



अ.शा. क्रमांक OAD/IR-2500/137 (H)
D.O. No.

वित्त व संचार लेखापरीक्षा कार्यालय
मुंबई - ४०० ०५४

Finance & Communication Audit Office
Mumbai - 400 054

दिनांक 17-1-2024
Date

एन.व्ही.सावंत
वरिष्ठ लेखापरीक्षा अधिकारी

लेखा वर्ष 2022-2023 के लिए दिनांक 07.12.2023 से 20.12.2023 तक आपके कार्यालय का जो स्थानीय लेखापरीक्षा निरीक्षण किया गया उससे संबंधित रिपोर्ट की एक प्रति संलग्न है।

कृपया मामले पर व्यक्तिगत रूप से ध्यान दें तथा रिपोर्ट प्राप्ति के एक माह के भीतर उत्तर भिजवाने हेतु कार्यवाई करें।

आपका

(Signature)

Smt. Radha Jaisimha, Registrar
C-MET, Sy No. 34/2B, Panchvati,
Dr Homi Bhabha Road, NCL(PO),
Pune - 411008

Inspection Report on the audit of office of the Director General, C-MET, Pune for FY 2022-23

PART-I

(a) Introduction :

The audit of office of the Director General, C-MET, Pune was conducted from 07/12/2023 to 20/12/2023 by Shri Abhigyan Ranjan, Assistant Audit Officer under the supervision of Shri Ravinder Kandukuri, Senior Audit Officer of office of the F&C Audit Office, Mumbai.

Shri B B Kale, Director General held the charge of this office during the accounting year 2022-23.

Brief of Auditee :

The Centre for Materials for Electronics Technology (C-MET) set up in March 1990 is an Autonomous Scientific Society functioning under the Ministry of Electronics and Information Technology (MietY), Government of India. It was formed as a unique concept for development of viable technologies in the area of materials mainly for electronics. C-MET carries research and development on electronic materials and their processing keeping in view the development in the electronic and IT Industry all over the World. C-MET is operating with 3 Laboratories located at Pune (Head Quarters), Hyderabad and Thrissur with specialized research mandate at each place. The Director General, C-MET, Pune is the Controlling Office of the above 3 Laboratories.

The mission of C-MET is to develop knowledge base in the electronic materials and their processing technology and become a source of critical electronic materials, know-how and technical services for the industry and other sectors of the economy. The core programmes of the C-MET are (1) Integrated Electronics Packaging (2) Nano-materials and Devices (3) Ultra High Purity Materials (4) Materials for Renewable Energy and (5) Un-conventional energy generation & storage (6) Materials for energy devices such as batteries, super capacitors, fuel cells, hydrogen & solar cells.

The functions of the Director General, C-MET, Pune are as follows :

- Monitoring of the expenditure with reference to Budget Allotment.
- Monitoring of the progress report of projects and implementation.
- Monitoring the Transfer of Technology to industries.

The Budget Allotment and Expenditure of O/o Director General, CMET Lab-Wise for the year 2022-2023 is as follows:

(₹ in Crore)

Sl. No	Name of the Lab	Allotted	Utilized	Returned/Lapsed
1	Pune	50.50	21.05	29.45
2	Hyderabad	29.50	25.91	0.59
3	Trissur	23.00	15.35	7.65
	Total	100.00	62.31	37.69

(b): Scope of Audit.

Audit of Office of the Director General, C-MET, Pune was conducted from 07.12.2023 to 20.12.2023 in terms of approved audit plan. The accounts of this unit for the period from 01.04.2022 to 31.03.2023 was test checked besides conducting a general review of all the records relating to functional activities and internal control since last audit inspection.

(c): Audit Criteria.

The audit of Office of the Director General, C-MET, Pune was assessed with reference to :

- Rules, laws and regulations, policies, established codes, or agreed upon terms and conditions etc., and norms prescribed by MeitY.
- Applicable laws, rules and regulations made there under and various orders and instructions issued by the competent authority are being complied with.
- GFRs and other Government rules and regulations for accounting procedures, By-laws of the C-MET, payment of various bills, procuring stores and SRs as applicable, budget allotment and utilization.
- Internal guidelines, policies, procedures and targets laid down and prescribed by MeitY in respect of various functional areas including Financial Management, Security policy and international best practices, if any, available.

