

List of Research & Development Projects sanctioned by Science & Technology Department

BASIC & APPLIED SCIENCES (Duration of the projects-3 years)				
Sl.	Name of Principal Investigator & Institute	Topic	Year	Amount released
01	Dr. Raj Kishore Patel, NIT, Rourkela	"Extraction of titanium from red mud by a cost effective process and utilization of the material after extraction"	2016-17	3,69,000/-
			2018-19	2,20,260/-
02	Dr. Monoj Kumar Ghosal, OUAT, Bhubaneswar	"Development of suitable technology for conversion of waste coconut into biocoal as an alternate cooking fuel"	2016-17	3,84,000
			2018-19	1,08,488/-
03	Dr. Manorama Patri, Ravenshaw University, Cuttack	"Behavioral changes and oxidative dna damage via dna methylation on early exposure to benzo (a) pyrene during development of zebrafish embryos"	2016-17	3,94,000
			2018-19	2,14,000/-
04	Prof. Rabindra Kishore Mishra, Berhampur University, Bhanja Bihar	"turi using digital web guide technique"	2016-17	2,51,000
05	Dr. Ram Naresh Mahaling, Sambalpur University, Jyoti Vihar, Burla	"Thermoset composites for potential coating application and its effect on cross- linking behaviour"	2016-17	4,12,000
			2018-19	56,434/-
06	Dr. Satya Narayan Sahu, Sambalpur University Jyoti Vihar, Burla	"Systematic study and imaging application of azine luminophores based on aggregation-induced emission enhancement"	2017-18	4,19,000/-
07	Dr. Kumar Sidhartha Kesav Varadwaj, Ravenshaw University, Cuttack	"Bridging the understanding between growth pattern of nanostructured manganese oxide polymorphs on graphene and their electrolytic oxygen reduction activity"	-do-	4,74,000/-
08	Dr. Gokarneswar Sahoo, National Institute of Technology, Raurkela	"Antiprotozoal active natural products from 'anthesis-nobilis flower': study on their total synthesis and interconversion"	-do-	4,04,000/-
09	Dr. Satyanarayan Pal, Utkal University, Vani Vihar	"synthesis of luminescent materials based on ir (iii) complex"	-do-	4,79,000/-
10	Dr. Sushanta Kumar Badamali, Utkal University, Van Vihar, Bhubaneswar	"Decontamination of lignin containing wastewater by metal oxide nanoparticles supported nanoporous solid based heterogeneous photocatalysts"	-do-	5,14,000/-
11	Dr. Laxmidhar Rout, Berhampur University, Berhampur	"Diversified chiral hemicotarnines for future cancer drug"	-do-	3,29,000/-
12	Dr. Shreerup Goswami, Sambalpur University, Jyoti Vihar, Burla	"Biodiversity and palaeo environment in the part of talcher basin: inferences from lower gondwana plant fossils"	-do-	2,74,000/-
13	Ashok Kumar Barik, College of Engineering and Technology(CET),Bhubaneswar	"Experimental & numerical investigation of heat transfer enhancement from a protruded surface using cross flow jet."	-do-	6,17,600/-
14	Dr. Prasanta Kumar Swain, North Orissa	"Water quality monitoring system for fresh water	-do-	5,84,000/-

