GOVERNMENT OF KERALA

Abstract

E&ITD - Kerala University of Digital Sciences Innovation and Technology (Digital University Kerala) - Establishment of "India Innovation Centre for Graphene" - Comprehensive Administrative Sanction accorded - Orders Issued.

ELECTRONICS & INFORMATION TECHNOLOGY (A) DEPARTMENT

G.O.(Rt)No.213/2022/ITD

Dated, Thiruvananthapuram, 14-10-2022

- Read: 1. G.O.(P)No.76/2019/Fin dated 02.07.2019
 - 2. G.O.(P)No.81/2019/Fin dated 09.07.2019
 - 3.Letter Nos.KUDSIT/03/Ad.A1/12021 dated 14.09.2021 and KUDSIT/459/DR AD/2022 dated 25.05.2022 from the Vice Chancellor, Digital University Kerala.
 - 4. Administrative Approval of Ministry of Electronics and Information Technology, Government of India No.GG- 11/40/2021-R&D-E dated 14.01.2022.
 - 5. Minutes of the Special Working Group meeting held on 19.08.2022.

ORDER

A National Graphene Institute and Innovation Centre titled "India Innovation Centre for Graphene" is to be jointly implemented in the State by Kerala University of Digital Sciences Innovation and Technology (Digital University Kerala) and Centre for Materials for Electronics Technology (C-MET), Thrissur in association with M/s Tata Steel Ltd, Mumbai as industrial partner. The Ministry of Electronics and Information Technology, Government of India has accorded Administrative approval for the project at a total estimated cost of Rs.8641.56 Lakh. The funding pattern of the project comprises contribution of MeitY as Grantin-aid: Rs.4918.56 Lakh, Government of Kerala: Rs.2575.00 Lakh, M/s Tata Steel Ltd: Rs. 700.00 Lakh and other industry contribution: Rs. 448.00 Lakh.

- 2. The Digital University Kerala has accordingly submitted proposal to Government for according Administrative Sanction for establishment of "India Innovation Centre for Graphene" at a total cost of Rs.86.41 Crore.
- 3. The meeting of Special Working Group for plan schemes held on 19.08.2022 considered the proposal and recommended to issue Comprehensive Administrative Sanction for the establishment of the "India Innovation Centre for Graphene" for an amount of Rs.86.41 Crore limiting the Government of Kerala share to 15 Crore for the current financial year.
- 4. Government have examined the matter and are pleased to accept the recommendations of the Special Working Group for plan schemes held on 19.08.2022 and accordingly Comprehensive Administrative Sanction is accorded for the establishment of "India Innovation Centre for Graphene" at an amount of

Rs.86.41 Crore (Rupees Eighty Six Crore and Forty One Lakh Only) with the following funding pattern.

Sl.No.	Name of the components	Name of the components Estimate (Rs in Lakh)	
idoe i i	Digital S tences Innovation and	Recurring	Non Recurring
1	MeitY Contribution		4918.56
2	Government of Kerala (State Share)	ICS & INTORNA	2575.00
3	M/s Tata Steel Ltd	\$12022AHID	700.00
4	Other Industry Contribution	(P)No.81/2019/Pin	448.00
	BAAAAI12021 daed 14.0	Total	8641.56

Government of Kerala share for the Financial Year 2022-2023 is limited to 15 Crore (Rupees Fifteen Crore Only)

The specifications of the components are as follows:-

SI. No.	Parameter	Description
1	Amount to be expended for the Project	Rs. 8641.56 lakh
2	Activity wise Statement	It is a collaborative project by the MeitY and Government of Kerala. Digital University Kerala, Thiruvananthapuram and C-MET, Thrissur are the implementing agencies in association with M/s TATA Steel Ltd Mumbai as an industrial Partner. The objective of this proposal is to set up the India Innovation Centre for Graphene (IICG) to focus on R&D, Innovation and Capacity building activities which lead to a knowledge centre.
3.	Outcome of the Project	1. Research, Development and Product Innovations in Graphene (a) Graphene and other 2D material and its composite technology (b) Graphene optoelectronic products (c) Graphene smart integrated devices on flexible/transparent substrates, with the necessary energy storage capability (d) Graphene energy conversion devices (Super capacitors, fuel cells and batteries).

