

NANDHA ENGINEERING COLLEGE

(AUTONOMOUS)

(Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai)

ERODE - 638 052 TAMILNADU

Email: principal@nandhaengg.org Mobile: 73737 12234

Criterion 3 – Research, Innovations and Extension Resource Mobilization for Research

3.2.2 Details of teachers having research projects during the year

E-copies of Grant award Letters for Research Projects



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List of Teachers having ongoing Research Projects Grant during Academic Year (2022-23)

S.No.	Name of the Principal Investigator/ Co-Investigator (if applicable)	Department of the Principal Investigator/ Co-Investigator	Name of the Funding Agency	Funds provided (INR in lakhs)
1.	Mr A Vishnu	Mech	MSME	14
2.	Dr M Muthukumar	Mech	MSME	15
3.	Mr P Krishnagandhi	EEE	MSME	14.75
4.	Dr C N Marimuthu R Murugasami	ECE	AICTE AQIS RPS	15.045
5.	Dr S Kavitha Dr S T Sadishkumar	ECE	AICTE-RPS	5.45098
6.	Mr M Prabu	EEE	TNSCST	0.075
7.	Dr E K Vellingiriraj	MCA	TNSCST	0.075





विकास आयुक्त का कार्यालय

(सूक्ष्म, लघु एवं मध्यम उद्यम) सूक्ष्म, लघु एवं मध्यम उद्यम मंत्राालय (भारत सरकार)

निर्माण भवन, सातवी मंजिल, मौलाना आजाद रोड, नई दिल्ली-110 108



OFFICE OF THE DEVELOPMENT COMMISSONER (MICRO, SMALL & MEDIUM ENTERPRISES)

MINISTRY OF MICRO, SMALL & MEDIUM ENTERPRISES
GOVERNMENT OF INDIA

Nirman Bhawan, 7^a Floor, Maulana Azad Road, New Delhi-110 108

Ph. EPAX-23063800, 23063802, 23063803, 23063804, 23063805 & 23063806

By-email

F.No. 6(19)/SanctiontoCNA/Incubation /2022-23

To,
The Accounts Officer,
Pay & Accounts Office,
Micro, Small & Medium Enterprises,
New Delhi.

Dated: 08/08/2023

SANCTION ORDER

Subject: Sanction of payment of Rs. 22,73,09,000/- (Rupees Twenty Two Crore Seventy Three Lakh Nine Thousand Only) to CENTRAL TOOL ROOM AND TRAINING CENTRE (CTTC), Bhubaneswar, ODISHA (as CNA) towards implementation of Incubation Component of MSME Innovative Scheme for FY 2023-24:reg.

I am directed to convey the sanction of the President of India for grant-in-aid of release of Rs. 22,73,09,000/- (Rupees Twenty Two Crore Seventy Three Lakh Nine Thousand Only) under Grant-in-aid General for implementation of Incubation Component of MSME Innovative Scheme, a component of MSME Champions Scheme to Central Tool Room and Training Centre (CTTC), Bhubaneswar, Odisha as Central Nodal Agency (CNA) w.r.t. approval in 4th PMAC held on dt. 26.06.2023 for the FY 2023-24. The details are as under:

(Rs. in lakh)

	BE of MSME Champions Scheme 2022- 23	approved in 4th	Amount Concurred by IFW	1st release Guidelines approved			
1	5272.00	3247.2720	2273.090		_	2	273.090

2. The details of ideas and the respective amount approved in 4th PMAC towards release of 70% of the amount as 1st installment as per scheme guidelines are provided in **Annexure-A**.

