History

Year of Establishment : 1913

History of the department : Teaching in Botany began in the University of Calcutta in the year1913 under the headship of Dr. C. C. Calder, the then superintendent of Royal Botanical Garden. Prior to that in the year 1912, Sir Taraknath Palit donated a large part of his property for the foundation of University College of Science and Technology, presently named as 'Tarak Nath Palit Shiksha Prangan'. That was the beginning of science teaching in Calcutta University, and then in 1913, Sir Rasbehari Ghosh donated a large sum of money for the creation of four chair professor posts, one each in Physics, Applied Mathematics, Chemistry and Botany. Prof. S P Agharakar was appointed as the first Ghosh Professor in Botany. Established in 1913, the PG Department of Botany, University of Calcutta, has been completed its Glorious 100 years and this century old Department is recognized for excellence in teaching and research in major areas of Plant Sciences in general. The Department has received funds from UGC [under COSIST Programme in two phases- 1984, 1989] and DST [FIST Programme 2004, 2010(Level 1)] in addition to funds received by faculty members individually or in groups from various funding agencies in form of major research projects.

The Centre of Advanced Study, Department of Botany, owes its inception to the cytogenetics laboratory of the Department of Botany, University of Calcutta, since Professor A.K. Sharma (the then Sri A.K. Sharma) joined this University in 1948 as Assistant Lecturer after the departure of Professor P.N. Bhaduri to Indian Agricultural Research Institute, New Delhi, under whom he had his initial training in chromosome study in this university. Since then, the emphasis of this laboratory was focused towards innovation of new methods for chromosome analysis, from any organ of the plant. Since inception till date, the Centre has been holding programmes of regular workshops, seminars and Colloquia on different aspects of emerging areas of Chromosome Research for the benefit of teachers and researchers alike.

Since inception in 1980, the identified thrust area had been on Cell and Chromosome research. In the Phase VI, the review committee had expanded the scope of the programme with the identified thrust area as "Plant genomics and Integrated Biology". As opined by Professor AK Sharma, FNA, in the First Meeting of Advisory committee (2011) of the CAS Phase VI programme, with introduction of integrative biology, all the faculty members who will be interested in working in an integrated programme of research will also participate. Prof. Sharma hoped that "with the introduction of expanded thrust area, the tempo of research will gradually be expanded. The department has also received the approval of implementing CAS Phase VII program from April 2016.

The Department maintains a Botanical garden since inception, a treasure of plant wealth, conservatory of rare, endangered species, trees and shrubs which are witness of glorious era of the Botany Department, catering to the needs of young botanists of today, attended by skilled gardeners.

The Herbarium cum Museum in the Department is one of the oldest in the country and is being renovated under UGC-UPE programme.

Special award/ recognition from UGC or related statutory body: UGC CAS SAP PHASE VII (April 2016)

Alumni Association of the Post Graduate - Botany

Academic

Faculty members :

Name Designation Area of specialisation Email Phone number

Ruma Pal

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[Profile]Professor Cell Biology &Toxicology anitamukherjee28@gmail.com +919831061998

Bratati De

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bratatide2@gmail.com +919831120700

Subir Bera

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Asoke Kumar Biswas

[Profile]Professor Plant Physiology & Biochemistrydr.biswasak@yahoo.co.in +919831701816

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[Profile]Professor Cytogenetics and Plant Biotechnology sandip135@yahoo.com +919433034351

Krishnendu Acharya

[Profile]Professor Molecular Mycology & Plant Pathology krish_paper@yahoo.com +918013167310

Rita Kundu

[Profile]Professor Cell Biology &Genetics kundu_rita@yahoo.co.in +919836155410

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Binay Chaubey (on lien)

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Santanu Paul

[Profile]Associate Professor Cell Biology spaul_1971@yahoo.com +919874192648

Karabi Dutta

[Profile]Reader Plant Molecular Biology & Biotechnology krbdatta@yahoo.com +91983058205

Maumita Bandyopadhyay

[Profile]Assistant Professor Plant Molecular Cytogenetics and Biotechnology maumita.bandyopadhyay@gmail.com +919830324204

