7c86c3b2be ScholarGPS™ World Rank in 2024: 11
Scopus ID	56245746100



Research Website: http:tinyurl.com/botany24

Education

Ph.D. (2000), Plant Physiology & Biochemistry, University of Burdwan, West Bengal, India
Doctoral Thesis Title: *Abiological stress induced metabolic disfunction in Amaranthus lividus (L.) with special reference to amelioration, membrane damage and changing protein profile.*
Research Fellowship awarded: UGC (JRF), West Bengal Government State Funded Research Fellowship, IISc, Bangalore Fellowship (Selected)

M.Sc.
Botany, University of Burdwan, West Bengal, India
Specialization: *Plant Physiology & Biochemistry*
Year: 1991
Remarks: **1st Class. University rank holder.**

B.Sc
Botany Hons, Chemistry, Zoology (Minor), University of Burdwan, West Bengal, India
Year: 1988.
Remarks: **Ranked 1st class 1st in Part II Exam & University position holder.**

Other Professional qualifications: UGC-CSIR NET (JRF), ICAR NET

Other Research attainments

Selected by **Agricultural Scientist Recruitment Board, Indian council of Agricultural Research, Govt. of India (ICAR) for the post of Senior Scientist (ARS, Plant Physiology)** and posted at Vivekananda Institute of Hill Agriculture (VPKAS), Almora, Uttarakhand in the year 2007.

Professional experience (*in chronological order – Last 5*)

Sl.	Designation	Name of the Institute / Organization & Appointment Letter no.	Responsibility	Duration
1.	**Professor of Botany**	The University of Burdwan, Burdwan, West Bengal.	Teaching, and Research, Administrative Role: (Former Head of the Department, Coordinator, UGC-Center for Advanced Study since 2016, and Director, Internal quality assurance Cell (IQAC)	05/11/2013 to till date (**Total tenure as Professor 11 years**)

2.	**Associate Professor & Reader (WBES)**	West Bengal Education Service (Department of Higher Education, Government of West Bengal) Posted at Post Graduate Department of Botany, Hooghly Mohsin College & Krishnanagar Government College	Teaching, Research. Head of the Department.	July 2007 to October 2013
3.	**Senior Scientist, ARS (ICAR, Govt. of India)**	Indian Council of Agricultural Service (ICAR), VPKAS, Almora	Mandate Research, Sectional Head	June 2007 on lien period
4.	**Lecturer/Senior Lecturer**	West Bengal Education Service Posted at Post Graduate Department of Botany, Hooghly Mohsin college.	Teaching, Research Coordinator NAAC	September 1997 to June 2006
5.	**Lecturer in Botany**	Sherubtse College, (University of Delhi, Under Special act & Colombo Plan of the Government of India)	Teaching, Research	June 1995 to August1997

⧈Research activity

Research domain

Plant Redox Biology & Phytochemistry of Bioactive compounds of Underutilized Medicinal Plants

Research funding

DST-SERB (Govt. of India), DST-FIST (Govt. of India), UGC-CAS (Govt. of India) DSTBT (Govt. of West Bengal), CSIR, UGC (Major), ICAR.

Number of research projects pursued: 10

Total outlay of money: 3.2 Crore

Legacy

Soumen Bhattacharjee has been working steadfastly for last three decades towards understanding the role of Redox Biology in biological processes like germination, morphogenesis (adventitious root formation) and abiotic stress response of crops. His Group has underscored the role of redox regulatory mechanisms in the origin of redox cue at metabolic interface responsible for conferring stress tolerance. His research has developed standard redox fingerprints based on Omics for fast and reliable screening of drought tolerant indigenous aromatic rice cultivars. His group while actively pursuing two central government funded research projects unfolded the role of redox biology in regulating grain yield and aroma stability (2-acetyl-1-pyrroline) under drought in aromatic rice. Currently, his group is working to understand the role of redox candidates in stress reminiscence and tolerance. He also took keen interest in exploring the natural sources of bioactive peptides and polyphenolic compounds from underutilized medicinal crops and their inclusion in crop diversity program of West Bengal. He has mentored several doctoral scholars and has delivered invited or plenary speeches at seminars and conferences. *His research contribution in ROS Biology can be vouched by his selection in top 2% Scientist of the World by Stanford University ranking for the four successive years (2021,2022,2023, and 2024. He is also selected by ScholarGPS™ (California, USA) as Highly Ranked Scholars™ (11th rank in the World) based on his lifetime or prior five-year activity in the field REACTIVE OXYGEN SPECIES in the year 2024.*