	University, Takatpur, Baripada	aquaculture using to iot(internet of things) and correlation analysis".		
15	Dr. Jyoti Ranjan Sahu, North Orissa University, Takatpur, Baripada	"Investigation of magnetocaloric effect in various oxides".	-do-	5,54,000/-
16	Dr. Ranjan Kumar Jena, College of Engineering and Technology(CET), Bhubaneswar	"Experimental comparison between current based maximum power point tracking (cmppt), voltage based maximum power point tracking (vmppt) and population based particle swarm optimization (pso)mppt technique for pv system under normal & partially shading operation"	-do-	4,94,000/-
17	Dr. Sudam Charan Sahu, North Orissa University, Takatpur, Baripada	"Tree species composition and carbon stocks assessment in different forest types of similipal biospher reserve, odisha(india)"	-do-	3,24,000/-
18	Dr. Priya Ranjan Debata, North Orissa University, Takatpur, Baripada	"Study on the frequency distribution pattern of mutated isociatrate dehydrogenase ½ (idh1/2) mutations".	-do-	4,09,000/-
19	Dr. Srikanta Jena, Ravenshaw University, Cuttack	"Effect of oxidative stress and antioxidant defences in liver, brain and muscle tissues of goldfish in response to temperature and food deprivation"	-do-	5,34,000/-
20	Dr. Sandeep Kumar Mishra, Institute of Life Science, Bhubaneswar	"A study of the anti-cancerous activity of antimicrobial peptide tachyplesin i and other potential compounds present in indian horseshoe crab in breast cancer"	-do-	4,00,000/-
21	Dr. (Mrs.) Bandana Kullu, Utkal University, Vani Vihar, Bhubaneswar	"Axenic culture of claroideoglomus claroideum and its application on micropropagated plants".	-do-	3,64,000/-
22	Dr. Gangadhar Nayak, OUAT, Bhubaneswar	"Genetic characterisation and identification of native chicken germplasm of northern odisha	-do-	3,79,000/-
23	Dr. Sriprakash Mohanty, Central Institute of Freshwater Aquaculture (CIFA), Bhubaneswar	"Bio-processing of fish wastes for productive end user"	-do-	3,54,000/-
24	Dr. G. Sangeetha, Central Horticulture Experiment Station (CHES), Bhubaneswar	"Morphogenetic characterisation of native virulent phytophthora isolates inciting vine rot and fruit rot of pointed gourd emerging in odisha and devising idm module in participatory mode"	-do-	5,64,000/-
25	Dr. Hirak Chakraborty, Sambalpur University	" Effect of unsaturated fatty acids on membrane organization, dynamics and fusion"	2018-19	2,99,500/-
26	Dr. Bibhuti Bhusan Parida, Berhampur University	"Anticancer drug discovery through diversified organic synthesis: a novel approach for anticancer drugs on human health and well-being"	-do-	1,87,000/-
27	Dr. Hemanta Kumar Kisan, Utkal University, Bhubaneswar	"Transition state modelling on cooperative multi-catalytic asymmetric reactions"	-do-	3,42,000/-
28	Dr. Sunil Kumar Behera, Khallikote University, Berhampur.	"Clean coal production by microbial flotation of ash material and coal de-sulphurization"	-do-	3,62,000/-
29	Dr. Biswa Ranjan Meher, Berhampur	"Exploring phytocompounds as antiviral agents against	-do-	5,71,000/-

	University	dengue ns2b ns3 protease: a multi-faceted in silico approach"		
30	Dr. Durga Prasad Barik, Ravenshaw University, Cuttack	"Agro bacterium-mediated hairy root culture of two important medicinal plants of odisha for production of bio-active compounds"	-do-	4,47,000/-
31	Dr. Dibakar Sahoo, Sambalpur University	"Sensing of non-b-dna structures by quantum exciton: the implications in future diagnostics"	-do-	2,64,500/-
32	Dr. Sudhansu Sekhar Sahoo, College of Engineering & Technology, Bhubaneswar	"Design and development of solar cooker for industrial zone using experimentation and computational investigations"	-do-	3,20,982/-
33	Dr. Sujata Dash, North Orissa University, Baripada	"Plagiarism detection software for odia documents using fuzzy neural network"	-do-	5,46,000/-

BIOTECHNOLOGY(Duration of the projects-3 years)

