

Kerala State Council for Science Technology and Environment

Ecology and Environment Programme

List of pre-proposal recommended to next stage by Programme Advisory Committee meeting held on 5th July 2023

Sl. No.	Principal Investigator	Title
1.	Dr Stanislaus Antony Ceasar Senior scientist Division of Plant Molecular Biology and Biotechnology, Department of Biosciences, Rajagiri College of Social Sciences, Cochin - 683 104	Analysis and recovery of heavy metals by hyper-accumulator plants from the industrial area around Elloor, Ernakulam district, Kerala Detailed Proposal Submission E&E, KSCSTE
2.	Dr Mangala K Assistant Professor Dept. of Chemistry, Nehru Arts and Science College Kanhangad, Kasaragod.	Fabrication of dendrimers for water purification
3.	Dr Preethy Chandran Assistant Professor School of Environmental Studies, CUSAT	Bioremoval of Chlorpyrifos contaminated effluents via Intimate Coupling of Photocatalysis and Biodegradation (ICPB)
4.	Dr. Jitha Kunhikrishnan M Assistant Professor Dept. of Chemistry, Sree Narayana College, Kannur	Fabrication of electrospun bacterial cellulose based composite water filtration membranes and applications in removal of emerging pollutants from plastic and e-waste leach
5.	Dr. Mayadevi M R Assistant Professor Department of Soil Science and Agricultural Chemistry, College of Agriculture, Vellanikkara, Thrissur	Developing silica – calcium nanocomposites from rice by-products and deciphering its dynamics for soil acidity amelioration
6.	Dr. Mini Thomas Assistant Professor Department of Chemistry, St. Joseph's College Irinjalakuda, Thrissur	Development of precision agricultural practices in Kerala using nanofibrous seed tape from Water Hyacinth(<i>Eichornia crassipes</i>) for controlled agrichemical release and improved crop yield
7.	Dr. Manogem E.M Associate Professor & Head Department of Zoology, University of Calicut, Kerala-673635	Functional Mapping of Insect Sensilla of Potential Coleopteran Pests Through Electrophysiological Approach : Integrated Pest Management
8.	Dr. B. Ajithkumar Associate professor & Head Department Of Agrl. Meteorology, College Of Agriculture, Kerala Agricultural University, Vellanikkara-680656 Thrissur, Kerala	Morpho - physiological and phenological responses of rice varieties under different temperature regimes Detailed Proposal Submission E&E, KSCSTE
9.	Dr. J. Beslin Joshi Scientist-B Land and Water Management Research Group, Centre for Water Resources Development and Management, Kozhikode-	Flooding Resilience in Crops through Microbial Bio-stimulant and Unravelling its Molecular Action