Research Projects pursued

Sl.	Title	Project cost (Rs.)	Duration & Sanction no	Role as PI/ CoPI	Agency	Status
1.	Fingerprinting bioactive polyphenolic compounds and peptides from some advanced accessions of Amaranthus hypochondriacus L. and exploring their anti-degenerative medicinal properties for utilization in crop diversification program of West Bengal.	**26, 28228.00** (Rupees Twenty-Six Lakh twenty-eight thousand and two hundred twenty-eight only).	Three years. **Sanction Memo no. 2361(Sanc.)STBT 11012(27)/3 /2024-ST SEC, dated 21/03/2024]**	PI	Department of Science and Technology & Biotechnol ogy, (DSTBT), Govt. of West Bengal	Running
2.	Modeling redox landscape and identification of candidate hub	**4239807.00** (Rupees	Three years.	PI	DST-SERB	Running

	genes regulating drought stress induced physiology of flag leaves and kernel aroma quality (2-acetyl-1- pyrroline) in indigenous aromatic rice cultivars of Rarh West Bengal	Fourty two Lakh thirty-nine thousandeight hundred seven)	**Sanction no. DST No: CRG/2021/000513. 28/12/2021**		Govt of India	
3.	Plant- environment, microbe interaction for augmenting agricultural productivity and restoring biodiversity of floras of Southern west Bengal	**10800000.00** (One Crore eighty thousand only)	Five years **Sanction no. SR/FST/LS-1/2018/188©, Dated, 01.10.2019**	CO-PI	DST-FIST Govt of India	Running
4.	Screening Amaranths commonly cultivated in Gangetic West Bengal for their Photochemicals having Antioxidant properties and stress tolerance attributes.	**1676920.00** (Sixteen Lakh seventy-six thousand nine hundred twenty only)	Four years. **Sanction no.: 971 (Sanc.)/ST/P/S&T/1G-33/2016 17/01/2017**	PI	DSTBT, Govt of West Bengal	Completed
5.	Elucidation of role of MYB transcription factor in UV stress signaling in *Arabidopsis*	**2900000.00** (Twentynine Lakh only)	**Three years** **Sanc no. 38(1417)16/EMRII, 17/05/2016**	Co-PI	CSIR	Completed
6.	Understanding the relationship between oxidative stress, growth and yield potential with special reference to chemical management of oxidative stress for augmenting productivity in rice (*Oryza sativa* L. Cultivar Ratna and SR26B	**1560000.00** (Fifteen lakh sixty thousand only)	Four years **Sanc no. 42-429/2012(SR)16/07/2012.**	PI	UGC major Govt of India	Completed on June 2017
7	Biochemistry, genetics and biosystematics study of some selected medicinal plants of West Bengal	**8475000.00** (Eighty-four lakh seventy-five thousand	Five years **Sanc no. . F.5-**	**Coordinator (PI)**	UGC CAS, Phase II Govt of	Completed and settled on March 2020.

		only)	**13/2012(SAP-II), 28/02/2012**		India,	
8.	Assessment of the role of Reactive oxygen Species (ROS) in germination and early growth performances with special reference to their implication in acclamatory stress tolerance and signaling in three rice cultivars, Ratna, Hamilton and SR 26B	**450000.00** (Four Lakh fifty thousand only)	Three Years **Sanc no. F.PSU.012 /08-09 (ERO)**	**PI**	UGC, Govt of India	Completed
9.	Understanding the role of divalent Calcium in abiotic stress induced oxidative stress management and related membrane deterioration in a tropical leaf crop ***Amaranthus lividus*** L	**200000.00**	Three years **Sanc. no PSW. 007/04 – 05, Dated 31.03.2005**	**PI**	UGC, Govt of India	Completed
10	Heavy metal and chilling stress impact on in some climate resilient crop suitable for higher altitude	Institutional funding.	Two years Sanction no.	**PI**	Royal Govt. of Bhutan	Completed