Surekha Kundu

[Profile]Assistant Professor Molecular Mycology & Plant Pathology surekha_kundu@yahoo.com +919874286840

Sudipta Roy

[Profile]Assistant Professor Plant Molecular Biology and Biotechnology essar75@yahoo.co.in +919433065760

Debabrata Maity

[Profile]Assistant Professor Taxonomy & Biosystematics debmaity@yahoo.com +919433088157

Susmita Das

[Profile]Assistant Professor Phytochemistry & Pharmacognosy susouravipar@gmail.com +919433233639

Sourav Moktan

[Profile]Assistant Professor Taxonomy & Biosystematics sauravmkn@gmail.com +917384336285

Soumitra Paul

[Profile]Assistant Professor Plant Physiology & Biochemistrypsoumitra@ymail.com +919748605305

Courses

Programme	Level of study	Eligibility	Intake capacity
MSc in Botany	Post Graduate	Graduate with Honours. in Botany	55
PhD in Botany	Doctoral	Post Graduate in Botany/related subjects (Biochemistry/Microbiology/Genetics/Agriculture)	25

Research

Research scholars

Name	Research topic	Name of the supervisor	Date of registration
Abhishek Sadhu	A study of the effects of cerium oxide nanoparticles and its bulk form on Arabidopsis thaliana and Nicotiana tabacum	Dr. Maumita Bandyopadhyay	11.02.2016
Ahinshuk Barua	Palaeophytodiversity in Damodar Basin during Permian and its palaeoenvironmental implications.	Prof. Subir Bera	Registered for PhD (2014)
Amrita Pal Basak	Study of the anti-leukemic and anti-oxidant potential of some wild edible mushrooms of West Bengal: leading to chemical identification of the lead molecules.	Dr. Santanu Paul	Not registered-
Anamika Kumari	Evaluation of genetic polymorphism and assessment of phylogenetic relationships amongst Indian species of Calathea and Maranta	Prof. Sandip Mukhopadhyay	05.08.2014
Anandamoy Bandyopadhyay	Melittopalynogical and biolochemical investigations of natural honey samples from Sal (Shorea robust Roxb. ex Gaertner.) forested areas of West Bengal, India.	Prof. Subir Bera	Registered for PhD (2012)
Anashuya Biswas-Raha	DNA based Phylogeny tracing of Mosses	Prof. Mousumi Poddar Sarkar	25th November, 2013
Aniket Bhattacharya	Stress Biology	Prof. Rita Kundu	June,2013
Ankita Mridha	Evaluation of anti -proliferative and apoptotic potential of crude Indian algal extracts on human cancer	Dr. Santanu Paul	9.03.2015
Anwesha Biswas	Petrified wood remains from the Neogene of western Bengal Basin, India and its implications in palaeoenvironment and palaeophytogeography.	Prof. Subir Bera	Registered for PhD (2014)
Aritra Karmakar	RNAi Mediated Silencing of Phytic Acid Pathway Gene(s) to Reduce Phytic Acid Content in Rice	Dr. Karabi Datta	23.08.2011-Continuing. PhD Registered
Arpit Basu, CSIR, SRF	Stress biology of Rice	Dr. S. Kundu	2010
Arpita De	Genotoxicity of gold and aluminum oxide nanoparticles in plant and mammalian cells.	Prof. Anita Mukherjee	Registered

(30.06.2015)

Arpita Mondal Stress Biology Prof. Rita Kundu 29.05.2014

Arup Das Identification, cloning and characterization of novel gene(s) or protein(s) involved in homologous recombination Dr.Sudipta Ray Not Registered

Asmita Pal Cancer Cell Biology Prof. Rita Kundu Not Registered

Atreyi Choudhury Prof. Bratati De

Anindita Singh Roy Studies on phytoplankton diversity of different ecological niches in relation to nutrient dynamics Prof.Ruma Pal 05. 08. 2014

Binod Saradar Pollination ecology of guava in West Bengal Prof. Subir Bera Registered for PhD