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10.	Dr. Sneha Yogindran Assistant Professor Department of Biotechnology, Cochin University of Science and Technology, Kochi, Kerala-682022	Diversity analysis of phyllosphere and rhizosphere bacterial microbiome associated with CMD in Indian cassava.
11.	Dr.B. Ajithkumar Director IT-BT complex Kerala Agricultural University 9847749670 Centre for e-Learning, Kerala Agricultural University	“CMYPDF”- Smart farming Technology with AI
12.	Dr.Anu Philip Assistant Professor Bharata Mata College , Thrikkakara.	Development of nanoporous Solid Polymer Composite Electrolyte for Lithium Batteries.
13.	Dr. E, Pushpalatha Professor Department of Zoology, University of Calicut, Malappuram, Kerala	Molecular cloning, characterization and expression analysis of Proteases from <i>Lagenidium giganteum</i> , a mosquito parasiting, against the dengue fever vector <i>Aedes aegypti</i>
14.	Dr. Suresh PS Associate Professor School of Biotechnology, NIT Calicut	Assessment of food packaging plastic covers and their genotoxic effects on biological systems: Impact of COVID-19 pandemic sustainable takeaway food culture in restaurants
15.	Dr.Linu Mathew Professor School of Biosciences, Mahatma Gandhi University, PD Hills P O , Kottayam	Bioprospecting of fungal endophytes of <i>Piper longum Linn.</i> for Piperlongumine production
16.	Dr. Shyam Kumar S. Assistant Professor PG and Research Department of Botany, Government College for women, Thiruvananthapuram-695014	Cyanobacterial biofilm using natural polymers for biological soil crust formation and reclamation of ‘usar’ soil
17.	Dr Manoj Oommen Scientist C Indian Cardamom Research Institute (Spices Board), Ministry of Commerce and Industry, GOI, Myladumpara, Idukki, Kerala 685 553	Climate Resilient cardamom production in Cardamom Hill Reserve in Idukki through crop weather interaction studies, simulation models and its validation
18.	Dr. Unnikrishnan C.K Scientist C Atmospheric Science Group National Centre for Earth Science Studies Akkulam, Thiruvananthapuram 695011	Study of atmospheric natural hazards in southern India using in situ and remote sensing measurements in the recent decades
19.	Dr.Mohammed Firoz C Associate Professor Department of Architecture and Planning, NIT Calicut, NIT Campus, Kerala.	A Decision Support System for Flood Resilience based Spatial Planning for Urban Local Bodies
20.	Dr. Aswathy E.V Assistant Professor Department of Civil Engineering, NIT Calicut, Kozhikode 673601	Measurement of atmospheric aerosols chemical composition in urban environments to study its sources and impact on the Climate equilibrium along the Kerala coast.

21.	Dr. Rekha V B Assistant Professor Christ College (autonomous), Irinjalakuda 679571	A Geospatial Approach Of Flood Risk Assessment And Management In Ernakulam District; Kerala.
22.	Dr. Suja R Associate Professor & Coordinator TPLC Co-ordinator , Translational research & Professional leadership centre, GEC Barton Hill	IoT Based Real time Spatial Monitoring of Streams for Climate change resilience in Trivandrum
23.	Dr. Shakeela V Director, MSSRF CA&C MSSRF Community Agrobiodiversity Centre, Puthoorvayal, Wayanad, Kerala 673577	Pollination Behaviour in Coffee Agro Forestry Systems: Ecosystem services & Climate Change
24.	Dr. Delphy Rocha Assistant Professor Dept. of Forest Biology and Tree Improvement, College of Forestry, Kerala Agricultural University, Vellanikkara, Thrissur, 680656	Assessment of methane emission from tree stems of selected tropical woody ecosystems
25.	Dr. Syllas V.P. Assistant Professor School of Environmental Sciences, Mahatma Gandhi University, Kottayam -686 560	Development of an indigenous microalgae based photobioreactor for carbon dioxide capture
26.	Dr. Baiju G Nair Associate Professor School of Biotechnology NIT Calicut. Kozhikode	Free swimming hybrid microbots to efficiently remove pathogens and toxic compounds from water resources.
27.	Dr Razeena Karim L Assistant Professor Department of Zoology, Christian College, Kattakada, Thiruvananthapuram	Occurrence and impacts of Microplastics in certain estuarine indigenous food fishes of Ashtamudi Lake- the Ramsar Site
28.	Dr. Jithu U. Krishnan Scientist-B Forest Entomology Department, Kscste-Kerala Forest Research Institute, Peechi, Thrissur-680653	Investigations on post-flood Ambrosia beetle outbreaks in Kerala
29.	Dr. Maya George Assistant Professor Department of Zoology, Alphonsa College, Pala, Kottayam (Dist), 686574	Isolation And Characterization Of Bioactive Actinomycetes
30.	Dr.Lekshmi R Chandran Assistant Professor Department of Zoology, NSS College Nemmara, Palakkad 678508	Inclusion Of Invasive Aquatic Weeds In Development Of Feed For Commercial Carps Cultured In Inland Fisheries Of Palakkad District, Kerala Through The Involvement Of Women Self Help Group- A Possible Sustainable Remedy In Managing Biological Invasion In Aquatic And Agro Ecosystems