⊡ Ph. D guidance and Research group

Name of the Ph D Scholar	**Funding body Registration status**	**Nature, whether awarded Ph.D**	**Sub-discipline**
Ananya Chakrabarty	UGC R-Ph.D./Regn./Sc./Bot./148	**UGC Fellow, Ph.D awarded**	Plant Redox Biology and stress acclimation
Manashi Aditya	State Govt. R-Ph.D./Regn./Sc./Bot./147	**State Fellow, Ph.D awarded**	Phytochemistry & Antioxidant
Sudeshna Duitta	Botanical Survey of India R-Ph.D/Regn/Sc/Bot/163/1(4)	**BSI Fellow (MoEF), Ph.D awarded**	Phytochemistry of Bioactive Secondary Metabolite
Nabanita Banik	Govt. of West Bengal R-Ph.D/Regn/Sc/Bot/A/146	**Ph.D awarded (University Fellow)**	Plant Redox Biology
Nivedita Dey	Govt. of West Bengal R-Ph.D./Regn./Sc./Bot./55	**State Fellow Ph D awarded**	Plant Redox Biology

Durga Kora	CSIR R-Ph.D/Regn/Sc/Bot/	**UGC Fellow, Ph D Awarded**	Plant Redox Biology
Uthpal Krishna Roy	ICCR (Govt of India) R-Ph-D./Regn./Sc./Bot./160/1(4)	**ICCR Overseas Fellow, Ph D Awarded**	Plant Redox Biology
Debasmita Sen	DSTBT (Govt of West Bengal) R-Ph.D/Regn/Sc/Bot/212	**DSTBT (WB) Fellow. Ph D Awarded**	Plant Redox Biology
Ananya Dey	R-Ph.D/Regn/Sc/Bot/583 CSIR	**CSIR Fellow Ph D Awarded**	Plant Redox Biology
Babita Pal	R-Ph.D/Regn/Sc/Bot/110 CSIR	**CSIR Fellow Ph.Dthesis submitted**	Redox Biology of Seed
Angnideepa Pal	R-Ph.D/Regn/Sc/Bot/126 UGC	**UGC Fellow**	Phytochemistry and Ethnomedicine
Piyali Dutta	DST-SERB	**DST-SERB Fellow**	Plant Redox Biology
Shilpa Gangopadhyay	State Funded (University Fellowship)	**State Funded Fellow (Govt of West Bengal)**	Agricultural Phytochemistry & phenotyping
Ria Dey	DST-Inspire (Govt of India)	**DST-INSPIRE**	Plant Redox Biology
Ankita Dhara	Department of Science & Technology & Biotechnology (Govt of West Bengal)	**DSTBt (Govt of West Bengal)**	Agricultural Phytochemistry

Also guided more than 120 students for their M.Sc dissertation projects.

Scientific contribution

The foremost contribution associates our understanding of role of redox regulation in metabolic orchestration and reprograming of gene expression associated with abiotic stress responses and morphogenesis in crop plants. The concept of regulation of "Oxidative Window' at metabolic interface involving antioxidant-coupled redox buffering with subsequent influence of hormonal signaling and reprogramming of gene expression during germination of orthodox rice seeds is established. Work also decoded the impact of redox landscape and identification of redox sensitive candidate hub genes

regulating drought stress induced physiology of flag leaves and kernel aroma quality (2-acetyl-1- pyrroline) in indigenous aromatic rice cultivars of Rarh West Bengal.

