## RESEARCH PROJECTS UNDERTAKEN BY THE TEACHERS IN THE LAST FIVE YEARS

Name of the Project/ Endowments, Chairs	Name of the Principal Investigator/ Co Investigator	Name of the Funding agency	Department of Principal Investigator/ Co Investigator	Year of Award	Funds provided (INR in lakhs)	Duration of the project
1. Chemical Priming: A novel approach of Maize (Zea Mays L.) improvement for drought tolerance at flowering stage. CSIR sanction order no. 38 (1309)/11 EMR –II dated 10/12/2011	PI: Zahed Hossain, Co-PI: Dr Ang Rinzing Sherpa	CSIR	Botany	2011	18.00	36 Months (2012-15)
2. Antioxidative Modulation and stress Related Genes & sRNA Expression Profiling of Maize (Zea mays L.) in Response to Arsenic Exposure. No. BT/PR538/AGR/2/795/2011	PI: Zahed Hossain, Co-PI: Dr Ang Rinzing Sherpa	DBT	Botany	2013	30.25	36 Months (2013-16)
3. Synthesis and Photophysics of Oxazole-based Fluorescent Dyes in homogeneous media: A tool for probing microheterogeneous media and supramolecular host assemblies	Prof. Ranjan Das	CSIR	Chemistry	2011	18.46	42 Months (2011-14)
4. Detection, molecular characterization and epidemiology of viruses infecting Large cardamom (Amomum subulatum Roxb.). CSIR sanction order No: 38(1344)12EMR-II dated 26.10.12		CSIR	Botany	2012	24.76	36 Months (2013-16)

5. Detection, Molecular characterization and development of geminivirus based VIGS vector SERB Ref: SR/FT/LS-165/2012 dated 26.12.2012	PI:Dr Ang Rinzing Sherpa	SCIENCE & ENGINEERING RESEARCH BOARD(SERB), DST, GOI	Botany	2012	27.22	36 Months (2013-16)
6. Synthesis, Characterisation of some transition metal complexes: Possible application in dye sensitized solar cell	Dr. Chirantan Roy Choudhury	CSIR	Chemistry	2012	14.00	36 Months (2012-15)
7. Comparative structural analysis of substrate specificity in astacin metalloendopeptidases by homology modelin	Sibani Sen (Chakraborty)	DBT, Govt of India	Microbiology	2012	30.15	2012-15
8. An Investigation into the Agrochemical-induced toxicity in native fishes of the North24 Parganas district of West Bengal associated with agricultural run-off events	PI- Dr Shamee Bhattacharjee	DST	Zoology	2012	20.00	36 Months (2012-15)
9. An Investigation into the Regulation of Nrf2 transcription factor by diosgenin and 1,8-cineole using the p53/p21 axis in lung and leukaemic cancer.	PI-Dr Shamee Bhattacharjee / Co-PI- Dr. Deba Prasad Mandal	ICMR	Zoology	2012	23.00	36 Months (2012-15)
10. Development of Online Handwriting Recognition System in Indic script: A case study with Bangla	Samir Kumar Saha	SERB	Zoology	2012	19.75	36 Months (2012-15)

11. Biorestoration of degraded mangrove forest along the embankment of the river Ramganga and related molecular study for the loss of mangrove ecosystem homeostasis	PI-Krishna Ray	DBT	Botany	2013	54.29	60 Months (2013-18)
12. Developing diagnostic parameters for control of Phytophthora infestans by studying Genetic Diversity using Phenotypic, Moelcular and Nextgen Sequencing methods.	PI- Sanjoy Guha Roy	CSIR	Botany	2013	16.16	36 Months (2013-16)
13. Studies on Link between Material Existence and Religio-Cultural Practices of the Marginals in the Coastal Areas of Bay of Bengal	Sutapa Chatterjee Sarkar	Indian Council of Social Science Research	History	2013	5.95	24 Months (2013-15)
14. Sport, Politics and Diplomacy: A Study of India-Pakistan Relations through the Prism of Cricket	Kausik Bandyopadhyay	Maulana Abul Kalam Azad Institute of Asian Studies, Kolkata (Ministry of Culture, Government of India)	History	2013	4.00	24 Months (2013-15)

15. Molecular, GeneticCharacteristics and phytoremediation of M.marinum in the state of West Bengal (PI)		DBT,Govt. Of WB	Microbiology	2013	26.46	48 Months (2013-2017)
16. Environmental Crisis and Solution: An Approach from Indian Philosophy and Religious Culture	Sabita samanta	Indian Council of Philosophical Research, New Delhi(Under MHRD)	Philosophy	2013	1.50	12 Months (2013-14)
17. Synthesis of C2-symmetric macrocyclic nucleosides and the study of their supramolecular complexes	Jhimli Sengupta	DST Fast Track	Chemistry	2014	18.60	42 Months (2014-18)
18. Interpreting Folklore: Understanding the Relation Between Folklore, Religion and Caste in India	Sipra Mukherjee	ICSSR	English	2014	6	36 Months (2014-17)
19. Empathy:Different Perspectives	Atreyee Mukherjee	Indian Council of Philosophical Research, New Delhi(Under MHRD)	Philosophy	2014	2.00	24 Months (2014-16)

20. Effect of disorder on the	Dr. Subhajit Sarkar	University	Physics	2014	1.15	36 Months (2014-17)
properties of BaTiO <sub>3</sub> based multi-		Grants				
ferroics		Commission				
		Consortium				
		for Scientific				
		Research,				
		Kolkata				
		Center (UGC-				
		CSR-KC)				
21. Probing the Planck-scale	Dr. Anirban Saha	DST SERB	Physics	2014	5.3	36 Months (2014-17)
structure of space-time through low						
energy quantum mechanical						
interaction of matter and gravity						
22.0		DDT NE	7 1	204.4	00	26.14 11 (2011.17)
22. Overcoming EGFR resistant	PI- Dr. Deba Prasad	DBT-NE	Zoology	2014	80	36 Months (2014-17)
Oral Squamous Cell Carcinomas	Mandal, Co-PI- Dr	Twinning				
with traditional healers of Tripura	Shamee Bhattacharjee					
<ul><li>A Preclinical Study"</li></ul>						
23. Evaluation of genotypic diversity	PI- Sanjoy Guha Roy	DBT-GoWB	Botany	2015	16.31	36 Months (2015-18)
of field isolates of <i>Phytophthora</i>	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		,			
melonis causing fruit and vine rot of						
pointed gourd in West Bengal for						
formulation of effective control						
measures.						

24. ICSSR Research Programme	Project Director: 1. Dr. Dipika Basu Co-Directors: 2. Dr. Arun Kumar Nandi, 3. Sulata Hembrem, 4. Partha Pratim Roy	ICSSR	1. Department of Economics (WBSU), 2. Department of Economics, Chakdaha College, Kalyani University, 3. Department of Geography, WBSU, 4. Department of Commerce, M.G College, S.K.B. University	2015	18.00	24 Months (2015-17)
25 An investigation into the crosstalk between transcription factors HIF- $1\alpha/2\alpha$ and Nrf-2 and their modulation by the use of active ingredients of black pepper (Piper nigrum) and coriander (Coriandrum sativum).	Dr Shamee Bhattacharjee, Co-PI- Dr. Deba Prasad Mandal	DBT	Zoology	2015	24.98	36 Months (2015-18)
26. An investigation in to the adjuvant capacity of non-self carbohydrate-protein complexes: Searching the therapeutic stimulator against Leishmania donovani infection	Chiranjib Pal (PI)	DST, Govt. of India	Zoology	2015	41.17	36 Months (2015-18)
27. Tea extracts, tea constituents and its effect on lineage commitment development of bone marrow derived hematopoietic stem cells in vitro and in vivo.	Chiranjib Pal (PI)	NTRF, Govt. of India	Zoology	2016	20.21	36 Months (2016-19)

28. An in-depth study of host-non-mulberry silkworm interaction with special reference to extra floral nectaries (EFN) and volatile organic chemicals (VOC) of host plants and the silkworm's adaptations to the host plant's defense response	PI Krishna Ray	DBT	Botany	2016	25.16	36 Months (2016-19)
29. Validation of some North-East Indian traditional anti-inflammatory plants for antiproliferative, antiangiogenic and anti-metastatic properties: In search of novel anticancer agents.	Dr Shamee Bhattacharjee, Co-Pl- Dr. Deba Prasad Mandal	DBT-NE Twinning	Zoology	2016	95.00	36 Months (2016-19)
30. Search for new biopharmaceuticals against drugsensitive and drug-resistant strain of Leishmania donovani: An approach for creation of NCE (new chemical entities)-library from teagarden associated wild mushrooms of North Bengal and adjoining regions.	Chiranjib Pal (PI); Bikramjit RoyChoudhury (Co-PI)	· ·	Zoology	2016	25.63	36 Months (2016-19)

31. ICSSR Major Research Project	Prof. Jyotish Prakash Basu	ICSSR	Economics	2017	7.00	24 Months (2017-19)
32. Understanding structural basis for the biological specificity of proteolytic regulators of human meprins and bone morphogenic protein1	Sibani Sen (Chakraborty)	DBT, Govt of India	Microbiology	2017	38.846	36 Months (2017-20)
33. A search for biopharmaceuticals for creation of new chemical entity (NCE)-library from wild mushrooms available in North Eastern Himalayas and adjoining regions: Overcoming the 'Oxidative-Stress-Tolerance' axis of drug-resistant protozoan parasite Leishmania donovani.	WBSU PI: Chiranjib Pal; SU (NE) -PI: Biswajit Gopal Roy	DBT, Govrt. Of India	Zoology	2017	34.75	36 Months (2017-20)
34. Analysis of PBRs already published officially	Silanjan Bhattacharyya	West Bengal Biodiversity Board	Zoology	2016	0.96	6 Months (2016)
35. Tarun Majumdar's Films - Reflection of Socio-Cultural Reality of Bengal	Pallav Mukhopadhyay	Indian Council of Social Science Research - Eastern Regional Centre	Journalism & Mass Communication and Coordinator, Department of Film Studies	2016	1.00	24 Months (2017-18)

36. Documentation of the diversity of fresh water fishes of North and South 24 Parganas of West Bengal'		West Bengal Biodiversity Board	Zoology	2017	3.5	24 Months (2017-19)
37. Study of reproductive biology of mangrove species in Sundarbans in correlation to its potential for mangrove restoration	co-PI Krishna Ray	SCIENCE & ENGINEERING RESEARCH BOARD(SERB), DST, GOI	Botany	2017	39.37	36 Months (2017-20)
38. Pharmacophore based modeling of a series of novel Procollagen C- proteinase inhibitors by virtual screening, molecular docking and molecular dynamics	Sibani Sen (Chakraborty)	DBT, Govt of WB	Microbiology	2017	24.38	36 Months (2017-20)
39. Screening, in-vitro and in-vivo study of the anti mycobacterial activity of potential plant extracts from North East Region	Tapti sengupta	ICAR, NE Region	Microbiology	2018	20.00	24 Months (2018-20)
40. Exploration of Mental Health Literacy and Intervention for Promotion of Mental Health Awareness in North 24 Parganas, West Bengal	Sreemoyee Tarafder	ICSSR	Psychology	2017	6	24 Months (2017-19)
41. "A Socio-Cultural Study on the Aspirational Dynamics and Embodied Identity of Namasudras in Post- Colonial Bengal"	Ramanuj Ganguly	ICSSR (No.: F.No 02/108/2017- 18/RP/MajorD ated:29- 12.2017)	Sociology	2018	8.00	24 Months (2017-19)

42. Molecular dissection of defense against Sigatoka infection in Banana: Exploitation of <i>Musa</i> germplasm of North East for development of Sigatoka-resistant hybrid	PI Krishna Ray	DBT	Botany	2018	22.67	36 Months (2018-21)
43. Study on the Pathogenicity of MDR Zoonotic NTMs and their Phytoprophylaxis: A Molecular approach	PI Tapti Sengupta	DBT,WB Govt.	Microbiology	2018	13.00	36 Months (2018-21)
44. Fluorescence probing of relaxation dynamics at interfaces and their role in biomolecular recognition		DST, West Bengal	Chemistry	2018	10.40	36 Months (2018-21)
45. Gender role and attitude towards child healthcare practcies by ethnic groups and settlements: A sociocultural study of North 24 Parganas District of West Bengal	Subir Biswas	Indian Council of Social Science Research (ICSSR)	Anthropology	2018	16.00	24 Months (2018-20)
46. Studies Towards the Syanthesis of Cyclic Hexa-peptide Scierotide and Its Analogues	Dr Suman Biswas	DST, West Bengal	Chemistry	2019	36.44	36 Months (2019-22)
47. Development of Online Handwriting Recognition System in Indic script: A case study with Bangla	Kaushik Roy	SERB	Computer Science	2019	22.20	36 Months (2019-22)

48. Transition-metal controlled	Molly De Raychaudhury	Science &	Physics	2019	12.44	36 Months (2019-22)
tuning of the structural stability and		Technology				
electronic properties of 2-		and				
dimensional Mxenes.		Biotechnology				
		Department,				
		Govt. Of West				
		Bengal				
49. Defect Induced Multiferroic	Subhajit Sarkar	University	Physics	2019	0.45	36 Months (2019-22)
Properties in BaTi1-xFexO3-δ		Grants				
systems in Powder and Film forms		Commission				
		Consortium				
		for Scientific				
		Research,				
		Kolkata				
		Center (UGC-				
		CSR-KC)				