3. Roles and Responsibilities of CNA:

Central Tool Room And Training Centre (CTTC), Bhubaneswar, Odisha shall release the amount to the respective Host Institutes (HIs) as per the Annexure-A after submission/upload of all requisite documents on MIS portal by the HIs concerned as per the scheme guidelines. The Grant-in-Aid will be regulated in accordance with the OM of Dept. of Expenditure, Ministry of Finance vide No. 1(18)/PFMS/FCD/2021 dated 9th March, 2022 (copy attached) regarding revised procedure for flow of funds under Central Sector Schemes and provisions contained in the Incubation Component of MSME Innovative Scheme. CTTC, Bhubaneswar, Odisha has been nominated as CNA vide letter No. 41(1)/Budget/MSME Champions/2021 dated 27.06.2022 for Incubation Component of MSME Innovative Scheme of MSME Champions Scheme (copy of the order enclosed for reference). CTTC, Bhubaneswar shall strictly follow the roles and responsibility as mentioned in the aforesaid O.M. The funds released are also subject to the provisions contained in Chapter 9 of the General Financial Rules, 2005, as amended from time to time, read with the Government of India's decisions incorporated there-

Bright Provided Control of States Control of Sta

	nt And Technolog				system using solar				
13	NANDHA ENGINEERI NG COLLEGE	TAMIL NADU	VISHNU ANBALAG AN	Others	Yield Enhancement for paddy field using Supervisory Control and Data Acquisition system with Machine Learning Technique	14.000	11.900	2.100	8.330
14	KAMARAJ COLLEGE OF ENGINEERI NG AND TECHNOLO GY	TAMIL NADU	Baskarap andi Pandiyara jan	Student	Design and Fabrication of Pesticide Spraying and Seed Sowing Robot	9.000	9.000	0.000	6.300
15	BHAGWAN MAHAVIR COLLEGE OF ENGINEERI NG & TECHNOLO GY	GUJARA T	Patel Dhruvku mar	Others	Al (Artificial Intelligence) based Agriculture Farming System	12.810	10.889	1.922	7,622
16	Mahendra Engineerin g College	TAMIL NADU	JEEVA V	Student	Automated Seed Sowing Machine using Internet of Things	14.000	14.000	0.000	9.800
17	K.S.RANGA SAMY COLLEGE OF TECHNOLO GY	TAMIL NADU	Muthuku mar Subrama niyan	Student	SMART LIVESTOCK MANAGEMENT FOR FARMERS USING DIGITAL TECHNOLOGY.	5.000	5.000	0.000	3.500
18	Governme nt Engineerin g College Thrissur	KERALA	AJITH P	Student	PHOENIX - DRONE BASED SOLUTION FOR HUMAN- WILDLIFE CONFLICT	6.500	6.500	0.000	4.550
19	Rajalakshm i Engineerin g College	TAMIL NADU	Priya L	Others	Timely Detection of Stem Borer Pest Infestation using Aerial Imagery for Smarter Rice	9.000	7.650	1.350	5.355

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170	KAMARAJ COLLEGE OF ENGINEERI NG AND TECHNOLO GY		PRAVIN M	Student	DEVELOPMENT OF HARDWARE INTERFACE TO GENERATE ELECTRIC POWER FROM PARKED ELECTRIC VEHICLES		11.750	0.000	8.225
171	Amrita Vishwa Vidyapeeth am	NADU	Shairagul Gautam	Student	aqueous battery	15.000	15.000	0.000	10.500
172	NANDHA ENGINEERI NG COLLEGE	TAMIL	Muthuku mar Marappa n	Others	Artificial Intelligence based Fuel cell powered Electric vehicle with high performance, on-board charging and zero emissions for eco-friendly environment	15,000	12.750	2.250	8.925
1/3	INDIAN INSTITUTE OF INFORMAT ION TECHNOLO GY AND MANAGEM ENT KERALA	KERALA	Prince Manu Baby	Others	Aluminum Air Battery- Hydrogen Fuel cell Hybrid system for EVs	15.000	12.750	2.250	8.925
174	Jerusalem College of Engineerin g	TAMIL NADU	Senthilna than K	Entrepren eurs/MSM E	Intelligent Battery Management System (iBMS)	15.000	12.750	2.250	8.925
175	Sreenidhi Institute of Science and Technolog y	TELANG ANA	Hemang Shah	Entrepren eurs/MSM E	EAR (Economical, Affordable, Reliable) Electric Passenger Cars	15.000	12.750	2.250	8.925
176	KAMARAJ COLLEGE OF ENGINEERI NG AND TECHNOLO GY	TAMIL NADU	SHALINI D	Student	DEVELOPMENT OF ECO- FRIENDLY BATTERY BALANCING KIT FOR ELECTRIC VEHICLE	10.500	10.500	0.000	7.350