Member of Scientific body

Member of European Society of Free Radical Biology, Plant Physiology Forum, Indian Botanical Society, Society of Plant Biology etc**.**

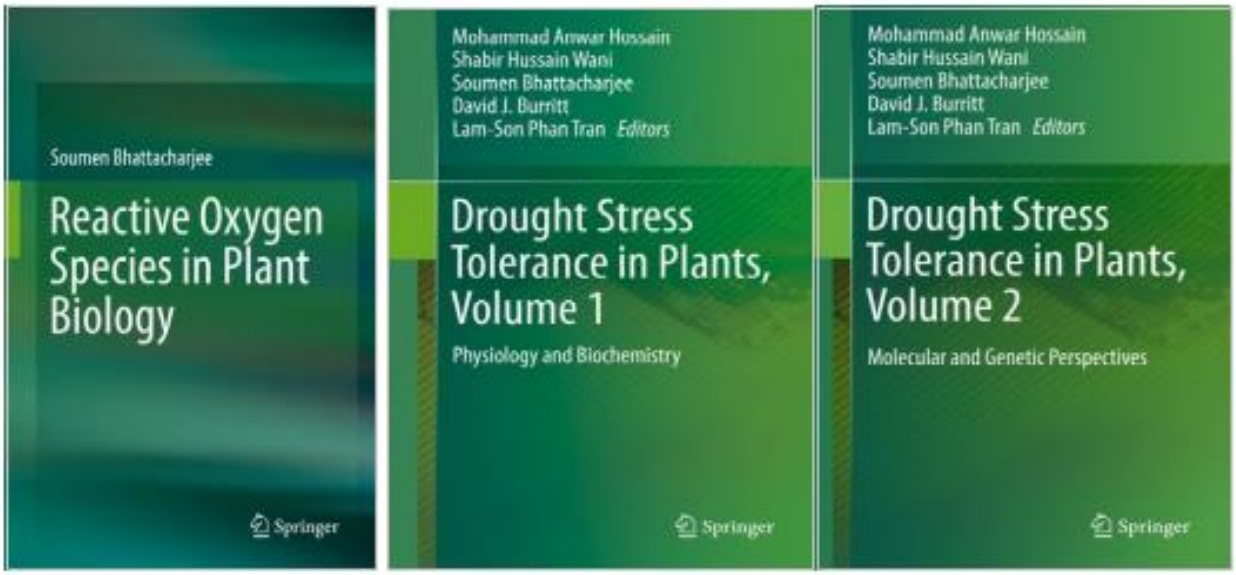
Research collaboration

1. Plant Chemistry section, Botanical Survey of India, Shibpur, Howrah (Working with Institutional **MoU, Collaborating Scientist: Dr Tapan Sil, Plant Chemistry Section, Scientist E, BSI)**),

2. Institute of Genomics for Crop Abiotic Stress Tolerance, Texas Tech University, USA & Cell Signaling unit, Riken Centre for Sustainable Resource Science, Yokohama, Japan RIKEN, Japan (Collaborating Scientist Professor Lam-Son phan Tran)

Research Impact

Published more than 150 research papers, out of which 86 papers are published in different international peer reviewed SCI journals of Springer Nature, Springer International, Nature Portfolio, Elsevier, Francis and Tailor, CRC Press, Frontiers group of publishing, Nova Pub. etc. with **cumulative Impact factor more than 130 (Thompson & Reuter).** As per Google Scholar, **total citation of articles is more than 4100 and I_{10} index and H-index are 54 & 28 respectively. Publications are outcome of ten funded Research projects (DST SERB, DST-FIST, CSIR, UGC-CAS, DSTBT WB, UGC etc.) with outlay of sanctioned amount more than 3.2 crore rupees. Authored one Monograph on Reactive Oxygen Species in Plant Biology in 2019 (Published by Springer Nature,** DOI: 10.1007/978-81-322-3941-3, ISBN: 978-81-322-3939-0). Also Published two books on Drought stress in 2016 (Springer International **Switzerland** DOI 10.1007/978-3-319-28899-4 & 10.1007/978-3-319-28899-4). Got s*elected by Scholar GPS™ (California, USA) as Highly Ranked Scholars™ (11th rank in the World) based on his lifetime or prior five-year activity in the field REACTIVE OXYGEN SPECIES in the year 2024.*



▣ Publications *(List of some Books & papers published in SCI Peer reviewed International Journals)*

Monographs & Books in Springer Nature / Springer International

1. Bhattacharjee S. **Reactive Oxygen species in Plant Biology.** (2019). **Springer Nature.** DOI: 10.1007/978-81-322-3941-3, ISBN: 978-81-322-3939-0

2. Drought Stress Tolerance in Plants, Volume 1: Physiology and Biochemistry. Eds. Hossain MA, Wani, SH, **Bhattacharjee Soumen**, Buritt, D, Son Lam. (2016). **Springer International Pub. Switzerland**. DOI: 10.1007/978-3-319-28899-4.