(d): Audit Methodology.

The audit approach for conducting the audit included the following :

- A study of policies and guidelines of the Accounting Policies, Procedure and Targets fixed by the C-MET headquarters in consultation with MeitY.
- Examination of records relating to sanctions issued and execution of works in respect of Projects, works estimates, entering into various contracts, etc.
- Review of purchase orders, tenders, targets and achievement reports, inventory, various monthly / quarterly reports forwarded to MeitY headquarters.
- Interaction with the Head of Office for various system monitoring.

(e): Departmental Inspection.

No Executive Inspection and Internal Check Inspection was conducted since the date of last audit inspection.

(f): Disclaimer Statement.

This Inspection Report has been prepared on the basis of information furnished and made available by Office of the Director General, C-MET, Pune for the year 2022-23 during the period from 07.12.2023 to 20.12.2023. The Office of the Director, F&C Audit Office, Mumbai disclaims any responsibility for any misinformation and / or non-information on the part of the audited entity.

PART-II-(A) : Significant Audit Findings

i. Systmatic Issues :

- Nil-

ii. Isolated Cases:

-Nil-

PART-II-(B): Other incidental Audit Findings

i. Systmatic Issues :

Para 1: Non-creation of Internal Audit Wing

As per Para 17.1 of the Policy Manual of the C-MET, the society is required to have a Internal Audit Wing which would perform the following important functions. Study of accounting procedures prescribed with a view to ensure that they are correct, adequate & free from ambiguity, defects or lacunae. Scrutiny & check of receipts & accounting thereof in respect of society/laboratory. Pursuance/settlement of objections taken by statutory audit/govt. audit. Scrutiny of purchases & stores procedures so as to ensure that they are free from any defect or lacunae. Checking of procedures in disposal of unused, un-serviceable & obsolete items. In addition, the following general checks to be exercised:

Payments are made in accordance with the rules & orders governing them.

Pay fixations are correct. The balances outstanding under various debt, deposit, suspense & remittance heads are reviewed at periodical intervals & steps taken to clear the same as expeditiously as possible. Checking of sanctions by administration.

The demands are raised promptly & that no amount due to the society is left outstanding in its books without sufficient reasons.

Further, guidelines for detection of defalcation & frauds were also issued. Results of internal audit, drafting & procedures for submission of audit reports, settlement of audit objections were also also to be taken care of. The internal audit section is required to submit a formal report showing the audit programmes completed & audit reports issued & pending to the Head of the Laboratory/Director/Director General with a copy to CFO/Finance Officer in every quarter.

However, the audit understood that though a CA Firm has been appointed for internal audit for check of finance/accounts related matters, but C-MET did not create an internal audit wing so far. It is desirable & mandatory on the part of C-MET to have an internal audit wing as per the Policy. DG, C-MET has three Labs under its control. Availability of internal audit wing will not only help the organization in improving its efficiency but also provide an effective monitoring system to facilitate course corrections.

In response to the above query it was replied that due to shortage of staff, no internal audit wing was created so far. However, C-MET would take up with the Ministry of Finance, DoE for additionaal manpower for the creation of an internal audit wing.

The matter may be taken up with the Ministry on urgent basis & action taken in this regard may be intimated.

Para 2: Irregular payment of Pay & Allowance of Rs.2.04 lakh.

As per Ministry of Electronics and Information Technology OM No. 2(11)/2016-Pers.III dated 19.09.2016: " the date from which the promotion are to be effected the DPRC recommendation may be placed before the authority competent to approve the promotion"

There shall be one DPRC in respect of promotions in all the Autonomous Scientific Societies under the department which shall be constituted with the approval of the Minister-in-charge. As and when a uniform policy for all scientific departments is formulated, the instant policy would be integrated with the same.

