

NOTIFICATION

Notification for the selection of Chief Minister's Nava Kerala Post-Doctoral Fellowships in the Inter University Centres under Mahatma Gandhi University

Ref- No. 1.G.O. (Rt) No.819/2023/HEDN dated 06-06-2023

2. VC.502/1/019/2023 from MGU dated 22-06-2023

3.No.C3/19/2023- HEDN dated 16-08-2023

Applications are invited from eligible candidates in one of the thematic areas specified under various research projects for the following Chief Minister's Nava Kerala Post-Doctoral Fellowship in the various Inter University centres of Mahatma Gandhi University, Kottayam, Kerala.

1. Inter University Instrumentation Centre

Thematic areas of Research

1. Advanced Oxidation Processes for water purification
2. Material synthesis for novel hybrid membranes for gas and water purification
3. Molecular basis of toxicology / Protein aggregation studies
4. Mass spectrometric analysis of micropollutants and transformation products in natural matrices
5. Biomonitoring agents in atmospheric pollution

Qualifications-PhD in Environmental Engineering/Chemistry/ Environmental Science/ Biotechnology (or any related area having a strong expertise in environmental chemistry related research work)

Address to which applications are to be sent

H. Director, Inter University Instrumentation Centre, M.G University, P.D Hills, Athirampuzha, Kottayam, 686560

E-mail: cic@mgu.ac.in

2. Inter University Centre for Organic Farming and Sustainable Agriculture (IUCOFSA)

Thematic areas of Research

1. Advanced Techniques for Sustainable Agriculture
2. Agriculture Pollution and its Remediation
3. Climate Change Adaptation in Agriculture

Qualifications

PhD in Environmental Sciences /Agricultural Sciences

Address to which applications are to be sent

Hon. Director

Inter University Centre for Organic Farming and Sustainable Agriculture (IUCOFSA)
3rd Floor, Convergence Academia Complex
Mahatma Gandhi University
PD Hills PO, Kottayam-686560
Email : iucofsa@mgu.ac.in , maheshmohan@mgu.ac.in

3. Inter University Centre for Studies in Science of Music (IUCSSM)

Thematic areas of Research

1. Music therapy

Qualifications

PhD in Music with specialization in Music Therapy

Address to which applications are to be sent

H. Director

Inter University centre for studies in science of music

M.G University, P.D Hills, Athirampuzha, Kottayam, 686560

Email: jayachandrank@mgu.ac.in

4. Inter University Centre for Social Science Research and Extension (IUCSSRE)

Thematic areas of research

- 1 “Ecology-Development Interface: Tourism Potential of River Conservation Project, Kerala.”
2. “Labour, Marginalized Communities and Economic Empowerment under MGNREGS in Kerala.”
- 3 “Human Mobility, Return Migration and Reintegration Challenges in Kerala.”

Qualifications

PhD in interdisciplinary areas in Social Sciences. Post-graduate degree in interdisciplinary areas in Social Sciences. Desirable: Field experience in the concerned areas of the projects under notification.

Address to which applications are to be sent

The Director,

Inter University Centre for Social Science Research and Extension (IUCSSRE),

Convergence Academia Complex (CAC), Priyadarshini Hills PO., Kottayam.

Email : iucssre@mgu.ac.in

5. Inter University Centre for Biomedical Research and Super Speciality Hospital (IUCBR & SSH)

Thematic areas of research

1. Genetic basis of drug-seeking behaviour among adolescents in Kerala

Qualifications

Essential: PhD in Life Sciences

Desirable: Experience in molecular neurobiology, specifically on genetics of neurological and neuropsychiatric diseases

2. Impact of brain hyperglycaemia on cognition: A multidisciplinary approach

Qualifications

Essential: Post graduate medical qualification (MD or equivalent) in Allopathy or Ayurveda.

Desirable: Experience in Clinical Research. Pharmacology of Ayurvedic and /or Allopathic medicines.

