FACULTY ACADEMIC PROFILE/ CV

1. **Full name of the faculty member**: ……Dr SUDIPTA RAY……
2. **Designation**: ……ASSISTANT PROFESSOR……..
3. **Specialisation** : FUNCTIONAL GENOMICS, MOLECULAR BIOLOGY AND PLANT BIOTECHNOLOGY
4. **Contact information** :

Dr.Sudipta Ray; Department of Botany, University of Calcutta, 35, Ballygunge Circular Road, Kolkata 700019

6. **Academic qualifications**:

College/ university from which the degree was obtained	Abbreviation of the degree
University of Calcutta	B.Sc
University of Calcutta	M.Sc
Jadavpur University/ Bose Institute	PhD

7. **Positions held/ holding:** ASSISTANT PROFESSOR ……

8. **Research interests**:
   - PLANT STRESS BIOLOGY……
   - HOMOLOGOUS RECOMBINATION…….
   - ANTIMICROBIAL PEPTIDE…….

9. **Research guidance** :

   Number of researchers awarded M.Phil/ Ph.D degrees : …2+1(Thesis submitted)…
   Number of researchers pursuing M.Phil/ Ph.D : ……4……

10. **Projects :**

Completed projects :

- DST Project "Identification of novel drought tolerant gene(s) by comparative analysis between rice and Sorghum: Isolation and validation through bacterial and inplanta expression"
- DBT Project "Identification cloning and characterization of novel gene(s) and protein(s) involved in homologous recombination in moss Physcomitrella patens"
- CSIR Project "Identification, cloning and characterization of glycine proline rich protein from Sorghum bicolor: Potentiality as an antimicrobial protein"

- WBDBT Project *"In planta* validation for co-expressing dehydrin gene(s) along with gene(s) involved in RFO biosynthesis for improving drought and salinity stress tolerance"

Current projects :

11. **Select list of publications**:

a) ***Journals:***

Sl. No.	Author(s)	Title	Name of the Journal	Volume	Page	Year
1.	Nirmalendu Biswas, Sachinath Bera, Nayim Sepay, Amrita Pal, Tanmoy Halder, **Sudipta Ray**, Swarnali Acharyya, Anup Kumar Biswas, MichelG. B. Drew and Tapas Ghosh	Simultaneous formation of non-oxidovanadium(IV) and oxidovanadium (V) complexes incorporating phenol-based hydrazone ligands in aerobic conditions	*New Journal of Chemistry(RSC)*	44	3700-3716	2020
2.	Tanmoy Halder, Gouranga Upadhyaya, Shuddhanali Roy, Ria Biswas, Arup Das, Angshuman Bagchi, Tanushree Agarwal, **Sudipta Ray**	Glycine rich proline rich protein from *Sorghum bicolor* serves as an antimicrobial protein implicated in plant defense response	*Plant Molecular Biology*	101	95-112	2019
3.	RajeswariMukherjee, Abhishek Mukherjee, Subhendu Bandyopadhyay, Sritama Mukherjee, Sonali Sengupta, **Sudipta Ray**, and Arun Lahiri Majumder	Selective manipulation of the inositol metabolic pathway for induction of salt-tolerance in indica rice variety.	*Scientific Reports*	9	5358	2019
4.	PapriBasak, Shiny Sangma, Abhishek Mukherjee, Tanushree Agarwal, Sonali Sengupta, **Sudipta Ray**, and Arun Lahiri Majumder	Functional characterization of two myo-inositol-1-phosphate synthase (MIPS) gene promoters from the halophytic wild rice (Porteresiacoarctata).	*Planta*	248	1121-1141	2018
5.	Tanmoy Halder, Gouranga Upadhyaya, Chandra Basak, Arup Das, Chandrima Chakraborty, **Sudipta Ray**	Dehydrins Impart Protection against Oxidative Stress in Transgenic Tobacco Plants	*Frontiers in plant science*	9	136	2018
6.	Tanmoy Halder, Gouranga	YSK2 type Dehydrin (SbDhn1) from Sorghum bicolor showed improved	*Frontiers in plant science*	8	918	2017