The policy shall cover all the existing Group "A" S&T Officers who are holding a Group "A" S&T Post. The grade structure for which this policy will be applicable shall be as under: -

Sl. No	Scientist Category	Minimum residency period (MRP)
1	Scientist B	3 years
2	Scientist C	4 years
3	Scientist D	4 years
4	Scientist E	5 years
5	Scientist F	5 years

All those S&T officials who have rendered the minimum residency period as indicated above, shall be eligible for consideration for promotion to the next higher grade. The crucial date for consideration shall be as on the 1st January and 1st July every year. The process for assessment should begin by October and April every year and end by mid - December and mid- June. So that all promotions are given effect to as on 1st January and 1st July respectively every year.

Further, DoPT OM dated F. No. AB-14017/17/2018-Estt. RR 12 August 2021 allowed maximum relaxation of eligibility service delegated to the Administrative Ministry I Department upto 3 months for those who would complete eligibility service prescribed in the RRs between 1st January and 31st March, 2023. Further, the relaxation is subject to the condition that actual promotions are effected only after completion of the eligibility service prescribed in the Recruitment Rules/Service Rules.

However, during the review of cases relating to promotions under Personnel Policy for Group 'A' S&T Officer, audit observed that the following three scientists were promoted to the next higher grade even before completion of the Minimum Residency Period (MRP) in the existing grade. These promotions were effected based on the recommendations of the Assessment Board Meeting for promotions held on 28.12.2022.

Dr. (Mrs.) Shany Joseph, Scientist-D (w.e.f 01.04.2019), C-MET Pune Lab was promoted to Scientist "E" on 01.01.2023 even though she rendered less than 4 years MRP in Scientist "D" Grade as of 01.01.2023. As per the provisions of DoPT OM dated 12th August 2021 *ibid*, she was to be promoted to Scientist -E only on 01.04.2023. This has resulted in wrong promotion/fixation of pay leading to excess payment of pay & allowances of ₹1,60,719 to the officer.

Dr. Sudhir S. Arbuji, Scientist-B (w.e.f 28.02.2020), C-MET Pune Lab was promoted to Scientist "C" on 01.01.2023 even though he rendered less than 3 years MRP in Scientist "B" Grade as of 01.01.2023. As per the provisions of DoPT OM dated 12th August 2021 *ibid*, he was to be promoted to Scientist -C only on 28.02.2023. This has resulted in wrong

promotion/fixation of pay leading to excess payment of pay & allowances of ₹ 21,632 to the officer.

Dr. M. N. Muralidharan, Scientist-B (w.e.f 28.02.2020), C-MET Thrissur Lab was promoted to Scientist "C" on 01.01.2023 even though he rendered less than 3 years MRP in Scientist "B" Grade as of 01.01.2023. As per the provisions of DoPT OM dated 12th August 2021 *ibid*, he was to be promoted to Scientist -C only on 28.02.2023. This has resulted in wrong promotion/fixation of pay leading to excess payment of pay & allowances of ₹ 21,632 to the officer.

This has resulted in irregular payment of pay & allowances of ₹ 2.04 lakh as detailed in **Annexure I.**

When it was asked to submit the provisions under which the above promotions were effected before completion of the MRP in the existing grade, it was stated that the promotions were effected as per personal policy for promotion of Group A S & T officers as governed by OM No. 2911/2016-pers. III dated 19.09.2016. as already indicated in the above OM, promotions were given effect to as on 1st Jan & 1 July. the doPT OM dated 08.05.2017 & DoPT OM No. AB-14017/1/2018 estt-RR dated 12.08.2012 have been issued consequent to shifting of APAR writing system from financial year to calendar year. However, C-MET has been following financial year system for writing APARs. Hence above quoted OMs are not applicable. The reply is not acceptable. Para No. 4 of MeITY OM No. 2911/2016-pers. III dated 19.09.2016 also speaks that " those S&T officials who have rendered the minimum residency period as indicated in the table, shall be eligible for consideration for promotion to the next higher grade. The crucial date for consideration shall be as on the 1st January and 1st July every year. The process for assessment should begin by October and April every year and end by mid - December and mid- June. So that all promotions are given effect to as on 1st January and 1st July respectively every year." Further, Para -8 of the policy states that " Scientist who have completed or will complete the prescribed period of residency in a post during a period of three months before or three months after 1st Jan & 1st July would be considered as on that date for review for promotion to the next higher grade."