31.	Dr. Manju C. Nair Associate Professor Department of Botany, University of Calicut, Calicut University P.O., Malappuram Dist., Kerala 9447439634 manjucali@gmail.com	Assessment of Bryophyte diversity of Karimpuzha Wildlife Sanctuary, Kerala in the Western Ghats of Nilgiri Biosphere Reserve
32.	Dr. Divya P R Principal Scientist, PMFGR Centre, ICAR NBFGR ICAR National Bureau of Fish Genetic Resources.	Diversity cataloguing, mapping and conservation of aquatic biodiversity of Myristica swamps in India
33.	Dr. Athira K Assistant Professor Kerala University of Digital Sciences, Innovation and Technology (Digital University, Kerala	Kerala Floral Spectra (KFS): A radiometric characterization approach towards ecological intensification Detailed Proposal Submission E&E, KSCSTE
34.	Dr. Sunil Jose K Assistant Professor Deva Matha College, Kuravilangad, Kottayam District, Kerala 686633	Geospatial distribution and emerging threats to primitive mygalomorph spiders of western ghats in Kerala (Araneae: Mygalomorphae).
35.	Dr. Deepa Thomas Assistant Professor (Agronomy) Rice Research Station, Vyttila, Kerala Agricultural University, Kochi-68201	Species diversity and adaptive mechanisms of sedges (family Cyperaceae) in Pokkali ecosystem
36.	Dr. Jayasooryan K K Scientist B Training and Outreach Research Group, Centre for Water Resources Development and Management, Kunnamangalam, Kozhikode 9544050780 jkk@cwrdm.org	Studies on ecological niche degradation and conservation aspects of smooth coated otters in the coastal wetlands and riparian forests of northern Kerala
37.	Dr. Jisha MS Professor School of Biosciences, Mahatma Gandhi University, P.D. Hills PO, Athirampuzha, Kottayam-686560, Kerala.	Bioprospecting, GIS Mapping and scientific validation of indigenous Arrow root varieties of Western Ghats of Kerala
38.	Dr. Anna Ancy Antony A. Assistant Professor Department of Botany, St. Albert's College, Ernakulam 682 018	Molecular Systematics, Biogeography, Taxonomic Revision and Conservation of the genus <i>Liparis Rich.</i> (Orchidaceae) in India with special emphasis on Rare and Endemic Species
39.	Dr. Jasin Rahman V. K Assistant Professor Department of Zoology TKM College of Arts and Science, Kollam	Identification of Conservation Strategies and Prediction of Population Trend of the Pollinators in the Mangroves of Southern Kerala
40.	Dr. Revathy V S Assistant Professor Department of Zoology, Union Christian College, Aluva	Butterflies as indicator taxa of ecological disturbances in Central region of Western Ghats.

