

Chief Minister's

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# NAVAKERALA POST DOCTORAL FELLOWSHIP

Department of Higher Education  
Government of Kerala &

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The Kerala State Higher Education Council

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April 2022





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നവകേരള പോസ്റ്റ് ഡോക്ടറൽ  
ഫെല്ലോഷിപ്പ്





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## THE KERALA STATE HIGHER EDUCATION COUNCIL

Constituted by Kerala State Legislature by notification No.19536/Leg.Uni.3/2007/Law. Dated, Thiruvananthapuram, 15<sup>th</sup> October, 2007  
Science and Technology Museum Campus, PMG, Vikas Bhavan P.O., Thiruvananthapuram-33  
website: [www.kshec.kerala.gov.in](http://www.kshec.kerala.gov.in), Tel: 0471-2301290/91/92/93/97/98 Fax: 0471-2301290, email: [heckerala@gmail.com](mailto:heckerala@gmail.com)

No: KSHEC-A3/344/Govt.Kerala-NKPDF/2021

Dated :18/10/2021

### Chief Minister's Nava Kerala Post-Doctoral Fellowships

#### NOTICE

The last date for submission of applications invited vide the notification dated 13.10.2021 from eligible scholars for the Chief Minister's 'Nava Kerala' Post-Doctoral Fellowships, announced by the Government of Kerala in the budget (2021-22) has been extended up to **15<sup>th</sup> November 2021**. Candidates who have submitted their Ph.D. thesis can/may also apply for Nava Kerala fellowship.

Details are available on <https://www.kshec.kerala.gov.in>



Member Secretary



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No: KSHEC-A3/344/Govt. Kerala-NKPDF/2021

Dated:13/10/2021

Chief Minister's

Nava Kerala Post-Doctoral Fellowships

### NOTIFICATION

Applications are invited from eligible scholars for the Chief Minister's 'Nava Kerala' Post-Doctoral Fellowships announced by the Government of Kerala in the budget (2021-22) ranging from Rs.50000 to Rs.100000 per month.

Last date of receipt of application in KSHEC is **20<sup>th</sup> October 2021**

Detailed guidelines of the selection of fellowships, eligibility criteria, Terms and Conditions, Utilisation of fellowship amount etc. are available on <https://www.kshec.kerala.gov.in>



Member Secretary

## PART I

### Chief Minister's Nava Kerala Post-Doctoral Fellowships

Govt. of Kerala Department of Higher Education

&

The Kerala State Higher Education Council

### Revised Guidelines

The Government of Kerala have introduced the prestigious Nava Kerala Post-Doctoral Fellowships scheme for meeting innovation and development needs of the state through promoting quality research spanning the sectors like social, economic, agriculture, development and industry. The scheme envisages **500** individual Post Doctoral fellowships and each one carries an amount ranging from **50,000/-** to **1,00,000/-** per month.

#### Eligibility Conditions:

- Applicant should be a Keralite in origin and should possess Ph.D. degree in Science, Technology, Social Science, Arts and Humanities. Scholars who are not Keralites but working in research related to Kerala in Universities/Institutions in Kerala.
- Candidates who have submitted their Ph.D. thesis can also apply.
- MD holders in medicine from recognised Universities that are approved by appropriate councils can apply
- All experts both in India and abroad can apply for these fellowships
- The period of fellowship will be for two years, which may be extended for one more year, if required.

- The upper age limit is **40** years as on the date of notification, with relaxation of five years for women and candidates from other eligible categories.( **5** years relaxation will be given to candidates belonging to SC/ST/OBC/physically challenged/women)
- Fellowship amount will be granted based on the progress of the project work
- Applications shall be accompanied with synopsis of the project proposal
- The post-doctoral fellowship registration can be done either in departments/centres or schools of the Universities/ Recognised Research Centres and the studies will be undertaken in collaboration with outside hospitals, industries and technical centres.
- To set up laboratory and other facilities, an additional amount of Rs.**50000** will be made available subject to requirement.
- Priority of fellowships will be based on the present developmental needs of Kerala especially the following sectors
- In order to explore the possibilities of Ayurveda and eco-diversity, the fellowship may be in the sectors of Bio-Informatics, Computational Biology, Bio Manufacturing, Bio-Processing, Genetic Engineering, Cell and molecular Biology, Systems Biology and Biotechnology.
- Against the backdrop of commercial crops and rubber, polymer science and technology is another priority sector. The composites of bamboo, coir and wood will also be given priority in this sector.
- In view of the major leap in cyber physical digital technologies, sectors such as Artificial Intelligence, Robotics, Block Chain, Internet of Things, Machine learning, Big data Analysis, Gaming, Augmented Reality, Virtual Reality, Digital Security Systems, Geo Spatial Systems, Quantum Technology and Application, Space Technologies, Advanced Materials, Edge Computing etc.
- Based on the major leaps in the scientific branches of genetics and genomics, Genetic Medicine, Stem Cell biology, Medical imaging, Bio Medical Photonics, Medical devices and

modelling, Brain Computer interface, epidemiology, Assistive Technologies, Genomics in medicine, Social Medicine, Public Health, Health Science and Technologies.

- We need to strengthen the search for the alternative possibilities for reducing the use of fossil fuels. In this background, sectors like Energy storage, Fuel cells, E-mobility, Battery technologies, Photo Voltage, Solar, thermal, bio energy modelling, Bio-mass recycling.
- For the all-round development of agricultural sector of Kerala – Food Science and technologies, Food Processing, Land and Water Management, Agricultural Sciences, Veterinary and Fisheries, Organic Farming, Agricultural value-added products, Precision Agriculture, Agriculture drones.
- For facing the challenges of climate change and for scientifically tackling recurring natural calamities – Housing, transport and Infrastructure, Climate Change, Disaster Management, Carbon foot printing, Hydrological Modelling, land slide prediction, Disaster forecasting, Waste recycling, Pollution control.
- Considering the importance of Innovation Sector – Innovation eco systems, Innovation studies, frugal innovation, Innovation Methodologies.
- In order to reinforce the indigenous culture of Kerala, Social equality and cohesion of Kerala – Archaeology and Material culture studies, Migration Studies, Art, history, language, Social studies, ecological laws, Intellectual property rights, Econometric Modelling of Kerala economy, Digital transformation of Kerala Co-operative sector, handling of new generation technologies including fintech.