Bipalb Kumar Bhowmick Chromosome evolution and expression of sex in some genera of Cucurbitaceae Prof. Sumita Jha Registered for PhD (2010)

Biswajit Mukherjee Non grass phytolith spectra of the Darjeeling and Arunachal Himalayas and their ecological significance. Prof. Subir Bera Registered for PhD

(2015)

Biswatosh Ghosh Ethology and Evolutionary Biology of mammalian system Prof. Mousumi Poddar Sarkar 24th July, 2012

Camellia Nandi Green algal diversity based on morphotaxonomy and cultural behaviour with special reference to genetic characterization of nuclear and plastidial markers of Zygnemataceae and Cladophoraceae. Prof. Ruma Pal 12.02.2016

Chandra Basak Identification, cloning and characterization of novel gene(s) or protein(s) involved in homologous recombination Dr.Sudipta Ray Not Registered

Chandrima Chakraborty Identification, cloning and characterization of novel gene(s) or protein(s) involved in homologous recombination Dr.Sudipta Ray Not Registered

Chirabrata Sarkar Development of transgenic jute (Corchorus olitorius) for fungal and herbicide resistance Dr. Karabi Datta 5.11.2012-

Debalina Das Effect of rol genes from Agrobacterium rhizogenes T-DNA on morphology and secondary metabolite production in transgenic cultures of Andrographis paniculata Dr. Maumita Bandyopadhyay 28.02.2012

Debasis Mandal Molecular phylogenetic study of Lamiaceae and Verbenaceae from Eastern India Dr. Maumita Bandyopadhyay Not yet registered for PhD

Debasish Upadhyay (PhD) Pollen analysis and antibacterial activity of natural honey samples from coastal districts of Orissa, India. Prof. Subir Bera Post-Doc fellow

Registration (2010)

Debasmita Sen Non-grass phytolith of eastern Himalaya. Prof. Subir Bera Registered for PhD

Dipak Kumar Paruya (PhD) Neogene-Quaternary palynostratigraphy of eastern Himalaya with reference to palaeoenvironment and paleogeography. Prof. Subir Bera Post-Doc fellow

Registration (2007)

Dipasree Roychowdhury (PhD) Molecular and phenotypic stability in Ri transformed organ cultures and plants of Tylophoraindica (Burm.f.) Merrill. Prof. Sumita Jha Post-Doc fellow

Dipu Samanta, Analysis of different species and varieties of Tabernaemontana using chromosomal, biochemical and molecular parameters Prof. Sandip Mukhopadhyay 17.06.2013

Gopal Krishna Vascular Plant Diversity of Buxa National Park, West Bengal, India with Special Reference to its Conservation Strategies. Dr. Debabrata Maity Registered

Gouranga Upadhyaya Anthocyanin biosynthetic pathway genes Dr.Sudipta Ray 9th Nov 2015

Ilika Ghosh Genotoxicity of magnetic metal oxide nanoparticles in different biological systems Prof. Anita Mukherjee Registered (30.12.2015)

Illora Sen (PhD) Xylotomical study on Neogene wood remains from different parts of Bengal Basin with remarks on palaeoenvironment.Prof. Subir Bera Post-Doc fellow

Registration (2002)

Indira Majumder Cancer Cell Biology Prof. Rita Kundu 04.03.2015

Indrani Manna Effects of nickel oxide nanoparticles on some plants Dr. Maumita Bandyopadhyay 16.02.2016

Ipshita Ghosh Phylogenetic analysis of different species of Momordica based on cytogenetic and systematic study Prof. Sumita Jha Registered for PhD (2015)

Ipsita De Prof. Bratati De

Jayashree Acharya Prof. Bratati De

Kaushik Das Genetic engineering of indica rice for sheath blight resistance Dr. Karabi Datta 9.7.2014-continuing

Ph.D Registered

Kotisree Lahiri (Ph.D.) Genome analysis and in vitro clonal propagation of Clitoria ternatea L. Prof. Sandip Mukhopadhyay Post-Doc fellow (UGC)