	ubate between 30-40 opanies for product devel uphene	(e) The intelligent wearable technology research of graphene materials for sensors and wearable energy devices
	nies (eg Tata Steet, CUMT e cudents and Postdoos for the	2. An incubator facility with at least 10 SMEs/Entrepreneurs. The start-ups focused in the area of 2D materials.
	ily researches for the products	3. Skill-based program for training at least 500 Entrepreneurs and technicians
	es who could take the IPs to	4. Grand Challenge for 10 products targeted at graphene devices and 2D materials, in the domain areas outlined by industry.
	rest year's budget provise	5. Design, development and research consultancy to 50 SMEs. Technology transfers of at least 10 commercialization ready products to industry.
	not end the fun	6. Annually generate at least four Ips, that has the potential to be commercialised.
4.	Benefit to the Public	a.Undertake R&D, Product innovation and Capacity building. b.Establish State of the Art Research and Capacity building facilities for micro electronics and semiconductor devices, sensors, thin film devices, Nanoelectrodes, OPVs, LCDs, OFETs, Energy Conservation Devices etc. c.To provide business and membership support to Startups. d.To create skilled HR and jobs in Graphene area. e.To promote innovation and entrepreneurship.
5.	Revenue Generation	Nil
6.	Deliverables	 Establish the First Graphene specific cleanroom and innovation centre in India World-class class 100 cleanrooms and characterization facilities that will help both industry and universities Generate unique IPs and products in Graphene and other two-dimensional (2D) materials Support at least 40 PhD students in 5 years to perform research in Graphene

91 V) 9W 1	ntelligeat wearable technolog and materials for sensors an evices	• Incubate between 30-40 startup companies for product development in Graphene
7.	Beneficiaries of the scheme	2. Companies (eg Tata Steel, CUMI etc)3. PhD students and Postdocs for translational research
	ased program for training a seurs and technicisms. Challenge for 10 postures	4.University researchers for translational research5. Public as the end users of the products6. Investors who could take the IPs to market.

- 5. The following conditions shall be adhered to while implementing the scheme.
- 1. Expenditure should be limited to the current year's budget provision.
- 2. The expenditure shall be met from the provision available under the appropriate Head of Account.
- 3. Fund release will be based on actual requirement and the fund released shall not be parked in banks.
- 4. Store purchase rules shall be strictly adhered to.
- 5. Tender/e-tender and other stipulated formalities shall be followed wherever necessary.
- 6. For Civil Works CPWD rates shall be followed.
- 7. Post creation and purchase of vehicle are not admissible under the schemes.
- 8. For hiring of project staff/ man power as a part of project implementation, instructions issued in the Government Orders read as 1st and 2nd paper above shall be followed.
- 6. The Vice Chancellor, Digital University Kerala shall follow all the prescribed guidelines, rules, other formalities and procedures for the establishment of the Institute. Proposals for release of funds shall contain break up of expenditure, report on the component wise Utilization Certificates in the prescribed proforma. Funds will not be released in case of any procedural laxity or violation.

(By order of the Governor)
DR RATHAN U KELKAR I A S
SECRETARY

To:

The Deputy Director, Ministry of Electronics and Information Technology, Government of India, Electronics Niketan, CGO Complex, Lodhi Road, New Delhi.

The Vice Chancellor, Digital University Kerala, Technocity campus,

Mangalapuram, Thonnakkal P.O, Thiruvananthapuram.

The Registrar, Digital University Kerala, Technocity campus, Mangalapuram,

Thonnakkal P.O, Thiruvananthapuram.

The Centre for Materials for Electronics Technology (C-MET), Shornur

Road. M.G.Kavu, Athani-P.O. Thrissur-680581, Kerala.

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

Planning & Economic Affairs Department.

Finance (Planning -B) Department.

Finance Department (PU-D3/84/2022/2080508-FIN dated 29.08.2022).

Web & New Media, I&PRD (for uploading in the Govt website).

Stock File/office copy

Forwarded /By order

Section Officer