	Upadhyaya, and **Sudipta Ray**	protection under high temperature and osmotic stress condition.				
7.	Tanushree Agarwal, Gouranga Upadhyaya, Tanmoy Halder, Abhishek Mukherjee, Arun Lahiri Majumder, and **Sudipta Ray**	Different dehydrins perform separate functions in Physcomitrella patens.	*Planta*	245	101-118	2017
8.	Tanmoy Halder, Tanushree Agarwal and **Sudipta Ray**	Isolation, cloning, and characterization of a novel Sorghum dehydrin (SbDhn2) protein.	*Protoplasma*	253	1475-1488	2016
9.	ParthaSarathiSaha, **Sudipta Ray**, Mainak Sengupta, and Sumita Jha	Molecular phylogenetic studies based on rDNA ITS, cpDNAtrnL intron sequence and cladode characteristics in nine Protasparagus taxa	*Protoplasma*	252	1121-1134	2015
10.	LilyGoswami, Sonali Sengupta, Sritama Mukherjee, **Sudipta Ray**, Rajeswari Mukherjee, and Arun Lahiri Majumder	Targeted expression of L-myo-inositol 1-phosphate synthase from Porteresiacoarctata (Roxb.) Tateoka confers multiple stress tolerance in transgenic crop plants	*Journal of plant biochemistry and biotechnology*	23	316-330	2014
11..	JollyChatterjee, Barunava Patra, Rajeswari Mukherjee, PapriBasak, Sritama Mukherjee, **Sudipta Ray**, Sanghamitra Bhattacharyya et al.	Cloning, characterization and expression of a chloroplastic fructose-1, 6-bisphosphatase from Porteresiacoarctata conferring salt-tolerance in transgenic tobacco	*Plant Cell, Tissue and Organ Culture (PCTOC)*	114	395-409	2013
12.	BarunavaPatra, **Sudipta Ray**, Andreas Richter, and Arun Lahiri Majumder	Enhanced salt tolerance of transgenic tobacco plants by co-expression of PcINO1 and McIMT1 is accompanied by increased level of myo-inositol and methylated inositol	*Protoplasma*	245	143-152	2010
13.	**SudiptaRay**, Barunava Patra, Aparajita Das-Chatterjee, Arnab Ganguli,	Identification and organization of chloroplastic and cytosolic	*Planta*	231	1211-1227	2010

	and Arun Lahiri Majumder	L-myo-inositol 1-phosphate synthase coding gene (s) in Oryza sativa: comparison with the wild halophytic rice, Porteresiacoarctata.				
14.	SonaliSengupta, Barunava Patra, **Sudipta Ray**, and Arun Lahiri Majumder	Inositol methyl tranferase from a halophytic wild rice, PorteresiacoarctataRoxb.(Tateoka): regulation of pinitol synthesis under abiotic stress.	*Plant, cell & environment*	31	1442-1459	2008
15.	BiswajitDas, Lily Goswami, **Sudipta Ray**, Shilpi Ghosh, Sanghamitra Bhattacharyya, Sampa Das, and Arun Lahiri Majumder	Agrobacterium-mediated transformation of Brassica juncea with a cyanobacterial (Synechocystis PCC6803) delta-6 desaturase gene leads to production of gamma-linolenic acid	*Plant cell, tissue and organ culture*	86	219-231	2006
16.	AparajitaDas-Chatterjee, , Lily Goswami, Susmita Maitra, Krishnarup Ghosh Dastidar, **Sudipta Ray**, and Arun Lahiri Majumder	Introgression of a novel salt-tolerant L-myo-inositol 1-phosphate synthase from Porteresiacoarctata (Roxb.) Tateoka (PcINO1) confers salt tolerance to evolutionary diverse organisms.	*FEBS letters*	580	3980-3988	2006

b) ***Book Chapter:***

Sl. No.	Author(s)	Title	Name of the Book	Page	Chapter	Year
1.	Tanmoy Halder and **Sudipta Ray**	Precision Farming :The Future Of Agriculture	Precision Agriculture and Sustainable Crop Production	543-551	31	2020
2.	Tanushree Agarwal and **Sudipta Ray**	Casein Kinase2 and Its Dynamism in Abiotic Stress Management	Protein Kinase and Stress Signaling in Plants : Functional Genomic Perspective	-	13	2020

12. **Awards :**

CSIR NET 2002
GATE 2002
DST BOYSCAST FELLOWSHIP 2010-11