### How to apply?

Eligible candidates may submit the application in the prescribed format with all relevant documents as prescribed through online mode. An undertaking from Head of any of the recognized Research Centres/Schools of Universities/ Departments stating that they have no objection to allow the PD Fellow to carry out the programme. The candidate may also submit a brief profile in the prescribed format along with the application form. The

application should contain mailing address, contact number and e-mail ID. The soft copy of the application must also be sent to heckerala@gmail.com. The hard copy of the application should be sent to The Member Secretary, The Kerala State Higher Education Council, Science and Technology Museum Campus, Vikas Bhavan P.O. Thiruvananthapuram – **695 033**

### **Mode of Selection**

The selection of the Post Doctoral Fellowships under the Nava Kerala Scheme from amongst the eligible applications through a process of evaluation of project proposals by the selection committee. Eminent experts from respective subject domains should be included in the selection committee constituted for the purpose. Subject experts may be included for detailed evaluation if necessary, of project proposals in the respective discipline in which a member of the selection committee will be chaired.

Procedure for submission of Statement of Expenditure and Utilization Certificate:

First year – within three months of completion of project period. Second year, within 6 months. The PD Fellows should submit three copies of the Annual Progress Report and Final Technical Report along with the soft copies within the above mentioned duration.

### **Periodic Review of the Projects:**

Review and monitoring of the progress of the project will be done by the selection committee/subject committee formed for the purpose.

### **Final Technical Report Evaluation:**

The Final Technical Report (FTR) submitted within 6 months after completion of the project shall be evaluated by the selection committee.

Further resolved to constitute Selection Committee for the Nava Kerala Post-Doctoral Fellowships.



Chief Minister's NAVAKERALA Post-Doctoral Fellowship: Selection Committee Chief Minister's NAVAKERALA Post-Doctoral Fellowships are intended for the promotion of original research in interdisciplinary issues relating to REBUILD KERALA involving the primacy of sustainability, equity and resilience. Kerala State Higher Education Council (KSEC), authorised to administer the Fellowships, has identified ten experts of international reputation in their fields to be Chair Persons of the following Areas of Knowledge. They will chair the Committee of academics, who matter in the Area concerned as specialists of convergence research. These specialists would be invited under the direction of the Chairperson concerned and on demand, as the specialisation involved in the research proposals requires.



## Part II

### The Chief Minister's NAVAKERALA Post-Doctoral Fellowships

#### Progress Monitoring and Assessment Guidelines

These guidelines are in continuation of the Revised Guidelines issued primarily regarding the eligibility conditions for application and mode of selection for Post Doctoral fellowships. These guidelines incidentally and briefly indicate only certain procedures after the award of the Fellowship, such as periodic reviews, monitoring and evaluation etc. As the procedures for the same are too general, certain set of specific Guidelines of Monitoring and Assessment require to be formulated. These guidelines are supplementary to the Revised Guidelines and should be applied in conjunction with them.

As originally notified, the Chief Minister's Navakerala Post-Doctoral Fellowship (CMNPF) has been instituted so specifically as to lead the research inevitably to the production of original knowledge relevant to the Rebuild Kerala Project (RKP). As already notified the research under the CMNPF shall address multidisciplinary and appreciably interdisciplinary/trans-disciplinary issues such as sustainability, equity and resilience. Kerala State Higher Education Council (KSHEC), which is authorised to administer the Fellowships, has identified experts of international reputation to be Chairpersons of the various Areas of Knowledge.

Accordingly, the selection of suitable researchers for the Fellowship has involved strict administration of higher order criteria insisting upon academic brilliance, research excellence and potential proposals to deliver the goods. Hardly does all this alone guarantee quality output contributing to RKP. Hence appropriate conditions of CMNPF are to be stipulated, an Expert Committee (EC) is to be constituted, and a mandatory Progress Monitoring and Assessment System (PMAS) is to be created for ensuring the attainment of the objective of the CMNPF.

## 1. Conditions of CMNPF

- I. The CMNPF is a non-renewable Fellowship granted conditionally for a period of two years, reckoned with the date of inception which is to be within a period six months from the date of the award.
- II. The Fellowship Amount is rupees Fifty Thousand during the first year and rupees One Lakh during the second year subject to the conditions stipulated thereof.
- III. The Fellowship amount shall be remitted by the KSHEC directly to the Bank Account of the CMNP Fellow.
- IV. The Department/Centre/Institution, where the CMNP Fellow conducts research shall cooperate with the KSHEC to ensure a hassle free institutional environment by preventing cumbersome procedures and bureaucratic control.
- V. Salaried candidates shall be allowed to choose either the Scheme of the protection of the pay and allowances, if eligible, or the Fellowship Amount, whichever is more advantageous to the Awardee. The Awardees shall be granted study leave with their service benefits protected subject to the Government orders. 6. PMAS shall be the assessment tool with which the performance of the CMNP Fellow would be measured.
- VI. An EC shall be entrusted with the responsibility of PMAS.
- VII. Every CMNP Fellow shall be required to undergo a short-term Orientation Course before starting the Project as may be intimated by the KSHEC.
- VIII. Each CMNP Fellow shall identify and benchmark stages appropriate for the proposed research progress and agree upon to attain them within the duration of the stage without fail.
- IX. Every CMNP Fellow shall be required to execute an agreement that he/she would attain the benchmarked goals of each stage within the stipulated duration.

- X. Irrespective of the stage of progress it shall be mandatory for the researcher to submit in the prescribed format a Self Assessment Report on the Progress (SARP) attained during the first six months.
- XI. CMNP Fellows shall be required to submit the SARP by using the Six Monthly Assessment Questionnaire (SMAQ) designed for the purpose.
- XII. The SARP shall be uploaded online to the portal of the KSHEC site within ten days of the CMNP Fellow's completion of the first six months of the Fellowship.
- XIII. Continuation of the Fellowship after the first six months shall depend upon the EC's recommendation under the PMAS.
- XIV. PMAS Committee's recommendation is mandatory for the KSHEC to continue disbursing the Fellowship.
- XV. In the event of the Committee's disapproval of an CMNP Fellow's claims of progress in the first SARP, the Fellowship would be suspended until the attainment of the target within the next three months. On attainment such CMNP Fellows would be reimbursed the Fellowship including the arrears.
- XVI. Only those CMNP Fellows who satisfactorily attain the avowed goals postulated against each stage shall be eligible for the continuation of the Fellowship.
- XVII. Contribution of intellectual property by way of copyright, trademarks and patents as common property is the primary output expected from each CMNP Fellow.
- XVIII. CMNP Fellows shall be supported to participate in academic conferences/seminars if their supervisors/mentors certify that such participation will contribute to the Project. Payment shall be in the form of reimbursement as per rules regarding TA and DA.
- XIX. CMNP Fellows shall be considered for partial financial support for overseas conferences relating to the Project if they are invited with hospitality and recommended by the supervisor/mentor as well as the EC. Payment shall be in the form of reimbursement.