This implies that, the scientists who are going to complete the Minimum Residency Period (MRP) in next three months from 1st Jan can be considered for review for promotion, it does not mean that the officers has to be promoted on 1st Jan itself before completion of MRP. Hence, promoting the officers to the next higher grade on 1st Jan before completion of MRP not in conformity with the extant rules.

Action taken for regularisation of promotions may be intimated.

Para 3: Shortfall in achieving Internal Revenue & Extra Budgetary Resources (IEBR)

The Executive Committee of C-MET in its 77th Meeting held on 11.08.2021 has fixed a target of ₹ 38 crore for generation of Internal Revenue & Extra Budgetary Resources (IEBR) for the financial year 2022-23 for C-MET. Accordingly, it was supposed to take up high value projects for future activities for more revenue generation which would enable C-MET in reaching self-sufficiency.

- However, scrutiny of records revealed that C-MET could achieve ₹ 32.84 crore IEBR during the year 2022-23 as there was a short fall of ₹ 5 crore. This achievement is far below the IEBR of ₹ 60.19 crore generated during the year 2021-22.

C-MET may strive to take up more no. of projects /technical services/ characterization of materials/ & do more ToT/ IP Rights to generate more revenue.

Comments on the above may be offered.

Para 4: Non-adherence to roles & responsibilities of Programme Co-Ordinator led to abandoned the projects

Byelaw 1.13 of C-MET envisages the following roles & responsibilities of the Programme Co-Ordinator (PC).

The Programme Co-Ordinator has a key role to play in the success of activities of C-MET in general, and more specifically respect to the areas & responsibilities allocated to him/her. He/ She would be the functional head of the Programme and be responsible for its overall functioning. His responsibilities include:

- Setting the target for various activities under the Programme.
- Managing & monitoring the activities of the groups & programme so as to ensure that various technical, business & financial targets are met.
- Arranging periodic reviews by the 'Steering Committee' to assess the progress of the activities under the programme.
- Carry out necessary studies to keep abreast with the latest development in technologies or business Areas to the programme.

However, it was observed that, the Programme Co-Ordinator (PC) who was required to perform the above activities which mainly involve over all monitoring of the projects/programmes of C-MET for their effective & time bound implementation & who also acts as a technical adviser to the Director General. He was entrusted (based on his own proposals) with the following projects.

- Dev of Lithium Sulphur Battery (SP/87) - ₹ 11.06 Lakh
- Dev of Aluminium Based Reserved Batteries (TS/17) - ₹ 4.41 Lakh

However, the above two projects were not completed by the PC within the time schedule & abandoned the projects midway. This has resulted unfruitful expenditure of ₹ 15.47 lakh on these projects. These projects were remunerative & successful delivery of desired outcomes could have helped C-MET to build its image for getting more Sponsored/Technical Services projects.

As taking up of technical projects was not under the duties of PC, the reasons & the provisions under C-MET Byelaws by which the above projects were assigned to PC may be stated. It is learnt that PC has not been reporting to duty for the last one & half years.

In this connection the following information was asked for.:

In addition to the above, whether PC has been assigned with any other project? If so, the status of the projects & expenditure incurred so far on the projects may be furnished.

- Whether any facility for the projects undertaken/proposed to be undertaken by the above PC was created? If so, the name & purpose of the facility & expenditure incurred on creation of the facility may be furnished. If facility is set up, whether it is under use? If so, the purpose for which it is used?

It was replied that the PC is responsible for techno-administrative matters of C-MET related to the programs. The then DG considering the expertise of the Dr Rao entrusted the above mentioned two projects. Dr. Rao, PC has gone to Singapore in March 2022 on EOL for three months. Dr. Rao had initiated the simulation facility costing approximately Rs. 2.0 crore. The purpose of the facility was for simulation of the materials required for C-MET. This facility is being used for on-going projects/areas like energy storage.

