GOVERNMENT OF ODISHA
SCIENCE AND TECHNOLOGY DEPARTMENT
*****

ST-BT-MISC-0005-2023- 1661 **/ST, dated** 28.03.2023

From

Puja Mishra
Joint Secretary to Government

To

All the Principal Investigators (List of PIs as enclosed at Annexure I)

Sub: Research and Development Project Grants in Biotechnology for the year 2022-23.

Madam/ Sir,

With reference to the subject cited above, I am directed to say that your project proposal has been selected for funding under the scheme "Research and Development Project Grants in Biotechnology" for the year 2022-23.

The comments/ suggestions made by the Expert Committee has been enclosed at Annexure-II and the approved budget particulars at Annexure-III for your information and reference.

Further, you are, requested to submit your bank details in the prescribed format (Annexure-IV) for release of the 1st year grant under the scheme.

Yours faithfully

28/3/23

Joint Secretary to Government

Memo No. 1662 /ST, Bhubaneswar, dated the 28th March 2023

Copy forwarded to the Registrar, Berhampur University, Bhanja Bihar, Berhampur-760007/ the Registar, Rama Devi University, Vidya Vihar, PO.Bhoi Nagar, Bhubaneswar-751022/ the Director, IGIT Sarang, Dhenkanal, Pin: 759146/ the Principal, SCB Dental College and Hospital,Cuttack- 753007/ the Principal, S.C.S(Autonomous) College., Chandan Hazuri Road, Puri-752001/ the Director, Indian Institute of Horticulture Research, Bhubaneswar-751019 for information and necessary action.

28/3/23

Joint Secretary to Government

Memo No. 1663 /ST, Bhubaneswar, dated the 28th March 2023

Copy forwarded to PS to Commissioner-cum-Secretary, S&T Department for kind information of Commissioner-cum-Secretary, S&T Department.

28/3/23

Joint Secretary to Government

ANNEXURE I

SL. No.	Name	Contact Details
1	Dr.Dillip Kumar Bishi	Department of Biotechnology, Rama Devi University, Vidya Vihar, PO.Bhoi Nagar, Bhubaneswar-751022 dillipkumarbishi@rdwu.ac.in
2	Dr.Pallavi Mishra	SCS Autonomous College, Puri-752001, pallavi.msh@gmail.com
3	Dr.Saswat Sourav Mohapatra	PG Department of Biotechnology, Berhampur University, Bhanja Bihar, Berhampur-760007 saswatsmohapatra@gmail.com
4	Dr.Alok Prasad Das	Department of Life Sciences, Rama Devi University, Vidya Vihar, PO.Bhoi Nagar, Bhubaneswar-751022 alok1503@gmail.com
5	Dr.Tribikram Debata	Department of Oral & Maxillofacial Pathology and Microbiology, SCB Dental College & Hospital, Cuttack-753007 tribikramdt@gmail.com
6	Dr.Manas Ranjan Sahoo	Central Horticulture Experiment Station (ICAR-IIHR-CHES), Indian Institute of Horticulture Research, Bhubaneswar-751019: manas.sahoo@icar.gov.in
7	Dr.Ipsita Dipamitra Behera	Department of Chemical Engineering, IGIT, Sarang-759146 ipsitabehera@gmail.com

ANNEXURE II

Sl. No.	Name of PI	Project Title	Comments/Suggestions
1.	Dr.Dillip Kumar Bishi, Ramadevi Women University, BBSR	Phyto-nanotechnological interventions for Hepatocellular Carcinoma treatment- as in vitro and in silico approach	The committee members believed that the investigator has the appropriate training and expertise to accomplish the proposed objectives. However, they suggest that; a. the investigator should develop nanoparticles that target hepatocellular carcinoma (HCC) to enable specific drug delivery to HCC b. the nanofiber-based mesh is not a viable option for in-vivo therapeutics, hence the investigator should strategize his methodology to develop nanoformulation with possible in-vivo delivery options.
2.	Dr.Pallavi Mishra, SCS College, Puri	To develop a chitosan-biochar composite and study its efficacy as a water purifier and an oil adsorbent	The committee members felt that the proposal aims at tackling a pertinent problem of environmental pollution with commonly available bio-waste. The members suggest that; a) the investigator should also use other alternatives to chitosan to develop an efficient and cost-effective composite to absorb antibiotics and oil pollutants b) the investigator should aim at developing a final product and collaborate with experts in the field to develop appropriate designs like cartridges to enable large-scale and efficient purification of industrial effluents and local water bodies c. To take the expert help of IMMT regarding the development of the cartridges.
3.	Dr.Saswat Sourav Mohapatra, Dept. of Biotechnology, Berhampur University	Genetic determinants of colistin resistance among bacterial isolates from the environmental sources in Odisha	The committee members believe that the proposal addresses a pertinent problem of uncontrolled use of antibiotics leading to the generation of antibiotic-resistance microbes and the successful accomplishment of the project will help in guiding policy decisions. However, the members suggest that; a) the investigator should adapt strategies in sample collection that will help in the correlation of prevalence of resistance with high usage of colistin or other antibiotics (like in hospital settings), random locations to identify naturally existing colistin resistance, and environments where uncontrolled use of all antibiotics is rampant like aquaculture and poultry farms. b) the investigator should collaborate with organizations/investigators who have the facilities to do complete molecular characterization of the resistant isolates c) the investigator should aim at deciphering the molecular mechanisms that drive colistin resistance in the identified isolates d) the investigator should take steps to create awareness among the public and government organizations and influence policy decision