Madhab Naskar Opaline silica bodies from grasses of deltaic West Bengal: Assessment of environmental and taxonomic significance. Prof. Subir Bera Registered for PhD

(2012)

Madhusree Halder: JRF, RFSMS Nanoparticles from fungal origin Dr. S. Kundu 2012

Mahasin Ali Khan (PhD) Changing pattern of vegetation in the Siwalik and post Siwalik sedimentary successions of Arunachal Pradesh, India.Prof. Subir Bera Post-Doc fellow

Registration (2007)

Mamita Debnath Metabolomics for Assessment of Chemical Diversity and Dereplication of Bioactive Contituents in Piper betel leaf and Capsicum annuum L. Fruit Prof. Bratati De Not Registered

Manivannan J Evaluation of genotoxic and immunotoxic responses of metal oxide nanoparticle Prof. Anita Mukherjee Registered

(08.12.2011)

ManoswiniChakrabarti Investigating the mechanism of metal-induced adaptive responses to combat genotoxic stresses in plants Prof. Anita Mukherjee Registered

(05.08.2014)

Mayukh Das: JRF Tomato stress biology Dr. S. Kundu To be registered

Mihir Halder Agrobacterium rhizogenes mediated transformation of Arachis hypogaea L. for production of resveratrol Prof. Sumita Jha Registered for PhD (2012)

Monimala Mondal:JRF, RGNF Drought and salinity resistant tobacco Dr. S. Kundu 2015

Mou Datta Morphological, cytological and molecular marker based study of Indian Allium L. Dr. Maumita Bandyopadhyay 11.5.2015

Moumita Das Das Taxonomic Revision of the Family Memecylaceae DC. in India Dr. Debabrata Maity Registered

Nebedita Das, JRF,

RGNF Nanoparticles of fungal origin Dr. S. Kundu 2016

Nicky Singh: UGC Mushroom improvement and transgenesis Dr. S. Kundu Post-Doc fellow (UGC)

Oindrila Biswas Grass phytolith assemblages and indices in vegetation and climate analyses in eastern Himalaya, India since last 10 ka. Prof. Subir Bera Registered for PhD

Pamela Saha Taxonomic studies on mosses of Darjeeling district (W.B., India) with emphasis on their anatomical details Dr. Debabrata Maity Registered

Paulami Koley

JRF, UGC Drought/salinity resistant tomato Dr. S. Kundu To be registered

Payel Das non-volatile pheromone of Leopard Prof. Mousumi Poddar Sarkar Not yet registered for PhD

Piya Roychowdhury Cyanobacteria and algae based production of gold and silver nanoparticles-characterization and application Prof. Ruma Pal 7.09.2012

Poulami Gupta Prof. Bratati De

Prakash Chandra Gorain Role of Cyanobacteria in carbon sequestration in both in situ and in vitro conditions Prof. Ruma Pal 11.02.2016

Priya Gopal Biological evaluation of novel curcumin analogues as anti leukemic agentsand elucidating its molecular mechanism leading to apoptosis Dr. Santanu Paul 19.07.2013

Priya Goswami In vivo and in vitro studies on the antioxidant and genotoxic properties of Zizyphus fruit extract Prof. Anita Mukherjee Registered (06.01.2016)

Priyanka Mukherjee An investigation on anti-oxidative activity of Green algae with special reference to antileukemic properties of algal polysaccharides Prof. Ruma Pal Registered (06.08.2015)

Priyanka Sen Development of Transgenic Rice Expressing C4 Enzymes. Dr. Karabi Datta 1.6.2010-Continuing.

PhD Registered

Prosanta Saha Development of an Efficient Genetic Transformation System of Jute Dr. Karabi Datta 1.1.2009-continuing.