However, the fact remains that entrusting the projects to the PC who was supposed to do duties as envisaged in the Bye-Laws & abandoning the projects mid-way has led to unfruitful expenditure on the projects & other allied facilities created for that purpose.

As replied Mr Rao, PC was proceeded to Singapore on EOL for three months in March 2022. Whether any action has been taken against Mr Rao for not reporting to duty for one and half years as observed by audit. If so, the same may be intimated.

Para 5: Delay in/Non-transfer of completed technologies

One of the main objective of CMET is to establish the technology up to pilot scale for a range of electronic materials and transfer the same to industry for commercialisation. C-MET is engaged in the development of process/product/technology and transfer of technology in the area of electronic materials, components and devices to cater to India's strategic and industrial applications, exploiting indigenous resources of raw materials. The R&D activities have been implemented in three laboratories at Pune, Hyderabad and Thrissur with their own area of specialisation with requisite infrastructure and expertise.

On scrutiny of records, it was observed that there were 28 completed technologies as on date which are yet to be transferred to the industries. The completed technologies were pertaining to the period from 2013-14 to 2020-21 as detailed in the enclosed Annexure-II.

Further, it was observed that out of the 17 Technologies available by 2018-19, only for eight technologies seeking Expression of Interest from industries were advertised and remaining six technologies were not at all advertised. Resulting in failure to bring to the notice of industry or interested institutions the technology available with the C-MET.

Further, 14 technologies developed by C-MET in the subsequent period i.e from 2019-20 to 2020-21, the Expression of Interest from the industry through advertisement was not made by C-MET so far leading to delay in transfer of technologies. The reasons for delay in advertising of above 14 technologies may be furnished to audit.

It is imperative that the technologies which were developed by C-MET were required to be transferred/commercialised on priority for the benefit of the society as well as recovery of cost incurred during execution of the projects. Delay in initiation of transfer i.e. more than 9 years & reaching their finality would defeat the very purpose of development of these technologies.

It was replied that the technology development is a continuous process & every year based on the work done, C-MET required to show the readiness of the technology & submit for further approvals. Similarly, due to highcost of the advertisement, C-MET displays the ToTs on the website, as well as the Annual Report. The process needs a full fledged office & manpower to deal with the technology transfer matters as involves many techno administrative matters.

Action taken / progress made in transfer of technologies may be intimated.

Para 6: Non-engaging of MBA consultants

The success of any product depends on how well it meets the needs and wants of industry/ customers. Marketing is the key to understand those needs and wants, and R&D is the key for developing products that meets those needs and wants.

Firstly, marketing drives R&D by providing market research that ensures R&D is valuable. Market research is the process of gathering and analysing information about customers, competitors and market trends. Marketing teams use market research to identify customer needs, market gaps and potential opportunities. This information is then used to guide the R&D process, ensuring that the products being developed are relevant and valuable to customers.

The Executive Committee in its 75th Meeting held on 18.06.2020, approved the appointment of two MBA consultants on temporary basis as per C-MET Policy. The justification, roles & responsibilities of these consultants to be appointed were not available in the records submitted to audit. In this context audit feels that the intention was to engage these consultants to facilitate C-MET in demonstrating its technological competency & marketing the available technologies for commercialisation which eventually benefit the society at large in addition to revenue generation by ToT.

C-MET has been doing multidisciplinary research dedicated to the development of materials required for various purposes. And it is required to work in close collaboration with industries & leading academic institutions.

In the backdrop of above, engagement of expertise by appointing the MBA consultants looks like a better option. But the audit observed that so far no such appointments were made by C-MET though there has been approval from the Executive Committee as stated above..

It was replied that the recruitment of the appointment of two MBA consultants on temporary basis was initiated in 2021. But, no candidate submitted the applications. However, the above said proposal would be submitted to MeITY shortly after obtaining the approval of C-MET authority.