41.	Dr. Vishnu R Assistant Professor Assistant Professor, Department of Forest Products and Utilization, College of Forestry, Kerala Agricultural University.	Computer vision-based wood identification of important timber species in Kerala.
42.	Dr. Srinivasan K Assistant Professor (II) Department of Forest Resource Management, Head (i/c) RS & GIS department, College of Forestry, KAU, Vellanikkara, KAU.P.O	Geospatial mapping of soil organic carbon of selected Mangrove forest ecosystems, Kerala using Machine Learning Algorithm (MLA)
43.	Dr. Francis Mathew Assistant Professor Department of Botany St Thomas College Ranny, Pathanamthitta.	Screening of bio-organic compounds for indoor wood preservation
44.	Dr. Deepthi A S Assistant Professor Department of Botany, Catholicate College, Basil Hills P O, Pathanamthitta.	Germplasm documentation, Evaluation, Protection, Popularisation and Value addition of local Jackfruit varieties in Kerala
45.	Dr. M. Prabu Assistant Professor Department of Computer Science and Engineering, National Institute of Technology Calicut, Kozhikode-673601	Scientific Techniques to mitigate Elephant Mortalities on Railway tracks of kanjikode- walayar forest Division, Palakkad, Kerala
46.	Dr. Mahesh Mohan Assistant Professor School of Environmental Sciences, Mahatma Gandhi University, PD Hills, Kottayam	Restoration of Riparian Vegetation on River Banks and Islets in the Chalakudy River
47.	Dr. R. Aruna Devy Assistant Professor Department of Zoology, St. Thomas College, Ranni	Assessment of microplastic and heavy metal contamination in Pamba river ecosystem with special reference to fish species.
48.	Dr. Sanilkumar M.G. Assistant Professor & Head Research Department of Botany, SNM College Maliankara, Ernakulam	Application of phytoplankton functional groups for the biomonitoring of two major river ecosystems of central Kerala
49.	Dr. Joji V S Associate Professor Dept. of Marine Geology & Geophysics, School of Marine Sciences, Cochin University of Science and Technology, Lake Side Campus, Fine Arts Avenue, Koch-682016	Assessment of the impact of coastal erosion and salinity ingress on shallow and deep coastal aquifers of Chellanam village by integrated hydrogeochemical, sedimentological, remote sensing and geophysical Techniques
50.	Dr. Jesitha K Assistant Professor, Department of Chemistry, Sree Sankara College, Mattoor, Kalady PO, Ernakulam DT, Kerala-683574	Screening and Quantitative Determination of Heavy metals, Pesticides, and bacteria in environmental samples with special reference to water.
51.	Dr. R. Jayaraj Principal Scientist Centre For Analytical Instrumentation - Kerala	Dynamics and seasonal variation of microplastics and associated chemicals in the urban freshwater bodies of Kerala

	(CAI-K) KSCSTE-Kerala Forest Research Institute Peechi - 680653, Thrissur, Kerala	
52.	Dr.George K. Varghese Associate Professor Department of Civil Engineering, NIT Calicut, NIT Calicut P. O., Kozhikode- 673601	Relational analysis of the abundance, distribution and composition of microplastics in coastal sediments, near shore waters and bottom sediments and estimation of the microplastic load in the marine environment of Kerala
53.	Dr. Mumthas Y Assistant Professor T.K.M.College of Arts & Science, Karicodu, TKMC P.O, Kollam - 5	Bio monitoring of the Accumulation of PAHs and its Health risk Assessment along the Southern coast of Kerala, India
54.	Dr Chaithanya E R Assistant Professor Assistant Professor, Dept. of. Marine Biology, Microbiology and Biochemistry, School of Marine Sciences, CCUSAT, Kochi, Kerala-682016	Microbiome in Vembanad wetland ecosystem and Its Functional Attributes to Pollutants with Special Reference to Antibiotics
55.	Dr. Manoj M.G. Scientist - D Advanced Centre for Atmospheric Radar Research, Cochin University of Science and Technology, Cochin-682022	Towards a heat resilient city: estimating the footprint of urban heat-island over Cochin, Kerala.
56.	Dr. Suja P. Devipriya Associate Professor School of Environmental Studies, Cochin University of Science & Technology, Kochi, Kerala – 682022	Risk assessment and modelling of microplastic in the alluvial aquifer systems associated with legacy landfill sites in Kerala.
57.	Dr Donald James Scientist B, Forest Biotechnology Department Forest Genetics and Biotechnology Divison, KSCSTE-Kerala Forest Research Institute, Peechi, Thrissur, 680653	Development of a Field-Deployable Loop-Mediated Isothermal Amplification of DNA (LAMP) Based Bioassay for Facilitating Landscape Epidemiology of Sandalwood Spike Disease in Marayoor Sandal Reserve Forest of Kerala.
58.	Dr. Vrinda S Assistant Professor School of Environmental Studies, Cochin University of Science and Technology, Cochin-682022	Combination of remote sensing and eDNA metabarcoding for biodiversity monitoring in polluted rivers of Kerala (ConSeRva)

The Principal Investigators of the above projects are requested to submit the detailed proposal in prescribed format on or before 25th August 2023. An email in this regard is forwarded to all Principal Investigators in the email id provided in the pre-proposal.