3. Drought Stress Tolerance in Plants Vol 2: Molecular and Genetic perspective: Eds. Hossain MA, Wani, SH, **Bhattacharjee Soumen**, Buritt, Son Lam. (2016).. **Springer International Pub. Switzerland**. DOI: 10.1007/978-3-319-28899-4. Date of publication Aug. 15, 2016.

4. **Basic science & Future challenges**. Eds. Soumen Bhattacharjee & Arghya Panigrahi. **Govt. of West Bengal Pub**., 2008. **ISBN: 978-81-908801-1-4.**

Research papers published in International Peer reviewed SCI Journals

1. Dey UKR, Pal B, Bhattacharjee S (2024). A novel approach for screening salinity tolerant rice germplasms exploring redox-regulated cytological fingerprints. **Rice Sci (Elsevier**). In Press. Man # Rice Sci-2024-0132.R3. **Impact factor: 5.6**

2. Pal B, Bhattacharjee S (2024). Redox interactome status, metabolic, and transcriptional reprograming associated with longevity phenotypes as seed viability markers in natural and accelerated aged seeds of indigenous aromatic rice cultivars. **Plant Grow Regln (Springer Nature).** Man # JPGR-D-24-00702R2 (On rev). **Impact factor: 4.7**

3. Dey N, Bhattacharya T, Bhattacharjee S (2023) Decoding the Impact of Drought Stress Induced Redox-Metabolic Shift in Flag Leaf During Grain-Filling Stage on Kernel Aroma Quality and Productivity in Some Indigenous Aromatic Rice Cultivars of West Bengal, India. **Journal of Plant Growth Regulation. Springer Nature**. DOI: https://doi.org/10.1007/s00344-023-11042-8. **Impact factor: 4.7**

4. Dey, N., Bhattacharjee, S. Comparative transcriptomic data confirm the findings of dehydration stress-induced redox biology of indigenous aromatic rice cultivars. ***3 Biotech*** **(Springer Nature) 13**, 392 (2023). https://doi.org/10.1007/s13205-023-03829-z. **Impact factor: 2.9**

5. Pal B, Bhattacharjee S (2023) Herbal and chemical seed potentiations improve the redox health of aged seeds of indigenous aromatic rice cultivars through regulation of oxidative window, gene expression, and restoration of hormonal homeostasis. **Physiol and Mol Biol of Plants (Springer Nature) DOI: https://doi.org/10.1007/s12298-023-01375-9. Impact factor: 3.7**

6. Dey, A., Bhattacharjee, S. (2023). Imbibitional redox and hormonal priming revealed regulation of oxidative window as a key factor for progression of germination of indica rice cultivars. **Physiol Mol Biol Plants. (Springer Nature).** https://doi.org/10.1007/s12298-023-01303-x. **Impact factor: 3.7**

7. Kora, D, Dey A, Pal B , Roy U.K., Dey N, Bhatacharjee T, Bhattacharjee S (2023). ROS-hormone interaction in regulating integrative defense signaling of plant cell, ***Biocell***, 023 47(3): 503-521. DOI: 10.32604/biocell.2023.025744. **Impact factor:1.4**

8. Roy U.K. and Bhattacharjee S (2022). Exploring the parameters of central redox hub for screening salinity tolerant rice landraces of coastal Bangladesh. ***Scientific Reports. Nature Portfolio*** | (2022) 12:12989 | **https://doi.org/10.1038/s41598-022-17078-2. Impact factor: 4.9**

9. Bhattacharjee, S., Chakrabarty, A., Kora, D. *et al.* (2022) Hydrogen Peroxide Induced Antioxidant-Coupled Redox Regulation of Germination in Rice: Redox Metabolic, Transcriptomic and Proteomic Evidences**.** ***Journal of Plant Growth Regulation.*** **Springer Nature**.https://doi.org/10.1007/s00344-022-10615-3. **Impact factor: 4.7**