The reply is not acceptable. No documents/ records relating to the advertisement made for appointment of MBA consultants were shown/submitted to audit in support of such claim during the audit. The same may be furnished and action taken in this regard may be intimated.

Para 7: Inadequate representation of reserved category candidates in appointment of technical Consultants/ Research Scientists on purely temporary & contractual basis.

Based on the approval by Secretary, MeITY vide GG-11/31/2021 R&D-E dated 31.08.2021 for appointment of temporary manpower (Technical Consultant/Research Scientist) for three Centres under jurisdiction of O/o DG, CMET Pune on contractual basis under specific projects, O/o Director General had placed an Advertisement (No. 1/2022) on 18 January 2022 calling for online applications for Technical Consultants/Research Scientists for 17 Posts on purely temporary & contractual basis for a period of 3 years for Pune, Hyderabad and Thrissur Labs.

In response to the advertisement 628 candidates had applied for the above-mentioned posts, out of which 327 candidates belongs to General/OBC/EWS & 301 candidates belongs to SC/ST/Women and others. Out of these 628 candidates, 120 candidates were shortlisted for selection to the posts. Out of 120, 17 candidates were selected & 18 candidates were kept on the waiting list. As some of the 17 candidates who were offered appointment did not join, the candidates from the waiting list were considered & finally 15 candidates were appointed. Remaining two posts were lying vacant.

Non-adherence to DoPT instructions relating to reservation in temporary appointments:

As per the extant guidelines issued vide Office Memorandum No. 27/4/67-Estt. (SCT) dated 24.09.1968. reservations are to be made for Scheduled Castes and Scheduled Tribes in all temporary appointments, except appointments which are to last for less than 45 days. Further, DoPT vide OM No. 36036/3/2018 Estt. (Res) dated 15th May 2018 reiterated that in respect of appointments to Central Government Posts and Services there shall be reservation for Scheduled Caste/ Scheduled Tribe/ Other Backward Class candidates in temporary appointments which are to last for 45 days or more.

Further, as per the provisions issued by DoPT relating to recruitment of SC/ST & OBC candidates in Central Govt. Posts, GoI from time to time, is providing a reservation to the members of the SC, ST and other backward classes @15%, 7.5% and 27% respectively (or at such rates notified from time to time) in the appointments.

As per the data & records provided to audit, 8 General Candidates, 6 OBC candidates & one SC candidate was appointed. However, as per the reservation percentages stated above: 5 - OBC Candidates, 2 - SC candidates & one ST candidate were to be appointed. Hence there was an in-adequate representation of SC & ST category temporary staff. This is against the extant instructions issued by GoI.

On this being pointed out it was replied that 88 SCs, 8 STs (1 PwBD), 197 OBCs (5 PwBD), 22 EWS (1 PwBD), 313 UR (2 PwBD), applied for the 17 positions. From the attached selection list that the first candidate on the Panel belongs to SC category and there were 4 OBCs in the selection list and waiting list had 2 SCs, 1 ST, 7 OBCs and 9 UR. However, many of the selected/ waitlisted candidates under reserved category did not join, even though opportunity was given to them. C-MET has made all efforts to ensure that representation from the reserved categories is met.

- The reply is not acceptable to audit as the first list issued for 17 selected candidates depicts general selection criteria and not as per seats reserved for SC/ST & OBC Quota. The SC/ST & OBC candidates should be considered under reservation quota also in addition to those appearing in the merit list.

C-MET needs to scrupulously follow the GoI instructions ibid & make adequate documentation in support of procedures followed while processing & selection of candidates.

PART-III : Follow up on findings outstanding of previous Inspection Reports

The following Paras are outstanding for want of further compliance.

Sl. No.	I.R. No. / Year of Issue.	Para No.
1.	2270 / 2019-2020	Part II B: 1 and 2
2	2436 / 2021-2022	Part-II B: 1

Replies to the outstanding Paras may be expedited for their early settlement.

PART-IV: Best Practices.

Maintenance of the records and work culture of the Unit is very good.

PART-V : Acknowledgement

The production of records called for were supplied immediately. The officers / officials were coordinated very well with the audit team for supply of records and furnishing of replies for smooth conduct of Audit. The audit team appreciates the co-operation extended by C-MET during the process of audit.