3. Identification of biomarkers for drug addiction using a computational approach

Qualifications

Essential: PhD in Bioinformatics / Computational Biology

Desirable: Experience in computational modelling of biomolecules. Laboratory experience or capability in *in vitro* culture and transfection assays

4. Development of molecular diagnostic panel for acute febrile illness.

Qualifications

Essential: PhD in Life Sciences

Desirable: Experience in molecular detection of fever-causing infectious diseases and handling of high-risk pathogens

5. Novel, easy to savour ayurvedic formulations for difficult to ingest medicinal concoctions

Qualifications

Essential: MD in Ayurveda

Desirable: Experience in the preparation herbal extracts for human use, and Ayurvedic formulations. Characterization of chemistry and biology of formulations employing high-end laboratory procedures. Capable of conducting limited, controlled clinical trials

Address to which applications are to be sent:

The Director, IUCBR & SSH, Mahatma Gandhi University Campus at Thalappady, Rubber Board PO, Kottayam, Kerala- 686009.

E-mail: careeriucbr@gmail.com

6. Inter University Centre for Disability Studies

Thematic Areas of Research

1. Inclusion of children with cochlear implants: Needs and challenges

Qualifications

PhD in Special Education

2. Enhancing perceived social support, social belonging, subjective happiness and social well being with social group work interventions among mothers of children with moderate to severe autism from the chosen panchayats of Kottayam district

Qualification

PhD in special education/ Disability social work/MSW

3. Exclusion and neglect in inclusive education; with special reference to children with specific learning disorders (SLD)

Qualifications

PhD in Special Education/Education

Address to which communications are to be sent

H. Director

Inter University centre for disability studies

M.G University, P.D Hills, Athirampuzha, Kottayam, 686560

Email: iucdsmgu@mgu.ac.in

7. International and Inter University centre for Nanoscience and Nanotechnology

Thematic Research Areas

1. Polymer blends /Composites/Biopolymers
2. Natural and Synthetic Rubber
3. Hydrogels/Aerogels
4. Nanomaterials for energy applications/sensors
5. Smart/Self-healing/Shape memory polymers/3D printing
6. Recycling and Waste Management/Water quality analysis
7. Nanomaterials/Applications of AI - Simulations in nanostructured materials

Qualifications

Ph. D. in Chemistry/Physics/Polymer Science/Life Sciences/Materials Science/Nanoscience and Nanotechnology/relevant area mentioned with proven track record evidenced with publications/patents/research experience in relevant fields.

Address to which applications are to be sent

H. Director

International and Inter University centre for Nanoscience and Nanotechnology

M.G University, P.D Hills, Athirampuzha, Kottayam,686560

Email: cnnmgu@mgu.ac.in

8. Advanced Centre of Environmental Studies and Sustainable Development

Thematic areas of research

1. Assessment of microplastic pollution and low cost-biochar filter design for dug wells
2. Human ecology and development externalities of Kuttanad
3. Microalgae-Fueled Cell: Wastewater treatment and bioelectricity generation
4. Role of Yoga towards the holistic well-being and environmental adaptability of visually impaired students in Kerala
5. Development of hybrid biodegradable material from biowaste for rigid clamshell application
6. Green nanotechnology for advanced water treatment and waste management
7. Application of biomolecular and genomic studies in biodiversity conservation from a climate change perspective
8. Climate change adaptations in agriculture and land use pattern

Qualifications

PhD in Environmental Sciences/Life Sciences/Chemistry/Social Sciences

Address to which applications are to be sent

H. Director

Advanced centre of Environmental Studies and Sustainable Development

M.G. University, P.D. Hills, Athirampuzha, Kottayam, 686560 (ACESSD)

Email; acessdmgu@gmail.com

General Instructions

1.Candidates applied earlier have to resubmit the proposal in the required format attached.

2.All applications should be submitted to the given address only through the email provided along with each centre.

3. Scholars of Kerala origin and possessing PhD degree can apply. Scholars who are not Keralite but working in research related to Kerala can also apply.

4. Other general eligibility conditions, mode of selection, duration and value of fellowships and all other provisions are as applicable to the Chief Minister's Nava Kerala Post-Doctoral Fellowships, Government of Kerala.

5. The upper age limit is 45 years as on the last date of application, with relaxation of five years for women and candidates from other eligible categories (SC/ST/OBC/Physically challenged/women).