4.	Dr. Alok Prasad Das, R D Women University	Investigation of Microbial Remediation Technology for synthetic microfiber	The committee members felt that the proposal addresses the huge problem of microplastic pollution in all spheres of the ecosystem. However, the members were of the opinion that; a) the investigator should use the funds to further characterize the previous isolates of his lab and establish their capacity to degrade plastics and immediately deposit the isolates in national repositories. b) in parallel the investigator can attempt to isolate and identify novel strains capable of degrading the plastics in the environment.
5.	Dr.Tribikram Debata, SCB Dental College	Association of vitamin D receptor polymorphism in Tobacco associated oral Cancer	The members felt that the proposal is a methodological attempt to characterize a yet unclear aspect of Vitamin D receptor polymorphisms in the development and progression of oral cancer. The members suggested that; a. the investigator should write a systemic review of the significance of Vitamin D polymorphism in Oral cancer b. the investigator should consider an ample sample size to make significant conclusion.
6.	Dr. Manas Ranjan Sahoo, CHES	Deciphering the role of native endophytes to elucidate the broad spectrum resistance mechanisms in wild brinjal under the east-coast Odisha ecosystem	The committee members felt that the proposal addresses an emerging aspect of developing abiotic and biotic stress resistance in plants by adopting strategies exploited by the wild varieties. The members suggested that; a. the investigator should attempt to culture and isolate the endophytes and characterize them at the molecular level by collaborating with organizations that have such facilities
7.	Dr. Ipsita Dipamitra Behera, IGIT, Sarang	Development of bioremediation strategy for enhanced degradation of petroleum hydrocarbon contaminated soil in Paradip industrial area.	The committee members felt that the proposal addresses a pertinent problem of pollution from oil refineries and believed that the investigator has the necessary expertise and training to conduct such research activities. However, the members felt that; a) the investigator should first test her previously characterized hydrocarbon-degrading bacteria in natural settings and attempt to utilize and develop the isolates for bioremediation applications b) in parallel the investigator can attempt to isolate and identify novel local strains capable of degrading hydrocarbon pollutants in the environment

Annexure-III

Sl.No	Name of PI	Project Title	Budget Particulars (in Rupees)			
			1st	2nd	3rd	TOTAL
1.	Dr.Dillip Kumar Bishi	Phyto-nanotechnological interventions for Hepatocellular Carcinoma treatment- as in vitro and in silico approach	3,22,000/-	3,74,000/-	3,03,000/-	9,99,000/-
2.	Dr.Pallavi Mishra	To develop a chitosan-biochar composite and study its efficacy as a water purifier and an oil adsorbent	3,60,000/-	3,60,000/-	2,80,000/-	10,00,000/-
3.	Dr.Saswat Sourav Mohapatra	Genetic determinants of collistin resistance among bacterial isolates from the environmental sources in Odisha	3,39,000/-	3,49,000/-	3,08,000/-	9,96,000/-
4.	Dr.Alok Prasad Das	Investigation of Microbial Remediation Technology for synthetic microfiber pollutants	5,64,000/-	3,44,000/-	-----	9,08,000/-
5.	Dr.Tribikram Debata	Association of Vitamin D receptor polymorphism in Tobacco associated Oral Cancer	3,24,000/-	3,24,000/-	3,48,000/-	9,96,000/-
6.	Dr.Manas Ranjan Sahoo	Deciphering the role of native endophytes to elucidate broad spectrum resistance mechanisms in wild brinjal under the east-coast Odisha ecosystem	6,49,000/-	3,49,000/-	-----	9,98,000/-
7.	Dr.Ipsita Dipamitra Behera	Development of bioremediation strategy for enhanced degradation of petroleum hydocarboncontaminated soil in Paradip industrial area	5,94,000/-	3,84,000/-	-----	9,78,000/-

Annexure-Iv

BANK DETAILS OF THE BENEFICIARY

(Comptroller of Finance/Registrar/Director/Chief Executive/...)

Sl.No	Payee Name	Bank IFSC	MICR No.	Account Type	Account No.	Mobile No.

Signature:
Name:

Designation:

Address:

Contact No.:

Email ID:

Mobile No.: