

## BACK-TO-LAB RESEARCH & POST-DOCTORAL FELLOWSHIP PROJECTS 2022-23

1. Projects continued from previous year - 20
2. Newly sanctioned Projects in 2022-23 - 07
3. Total number of projects in operation in 2022-23 - 27
4. Projects completed at the end of F.Y. 2022-23 - 03
5. **Projects carried forward to F.Y. 2023-24 - 24**

### **1. Projects continued from previous year**

Sl. No	Name/ Research Center	Title of the Project	Broad Subject area	Duration & Type of fellowship	Scientist Mentor	Project cost (Rs) Status
1	<b>Dr. Sunitha S.S</b> University of Kerala, Kariyavattom	<i>Role of Mitochondrial K-ATP channel in neuroprotection in Parkinson's disease model and its therapeutic response to the plant, Withania somnifera and Morus alba</i>	Neurobiology	26.04.2018 to 25.04.2022 PDF	<b>Dr. Benno Pereira F.G</b> Asst. prof., Dept. of Zoology, Kariyavattom, Trivandrum	24,21,200 Completed
2	<b>Dr. Sapna K</b> Dept. of Marine Biology, Microbiology, Biochemistry, CUSAT	<i>Isolation and functional analysis of protease inhibitors from mangroves in Kerala for therapeutic applications</i>	Biotechnology	02.04.2018 to 01.04.2022 PDF	<b>Dr.A.A. Mohamed Hatha</b> Prof., Dept. of Marine Biology, Microbiology, Biochemistry, CUSAT	21,57,200 Completed
3	<b>Smt. Arya Krishnan</b> IIITMK, Techno park campus, Trivandrum	<i>Finger Vein Based User Authentication</i>	Biometrics	23.01.2019 to 22.01.2022 RF	<b>Dr. Tony Thomas</b> Asst. Prof., IIITM-K Kazhakkuttom, Trivandrum	9,70,800 Completed
4	<b>Dr. Gincy Marina Mathew</b> Microbial Process & Tech. Division CSIR-NIIST, Trivandrum	<i>Prawn shell waste management and valorization by biotechnological conversion to chitin and other value added products</i>	Biotechnology	07.02.2019 to 06.05.2022 PDF	<b>Dr. Rajeev Kumar Sukumaran</b> Sen. Scientist and Head, Microbial Process &Tech. Division, NIIST, Trivandrum	14,36,366
5	<b>Dr. Preetha G Nair</b> Dept. of Marine Biology, School of Marine Sciences, CUSAT	<i>Fragilaria Oceanica: Is it a true indicator of high Indian Oil Sardine stock along the southwest (Kerala) coast of India</i>	Fishery oceanography	25/01/2019 to 24/07/2022 PDF	<b>Dr. Mohammed Hatha</b> Professor, School of Marine Sciences, CUSAT	14,71,171
6	<b>Dr. Resmi P</b> Dept. Aquatic Environment Management, KUFOS, Kochi	<i>Isolation and characterization of alkaloids from the mangrove plants of Rhizophoraceae family and investigations on their anti-bacterial and antidiabetic activities</i>	Oceanography	24.01.2019 to 23.07.2022 PDF	<b>Dr. Anu Gopinath</b> Asst. Professor, Dept. Aquatic Environment Management, KUFOS, Kochi	14,70,710
7	<b>Dr. Roshni K</b> Dept. of Aquatic Environment Management, KUFOS, Kochi	Risk assessment and impacts of aquaculture species on native fish diversity in the downstream and upstream areas of Mullaperiyar Reservoir, Periyar River, Kerala	Fisheries Science	01.02.2019 to 31.07.2022 PDF	<b>Dr. Ranjeet K</b> Associate Professor, Dept. Aquatic Environment Management KUFOS, Panangad , Kochi	14,74,400
8	<b>Dr. Sujitha Mary</b> Marine Biotechnology Division, CMFRI, Kochi	Biomarkers for environmental pollution: Development of genomic biomarkers using <i>Perna indica</i> ( <i>Perna Perna</i> ) as model species	Bioinformatics	16.01.2019- 15.07.2022 PDF	<b>Dr. Sandhya Sukumaran</b> Principal Scientist, Marine Biotechnology Division, CMFRI	14,67,018
9	<b>Dr. Raji S Nair</b> Division of Crop Utilization, CTCRI, Trivandrum	Chlorophyll fluorescence kinetics and monitoring of photochemical efficiency in cassava ( <i>Manihot esculenta</i> Crantz) genotypes for energy efficient cassava	Plant Physiology	18.02.2019 to 17.08.2022 PDF	<b>Dr. Saravanan Raju</b> Senior Scientist, ICAR- CTCRI, Trivandrum	14,49,757