How to apply:

Eligible candidates can send **their application (Section A) and proposed project (Section B) in the following format to the H. Director of the concerned Inter University Centre in the address given above only through the given email address so as to reach the centres on or before Sept.30, 2023 .**

GOVT.OF KERALA
CHIEF MINISTER'S NAVA KERALA POST-DOCTORAL
FELLOWSHIP

Administered by KSHEC-Module 1

APPLICATION

*[A Programme for Ph.D. holders to pursue independent research and to develop
career as scientists]*

SECTION – A

GENERAL INFORMATION

1. Name (in Block Letters) :
2. Postal address for correspondence:
3. Telephone- Land line:E-mail:
4. Permanent address :
5. Age and Date of Birth :
6. Age relaxation claimed (Yes/No) :
)
7. Are you Keralite by origin/domicile:
8. Married/Unmarried :
9. Academic record (from Masters' Degree onwards)

| Sl. No. | Degree awarded | University/ Institute | Period (From-To) | Subject | Marks (%) | Year of award of Degree |
|---------|----------------|-----------------------|------------------|---------|-----------|-------------------------|
| | | | | | | |

10. Scholarships, Medals, Awards, Prizes, Distinctions or Honours received:
11. Whether passed NET/GATE/ICAR/ICMR/KSCSTE/ICHR Research Fellowship: If yes, indicate Name of the Examination, Year and Rank:

12. Give details of previous employment, if any:

| Sl. No. | Name of the Employer | Designation | Duration | Nature of work |
|---------|----------------------|-------------|----------|----------------|
| | | | | |

13. Give details of research experience, if any:

| Sl. No. | Name of Institution | Designation | Duration | Nature of work |
|---------|---------------------|-------------|----------|----------------|
| | | | | |

14. (a) Research output: (*Numbers only*)

| Publications in Peer reviewed Journals (in SCI/Scopus) | | Seminar/Conference proceedings | | Books | Chapters |
|--|---------------|--------------------------------|---------------|-------|----------|
| National | International | National | International | | |
| | | | | | |

1. Details of Research Publications in SCI/Scopus journals:

| Sl. No. | Author(s) | Title of the paper published | Name of the Journal/Year, Volume | Citations received | Current impact factor of the journal |
|---------|-----------|------------------------------|----------------------------------|--------------------|--------------------------------------|
| | | | | | |

2. Details of patents (if any):

| Sl. No. | National | International | Year |
|---------|----------|---------------|------|
| | | | |

15. Details of Ph.D work

(i) Title of the Ph.D thesis:

(ii) Outcome of the work:

(iii) Name of the R&D Institute/University Dept./College where you have done the Ph.D Work:

(iv) Date of award of Ph.D:

16. Are you currently doing Post-Doctoral Research of any funding agency, if yes give details:

17. Research fellowship received (if any):

| Name of fellowship | Sponsoring agency | Duration | | Fellowship Amount |
|--------------------|-------------------|----------|----|-------------------|
| | | From | To | |
| | | | | |

18. Name and address of two referees from whom the testimonials are attached

SECTION – B

DETAILS OF THE R&D PROJECT TO BE SUBMITTED ALONG WITH THE APPLICATION

I. Project Profile

1. Title of the proposed research project:
2. Broad subject area:
3. Institution where work is proposed to be carried out:(Name, address, Tel No., e-mail etc.)
 - i. The candidate should choose an institution other than their Ph.D. research Centre.
 - ii. The Research Centre should belong to the category of R&D institutions (National/State level)/ UniversityDepartments]

II. Technical Information of the Project Proposal shall include the following titles (Each title preferably within 200 words)

1. Research Question (An outline of the research proposed to be carried out) :
2. Expected outcome
3. Significance of the expected outcome with respect to the latest developments in the field and its utility if any specific to the socio-economic or developmental scenario of the State of Kerala

DECLARATION BY THE APPLICANT

1. I agree to abide by the terms and conditions of the Nava Kerala Post-Doctoral Fellowship.
2. I have explored and ensured that equipment and basic facilities in the Institution will be available as and when required for the purpose of the work.
3. I AFFIRM that all statements and documents submitted along with this application are correct. I UNDERSTAND that any inaccurate or false information will render this application invalid and that, if admitted and awarded Nava Kerala Post Doctoral Fellowship on the basis of such information, my candidature will be terminated. I also understand that I have to undertake the agreement, in the prescribed format with KSHEC for fulfilling the conditions necessary for awarding the Post-Doctoral Fellowship, if selected.

Place:

Signature:

Date:

Name & Address:

Applications must carry self-attested copies of certificates to prove date of birth, place of birth, category (for age relaxation only), PhD degree and patents. List of publications (only those relevant to the proposed research area) also need to be enclosed.