- XX. Details of funding received in support of the Project from external bodies if any either prior to, during or subsequent to the award of Fellowship must be reported in writing to the Government through the KSHEC within six weeks of its receipt.
- XXI. CMNP Fellows may publish their findings with due acknowledgement of the Fellowship and the source of Funding (Government of Kerala) and with the consent of the supervisor.

## **2. The Committee of Experts (EC)**

The KSHEC shall constitute an EC consisting mainly of locally available but leading Academics representing domains of sciences, social sciences and humanities, and chaired by one among them. The Committee shall meet at least once in three months for a critical appraisal of research progress in the CMNP Projects.

## **3. Responsibilities of EC**

- I. To regularly monitor and critically appraise the progress of the CMNP Projects and render appropriate advice.
- II. To seek external experts' opinion regarding progress of research in themes of rare specialisation, if necessary.
- III. To meet periodically and discuss the measures to be adopted for ensuring hassle free research environment for the CMNP Projects in the Department/Centre/ Institution concerned.
- IV. To facilitate the successful completion of CMNP Projects by making sure the prevalence of suitable ambience in the Institution concerned as well as outside the Institution to carry out the activities approved by the Committee as part of the Project's research protocol.
- V. To create awareness regarding research methodology, ethical issues, biosafety practices, and any other information relevant to the CMNP Projects.
- VI. To make sure ethical, scientific and professional standards of research by joining the KSHEC in assuring the cooperation of the Institution concerned.

VII. To facilitate presentation of their research outputs in the proper scientific forum, workshops, conferences, etc., and publication of their discoveries and inventions in refereed journals of high impact.

Vice Chairman, KSHCE





### PART III

#### Recommended List of Candidates for the Chief Minister's Nava Kerala Post Doctoral Fellowship

Sl. No	Domain Name	Number of Candidates Recommended
1	Life Science	21
2	Chemical Science	10
3	Material Science	7
4	Political Science, Historical Studies, Humanities & Liberal Arts	5
5	Economic Studies	5
6	Agriculture & Ecological Science	7
7	Climate Change & Geological Studies	8
8	Medical Science	2
9	Commerce & Management Studies	6
10	Digital Technology & Engineering	6
	Total	77

## 1. Life Science

Sl. No.	Application No.	Name & Address of Applicant	Gender	Institution Presently Attached	Name of Registering University With Department /School/Centre (For NavaKerala Post-Doctoral Fellowship)	Title of the Research Proposal
1	10000072	MithunPadmakumar Souparnika, KSRTC Depot-Nalumukku Road, Velland, Thiruvananthapuram- <b>695543</b>	M	Kerala University of Digital Sciences, Innovation and Technology	Kerala University of Digital Sciences, Innovation and Technology	Effects of Ultrasonic Neuromodulation on Nucleus Accumbens Neurons: A Computational Study.
2	10000107	Leya Thomas LSQ, B- 11, Police Quarters, India Reserve Battalion, Kerala Police Academy Campus, Ramavarmapuram, Thrissur- <b>680631</b>	F	NIL	Kerala Agricultural University	Transcriptomic Profiling of Xylan Utilisation System of a Potent Bacterial Isolate during the Growth on Agro-Residue Under Solid State Fermentation
3	10000944	Sharrel Rebello Dimstan Villa, Near Railway Station, Koratty, Thrissur- <b>680308</b>	F	St Joseph's College, Irinjalakuda	National Institute of Plant Science Technology, M. G. University	Microbe Mediated Synthesis of Cellulosic Nanocomposites from Agro-wastes
4	10000773	Shine V. J. V J Cottage, Vlathankara, Vlathankara P.O. Thiruvananthapuram- <b>695134</b>	M	Nil	Rajiv Gandhi Centre for Biotechnology (RGCB), Thiruvananthapuram, Kerala	A Highthroughput BSL2 Compatible Assay Development for Screening of Natural Products and Compound Libraries against SARS-Cov-2

Sl. No.	Application No.	Name & Address of Applicant	Gender	Institution Presently Attached	Name of Registering University With Department /School/Centre (For NavaKerala Post-Doctoral Fellowship)	Title of the Research Proposal
5	10000045	Joyous T. Joseph Thokkanatt House, Kalichanadukkam PO .Nileshwar, Kasaragode- <b>671314</b>	F	Nil	Rajiv Gandhi Centre for Biotechnology (RGCB), Thiruvananthapuram, Kerala	CRISPR/Cas9 mediated epigenetic editing of genes orthologous to soft-rot disease susceptibility genes of ginger in <i>P. myriotylum</i> susceptible <i>Nicotiana benthamiana</i>
.6	10000252	Remya Chandran Puthanmadam, Palakkad- <b>678595</b>	F	Kannur University	Laboratory for Computational and Structural Biology, Jubilee Centre for Medical Research Under Kerala University of Health Sciences	Ayurvedic Nootropics as Countermeasures for Alzheimer's Disease: Strategic Thinking and Reverse Pharmacology Assisted Scientific Expositions
7	10000081	Jeswin Joseph Research Fellow, National Centre for Aquatic Animal Health, Cochin University of Science and Technology	M	National Centre For Aquatic Animal Health, Cochin University of Science and Technology	Cochin University of Science and Technology, National Centre for Aquatic Animal Health	Novel dsRNA of STAT gene based 'drug' to protect shrimp from White Spot Syndrome virus
8	10000514	Dr Reshma Silvester Kokkat House, Snehavedhi, Kanimangalam PO, Thrissur- <b>680027</b>	F	NA	School of Industrial Fisheries, Cochin University of Science and Technology	Mapping antimicrobial use and antimicrobial resistance in aquaculture farming in Kerala
9	10000494	Anu K. Karinganthra, Perumbaikadu P O, Kottayam- <b>686016</b>	F	Nil	Department of Biotechnology and Microbiology	Exploration Of Black Pepper-Microbiome for Developing Biosynthetic Bacterial Consortia for Enhancing Sustainable Crop Productivity, by a Combined Metagenomics, Metabolomics and Synthesized Microbiome Approach