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विकास आयुक्त का कार्यालय (सूक्ष्म, लघु एवं मध्यम उद्यम) सूक्ष्म, लघु एवं मध्यम उद्यम मंत्रालय (भारत सरकार)

विर्माण भयन, सातवी मंजिल, मोलावा आजाद रोह, नई दिल्ली-110 108



OFFICE OF THE DEVELOPMENT COMMISSO (MICRO, SMALL & MEDIUM ENTERPRISES)

MINISTRY OF MICRO, SMALL & MEDIUM ENTERF
GOVERNMENT OF INDIA

Nirman Bhawan, 7th Floor, Maulana Azad Road, New Delhi-110 108

Ph. EPAX-23063800, 23063802, 23063803, 23063804, 23063805 & 23063806

F.No. 6(19)/Sanction to CNA/Incubation /2022-23

Dated: 17/08/2

To.

The Accounts Officer,
Pay & Accounts Office,
Micro, Small & Medium Enterprises,
New Delhi.

SANCTION ORDER

Subject: Sanction of payment of Rs. 20,57,00,000/- to CENTRAL TOOL ROOM AND TRAINI CENTRE (CTTC), Bhubaneswar, ODISHA towards implementation of Incuba Component of MSME Innovative Scheme for FY 2022-23:reg.

Sanction of the President of India is hereby conveyed to release of payment of 20,57,00,000/- (Rupees Twenty Crore Fifty Seven Lakh Only) under Grant-in-aid General implementation of Incubation Component of MSME Innovative Scheme, a component of MS Champions Scheme under Technology Upgradation and Quality Certification (CLCS-TUS), to Cen Tool Room And Training Centre (CTTC), Bhubaneswar, Odisha as Central Nodal Agency (CNA) w approval in 2nd PMAC held on dt. 22.06.2022 for the FY 2022-23. The details are as under:

(Rs. in lal

S. No.	BE of MSME Champions Scheme 2022-23	Amount approved in 2nd PMAC	Amount Concurred by IFW	1st release as per Scheme Guidelines 70% of amount approved and available funds under Grant-in- aid General	Fund will be released in due course of time	utilization of 60's amount of 1st releas
10	3072.00	2963.676	2074.573	2057.0000	17.573	889.10:

The details of ideas and the respective amount approved in 2nd PMAC and 70% of the amount as 1st installment as per scheme guidelines are as per Annexure-A

3. Roles and Responsibilities of CNA:

Central Tool Room And Training Centre (CTTC), Bhubaneswar, Odisha shall release the amount to the respective Host Institutes (HIs) as per the Annexure-A after submission/upload all requisite documents on MIS portal by the HIs concerned as per the scheme guidelines. The Grant-in-Aid will be regulated in accordance with the OM of Dept. of Expenditure, Ministry of Finance vide No. 1(18)/PFMS/FCD/2021 dated 9th March, 2022 (copy attached) regarding revised procedure for flow of funds under Central Sector Schemes and provisions contained in the Incubation Component of MSME Innovative Scheme. CTTC, Bhubaneswar, Odisha has been nominated as CNA vide letter No. 41(1)/Budget/MSME Champions/2021 dated 27.06.2022 for Incubation Component of MSME Innovative Scheme of MSME Champions Scheme (copy of the order enclosed for reference). CTTC, Bhubaneswar shall strictly follow the roles and responsibility as mentioned in the aforesaid O.M. The