10	<b>Dr. Dhanya G.</b> Dept of Botany, University of Kerala, TVM	<i>Phyto Mining(Bio-Ore Mining)- A Green Novel Strategy for the management of Hyper Accumulators</i>	Plant Biotechnology	05.02.2020 to 04.02.2023  PDF	<b>Dr. P. M. Radhamany</b> Professor, Dept of Botany, University of Kerala, TVM	14,17,200 Ongoing
11	<b>Dr. Sobhana K.A.</b> Zoological Survey of India, Western Ghat Regional Centre, Kozhikode,	<i>Taxonomy of the subfamily Aphodiinae (Coleoptera: Scarabaeidae) in the South Western Ghats region of Kerala.</i>	Entomology	06/07/2020 to 05/07/2023  PDF	<b>Dr. Girish Kumar P,</b> Scientist D, Zoological Survey of India, Western Ghat Regional Centre	14,17,200 Ongoing
12	<b>Dr. Lailaja V.P.</b> Marine Biotechnology Division, Central Marine Fisheries Research Institute (CMFRI), Kochi,	<i>Investigation for L-Asparaginase free of clinical toxicity from symbiotic bacterial isolates from hemolymph and gut of Marine crabs</i>	Microbiology	01/07/2020 to 30/06/2023  PDF	<b>Dr. Sumithra T.G.,</b> Scientist, Marine Biotechnology Division, CMFRI, Kochi	14,17,200 Ongoing
13	<b>Dr. Hridya V.K.</b> Chemical Sciences & Technology Division, CSIR-NIIST, Thiruvananthapuram,	<i>Bioprospecting of selected mangroves from Kerala coast</i>	Chemistry	13/08/2020 to 12/08/2023  PDF	<b>Dr. K. V. Radhakrishnan,</b> Senior Principal Scientist & Head, CSIR- NIIST, Thiruvananthapuram	14,17,200 Ongoing
14	<b>Dr. Haseena A.</b> Dept. of Agricultural Microbiology, College of Horticulture, Kerala Agricultural University (KAU), Thrissur,	<i>Development of microbiome for the regeneration of soil organic matter to stabilize the disturbed and undisturbed areas of Nellyampathy and Attapadi</i>	Microbiology/ Biotechnology	01/07/2020 to 30/06/2023  PDF	<b>Dr. Surendragopal,</b> Professor, Dept. of Agricultural Microbiology, College of Horticulture, KAU, Thrissur	14,17,200 Ongoing
15	<b>Dr. Smitha P. S.</b> NCESS, Aakkulam, Thiruvananthapuram	<i>Socio-economic and environmental viability of Pamba-Achankovil-Vaippar link</i>	Civil Engineering	31.03.2021 to 30-03.2024  PDF	<b>Dr. K. Maya,</b> Scientist F, Hydrological Processes (HyP), NCESS , Aakkulam, Thiruvananthapuram	14,17,200 Ongoing
16	<b>Dr. Chinthu T. Udayarajan</b> CSIR-NIIST, Thiruvananthapuram	<i>Development of Vegan Cheese</i>	Food Science	08/04/2021 to 07/04/2024  PDF	<b>Dr. Nisha P,</b> Principal Scientist, CSIR-NIIST, Thiruvananthapuram	14,17,200 Ongoing
17	<b>Dr. Manju P. Nair</b> Dept. of Aquatic Environment Management, KUFOS, Kochi	<i>Nano and microplastics prevalence as point source of trace metals: A tropical-polar evaluation</i>	Earth and Environmental Sciences	03/04/2021 to 02/04/2024  PDF	<b>Dr. Anu Gopinath,</b> Assistant Professor , Dept. of Aquatic Environment Management, KUFOS, Kochi	14,17,200 Ongoing
18	<b>Dr. Bindu M.</b> Dept. of Chemistry, University of Calicut	<i>High Performance Core @ Double Shell Structured TiO<sub>2</sub>-Polymer Nanocomposites for Energy Storage and Dielectric Applications</i>	Polymer nanocomposites	15.04.2021 to 14.04.2024  PDF	<b>Dr. Pradeeepan Periyat,</b> Associate Professor, Dept. of Environmental Studies, University of Calicut	14,17,200 Ongoing
19	<b>Dr. Sandra Maureen Francis</b> School of Biology, IISER, Thiruvananthapuram	<i>Structural elucidation of the bacterial transcription elongation complex with Gre factors: focus on Mycobacterium tuberculosis RNA polymerase</i>	Molecular biology	26.04.2021 to 25.04.2024  PDF	<b>Dr. Ramanathan Natesh,</b> Assistant Professor, School of Biology, IISER, Thiruvananthapuram	14,17,200 Ongoing
20	<b>Dr. B. Indulakshmi</b> Department of Mechanical Engineering, CET, Thiruvananthapuram	<i>Design and development of an instrument-free microfluidic thermal control module for point of care pathogen detectors.</i>	Instrumentation and Control	26.04.2021 to 25.04.2024  PDF	<b>Dr. Ranjith S. Kumar,</b> Associate Professor, Dept. of Mechanical Engineering, CET, Thiruvananthapuram	14,17,200 Ongoing