PhD Registered

Pulakesh Parai Interrelationships And Evolution of Some Members of The Family Xanthorrhoeaceae As Reflected In Its Cytology. Prof. Anita Mukherjee Registered

(02/01/2012)

Rahul Bose Phytoplankton diversity study with special reference to cultural behavior of Diatoms and biofabrication of biogenic silica Prof. Ruma Pal Not registered

Rahul Bose Identification of rolB induced auxin- responsive transcription factors involved in hairy root formation Prof. Sumita Jha Registered for PhD (2015)

Ritesh Banerjee Phytoremediation of iron mine spoil dump by vetiver system Prof. Anita Mukherjee Registered

(30.12.2015)

Sagarika Lahiri Chromosomal and molecular characterization among different population of Sphagneticola calendulacea (L.) Pruski Prof. Sandip Mukhopadhyay 08.04.2016

Sainiara Begum Prof. Bratati De

Samadrita Deb Chromosomal and Molecular characterization as well as in vitro culture of Hygrophila auriculata Prof. Sandip Mukhopadhyay Not Registered

Sananda Bhattacharya Development of Low Phytate Rice for Increment of Bioavailable Phophorus and Other Nutrients Dr. Karabi Datta 16.08.2011-continuing

Ph.D Regisetred

Sandip More (PhD) Botanical evidences in relation to forensic investigations: development of experimental database. Prof. Subir Bera Post-Doc fellow

Registration (2008)

Sandipan Ray Aroma Chemistry of Natural resources Prof. Mousumi Poddar Sarkar 13th March, 2015

Sarban Sengupta Role of algae in carbon sequestration in both in situ and in vitro conditions Prof. Ruma Pal Registered

(11.05.2015)

Sarmistha Ray: DST Inspire, JRF Defense response of tomato to early blight of tomato, RNAi tomato Dr. S. Kundu 2012

Sayantani Das (PhD) Phytolith spectra in non-grass plant communities of Sunderbans, West Bengal and its significance in coastal climatic reconstruction. Prof. Subir Bera Post-Doc fellow

Regiatration (2010)

Sayantani Nath Phylogenetic study of the genus Drimiaand other related taxa of Hyacinthaceae Prof. Sumita Jha Registered for PhD (2011)

Sayantika Sarkar Evaluating the influence of rol genes on morphogenesis and bacoside accumulation in transformed Bacopa monnieri plants Prof. Sumita Jha Registered for PhD (2014)

Sentu Dey Diversity of flowering plants of Zemu and Lhonak valley, Sikkim Dr. Debabrata Maity Registered

Shinjini Sengupta Reduction of Phytic Acid Level in Rice Seeds by RNAi Mediated Downregulation of inositol 1,3,4-trisphosphate-5/6-kinase (ITPK) Gene Dr. Karabi Datta 27.11.2011-continuing

Ph.D. Registered

Shuddhanjali Roy Identification, Cloning and characterization of glycine rich proline rich protein from Sorghum bicolor: Potentiality as an antimicrobial protein Dr.Sudipta Ray Not Registered

Shuvobroto Majumder Development of Insect Resistance in Jute by Expressing of cryIAb/Ac gene. Dr. Karabi Datta 17.02.2011-continuing.

PhD Registered

Snehalata Majumdar Stress Biology Prof. Rita Kundu Not yet Registered

Somnath Mondal: UGC, SRF Blast disease of rice Dr. S. Kundu 2013

Sonia Mitra Foliar Architecture of Indian Sterculiaceae and its systematic relevance Dr. Debabrata Maity Registered

Souvik Mitra Lipidome based signaling behavior of mosses under climatic stress related to oxylipin molecules Prof. Mousumi Poddar Sarkar 13th Feb.2012

Sreemanti Banerjee Biodiversity of cyanobacteria with special reference to metal tolerance and nano-metal production Prof. Ruma Pal Not registered

Sreetama Bhadra Cytological and molecular marker based studies of Zingiberaceae for identification of some elite genera Dr. Maumita Bandyopadhyay 11.05.2015

Subhabrata Paul Cancer Cell Biology Prof. Rita Kundu 03.10.2013

Subhasis Karmakar Pyramiding of Genes Resistant to Sheath Blight Pathogen (Rhizotonia solani) in Rice Dr. Karabi Datta 2.2.2010-continuing.

PhD Registered

Subhrajyoti Ghosh Genetically Engineered Rice with Enhanced Carotenoids and Nutritional Profile in Rice Endosperm. Dr. Karabi Datta 10.2.2011-continuing.

PhD Registered

Suchandrima Sidhantta Pollen flora of Lachen valley, Sikkim Dr. Debabrata Maity Registered

Sulata Maity (PhD) phytoremediation Prof. Anita Mukherjee Post-Doc fellow

Sumedha Roy Chowdhuri Membrane Biochemistry and metabolic pathway of lower group of plants Prof. Mousumi Poddar Sarkar 31.03 2014

Supriyo Chowdhuri : UGC,

Submitted thesis Transgenic multi-stress resistant Sesame, defense response in sesame Dr. S. Kundu 2009

Swadesh Sarkar Isolation and Characterization of Bio molecules from

Andrographis paniculata and Azadirachta indica for Its Anti-Leukemic Activities. Dr. Santanu Paul 21.06.2013

Swagata Karak Prof. Bratati De

Swarupa Ghosh (PhD) Drug Delivery by Nano particles Prof. Anita Mukherjee Post-Doc fellow

Tanmoy Halder Characterization of Dehydrins form Sorghum bicolor Dr.Sudipta Ray 24th August 2015

Tanushree Agarwal Cloning,Characterisation and Functional validation of Dehydrin protein(s) Dr.Sudipta Ray 24th August 2015

Tapojita Samaddar Agrobacterium mediated transformation in Swertia sp. Prof. Sumita Jha Registered for PhD (2010)

Srijita Ghosh Influence of arsenic and its possible interaction within selenium on growth and metabolism in wheat (Triticum aestivumL.). Prof. Asok Kumar Biswas 11.5.2010

Debarati Das Characterization of growth and metabolism in rice (Oryza sativa L.) induced by selenium and its possible reversal by sulphate. Prof. Asok Kumar Biswas 25.06.2010

Paramita Chatterjee Studies on salt induced changes in growth and metabolism in some legume cultivars and its possible alteration by pretreatment by sodium chloride. Prof. Asok Kumar Biswas 09.03.2012

Jayeeta Saha Characterization of some arsenic tolerant and sensitive rice (OryzasativaL.) cultivars grown in West Bengal on growth and metabolism. Prof. Asok Kumar Biswas 25.11.2013

Susmita Das Studies on arsenic induced toxicity in growth and metabolism in rice (Oryzasativa L.) and its possible amelioration by selenium and silicon. Prof. Asok Kumar Biswas 23.12.2014

Paulin Seal Physio-chemical Studies on arsenic induced regulation of growth and metabolism in wheat (Triticum aestivum L.) and its possible reversal by application of silicon. Prof. Asok Kumar Biswas 07.08.2015

Barsha Majumder Influence of arsenic accumulation on biochemical parameters related to growth and metabolism in rice (Oryza sativa L.) cultivars and further validation by genomic profiling. Prof. Asok Kumar Biswas 11.02.2016

Sabarni Biswas Influence of Sodium chloride on biochemical and metabolite profiles of Vigna mungo (L.) Hepper and Cajanus cajan L. seedlings and its possible alterations by pretreatment with Sodium chloride. Prof. Asok Kumar Biswas 02.03.2016

Projects :

Project title Funding agency Principal investigator Duration Budget

Investigation on iron ore mine site restoration and species performance in spoils dumps slope stabilization with Vetiver System Technology [no.38 (1367)/13/EMRII dt 1.10.2013]. CSIR-EMR Prof. Anita Mukherjee 2014-2017 29 lacs

Identification cloning and characterization of novel gene(s) and protein(s) involved in homologous recombination in moss Physcomitrella patens DBT-GOI Dr. Sudipta Ray 3years 38,52,500

Identification, cloning and characterization of glycine rich proline rich protein from Sorghum bicolor: Potentiality as an antimicrobial protein CSIR Dr. Sudipta Ray 3years 24 lakhs approx

Defence reponse in rice against blast disease DBT-GOI Dr. Surekha Kundu 3 years

Network Programme for Enrichment and Update of Plant Chromosome Database for Spermatophytes and Archegoniates DBT-GOI Prof. Sumita Jha (PI)

Dr. M. Bandyopadhyay (Co-I), Dr. S. Ray (Co-I) 3 years 33.50 lakhs

Evaluation of cytogenetic diversity in some genera of Cucurbitaceae and characterization of sex linked genes in Coccinia through SCAR marker approach DBT-GOI Prof. Sumita Jha (PI)

jointly with SOU University, Bhubaneshwar 3 years 25 lacs

Establishment of Portal for Indian Bioresource Information Network (IBIN): BRIC-III:Plant Chromosome Information Centre, CAS, Dept.of Botany, CU) DBT-GOI Prof. Sumita Jha jointly with Prof. A. Mukherjee, Prof.S.Mukhopadhyay, Dr.M.Bandyopadhyaya and Dr.S.Ray(CoI) 3 years 40.56 lakhs

Calibration of phytolith indices along the modern vegetation gradient of Eastern Himalaya, India and its application in late Quaternary environment analysis. DST-SERB, New Delhi (2012-2015) Prof. Subir Bera 19.07.2012-ongoing Rs 36.41 lakhs

Sedimentology and stratigraphy of the Siwalik succession of eastern Himalaya and its bearing on the evolution of the Neogene foreland basin in the eastern Himalaya ISI, Kolkata Prof. Subir Bera April 2015- ongoing

Screening for anti-leukemic activity of some wild edible mushrooms of India and unraveling the molecular mechanism involved in apoptosis UGC, New Delhi Dr. Santanu Paul 2013-2017 Rs. 14,85,800

Study of the anti-leukemic and anti-oxidant potential of some wild edible mushrooms of West Bengal: leading to chemical identification of the lead molecules DST, West Bengal Dr. Santanu Paul 2014-2017 Rs. 35,64,000

Production of microalgal biomass and their application in aquaculture WBSCST Prof. Ruma Pal 2013-2016 Rs. 30,00,000

Mapping Sunderbans Algae for CO2 sequestrations with special emphasis on Brakish water wetlands All India network program Program DST-New Delhi Prof. Ruma Pal 2013-2016 Rs.50,00,000

Evaluating the Cytotoxic properties of some major algae from Sundarban mangrove ecosystem on selected cell line DST, West Bengal Prof. Rita Kundu 2013-2016 15.63 lakhs

Study on Altitude Based Multielemental Profiling of Eastern Himalayan Bryophytes For Eco-Restoration Purpose UGC-Dept. of Atomic Energy-CSR Prof. M. Poddar Sarkar 2013-2016 15 Lakhs approx.

Study on Behaviour and Chemistry Related to Pheromone of Indian Porcupine and Leopard Dept. of Science & Technology, Govt. of West Bengal Prof. M. Poddar Sarkar 2015-2018 Rs. 19,66,264

Translational Research on Transgenic Rice (Phase II) DBT , Govt. of India

(Coordinator) Dr. Karabi Datta 2015-2020 Rs. 428.03 lakhs

Biofortification in selected crops for nutritional security ICAR,All India Coordinated Project

(PI) Dr. Karabi Datta 2014-17 Rs. 40.18 lakhs for 2014-2016

Incentivizing Research in Agriculture ICAR, All India Coordinated Project (PI) Dr. Karabi Datta 2014-2017 Rs. 168.65 lakhs for 2014-2016

Network Project on Transgenics in crops (NPTC) ICAR, All India Coordinated Project (PI) Dr. Karabi Datta 2014-2017 Rs. 18.00 lakhs for 2014-2016

Cytological ----- conservation UGC major Project Prof. Sandip Mukhopadhyay 2013-2016 Rs. 14.00 lakhs

Screening of arsenic tolerant and sensitive rice (Oryza sativa L.) cultivars grown in the arsenic contaminated soil of West Bengal on the basis of tolerance, growth and metabolism UGC, New Delhi Prof. Asok Kumar Biswas 2016-2019 14.2 lacs