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funds released are also subject to the provisions contained in Chapter 9 of the General Financial Rules, 2005, as amended from time to time, read with the Government of India's decisions incorporated there-under and any other guidelines which may be issued in this regard and in particular to the

CTTC, Bhubaneswar shall maintain CNA account of Grant-in-Aid received from the Government and utilized. In addition, a separate Bank account shall be maintained for the Government Grants under this Scheme. (The bank account should be same which was authorized for operation at the time of registration under the central plan Scheme monitoring system (CPSMS) of the Ministry of Finance).

The grant shall be utilized for the purpose of development of idea under Incubation Component of MSME Innovative Scheme as provisioned in the Scheme guideline. Further, while incurring the expenditure, austerity measures should be taken into account as issued

from time to time by competent authority.

Innovative.msme.gov.in portal shall be used for uploading all relevant information by the HIs as and when required by this office under Incubation Component of MSME Innovative

CTTC, Bhubaneswar shall maintain a register of permanent and semi-permanent assets acquired if any, wholly or mainly out of the above grant in the prescribed format and copy thereof should be furnished to this Ministry.

If any capital assets created in the CTTC, Bhubaneswar, DC (MSME) will be the sole proprietor of the same. Assets acquired wholly or substantially out of Government Grant shall not be disposed of without obtaining the prior approval of the sanctioning authority of Grantin-aid.

The accounts of CTTC, Bhubaneswar shall be open for inspection by the sanctioning authority and audit, both by the Controller & Auditor General of India under the provision of C&AG (DPC) Act, 1971 in accordance with the provisions laid down in Section 14 of the C&AG (DPC 1971) as amended from time to time and Internal Audit party of the Principal Accounts Office of the Ministry of Micro, Small & Medium Enterprises (MSME), whenever it is called vii)

The grantee shall submit the Utilization Certificate in the prescribed form GFR-12 duly signed by the Head of the Institution/ Grantee latest by 31.03.2023. The utilization certificate in respect of grants should also disclose whether the specified, quantified and qualitative targets that should have been reached against the amount utilized were in fact reached, and if not, the reasons therefor furnished by concerned HI.

CTTC, Bhubaneswar shall furnish an Audited Statement of Accounts of the financial year viii) before 30.04.2023 also indicating separately Activity-wise and Head-wise expenditure. ix)

Grant-in-Aid shall be utilized subject to the Economy and other Instructions issued from time

to time by the M/o Finance or by the Competent Authority.

CTTC, Bhubaneswar shall certify that the utilization certificates due for submission for the Grants-in-aid sanctioned in the previous year's containing all the relevant details under GFR 212(1) have been submitted to the satisfaction of the Ministry of MSME.

CTTC, Bhubaneswar shall adhere to all the relevant provisions of GFR and any other xi) instructions/ guidelines issued by the Government from time to time, while making procurement/ purchases of goods and services including compliance to GFR provisions in case of out-sourcing of services and engagement of consultants.

CTTC, Bhubaneswar has been exempted from execution of the bond. CTTC, Bhubaneswar shall, however, furnish an undertaking that it will comply with all the fermis and conditions

stipulated in the sanction order.

CTTC, Bhubaneswar should send pre-receipted bill and undertaking to agree to the terms & xiii) condition of this sanction (in triplicate) to this Ministry for payment of the amount drawn

In no case the grant released under this sanction will be utilized for any purpose other than those indicated in the sanction. The grantee shall not divert the grants and entrust execution o the Scheme or work concerned to another Institution or Organization and shall abide by the terms & conditions of the grant and follow/ adhere to all the relevant provisions of GFR regarding Grants in aid. If the grantee fails to utilize the grant for the purpose for which the same has been sanctioned or does not adhere to the terms & condition of Grant and GFR provisions, the grantee/Institution shall be required to refund the grant with interest @10% per XV)

