



GOVERNMENT OF KERALA

Abstract

Science and Technology Department – Establishment of Centre of Excellence in Microbiome (CoEM) Administrative Sanction-accorded- Orders issued.

SCIENCE AND TECHNOLOGY (A) DEPARTMENT

G.O.(Ms)No.16/2023/S&TD Dated,Thiruvananthapuram, 19-10-2023

Read 1 Budget Speech 2022-23.

2 G.O.(Rt) No.1/2022/PLG&EA dated 14.1.2022.

3 Detailed Project Report for the establishment of Centre of Excellence in Microbiome (CoEM) submitted by KDISC.

4 Minutes of the meeting dated 17.11.2022.

5 Budget Speech 2023-24.

6 GO(Rt)No.19/2023/PLG&E dated 19.02.2023.

7 Minutes of the Steering Committee meeting dated 02.03.2023.

8 Note No.4/Prl.Secy/S&T/2023/KSCSTE dated 19.05.2023.

ORDER

‘Microbiome Research’ is one of the sectors that has recently attracted key attention in the research realm. ‘Microbiome’ is the sum total of the interventions of Microbial organisms and their genetic components in a special environment. With the advent of new sequencing technology and the need for a better understanding of the microbiome, especially after covid pandemic, there is an increasing need for advanced microbiome research based on One- Health approach. Understanding the role of microbiota, including their dynamic interactions with their hosts and other microbes, can enable the engineering of new diagnostic techniques and interventional strategies that can be used in a diverse spectrum of fields, spanning from ecology and agriculture to medicine and forensics to exobiology.

2. To effectively utilise the various possibilities in this field, Government of Kerala has decided to establish Centre of Excellence in

Microbiome(CoEM), integrating various research institutes. Accordingly in the Budget Speech for the financial year 2022-2023, an amount of Rs.5 crore is set apart for initial expenses and for preparing Detailed Project Report. Kerala Development Innovation Strategic Council (KDISC) was entrusted for preparing Detailed Project Report (DPR).

3. Subsequently KDISC has constituted a Working Group as per reference cited 2nd paper above, with eminent persons working in reputed Research and Development institutions, Universities and industry to explore the prospects of setting up the Centre of Excellence in Microbiome in Kerala and developed a Detailed Project Report (DPR) along with the course of action for the same.

4. As per reference cited 4th paper above it was decided to give In Principle Approval for establishing Centre of Excellence in Microbiome (CoEM).

5. In the Budget Speech of 2023-24 it was announced that the Centre of Excellence in Microbiome (CoEM) will be established at Life Science Park, Thonnackal, Thiruvananthapuram, under the aegis of Kerala State Council for Science Technology and Environment with the support and participation of Rajiv Gandhi Centre for Bio-Technology (RGCB). An amount of Rs.10 crore is provided for this purpose.

6. As per GO read as 6th paper above a Steering Committee was constituted under the Chairmanship of Chief Secretary with respective departments and representatives of KSCSTE to oversee the establishment of CoEM.

7. The Steering Committee recommended to engage minimum workforce to function the CoE and also proposed that the first Director for the Centre of Excellence in Microbiome may be appointed by nomination and suggested to appoint Dr.Sabu Thomas, Rajiv Gandhi Centre for Bio-Technology as the first Director of the CoEM. The committee also directed to take the proposal for the establishment of CoEM to Government through Science and Technology Department, Government of Kerala.

8. Accordingly proposal for establishment of CoEM was received in Government vide reference cited 8th paper above.

Mission of CoEM

To catalyze and support research of need- based therapeutic

interventions to address identified challenges by supporting potential projects with well-defined milestones through a system of S&T based academic institutions, Central/State laboratories. Thereby find novel, appropriate solutions to cater the needs of the State by nursing the unexplored potential unique microbiome available in different domains.

Objectives of CoEM

- To be a significant global center that coordinates interdisciplinary research, cross domain collaborations and innovative product development to popularize the importance of microbiota in One Health.
- To create Spatio-temporal mapping of microbiome data utilizing big data technologies such as IoT, AI and data analytics.
- To create a genomic database that could harness further research and development to understand the microbial interactions better.
- To catalyse and support research, development and need based therapeutic interventions to cater to the State's need.
- To develop new tools using emerging technologies, leading to exemplary research work, to promote and support start-ups and entrepreneurs.
- To contribute to the social, economic and environmental development of State towards the fulfillment of sustainable development goals.

Domains of Research

- i. Human Microbiome
- ii. Animal Microbiome
- iii. Plant Microbiome
- iv. Aquatic Microbiome
- v. Environment Microbiome
- vi. Data Labs

The proposed CoEM shall not function merely as a research institute but it would be an amalgamation of both research and industrial components with a focus on creating an ecosystem with Multiple Small and Medium-sized Enterprises (MSMEs) and start-ups involved in this field. All research carried out in association with the CoEM shall augment the industrial component. Considering all these facts, the CoEM shall be registered as a 'Section 8 Company'.