10. Dey A, Bhattacharjee S (2022). Temporal Regulation of Oxidative Window and Hormonal Homeostasis Are the Key Events Regulating Germination Under Salinity and Oxidative Stress. ***Journal of Plant Growth Regulation.s*** **Springer Nature** https://doi.org/10.1007/s00344-022-10756-5. **Impact factor: 4.7**

11. Kar A, Bhattacharjee S (2022) Bioactive polyphenolic compounds, water-soluble vitamins, *in vitro* anti-inflammatory, anti-diabetic and free radical scavenging properties of underutilized alternate crop *Amaranthus spinosus* L. from Gangetic plain of West Bengal. ***Food Bioscience. Elsevier.*** 50(A), 102072. DOI https://doi.org/10.1016/j.fbio.2022.102072. **Impact factor:4.8**

12. Aditya M, Sen D, Bhattacharjee S (2022). Drought tolerance promoted by complementation of ascorbate-glutathione system and antioxidant-rich phytochemicals in *Amaranthus hypochondriacus* L. ***JSFA Reports. Wiley*** **DOI http://doi.org/10.1002/jsf2.89. Impact factor: 4.9**

13. Datta S, Bhattacharjee S and T. Seal (2022). Anti-diabetic, anti-inflammatory and anti-oxidant properties of four underutilized ethnomedicinal plants of West Bengal, India: an in vitro approach. ***South African Journal of Botany. Elsevier*** (2022), **https://doi.org/ 10.1016/j.sajb.2022.06.02. Impact factor: 3.1**

14. Sen D, Bhattacharjee S. Genetic and seasonal variability of bioactive polyphenolic compounds and antioxidant-based phytonutrient promise of diverse vegetable amaranths of Indo-Gangetic plains of West Bengal. **JSFA Reports (Wiley).** 2022;1–15. https://doi.org/10.1002/jsf2.34. **Impact factor: 4.9**

15. Mohammad A. Hossain, Soumen Bhattacharjee, Saed-Moucheshi Armin, Pingping Qian, Wang Xin, Hong-Yu Li, David J. Burritt, Masayuki Fujita and Lam-Son P. Tran. Hydrogen Peroxide Priming Modulates Abiotic

Oxidative Stress Tolerance: Insights From Ros Detoxification And Scavenging Mohammad A. In: Anjum, N. A., et al. , eds. (2022). Recent Insights Into the Double Role of Hydrogen Peroxide in Plants. **Lausanne: Frontiers Media SA**. **doi: 10.3389/978-2-88974-524-1. Impact factor: 5.7**

16. Kar A, Bhattacharjee S. (2022) Exploring Polyphenol Based Bioactive Antioxidants of Underutilized Herb Amaranthus Spinosus L. for Medicinal Purposes. ***J Explor Res Pharmacol***;. **doi: 10.14218/JERP.2022.00012.**

17. Banik N, Dey N, Bhattacharjee S (2022) Salinity induced redox metabolic shift influence hormonal profile and germination performance of two contrasting indica rice cultivars. **Ann Syst Biol** 5(1): 001-007. DOI: https://dx.doi.org/10.17352/asb.000016.

18. Nabanita Banik, Durga Kora and, Uthpal Krishna Roy, Soumen Bhattacharjee*. (2022). LC-MS/MS Based Label Free Quantitative Shotgun Proteomics Revealed Contrasting Responses of Rice Germplasms towards Salinity and Identified Expression of Redox-Regulatory Proteome. **J Genetic Engg & Biotech Res**, 4(2),183-194. **DOI: https://dx.doi.org/10.33140/JGEBR. Impact factor: 1.2**

19. Sen D, Aditya M, Bhattacharjee S (2022). Polyphenol based therapeutic potential of Amaranths. In : A closer look into Polyphenolics. Nova Sci Pub Inc, New York, USA DOI: https://doi.org/10.52305/QQNR6474

20. Kora, D**.,** Bhattacharjee, S., 2021. Redox regulation of adventitious root formation through downstream changes in hormonal system in mung bean [*Vigna radiata* (L.) R. Wilczek]. **Ann Syst Biol** 4(1): 005-012. Doi: https://dx.doi.org/10.17352/asb.000011