CTTC, Bhubaneswar will send the detailed progress report of for fund utilized by HI

CTTC, Bhubaneswar may use the fund as prescribed in the Scheme guidelines of Incubation component of MSME Innovative Scheme relating to development of ideas. The expenditure under the sanction is maximum, saving if any, will be surrendered to the Govt. of India.

xvii) The grantee institution shall not utilize the interest earned if any on the recurring/non-recurring grants-in-aid released to the institution for any purpose. The interest earned shall be indicated in UC which can be either adjusted in next release or to be refunded to Go I after grants-in-aid

4. Roles and Responsibilities of Host Institutes:

- The expenditure shall be incurred towards Technology related Expenditure towards machine usage charges, Electricity charges, Procurement of raw material, testing/Calibration charges, other charges essential for development of idea, charges for mentor/handholding supporting team Travelling Expenses or any other item not covered as above may be allowed as per need for development of the idea. The main activities includes nurturing of innovative business ideas (new/indigenous technology, processes, products, procedures, etc.), with the expected outcome of it being commercialized into an enterprise.
- ii) The terms and conditions governing the grant will be as per undertaking executed to Government by the HIs on MIS portal. The amount released as 1st installment will be utilized in a manner that Proof of Concept (POC) of project/idea is made. The Host Institution shall maintain separate accounts of the funds received and expenditure incurred on various activities. Further, the HI would submit Annual Accounts, Audited expenditure Statement and Utilization Certificate to the Government. In case of mis-utilisation or diversion of grant sanctioned under the scheme, the HI shall be liable to refund to the President of India the whole or a part amount of the grant with interest @ of 10 % per annum thereon. Further, The Host Institution shall not utilize the interest earned on the recurring / non recurring grants -in -aid released to the institution for any purpose. The interest earned shall be indicated in UC which can be either adjusted in next release or to be refunded to GOI after grants -in-aid sanctioned is utilized.
- iii) The time limit for Completion of ideas through Host institute is preferably one year until and unless some valid justification is given for extension of the time limit The Executive Head shall submit Quarterly Progress Report of the Business Incubator to this office. The consolidated report on the final outcome of such incubation along with the report of mentor/guide about the quality of the work done, its cost effectiveness, tangible gains (quantitative) likely to be achieved, etc., is also to be submitted immediately after completion

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v) In addition to the above, the HI will have to abide by the terms & condition as given in the detailed guidelines of the scheme. Also, the office of DC (MSME) may lay down any other condition to be followed by HI.

condition to be followed by HI as and when required.

vi) The expenditure incurred by the institutions shall be open to inspection by the sanctioning authority/ CAG/Chief Controller of Account (CCA), Ministry of Micro, Small & Medium Enterprises.

vii) The HIs shall certify that it has not obtained or applied for grants for the same purpose or activities from any other Ministry or Department of Government of India or the State Government.

5. Noted at Serial No. 03 in the Register of Grants.

6. Sh. P.V Suresh Babu, DDO of the office of DC (MSME) will act as Drawing and Disbursing Officer for this sanction.

7. The progress of the scheme would be monitored by the PMAC, O/o DC (MSME).

8. The expenditure involved is debitable to the Budget Allocation under Demand No. 68 Ministry of Micro, Small & Medium Enterprises (MSME) under Technology Up gradation and Quality Certification (MSME Champions Scheme) for FY 2022-23. Details are as under:

(i)	Major Head 2851.00.102.95		Village &Small Industries
(ii)	Object Head	95.04.31	GIA-G
(iii)	BE MSME CLCS-TUS Champions Scheme)	34.39 Cr.	-
(iv)	Present sanction/release	20.57 Cr.	-

9. The CNA bank details of the Central Tool Room & Training Centre, Bhubaneswar for making payment are as below:

Name of the CNA	Name of Bank where A/c of Org. Held	Address/Code of Bank Branch	Saving Bank A/c No. of CNA	MICR Code and IFSC Code
Room & Training Centre	State Bank of India	Infocity Branch, Bhubaneswar		MICR-751002030 IIFC NO. – SBIN0010133

10. There is no pending UC with CTTC, Bhubaneswar under "MSME Innovative Scheme

11. This issues with the approval of Integrated Finance Wing vide their Dy. No. 64/2022-23/IFW-II dated 16.08.2022.

(Rakesh Kumar)

Joint Director

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Figure Folders/Joint Director

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Encl: As above.