Sl. No.	Application No.	Name & Address of Applicant	Gender	Institution Presently Attached	Name of Registering University With Department /School/Centre (For NavaKerala Post-Doctoral Fellowship)	Title of the Research Proposal
10	10000255	Vineetha R.C. Krishnaprabha, KRA 137A, Kedaram Nagar, Pattom P.O, Thiruvananthapuram- 695004	F	Regional Cancer Centre, Thiruvananthapuram	Regional Cancer Centre, Thiruvananthapuram, Kerala	MicroRNA profiling in different cytogenetic subtypes of Acute Myeloid Leukemia patients
11	10000022	Asha Raj K.R. Kariyil, T V Puram, Vaikom, Kottayam-686606	F	SCMS, Kalamassery	Calicut University/Department of Zoology, Christ College, Irinjalakkuda	Effects of predicted climate change scenarios on Ecosystem functions and life history traits of the spider <i>Pardosasumatrana</i> (Thorell 1890)
12	10000946	Dr.Hareesh P.S. PadinjarePulikkijil (H), Palakkattumala, Marangattupally (Via), Kottayam-686635	M	Govt .Arts College	ICAR-Central Tuber Crops Research Institute, Thiruvananthapuram	Development and evaluation of artificial microRNA gene constructs suitable for transformation of cassava ( <i>Manihot esculenta</i> Cratz.) for cassava mosaic geminivirus (CMG) resistance
13	10000326	Unnikrishnan B. S. TC 20/305, Kadakamthalakal House, Melaranoor, Karamana P O, Thiruvananthapuram- 695002	M	College Of Agriculture, Vellayani, Thiruvananthapuram	Kerala Agricultural University, College of Agriculture, Vellayani, Thiruvananthapuram	Exploring the Role of Ionic Liquids in the Conversion of Agricultural Wastes into Commercially Valuable Product
14	10000486	Ahlam Abdul Aziz Misbah, Muthuvattoor,Chavakkad (Post), Thrissur-680506	F	NA	Kerala Agricultural University, Vellanikkara, Thrissur	Structural elucidation, molecular docking and bioprospecting of secondary metabolites from callus cultures of <i>Curcuma angustifolia</i> Roxb. elicited with biogenic ZnO nanoparticles
15	10000206	T.R. Resmi Pulari, Venkulam, Edava, Thiruvananthapuram- 695311	F	NA	ICAR-CTCRI	CRISPR/Cas gene editing strategies to develop resistance against sweet potato infecting begomoviruses

Sl. No.	Application No.	Name & Address of Applicant	Gender	Institution Presently Attached	Name of Registering University With Department /School/Centre (For NavaKerala Post-Doctoral Fellowship)	Title of the Research Proposal
16	10000341	Manomi S. Aramam, Njakkad, Vadasserykonam, Varkala, Thiruvananthapuram-695143	F	Cochin University Of Science And Technology	National Centre for Aquatic Animal Health, Cochin University Of Science and Technology	Development of Low-cost Multivalent Non antibiotic IgY-based Oral Edible Vaccine (LoMNA-IOV) as Bio-therapeutics to Combat Major Bacterial Diseases Affecting Aquaculture in Kerala
17	10000602	Megha K.B. Paavanam, PURA 67-A, Nallathu Temple Road, Thiruvananthapuram-695012	F	Sree Chitra Tirunal Institute For Medical Sciences And Technology	Toxicology Division, Bio Medical Technology Wing, Sree Chitra Tirunal Institute for Medical Sciences and Technology, Thiruvananthapuram	Peptide (HHC-36) coated 3D print montmorillonite scaffold for bone regeneration
18	10000754	Hazeena S. H. Edakkalanjoor House, Edakkalanjoor House, Kollam-691522	F	CSIR-NEERI, Nagpur	Central University of Kerala, Kasargode	Integrative Approach for the Valorization of Dairy Wastes for the Production of Xanthan Exopolysaccharides
19	10000286	Amrutha Nisthul A. Areekkara House, Kuthiravattom PO, Near Desaposhini Public Library, Kozhikode-673016	F	Nil	University of Calicut	Synergistic Antitumor Activity of Cucurbitacin B with BRAF Inhibitors/Natural Chemopreventives against Melanoma <i>In Vitro</i> .
20	10000110	Tripti Raghavendra 7B, Heera Royale Apartments, Karingachira, Ernakulam-682301	F	Cochin University Of Science And Technology	Department of Biotechnology, Cochin University of Science and Technology	Bacterial Diversity of Water and Sediment under Anthropogenic Influence of Kochi Maritime Facilities

Sl. No.	Application No.	Name & Address of Applicant	Gender	Institution Presently Attached	Name of Registering University With Department /School/Centre (For NavaKerala Post-Doctoral Fellowship)	Title of the Research Proposal
21	10000175	Seena Jose National Centre For Aquatic Animal Health, Cochin University Of Science And Technology, Lake Side Campus	F	National Centre for Aquatic Animal Health, Cochin University Of Science And Technology	National Centre for Aquatic Animal Health, Cochin University of Science and Technology	Protection of Shrimp from White Spot Virus: Development of a Marine Invertebrate Permanent Cell Line Susceptible to the Virus through Reprogramming Shrimp Lymphoid Cells