21. Kora D and Bhattacharjee S (2020) The interaction of reactive oxygen species and antioxidants at the metabolic interface in salicylic acid-induced adventitious root formation in mung bean [*Vigna radiata* (L.) R. Wilczek]. **Journal of Plant Physiol. (Elsevier). doi: 10.1016/j.jplph.2020.153152. Impact factor: 4.3**

22. Kora D and Bhattacharjee S (2020). Redox gateway associated with adventitios root formation under stress and hormonal signaling in plants. **Current Science.** 119(03) 462-472. **doi :10.18520/CS/v119/i3/462-472. Impact factor: 1.1**

23. Banik N and Bhattacharjee S. (2020) Complementation of ROS scavenging secondary metabolites with enzymatic antioxidant defense system augments redox-regulation property under salinity stress in rice.

Physiology and Molecular Biology of Plants. Springer Nature. DOI 10.1007/s12298-020-00844-9. Impact factor: 3.7

24. Dey N and Bhattacharjee S (2020) Accumulation of polyphenolic compounds and osmolytes under dehydration stress and their implication in redox regulation in four Indigenous Aromatic Rice Cultivars. **Rice Science. Elsevier.** 27(4): 329-344.DOI: **https://dx.doi.org/10.33140/JGEBR. Impact factor: 5.6**

25. Aditya M, Sen D, Bhattacharjee S (2020). Amaranth: A reservoir of antioxidant- based phytonutrient for combating degenerative diseases. **Plant Natural Product Chemistry (Bioactive compounds). Elsevier. DOI:http://doi.org/10.1016/B978-0-819483-6.00003-5. Cite score: 3**

26. Chakrabarty A, Banik N, Bhattacharjee S (2019). Redox regulation of germination in an indica rice cultivar (*Oryza sativa* L. Cultivar Ratna). **Physiol & Mol Biol of Plants. Springer Nature**. **DOI: 10.1007/s12298-019-00656-6. Impact factor: 3.7**

27. **Dey N, Roy UK, Aditya M and Bhattacharjee S (2020)** Defensive strategies of ROS in programmed cell death associated with hypertensive response in plant pathogenesis. **Annals of Systems Biology** 3(1): 001-009. DOI: 10.17352/asb.000004

28. Dey N and Bhattacharjee S. Oxidative Membrane Lipid Peroxidation and Accumulation of Redox Sensitive Polyphenolic Compounds Serves as Sensitive Redox-Metabolic Biomarkers of Drought Stress of Rice**. Aust. J Plant Biol.** 2019; 5(1): 1021. **Impact factor: 1.5**

29. **B**hattacharjee S. 7 Dey N. (2017). Redox metabolic and molecular parameters for screening drought tolerant indigenous aromatic rice cultivars. **Physiol & Mol Biol of Plants. Springer Nature. DOI :10.1007/s12298-017-0484-1. Impact factor: 3.7**

30. Dutta S , Sinha B.K. Bhattacharjee S. Seal T. (2019). Nutritional composition, mineral content, antioxidant activity and quantitative estimations of water soluble vitamins and phenolics by RP-HPLC in some lesser known wild edibles. **Heliyon. Elsevier. DOI: 10.1016/J.helion.2019e01431. Impact factor: 3.4**

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Some Book Chapters

1. Sen D, Aditya M, Bhattacharjee S (2021). Polyphenol Based Therapeutic Potential of Amaranths. In A Closer Look at Polyphenolics. **Nova Sc. Pub Inc. Hauppauge, NY 11788-3619, USA. DOI: https://doi.org/10.52305/QQNR6474**

2. Bhattacharjee S. (2019) ROS and Oxidative Stress: Origin and Implication. In Reactive Oxygen Species in Plant Biology, **Springer Nature, pp- 1-31. DOI: https://doi.org//10.1007/978-81-322-3941-3_1.**

3. Bhattacharjee S. (2019) ROS and Antioxidants: Relationship in Green Cells. In Reactive Oxygen Species in Plant Biology, **Springer Nature, pp- 33-63. DOI: https://doi.org//10.1007/978-81-322-3941-3_2.**