Copy To,

- General Manager, Central Tool Room & Training Centre, B-36, Chandaka Industrial Area Bhubaneswar-751024
- 2. The Drawing & Disbursing Officer, Office of DC (MSME), New Delhi.
- 3. B&A Section, Office of DC (MSME), Nirman Bhawan, New Delhi.
- 4. Budget Division, Office of DC (MSME), Nirman Bhavan, New Delhi.
- 5. Principal Director of Audit, Economic and Service Ministry, AGCR Building, IP Estate, New Delhi.
- 6. Under Secretary, IFW, Ministry of MSME, Nirman Bhavan, New Delhi.
- 7. PS to JS (AFI)/ PS to Director (T&P). Ministry of MSME, Udyog Bhawan, New Delhi.
- 8. SENET Division with the request to upload on DC (MSME) website. .
- 9. All MSME -DFOs

10. Guard File.

(Rakesh Kumar)

RIGHT GREEF RAKESH Joint Director

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243	Sona College of Technology	Tamil nađu	AdeshVija yaraghava n	Student	Fabrication of IOT Based Hydrophobic Coating Kit using Acid Erosion Method- to manipulate IoT based system for acid etching and to promote superhydrophobic surface with greater surface finish	15.000	15.000	0.000	10.500
244	Nehru Institute of Technology	Tamil nadu	Srinivasan S	Start Up /Employe d/Others	for the material Automated Items Dispenser using UPI and IoT	15.000	12.750	2.250	8.925
245	Sharda University	Uttar prades h	sudhanshu sharma	Student	Smart Battery Management System for large Battery / EVs with Controller Area Network(CAN) , Individual Cell Monitoring and Active Balancing	15.000	15.000	0.000	10.500
246	Nandha Engineering College	Tamil nadu	Krishna Gandhi Pachiappa n	Start Up /Employe d/Others	Smart Solar Waste Segregation and Management System using Internet of Things	14.750	12.538	2.212	8,777
247	Mallareddy Engineering College For Women	Telang ana	Kousurisai Bharathvis wapayan	Entrepren eurs/MSM E	Ghatak Robot - s a semi autonomous robot which is intended to operate in Counter insurgency	14.300	12.155	2.144	8,509
248	University College of Technology	Telang	ThatiJyoth i	Start Up /Employe d/Others	Waste water treatment electricity production using Microbial fuel cell -to treat industrial	15.000	12.750	2,250	8.925

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पार्वेश कुमार/RAKESH KUMAR संयुक्त निर्देशक/Joint Director सारम संघलता/Govt. of trota राज्य संघलता/Govt. of trota राज्य संघुक्त के माना द्वारा प्रभावता Mediuty of Mario. Direct & Medium Ginerprotect किया बाह्य है, या राज्य अ. स्थान) अ. कार्यावत वर्णाव कर के विकास पार्विक कर्मा कर्मा

ALL INDIA COUNCIL FOR TECHNICAL EDUCATION

Nelson Mandela Marg, Vasant Kunj, New Delhi-110070

RPS - Sanction Letter

File No. 8-33/FDC/RPS/POLICY-1/2021-22

The Drawing and Disbursing Officer
All India Council for Technical Education
Nelson Mandela Marg,
Vasant Kunj, New Delhi-110070,



Sub: Release of a sum of Rs. 1316437/- being the 1st installment of the total grant of Rs. 1504500/- for conduct of Project under Research Promotion Scheme (RPS) during the financial year 2021-22.