## 2. Chemical Science

Sl. No	Application No.	Name & Address of Applicant	Gender	Institution presently attached	Name of Registering University with department /School/Centre (for NavaKerala Post-Doctoral Fellowship)	Title of the Research Proposal
1	10000433	Dr. Wilbee D.S. Thejas, JNRA 75 E, Near Pulikkal Devi Temple, Janasakthinagar, Pongummodu, Thiruvananthapuram-695011	F	Govt. Medical College, Thiruvananthapuram	Not yet decided	Identification and modification of RNA Dependent RNA Polymerase (RDRP) Allosteric Inhibitors of SARS CoV2 based on Drug Repurposing Strategy using Well Tempered Metadynamics Simulations.
2	10000194	V. S. Dilimon Kochumelathil House, Korani PO, Attingal, Thiruvananthapuram-695104	M	NA	University of Kerala, Kariavattom Campus	Development of high-performance lithium-sulfur and aluminum-sulfur batteries for automobile applications by elucidating their detailed sulfur electrochemistry
3	10000006	Abhilash P. Thozhuthungal House, Moothakunnam, North Paravur, Ernakulam-683516	M	Nil	Cochin University of Science and Technology (CUSAT), Kerala/Department of Polymer Science and Rubber Technology	2D Quantum Dots Based Fibre Supercapacitors for Wearable Energy Storage
4	10000125	Sherin D.R. Sapphire, TC No.9/1545-1, GRA E 17B, Venchavode, Sreekaryam, Thiruvananthapuram-695017	F	KUDSIT-IIITMK	Kerala University of Digital Sciences, Innovation and Technology	Unravelling an Effective Phytochemical Scaffold in the Development of NIRF Probe for the Early Detection of Amyloid- $\beta$ plaques: An AI-Based Approach

Sl. No	Application No.	Name & Address of Applicant	Gender	Institution presently attached	Name of Registering University with department /School/Centre (for NavaKerala Post-Doctoral Fellowship)	Title of the Research Proposal
5	10000138	Vishal Kandathil Kandathil House, Vannathikulam, Perole, Nileshwar, Kasargode- <b>671314</b>	M	Nil	Department of Applied Chemistry, Cochin University of Science and Technology (CUSAT)	A step toward combating global warming by efficient CO <sub>2</sub> utilization by structurally engineered single-atom catalysts
6	10000361	Ramya A.R. Athira, RamnagarAnandashram P.O, Kanhagad, Kasargode- <b>671531</b>	F	CSIR-IICT, Hyderabad	Department of Chemistry, Calicut University	Molecular Engineering of Cyclic Tetrapyrroles as Photocatalysts for Solar-driven Hydrogen Production
7	10000133	Neema P.M. PallikkarathodiHouse,Chembra, Thiruvegappura, Palakkad- <b>679304</b>	F	Nil	School of Physics, Indian Institute of Science Education and Research Thiruvananthapuram (IISER TVM)	Creative design of LED Devices; Light matters.
8	10000743	Dr. Soumya S. J. Niveditham, SARA- <b>115</b> ,Sarvodayam Road, Santhivila, Nemom P. O., Thiruvananthapuram- <b>695020</b>	F	Nil	Dept. of Computational Biology and Bioinformatics, University of Kerala	Investigations on Ayurveda based analgesics for targeting Transient Receptor Potential (TRP) pain receptors
9	10000329	Liju Elias Edamalayil, Ooramana P O, Muvattupuzha, Ernakulam- <b>686663</b>	M	University of Kerala, Thiruvananthapuram	Department of Chemistry, University of Kerala	Design and Development of Chemical Recycling Strategies for Handling Concrete Waste in Kerala: A Region-specific Approach to Reuse Concrete Wastes for Potential Applications



Sl. No	Application No.	Name & Address of Applicant	Gender	Institution presently attached	Name of Registering University with department /School/Centre (for NavaKerala Post-Doctoral Fellowship)	Title of the Research Proposal
10	10000273	Dr Soumya B.N. Seashell, Malamkunnu, Pattathanam, Bekal (P.O.),Kasaragod-671318	F	Central University of Kerala	Department of Chemistry, Central University of Kerala	Design and Development of efficient and economic catalyst for Hydrodeoxygenation of lignin derivatives: Exploration of late transition metal oxides

### 3. Material Science

Sl. No.	Application No.	Name & Address of Applicant	Gender	Institution presently attached	Name of Registering University with department /School/Centre (for NavaKerala Post-Doctoral Fellowship)	Title of the Research Proposal
1	10000192	Hijas K.M. Pambil house, Pallipuraya, Omanoor post, Malappuram- <b>673645</b>	M	Nil	School of Physics, Indian Institute of Science Education and Research Thiruvananthapuram	Selective Crystallisation of Preferred Polymorph Using Terahertz Irradiation
2	10000057	Dr. Manju Perumbil Daffodils,Karattuvayal, Balla- Po, Kanhangad, Kasargode- <b>671531</b>	F	School Teacher (Higher Secondary Education)	Department of Physics, School of Physical Sciences, Central University of Kerala	Atom interferometry in space: Improving quantum sensors for space environments
3	10000450	Alex Joseph Chiramattel H, west Kodikulam, Thodupuzha, Idukki- <b>685582</b>	M	Newman College Thodupuzha	School of Chemical Science, Mahatma Gandhi University	Bimetallic transition metal modified hierarchical structure electrodes for electrocatalytic applications – Towards green hydrogen energy
4	10000073	Vineetha P. K. ArackalThoppil, Poovanthuruthu, Kottayam- <b>686012</b>	F	Nil	Mahatma Gandhi University	Ladder-like Donor–Acceptor polymers as Dopant-Free, Hole-Transporting Materials for Perovskite Solar Cells
5	10000139	Dr. Sivadasan A. K. Quarters No. TVI/3, Staff Quarters, Government	M	Government Polytechnic College,	Calicut University / Research Center and Department of Physics	An indigenous development of economical and eco-friendly perovskite solar cells

Sl. No.	Application No.	Name & Address of Applicant	Gender	Institution presently attached	Name of Registering University with department /School/Centre (for NavaKerala Post-Doctoral Fellowship)	Title of the Research Proposal
		Polytechnic College, Perinthalmanna, Angadippuram-Malappuram- <b>679321</b>		Perinthalmanna, Angadippuram- <b>679321</b>	Govt. Victoria College, Palakkad, Kerala	,
6	10000319	Dr. Reshmi S.  Flat No: <b>205H</b> , DD Diamond District,Pangappara, Thiruvananthapuram- <b>695581</b>	F	Institute of Physics, Bhubaneswar	Dept. of Physics, University of Kerala,	Development of MoS <sub>2</sub> ,MoSe <sub>2</sub> /Graphene composites for solar cell applications
7	10000493	Aswathi K.  KAIPAMANGALATH -H, AYANAKALAM PO, TAVANUR VIA, Malappuram- <b>679573</b>	F	Nil	Indian Institute of Science Education and Research, Thiruvananthapuram	Hexagonal perovskites as quantum spin liquid materials for magnetic applications