Sr Audit Officer

Annexure - I

Statement showing irregular payment of Pay & Allowance due to insufficient Order

SI No.	Month	Name of the Officer	Pay due			Total Due	Pay Drawn			Total Drawn	difference
			Basic	HRA@27%	DA @42%		Basic	HRA@27%	DA @42%		
1	Jan-23	Dr. (Mrs. Shany Joseph)	91400	24678	38388	154466	123100	33237	51702	208039	53573
	Feb-23	(Scientist 'E' (Pune)	91400	24678	38388	154466	123100	33237	51702	208039	53573
	Mar-23		91400	24678	38388	154466	123100	33237	51702	208039	53573
										Total:-	160719
2	Jan-23	Dr. Sudhir S. Arbuj	61300	16551	25746	103597	67700	18279	28434	114413	10816
	Feb-23	Scientist 'C' (Pune)	61300	16551	25746	103597	67700	18279	28434	114413	10816
										Total:-	21632
3	Jan-23	Dr. M. N. Muralidharan	61300	16551	25746	103597	67700	18279	28434	114413	10816
	Feb-23	Scientist 'C' (Thrissur)	61300	16551	25746	103597	67700	18279	28434	114413	10816
										Total:-	21632
										Grand Total:-	203983

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SI No.3 pay bill of the Officer is in Thrissur. But . Pay & Date of promotion both old and new grade for SI No. 02 & 03 was same. Hence Audit has taken SI No. 3 into consideration.

ANNEXURE

Statement showing delay in transfer of Technologies developed by C-MET

SI No.	Name of the Technology	Completed in year	Whether Advertisement made in May 2017	Whether Advertisement made in April 2018
1	Lead free X-ray absorbing materials	2013-14	No	No
2	Lead Free X-Ray Absorbing Materials & Medical Apron	2013-14	Yes	Yes
3	Modified silica fillers for space application	2013-14	Yes	Yes
4	Piezoceramic Compositions and Components	2015-16	Yes	Yes
5	Process for Nano-ZnO powder	2016-17	No	Yes
6	Quickly Rechargeable Emergency Lamp	2016-17	Yes	No
7	Nano Zinc Oxide	2016-17	Yes	No
8	Microwave substrates with dielectric constant 6.15 and 3.0	2017-18	Yes	Yes
9	Thermistor based digital thermometers	2018-19		No
10	Graphene through Chemical route technology	2018-19		No
11	Graphene supercapacitors	2018-19		No
12	(a) Environmental friendly treatment of PCBs and production of black copper enriched with precious metals (b) Recovery of valuable and precious metal from spent printed circuit boards (c) Recovery of valuable and precious metals from black copper obtained from spent printed circuit boards	2018-19		Yes
13	Aerogel Supercapacitors for Electronics & Energy Storage Applications	2018-19		Yes
14	Transparent thin film heater	2018-19		Yes

15	3YSZ ceramic Tapes for oxygen sensor applications	2019-20		No
16	Microwave substrates of dielectric constant 10.2, 13 & 14.8	after 2020		No
17	Nano silver screen-printable ink for flexible electronics applications	after 2020		No
18	Process for making low ESR aerogel supercapacitors	after 2020		No
19	Process for making snap in type graphene supercapacitor having capacitance above 100F	after 2020		No
20	Process for making coin cell graphene supercapacitor modules	after 2020		No
21	Process for making 70F, 16V graphene supercapacitor module	after 2020		No
22	Process for making IoT enabled smart digital thermometer	after 2020		No
23	Process for making IoT enable fire alarm	after 2020		No
24	Process for making IoT enabled humidity sensors	after 2020		No
25	Process for making IoT enabled CO2 sensors	after 2020		No
26	Process for making 48 channel data acquisition system for thermal sensors	after 2020		No
27	Process for polybutadyne based MW substrates	after 2020		No
28	Process for plasmonic based gas and bio sensors.	after 2020		No

Asst. Audit Officer/LAP