4. Bhattacharjee S. (2019) ROS in Aging and Senescence. In Reactive Oxygen Species in Plant Biology, **Springer Nature, pp- 65-79. DOI: https://doi.org//10.1007/978-81-322-3941-3_3.**

5. Bhattacharjee S. (2019) ROS and Oxidative Modification of Cellular Component. In Reactive Oxygen Species in Plant Biology, **Springer Nature, pp- 81-105. DOI: https://doi.org//10.1007/978-81-322-3941-3_4.**

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Editor & Reviewer of Journals

- Associate Editor, Plant Growth Regulation, Springer Nature. Impact Factor 4.7, Cite Score 7, 2023-2024.
- Associate Editor, Frontiers in Plant Science, Impact Factor 5.6, Cite Score 7.3.
- Reviewer of several peer reviewed SCI journals of Sprinter Nature, Elsevier, Francis Tailor, Frontiers group etc.

Recognitions

1. *Selected by ScholarGPS™ (California, USA)* ***as Highly Ranked Scholars™ (11th rank in the World) based on his lifetime or prior five-year activity in the field REACTIVE OXYGEN SPECIES in the year 2024.***
2. Selected as **top 2% scientistsof the World by Stanford University Ranking**, in 2021,2022, 2023 & 2024.
3. Selected as **Expert committee member of AYUSH & MEDICINAL PLANTS by Government of West Bengal** in the year 2023.
4. Selected as **Member of European Societyof Free Radical Research in 2020.**

5. Selected as **Coordinator, UGC Center for Advanced Study**, Department of Botany, University of Burdwan in the year 2016.

6. Member, Screening Committee for Research Associate, MoEF & CC-Botanical Survey of India.

7. Delivered **Lead Lecture and received felicitation award in the International Symposium Organized by Botanical Survey of India**, on 13.02.2023.

8. Delivered Special invited lecture at Kalyani University and **received Felicitation award for contribution in Plant Biology in 2024.**

9. Delivered Key note address in **Agri 2021 Global conference, Spain**.

10. Delivered **Lead Lecture in the International Symposium Organized by Botanical Survey of India**, on 13.02.2019

11. Delivered **Prestigious S. M. Sirkar Memorial Lecture at Bose Institute, Kolkata** for the year 2018, and felicitated by Plant Physiology Forum, India.

12. Delivered **Lead Lecture in the International Conference and received award for contribution in Science, Organized by Adamas University**, Kolkata, on April 09, 2018.

13. **Delivered Plenary Lecture in National Seminar on Plant Physiology for sustainable development at Benaras Hindu University**, Benaras, UP, on March 4th, 2016.

14. **Participatory Scientist in Special Workshop on "Advance Biotechnology for All Level of Scientists"** Organized by Department of **Science and Technology, Government of India at The Energy Research Institute (TERI).** New Delhi from 08.11.2010 to 13.11.2010.

International Academic Exposure

Worked as Lecturer in Botany for more than two years (from June 1995 to Aug 1997) in **premier Institute of Royal Government of Bhutan, SAARC Country** (Sherubtse College, Kanglung East Bhutan) and taught curriculum of University of Delhi besides also involved in research work.

Organizing National Seminar / Symposium / Conferences/ Refresher courses

1. ***Acted as Convener of 2nd Botanical Congress 2024 on*** **Plant Science and Society,** ***23rd-24th March, 2024,*** Organized by Department of Botany, The University of Burdwan in collaboration with Botanical Society of Bengal & Indian Institute of Agricultural Biotechnology (ICAR) & Botanical Survey of India.

2. ***Acted as Organizing Secretary*** **of** ***National Seminar on Contemporary progress in Plant Sciences,*** March 20-21, 2015 Organized by UGC Center for Advanced Study, Department of Botany, The University of Burdwan.

3. ***Organized Refresher Course on Life Science as Convener in HRDC***, The University of Burdwan in the year 2015.

4. ***Resource person of several Refresher courses in Life Science,*** Environmental Science organized by HRDC, The University of Burdwan & Calcutta University since 2015.