#### 4. Political Science, Historical Studies, Humanities & Liberal Arts

Sl. No..	Application No.	Name & Address of Applicant	Gender	Institution presently attached	Name of Registering University with department /School/Centre (for NavaKerala Post-Doctoral Fellowship)	Title of the Research Proposal
1	10000700	Arya K. KoottalilHouse,Keezhadoor,Mel adoor-680741	F	Nil	Institute of English, University of Kerala	അച്ചടിആധുനികതയുംകേരളീയരളിതനവോത്ഥാനവും:മലയാളവർത്തമാനപ്പത്രങ്ങളിലെദളിത്പക്ഷമുഖപ്രസംഗങ്ങളുടെ (1881-2021) സമാഹരണവുംഅപഗ്രഥനവും
2	10000606	Dr. Anil Gopi Assistant Professor-Adhoc, Department of Anthropology, University of Hyderabad, Hyderabad-500046	M	Department of Anthropology, University of Hyderabad	Inter University Centre for Social Science Research and Extension, Mahatma Gandhi University	Human Ecology, Indigenous Knowledge and Survival of Communities: An Anthropological Study of Idukki District, Kerala
3	10000324	Indu V. Menon Prarthana,Kairali Residence Road,Chevayur PO-673017	F	KIRTADS	Research Center for Sociology, Zamorins Guruvayurappan College	Shamanic Discourses and Religious Cults; A Study among Selected Tribes of Kerala
4	10000112	Lijisha A.T. Kottakkunnummalhouse,Madar ukund,Iruvetty post-673639	F	Integrated Rural Technology Centre	Department of Linguistics, University of Kerala,	Linguistic Documentation Of Biodiversity And Indigenous Knowledge among Cholanaikka Tribes in Nilambur, Western Ghats.
5	10000244	Anu Kuriakose ThekkekandathilHouse,Thekkek andathil House,Kasaragod-671326	F	Nil	Department of English, University of Calicut	Dissenting Heteronormativity and Mainstreaming Identity: A Critical Assessment of the Digital Turn in Gender-Queer Movements in Kerala

## 5. Economic Studies

Sl. No.	Application No.	Name & Address of Applicant	Gender	Institution presently attached	Name of Registering University with department /School/Centre (for NavaKerala Post-Doctoral Fellowship)	Title of the Research Proposal
1	10000393	Dr.Swathy Varma P.R. Department of Economics, St.Teresa's College(Autonomous),Park Avenue, Marine Drive,Ernakulam-682011	F	St. Teresa's College(Autonomous), Ernakulam	Gulati Institute of Finance and Taxation, Trivandrum through Cochin University of Science and Technology, Kochi	Fiscal Implications and Effectiveness of Government Sponsored Health Insurance Schemes: An Empirical Evidence from Kerala State.
2	10000389	Sabu M. Cheelanthivilakom, Paruthiyoor, Pozhiyoor, Thiruvananthapuram-695513	M	Nil	Central Marine Research Institute, Kochi	Assessment of occupational hazards and use of life safety gadgets among small-scale motorised fishermen in Southern Kerala
3	10000703	Aravindh P. Govind', Vinayaka Nagar, Kolazhy, Thrissur-680010	M	Nil	Department of Atmospheric Sciences, Cochin University of Science and Technology	Vulnerability, Social Resilience and Adaptation Strategies against Climate Change: The Case of Traditional Fisherfolk in Kerala

Sl. No.	Application No.	Name & Address of Applicant	Gender	Institution presently attached	Name of Registering University with department /School/Centre (for NavaKerala Post-Doctoral Fellowship)	Title of the Research Proposal
4	10000004	Dr. Deepa V.D. Valiyappurakkal House, Anakkayam (P O), Cheppur, Malappuram-676509	F	University of Calicut, Dr. John Mathai Centre, Department of Economics, Thrissur, Kerala.	Dr. John Mathai Centre, University of Calicut, Department of Economics, Thrissur	Impact Of Covid-19 on Income and Employment of Urban Informal Sector Workers in Kerala
5	10000614	Muhammed Ashiq V. Villanthenkodath (H), Kodur P.O Chemmankadavu, Malappuram-676504	M	Nil	IIT Madras	Assessing the asymmetric effect of tourism development on economic growth in Kerala: A non-linear approach

## 6. Agriculture & Ecological Science

Sl. No.	Application No.	Name & Address of Applicant	Gender	Institution presently attached	Name of Registering University with department /School/Centre (for NavaKerala Post-Doctoral Fellowship)	Title of the Research Proposal
1	10000909	Neethu B. Sankaramangalam, Ramanattukara, Kozhikode -673633	F	None	CWRDM Kozhikode	Development of hybrid packaged wastewater treatment system comprising of Moving Bed Biofilm Reactor (MBBR) and Microbial fuel cell (MFC).
2	10000377	Rani Varghese Pudussery House, Parackal Road, Keerthi Nagar, Kra-14,Njarackal, Ernakulam-682505	F	COCHIN UNIVERSITY OF SCIENCE & TECHNOLOGY	Department of Climate Variability and Aquatic Ecosystems, Kerala University Of Fisheries & Ocean Studies	Sustainable use of blue carbon from the mangroves in relation to climate change mitigation for the state of Kerala
3	10000268	Jesiya N.P. H.no- 4/1142, Baithul Noor, Gandhi Road, Kozhikode-673032	F	Kannur University	Department of Civil Engineering, National Institute of Technology Calicut	Investigation of hydrologic regimes in the coastal urban environment of Northern Kerala using machine learning algorithms in the context of climate change.
4	10000257	Deepu Sivas Deepthi', Thudikottukonam, Aralummoodu P.O., Thiruvananthapuram-695123	M	Jawaharlal Nehru Tropical Botanic Garden and Research Institute	Department of Botany, University of Kerala	Documenting the landslides and Post-landslide soil and vegetation recovery in the forest areas of North Kerala