## 2. Newly Sanctioned projects

21	<b>Dr. Mary Rani Abraham</b> Department of Electrical Engineering, IIT Palakkad	<i>Design and development of Planar Tuneable RF Filters for 5G Communication Systems</i>	Microwave electronics/ Electronics	01.11.2022 to 31.10.2024 PDF	<b>Dr.Sukomal Dey,</b> Assistant Professor, Dept. of Electrical Engineering, IIT Palakkad	13,38,000 Ongoing
22	<b>Dr. Anaswara Krishnan S</b> Material Science and Technology Division, CSIR-NIIST, Thiruvananthapuram	<i>Process optimization of a cost effective Heterogeneous Catalyst for Biodiesel Production from used cooking oil</i>	Bio-fuel/ Biotechnology	31.10.2022 to 30.10.2024 PDF	<b>Dr.Ananthakumar S</b> Chief Scientist, Material Science and Technology Division, CSIR-NIIST, Thiruvananthapuram	13,38,000 Ongoing
23	<b>Dr. Shyama Ramakrishnan</b> Department of Chemistry, IIT Palakkad	<i>A Molecular Dynamics Perspective on the Mechanism of Dioxigen Activation</i>	Bioinorganic Chemistry/ Computational Chemistry	01.11.2022 to 31.10.2024 PDF	<b>Dr. Padmesh A,</b> Assistant of Professor, Department of Chemistry, IIT Palakkad	13,38,000 Ongoing
24	<b>Dr.Sruthi T</b> Department of Physics, Central University of Kerala, Kasaragod	<i>Density Functional Theory Studies of Novel Two-Dimensional Materials for Energy Storage Applications.</i>	Energy storage applications, Supercapacitors	02.11.2022 to 01.11.2024 PDF	<b>Prof.Vincent Mathew,</b> Professor, Department of Physics, Central University of Kerala, Kasaragod	13,38,000 Ongoing
25	<b>Dr.Sharanya Suresh C</b> Rajiv Gandhi Centre for Biotechnology, Thiruvananthapuram	<i>Drug repurposing against SARS CoV-2 Using E- Pharmacophore and Polypharmacology approaches.</i>	Drug Discovery / Computational Biology	25.11.2022 to 24.11.2024 PDF	<b>Dr. Kathiresan Natarajan</b> Scientist C , Rajiv Gandhi Centre for Biotechnology, Thiruvananthapuram	13,38,000 Ongoing
26	<b>Dr.Sruthi S</b> Vizhinjam Regional Centre of CMFRI, Thiruvananthapuram	<i>Parasites of Brachyuran Crabs of Kerala, South West Coast of India</i>	Taxonomy/ Aquatic Biology & Fisheries	01.11.2022 to 31.10.2024 PDF	<b>Dr.B.Santhosh,</b> Principal Scientist, Vizhinjam Regional Centre of CMFRI, Thiruvananthapuram	13,38,000 Ongoing
27	<b>Dr. Minu P</b> KUFOS, Kochi	<i>Response studies on bivalves due to harmful algal bloom exposure in the coastal waters of Malabar, Kerala</i>	Life Sciences/ Marine Biodiversity and Ecology	25.01.2023 to 24.01.2025 PDF	<b>Dr Prabhakaran M P</b> Assistant Professor (Fisheries Oceanography) Dept. of Aquatic Environment Management, KUFOS, Kochi	13,38,000 Ongoing