Sl.	Name of the Principal Investigator & Institute	Title of the Project	Year	Amount Sanctioned
1.	Dr. Prakash Ch. Mishra, Fakir Mohan University, Balasore	Synthesis characterization and application of conducting polymer / blast furnace slag nanocomposites for removal of Arsenate, Phosphate and fluoride from aqueous medium.	2018-19	Rs. 7.625/- lakh
2.	Dr. Sanjeev Ku. Bhoi, Associate Professor, Department of Neurology, AIIMS, BBSR	Study the clinical, electroneuromyographic and immunohistochemical correlation of pure neuritic leprosy.	2018-19	Rs. 4.805/- lakh
3.	Dr. Suman Jha, Asst. Professor, National institute of Technology, Rourkela	Evaluation of Alpha-synuclein aggregation propensity on interaction with varying zinc oxide nanoparticle interfaces.	2018-19	Rs. 5.625/- lakh
4.	Dr. Suchitra Kumari, Associate Professor, AIMMS, Bhubaneswar	Developing a biomarker based prediction tool using artificial intelligence algorithm for detecting Epithelial Ovarian Cancer among patients presenting with ovarian mass.	2018-19	Rs. 4.955/- lakh
5.	Dr. Sony Pandey, Sr Scientist, Department of Environment & Sustainability, CSIR-IMMT, BBSR	Novel bioplastic material from marine microbes for industrial applications through sustainable processes.	2018-19	Rs. 4.980/- lakh
6	Dr Biswajit Rath Dept. of Biotechnology, North Orissa University, Baripada	Survey and isolation of marine microalgae from Odisha coast and evaluation of their food and pharmaceutically important Biomolecules	2016-17	4,84,000/-
			2017-18	2,29,000/-
			2018-19	2,33,000/-
7	Dr. Gunanidhi Dhangadamajhi	Isolation and Characterization of	2016-17	2,94,000/-

	Dept. of Biotechnology, North Orissa University Baripada	antiplasmodial metabolites from selected medicinal plants	2017-18	2,64,000/-
			2018-19	2,88,000/-
8	Dr (Mrs) Puspanjali Parida, Dept. of Zoology, North Orissa University Baripada	Effect of antioxidant and pesticide on earthworm and its Implication	2016-17	2,64,000/-
			2017-18	
			2018-19	2,63,000/-
9	Dr Binod Bihari Sahu Department. of Life Sciences NIT, Rourkela	Engineering Arabidopsis-specific nonhost resistance mechanism in rice for durable and broad spectrum sheath blight resistance against Rhizoctonia solani	2016-17	3,34,000/-
			2017-18	nil
			2018-19	2,28,000/-
10	Dr. Sujit Kumar Bhutia Department of Life Science NIT,Rourkela	Molecular profiling of apoptotic pathway in cancer stem cells of oral squamous cell carcinoma and its modulating by plant lectins for potential cancer therapeutics	2016-17	4,09,000/-
			2017-18	nil
			2018-19	2,33,000/-
11	Dr(Mrs)Binata Nayak School of Life Sciences Sambalpur University, Sambalpur	Combinational use of Neem extract and cyanobacteria for their use as biofertilizer and pest management : An Eco-friendly approach	2016-17	3,14,000/-
			2017-18	2,54,000/-
			2018-19	2,38,000/-
12	Dr Ekamber Kariali School of Life Sciences Sambalpur University, Sambalpur	Identification and transcriptional profiling of ethylene responsive factors and downstream signaling transducers in the traditional rice cultivars grown in back water flood prone zone of the Hirakud dam reservoir	2016-17	2,74,000/-
			2017-18	nil
			2018-19	2,38,000/-
13	Dr. Nihar Ranjan Singh Deptt. of Botany, Ravenshaw University, Cuttack	Identification of potential anti- glycation agents from some ethnomedicinally important edible plants of Odisha	2016-17	5,89,000/-
			2017-18	2,14,000/-
			2018-19	1,88,000/-
14	Dr. Debasis Dash Department of Botany, College of Basic Sc. & Humanities, OUAT, Bhubaneswar	Study on molecular characterization and bioactive potential assessment of chromium reducing microbes isolated from chromit mines of Odisha	2016-17	4,24,000/-
			2017-18	29,000/-
			2018-19	2,28,000/-
15	Dr Laxmi Kumari Samad Department of Botany, College of Basic Sc. & Humanities, OUAT,BBSR	Screening and extraction of biologically active compounds from sheathed cyanobacteria isolated from building facades and monuments of Odisha	2016-17	4,30,000/-
			2017-18	nil
			2018-19	2,18,000/-
16	Dr(Mrs) Nibha Gupta, Sr. Scientist, RPRC, Bhubaneswar	Optimization of submerged culture requirements for the production of mycelial growth and exopolysachharide by some selected fungi	2016-17	2,89,000/-
			2017-18	2,54,000/-
			2018-19	2,63, 000/-
17	Dr Giridara Kumar Surabhi Senior Scientist, RPRC Bhubaneswar	Cloning and functional validation of key ripening process genes and enhancement of fruit shelf life in banana	2016-17	2,89,000/-
			2017-18	3,79,000/-
			2018-19	2,63, 000/-