Sl. No.	Application No.	Name & Address of Applicant	Gender	Institution presently attached	Name of Registering University with department /School/Centre (for NavaKerala Post-Doctoral Fellowship)	Title of the Research Proposal
5	10000021	Raji P. 12 G Daffodils, Bellevue, Favouritehomes, Kalpada, Kallayam PO, Thiruvananthapuram- <b>695043</b>	F	Visiting Faculty, Indian Institute of Information Technology, Sree City, Chittoor	ICAR-Central Tuber Crops Research Institute, Thiruvananthapuram	Future climate suitability and regional yield forecasts of major agricultural crops in Kerala: a GIS-based approach
6	10000859	Khatawkar Dipak Suresh Palltah House, NH66, Tavanur, Malappuram- <b>679573</b>	M	Kelappaji College of Agrl. Engg. & Tech., Tavanur - <b>679573</b>	Dept. of Farm Machinery and Power Engineering, KCAET - Tavanur, Kerala Agricultural University	Design and development of an energy efficient high clearance 4-wheel drive 4-wheel steering electric vehicle for farm operations
7	10000126	Neeraja Puthiamadom Ambattu House, Kuruppampady Post, Perumbavoor, Ernakulam- <b>683545</b>	F	Kerala Agricultural University	RICE Research Station, Vyttila, Kerala Agricultural University	Allele mining in rice to unravel the genetic mechanism of salinity tolerance



## 7. Climate Change & Geological Studies

Sl. No.	Application No.	Name & Address of Applicant	Gender	Institution presently attached	Name of Registering University with department /School/Centre (for NavaKerala Post-Doctoral Fellowship)	Title of the Research Proposal
1	10000430	Prijitha R. G. ThannivilaPuthenVeedu, Vadakkumkara West, Umayanalloor P. O., Kollam-691589	F	Indian Institute of Technology Kharagpur	Department of Environmental Sciences, University of Kerala	Influence of Indian Monsoon on Water Vapor : Link with Climate Change
2	10000769	Lakshmi N. B. 218L, DD Diamond District,Pangappara, Thiruvananthapuram-695581	F	National Centre for Earth Science Studies	National Centre for Earth Science Studies, Atmospheric Science Group	Aerosol-Cloud interaction in the changing patterns of rainfall events over Kerala
3	10000230	Muhsin M. Muneera Manzil, Poonoor, Unnikulam, Kozhikode-673574	M	National Institute of Technology Calicut	National Institute of Technology-Calicut	Retrieval of the atmospheric aerosol optical properties affecting climate radiative forcing
4	10000249	Deepu A. Gopakumar Thapasya, Kandiyoor, Thattarambalam P.O, Mavelikara, Alappuzha-690103	M	NA	Cochin University of Science and Technology	Cellulose Nanofiber Based Polymer Composite Membranes and Aerogels from Underutilized Coir and Bamboo waste as a Sustainable Solution for Water Purification

Sl. No.	Application No.	Name & Address of Applicant	Gender	Institution presently attached	Name of Registering University with department /School/Centre (for NavaKerala Post-Doctoral Fellowship)	Title of the Research Proposal
5	10000547	Shijeesh M.R. International School of Photonics, Cochin University of Science and Technology, Kalamassery, Cochin, Kerala, Ernakulam-682022	M	International School of Photonics, Cochin University of Science and Technology, Cochin,	International School of Photonics, Cochin University of Science and Technology	An integrated energy storage system based on triboelectric nanogenerator and supercapacitor
6	10000264	Shini Renjith Adwaitam, C6 Sivahari Heritage Park, Sobha Gardens, Ulloor, Medical College PO, Thiruvananthapuram-695011	F	Mar Baselios College of Engineering and Technology, Thiruvananthapuram	Department of Computer Science, University of Kerala	An intelligent disaster forecasting framework using Deep Hybrid Learning for proactive identification of recurring natural disasters in the state of Kerala
7	10000140	Ajmal Khan A.T. Areethala House, Kalikavu, Anchachavidi, P O 676525, Malappuram-676525	M	Ashoka University	Kerala University, Department of Economics in collaboration with Department of Asian Studies, University of Victoria, Canada.	Addressing the Challenges of Climate Change in Kerala: Building Climate Resilient Regional Development Plan for Kuttanad
8	10000770	Dr. Dhanya P. Darsana H, D/O P.Rajan, Perumannur PO, Chalissery Via, Palakkad-679536	F	Directorate of Crop Management, Tamil Nadu Agriculture University	Department of Geography, Government College-Chittur, Calicut University	Augmenting climate change adaptive capacity and mitigation potential among the rice farmers of Bharathapuzha basin areas in Palakkad through ICTs and ecosystem-based adaptation (EbA) interventions.

## 8. Medical Science

Sl. No.	Application No.	Name & Address of Applicant	Gender	Institution presently attached	Name of Registering University with department /School/Centre (for NavaKerala Post-Doctoral Fellowship)	Title of the Research Proposal
1	10000836	Dr. Abilash Nair Devanandanam, Sreekumarapuram 61A, Mangad, Kollam-691015	M	Govt. Medical College Thiruvananthapuram	Kerala University of Health Sciences	Genetic and Epigenetic Markers of Insulin Resistance in Community Dwelling Non-Obese Youth of Kerala- Unwiring the Time Bomb of Diabetes
2	10000761	Dr. Simi Mohan J. S. Beula Cottage, I.T.I. Junction, Dhanuvachapuram. P.O, Thiruvananthapuram-695503	F	Dr. Somervell Memorial C.S.I Medical College, Karakonam	School of Public Health Kerala University of Health Sciences	Magnitude of Cybercrime Committed Against Children and Exploring the Possibilities of Digital Technology ['CSA Alert' App] for More Efficient Reporting, Action & Follow Up of Child Sexual Abuse Cases in Kerala