Development of salt tolerant legume cultivars adapting hardening technology and their evaluation for cultivation in saline prone soils of West Bengal Department of Science and Technology, Govt. Of West Bengal Prof. Asok Kumar Biswas 2016-2019 17.9 lacs

Thrust areas in teaching and research of the academic department/ centre :

Plant Genomics, Chromosomal explorations and Plant Biotechnology

Genotoxicity and Stress Biology

Taxonomy, Phylogeny and Bioprospecting

Integrative Biology–Genomics and Proteomics and Integrative plant biology

Teaching support

E- learning

Open educational resources.

Research support :

Name of the equipment	Funding agency
GC MS	DST-FIST
GC	COSIST
HPLC	DST-FIST
HPTLC	UGC-CAS
Ultracentrifuge	DST-PURSE
Cold Centrifuge	UGC CAS
Gradient PCR	UGC
-80ºC refrigerator	UGC-CAS
Gel Documentation unit	UGC

Microplate reader UGC

Fluorescence Microscope DST FIST

Major activities:

National Symposium on “Plant Diversity: Structure, Function, Utilization and Conservation”, organized jointly by CAS, Department of Botany and Botanical Society of Bengal during 4th-6th December, 2014, (Convener: Prof N.D. Paria).

National Seminar on “Genomic Perspectives of Host-Pathogen Interactions”, held on 3rd December 2015, (Conveners: Prof. Sandip Mukhopadhyay and Prof. Rita Kundu).

National Symposium on “Microbial Diversity and Its Impact”, jointly organized by Indian Mycological Society, Kolkata and Department of Botany, University of Calcutta, held during 18th 19th February 2016.

Workshop on “Chromatography: A technique for analysis of biomolecules from natural resources and agricultural crops”, sponsored by Department of Botany, University of Calcutta, held during 5th -8th January 2016, (Convener: Prof. M. Poddar Sarkar).

Centenary Celebaration of the Department of Botany was commemorated with a year-long schedule of workshops in 2013-2014.

Workshop on B.Sc. Practical, Centenary Celebration, Department of Botany, University of Calcutta, held on 24th & 25th October, 2013, (Conveners- Prof. A.K. Biswas and Prof. Anita Mukherjee).

Workshop on Cryptogamic Botany- from Curriculum to Application, Centenary Celebration, Department of Botany, University of Calcutta, held during 19th- 26th November, 2013, (Conveners- Prof. R. Pal, Prof. K. Acharya and Prof. S. Bera).

Workshop on “Chromatography- the Catapult for Unraveling the Facts of Nature”, Centenary Celebration, Department of Botany, University of Calcutta, held on 26th & 27th December, 2013 (Conveners- Prof.. M. Poddar Sarkar & Dr. M. Bandyopadhyay).

Workshop on Hands on Training on Palaeobotanical and Palynological Techniques, Centenary Celebration, Department of Botany, University of Calcutta, held during 21st -28th April, 2014, (Conveners- Prof. S. Bera & Dr. A.D’ Rozario).

Workshop on Basic Techniques on Molecular Biology, Centenary Celebration, Department of Botany, University of Calcutta, held during 14th- 21st May, 2014, (Conveners- Dr. R.Kundu, Dr. M. Bandyopadhyay, Dr. S. Ray and Dr. S. Kundu).

Workshop on Taxonomy and Biosystematics of Vascular Plants, Centenary Celebration, Department of Botany, University of Calcutta, held during 14th- 21st July, 2014, (Conveners- Prof. N.D. Paria and Dr. D. Maity).

International Symposium on “Trends in Plant Science Research”, Centenary Celebration, Department of Botany, University of Calcutta, held during 15th-16th February 2014, (Conveners: Prof. Anita Mukherjee and Prof. Sandip Mukhopadhyay).

Additional information :

New M.Sc. Syllabus implemented in 2015-2017 Session.

New M.Sc. syllabus including inter-departmental (Biological Sciences) Choice-based course from 2016-2018 session.