18	Dr Biswa Ranjan Paital, Dept of Zoology, College of Basic Sc & Humanities Orissa University of Agriculture and Technology, BBSR	Biotechnological approaches to evaluate nutritional and pharmaceutical values of Scylla serrata and pila globosa	2017-18	4,88,000/-
			2018-19	2,33,000/-
19	Prof. Jagneshwar Dandapat, P.G. Department of Biotechnology, Utkal University	Signature of DNA methylation machinery in the brain of propyl thiouracil (PTU)-induced hypothyroid rat: Effect of green tea catechins” by the Principal Investigator	2017-18	4,19,000/-
			2018-19	2,64,000/-
20	Dr. Sabuj Sahoo, P.G. Department of Biotechnology, Utkal University, Vani Vihar	Molecular expression of thermostable glutaminase free l-asparaginase gene from a high yielding thermophilic isolate in e. coli: a prospective recombinant enzyme for leukaemia chemotherapy	2017-18	5,09,000/-
			2018-19	2,57,000/-
21	Dr. Chinmay Pradhan, Reader in Botany, P.G. Department of Botany, Utkal University	Evaluation of Bio Degradability of Bio- Composites using PLA and Natural Fibers	2017-18	3,04,000/-
			2018-19	2,42,000/-
22	Dr. Surajit Das, Assistant Professor, Department of Life Science and Principal Investigator NIT, Rourkela-769 008	Characterization of marine bacterial biofilm for utilization in degradation of petroleum hydrocarbon’ by the Principal Investigator	2017-18	4,38,000/-
			2018-19	2,39,000/-
23	Dr Monalisha Mishra, NIT, Rourkela-769 008	Roles of micro RNAs in Drosophila ear formation and function	2017-18	4,04,000/-
			2018-19	2,84,000/-
24	Prof Pradeep Kumar Naik, Dept. of BT & BI, Sambalpur University	Preclinical Efficacy Evaluation of Extremely Promising Novel Noscainoid: A Tubulin-Binding Agent in the Management of Breast Cancer”	2017-18	3,24,000/-
			2018-19	3,14,000/-
25	Dr Debabrata Panda, Asst Prof, Dept. of Biodiversity & conservation of Natural Resources, Central University of Odisha, Koraput-764 021	Molecular Characterisation of selected indigenous rice landraces of Jeypore tract of Odisha in relation to drought stress tolerance	2017-18	3,94,000/-
			2018-19	2,64,000/-
26	Dr Biswa Ranjan Paital, Dept of Zoology, College of Basic Sc & Humanities Orissa University of Agriculture and Technology, BBSR	Biotechnological approaches to evaluate nutritional and pharmaceutical values of Scylla serrata and pila globosa	2017-18	4,88,000/-
			2018-19	2,33,000/-