## 9. Commerce & Management

Sl. No	Application No.	Name & Address of Applicant	Gender	Institution presently attached	Name of Registering University with department /School/Centre (for NavaKerala Post-Doctoral Fellowship)	Title of the Research Proposal
1	10000353	Radhika.P.C. Flat No D3, Lotus Chithrapoorna, Alikotta Palace Road, Statue Junction, Thripunithura, Kochi, Ernakulam-682301	F	Sacred Heart College, Thevara, Kochi	PG and Research Department of Commerce, Sacred Heart College, Thevara Under Mahatma Gandhi University	Tourism Destination Cleanliness - A Study to Analyse the Effectiveness of Present System and to Suggest the Way Forward
2	10000656	Dr. Ruby S. PlavilaPuthenVeedu, Pooyappally P O, Kollam-691537	F	BJM Govt College, Chavara, Kollam	Fatima Mata National College, Kollam	Promotion of Innovative Women Business Start-Ups Through Local Self Government Institutions for Local Economic Development
3	10000812	LATHA K. Sutheertham House, Manarcadu P O, Kottayam- 686019	F	Saintgits College of Engineering, Kottayam	Saintgits College of Engineering, APJ Abdul Kalam Technological University	Adoption of Digital Technology - A Driving Force of Business Growth in the Kerala Co-operative Sector and its impact on organizational performance
4	10000041	Elizabeth Dominic Associate Professor, Department of Business Administration, Saintgits College of Engineering, Pathamuttom, Kottayam-686532	F	Saintgits College of Engineering, Pathamuttom, Kottayam	APJ Abdul Kalam Technological University	Examining the Levels and Determinants of Psychological Wellbeing during Epidemic Outbreaks with Special Reference to COVID –19 : A Study among Health Care Professionals in the State of Kerala.

Sl. No	Application No.	Name & Address of Applicant	Gender	Institution presently attached	Name of Registering University with department /School/Centre (for NavaKerala Post-Doctoral Fellowship)	Title of the Research Proposal
5	10000368	Dr. Jacob Joju X1/446, "Meakkattukulam", K.B Jacob Road , Fort Kochi, Kochi,Ernakulam-682001	M	LEAD College of Management ,Dhoni, Palakkad	Cochin University of Science and Technology	Digital Transformation in Co-Operative Banking Sector in Kerala and Adoption of Financial Technologies
6	10000910	Gowri Vijayan TC 13/718, Indiragiri, SV Shastri Gardens, Mananthala PO, Thiruvananthapuram-695015	F	Institute of Co-operative Management (Guest Lecturer)	School of Management Studies, Cochin University of Science and Technology	Problems and Prospects in the Transition of Kerala's Agriculture Sector into a Circular Economy

## 10. Digital Science & Engineering

Sl. No.	Application No.	Name & Address of Applicant	Gender	Institution presently attached	Name of Registering University with department /School/Centre (for NavaKerala Post-Doctoral Fellowship)	Title of the Research Proposal
1	10000746	Adithya V. Department of Computer Science, Central University of Kerala, Periya, Kasaragod-671320	F	Central University of Kerala	Department of Information Technology, Kannur University	Development of Efficient Methodologies for Automatic Speech-Gesture Recognition to Enable Natural and Multimodal Human Computer Interaction
2	10000714	Sreeja M.U. Nirmalyam,Psara 22b, Near VB Mist, Thanapadam Road, Kakkanad, Kochi, Ernakulam-682022	F	TOC-H Institute of Science and Technology	Department of Electronics, Cochin University of Science and Technology	A smart system for Ischemic Heart Disease (IHD) prediction through Explainable AI
3	10000152	Dr. Ansal K. A. Associate Professor ECE, Saintgits college of Engineering, Pathamuttom P O, Kottayam-686532	M	Saintgits college of Engineering Kottayam ,Kerala	Indian Institute of Information Technology Kottayam, Kerala	Isolation enhancement of MIMO antenna array with reduced mutual coupling for low latency connectivity
4	10000343	Vijender Kumar Sharma Ward No. - 11, VPO - Bhatiwari, Tehsil - Udaipurwati, Jhunjhunu-333020	M	Indian Institute of Technology, Mandi	Kerala University of Digital Sciences, Innovation and Technology	CAD Tool for Power Delivery Analysis and On-Chip Implementation of Variable Negative Impedance Circuits (CADT-PDA-VNIC)
5	10000111	Dr Raji C.G. "Pooja",Thottakara Road, Perinthalmanna, Malappuram-679322	F	MEA Engineering College, Perinthalmanna, Malappuram	Department of Computer Science, University of Kerala	Machine Learning Techniques based Survival Forecast in Organ Transplantation Patients over Kerala State
6	10000605	Vivek R. MeethaleVadakkayil House, Iyyamkode Po, Nadapuram, Kozhikode-673504	M	Department of Electronics, Cochin University of Science and Technology	Department of Computer Science, Cochin University of Science and Technology	AI based detection of buried human bodies using Ground Penetrating Radar during landslides

## വിഷയ വിദഗ്ദ്ധരുടെ വിശദാംശങ്ങൾ

Sl. No.	Subject / Domain	Chairpersons
1	Life Science	Prof. H.A. Ranganath Visiting Professor, Centre for Human Genetics, Bangalore, Distinguished Professor (for life), University of Mysore; Chairman, Board of Governors (BoG), IIIT Kurnool; Former Visiting Professor, Indian Institute of Science, Bangalore (2014-2019); Former Director, National Assessment & Accreditation Council (NAAC) (2008-2013); Former Vice Chancellor, Bangalore University (2006-2008)
2	Chemical Science	Prof. Suresh Das Former Executive Vice President, Kerala State Council for Science Technology and Environment
3	Material Science	Prof. Sharath Ananthamurthy Professor, University of Hyderabad
4	Historical Studies, Political Science, Humanities & Liberal Arts	Prof. KesavanVeluthat (Delhi University)
5	Economic Studies	Prof. C.P. Chandrasekhar, Centre/School/Special Centre, Centre for Economic Studies and Planning, School of Social Sciences, JNU
6	Management and Commerce	Dr. Saji Gopinath Hon'ble Vice Chancellor, Digital University of Kerala
7	Agriculture and Ecological Studies	Prof. V.S. Vijayan Honorary, Chairman at Salim Ali Foundation
8	Climate Change and Geological Studies	Dr. C. P. Rajendran Jawaharlal Nehru Centre for Advanced Scientific Research (JNCASR), Bangalore
9	Medical Science	Prof. Dr. Valiathan (National Research Professor, Manipal Academy of Higher Education
10	Digital Technologies and Engineering	Dr. Gangan Prathap, Acting Director, National Institute for Interdisciplinary Science and Technology









## Chief Minister's NavaKerala Post Doctoral Fellowships Report-April 2022

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