9. Government have examined the recommendations and proposal

in detail and are pleased to order the following:

i. Government accept the Detailed Project Report submitted by KDISC and accord Administrative Sanction for the establishment of the Centre of Excellence in Microbiome (CoEM) under the aegis of Kerala State Council for Science, Technology and Environment with the active support and participation of Rajiv Gandhi Centre for Bio- Technology (RGCB)

ii. The posts appended as Annexure to this Government Order are created on temporary basis subject to the following conditions.

a. No permanent posts be created and only essential personnel shall be taken on contract for a period of three years.

b. Services such as security and cleaning could be outsourced.

iii. Dr.Sabu Thomas, Scientist (Rtd), Rajiv Gandhi Centre for Bio-Technology is appointed as the first Director of Centre of Excellence in Micorbiome (CoEM) on contract basis for a period of three years.

iv. Centre of Excellence in Micorbiome (CoEM) shall be registered under Section 8 of Company Act 2013 and KSCSTE is entrusted to initiate the process for registering the CoEM as a Sec.8 Company.

v. Science and Technology Department, Government of Kerala is assigned as the Administrative Department of the CoEM.

(By order of the Governor)

PROF DR K P SUDHEER

EX-OFFICIO PRINCIPAL SECRETARY

To:

The Principal Accountant General(Audit) Kerala, Thiruvananthapuram.

The Accountant General(A&E), Kerala, Thiruvananthapuram.

The Member Secretary, Kerala State Council for Science Technology & Environment.

Dr.Sabu Thomas, Padinjattadathu, Auvaneeswarem R.S.PO,
Kunnicothu,Kottarakkara, Kollam District.

The Director, Rajiv Gandhi Centre for Biotechnology (RGCB),

Thiruvananthapuram.

Executive Director, Kerala Development Innovation Strategic Council
(KDISC).

General Administration (SC) Department

The Finance Department (Vide Note No.2501063/PU-C4/87/2023-FIN
dated 01/08/2023)

The Law Department (Vide Note No.CONV-2/103/2023-LAW dated
26/9/2023)

✓ The Information and Public Relations Department (for uploading the
G.O in official website)
Stock File/Office Copy.

Forwarded /By order

Signed by

Sanu Kumar S

Date: 20-10-2023 10:44:26

Section Officer

Copy to :-

PS to Hon'ble Chief Minister

Officer on Special Duty to Chief Secretary

CA to Ex-Officio Principal Secretary, Science & Technology Department

CA to Joint Secretary, Science & Technology Department.

ANNEXURE

Details of Sanctioned Post (Temporary)/ Mode of Appointment/

Qualification in respect of Centre of Excellence in Microbiome (CoEM)

SI No	Post	No of post	Age,Qualification & experience	Mode of appointment and remuneration
1	Director	1	Not exceeding 55 years of age as on the date of notification Essential Qualification First class Master's Degree and Ph.D from a recognised University in any of the Life Sciences branches. Experience- Minimum of 15 years post -Ph.D research experience in Universities/ reputed R&D State /Central Institutes. Experience should be proven by track record with quality publications in national/international journals of repute of high impact factor (SCI/SCOPUS indexed).He/she should have demonstrated ability	On contract basis through Open advertisement with Consolidated pay of Rs.2,50,000/- per month . Note: The FIRST Director on Nomination

			to lead research and manage multidisciplinary teams to create an environment conducive to R&D /education/extension Desirable Competence in microbiome research with proven track record	
2	Senior Scientist	2	Not exceeding 45 years of age as on the date of notification. Essential Qualification First class Master's Degree and Ph.D from a recognised University in any of the Life Sciences branches/ Medicine/Veterinary / Environmental sciences with minimum 10 years of post-Ph.D research experience in the respective domain with proven track record. High quality research	On contract basis through Open Consolidated pay of Rs.1,50,000/- per month

			publications in peer-reviewed journals of repute (SCI/SCI/SCOPUS indexed). Proficiency in independent project handling as evidenced by successfully completing research projects from State/National /International agencies. Desirable- One Position of the two- Experience in microbiome related research, Bioinformatics, Big Data Analysis Second position of the two Experience in product development with excellent track records in technology transfer/patents and commercialization.	
3	Scientist	3	Not exceeding 38 years of age as on the date of notification.	On contract basis through Open advertisement with Consolidated pay of

			Essential Qualification First Class Master's Degree and Ph.D in Biotechnology/ Microbiology/Veterinary/ Fisheries/Environmental Sciences/Bioinformatics, from a recognised University. 3 years' post Ph.D research experience in the respective domain High quality, peer reviewed research publications in SCI/SCOPUS indexed journals of repute. Desirable- Documented experience in microbiome/ probiotic research, Metagenomics/ Genomics data analysis.	
4	Administrative Staff 1-Manager		Not exceeding 40 years of age as on the date of notification. Essential Qualification	Contract basis through Open advertisement with Consolidated pay of Rs.1,00,000/- per month

			Masters in Management/ MINT(Mathematics, Informatics, Natural Science & Technology) subjects/MBA Minimum 7 years of experience in Management or experience in Project Execution and Coordination of Biotechnology or Healthcare related projects. Desirable- Experience in Metagenomics/ Genomics data analysis.	
5	Administrative Staff-1 Administrative Assistant		Not exceeding 35 years of age as on the date of notification. Essential Qualification Bachelor's degree in any subject 2 years of clerical, secretarial, or office experience in Public Sector/Government Undertakings. proficient computer skills, including Microsoft Office Strong verbal and	On contract basis through Open advertisement with Consolidated pay of Rs.30,000/- per month

			written communication skills.	
6	Security	3 for shifts	3 Preferably service man	ex By out sourcing
7	Cleaning staff	1	Preferably from Kudumbasree	By out sourcing
8	Laboratory Assistant	2	Degree in any biology subject & trained in laboratories)	On Contract basis through open advertisement with a consolidated pay of Rs 25000