Sir,

With reference to the proposal submitted by the institute, this is to convey the sanction of the Council for payment of Rs. 1316437/- (Rupees Thirteen Lakh Sixteen Thousand Four Hundred ThirtySeven Only) as 1st installment out of a total approved grant-in-aid of Rs.1504500/- for conduct of a Project under the Research Promotion Scheme (RPS), as per details given below:-

1.	Name and address of the Beneficiary Institution (University / College / Institution)		Registrar / Director / Principal, NANDHA ENGINEERING COLLEGE, 28, CHENNIMALAIPALAYAM ROAD, PITCHANDAMPALAYAM (PO), ERODE-638052, TAMIL NADU			
II.	Principal Investigator's Name & Dept./Course	:	Dr MARIMUTHU (ELECTRONICS AND COMMUNICATIONS ENGINEERING)			
111.	Co-Principal Investigator's Name & Dept.		RAMASAMY MURUGASAMI (ELECTRONICS & COMMUNICATION ENGG)			
IV.	Grant-in-aid Sanctioned	:	Rs. 1504500/- Rs. 1128375/- for non-recurring and Rs. 3/6125/- for recurring expenditure)			
V.	Amount to be Released during the year 2021-22 (as 1 st installment)	3	Rs. 1316437/- (Rs. 1128375/- Full amount of non-recurring & Rs. 188062/- recurring i.e. 50 % of total sanctioned recurring grant)			
VI.	Project Duration	: 3 Years				
VII.	Title of the Project	:	Designing a Fully Textile Fractal Monopole Wearable Antenna for Medical Imaging Applications			

I. Release of funds:

- The amount of the grant shall be drawn by the Drawing and Disbursing Officer (DDO), All India Council for Technical Education, New Delhi on the Grants-in-aid bill and shall be disbursed to and credited to the account of NANDHA ENGINEERING COLLEGE, 28, CHENNIMALAIPALAYAM ROAD, PITCHANDAMPALAYAM (PO), ERODE-638052, TAMIL NADU through PFMS.
- The sanctioned grant-in-aid is debitable to the Major Head "601.12.a (RPS Plan)" Gen. and is valid for payment during the financial year 2021-22.
- The sanction issues in exercise of the powers delegated to the Council. It is also certified that grant-in-aid is being released in conformity with the rules and principles of the Scheme.
- The grant-in-aid is being released in conformity with the Terms & Conditions as well as norms of the scheme as already communicated and also being communicated in this letter.

II. Maintenance of account by the Institute/PI:

- Funds covered by this grant shall be kept separately and would not be mixed up with other funds so as to know the amount
 of interest accrued on the grant.
- 2. The grant is intended to cover items of expenditure/equipment approved by AICTE.
- Acknowledgement of receipt of grant and letter of acceptance of terms and conditions is to be submitted to AICTE within 15 days from the receipt of the grant to the following address:

Director (Faculty Development Cell), AICTE, Nelson Mandela Marg, Vasant Kunj, New Delhi-110070

- The accounts of the grantee will be opened for test check by the Council or Comptroller & Auditor General of India or by any
 officer designated by them.
- 5. The Principal and PI of the institute are requested to verify the correctness of the undermentioned bank account/RTGS/PFMS details submitted by them alongwith the Proposal, in which the grant is being released. In case of any omission, the same should be reported to AICTE immediately along with refund of entire grant: -

Institute Pan No.	Bank Name	Bank Branch	Bank Branch Add.	Account Holder Name	Account Type	Account Number	IFSC Code
AAATN48 391	BANK	THOTTANI	INDIAN BANK,THOTTANI BRANCH,NANDHA COLLEGE OF PHARMACY, ERODE -638052	PRINCIPAL, NANDHA ENGINEERING COLLEGE, ERODE	Saving Account	970801700	IDIB000T137

- 6. The grantee Institution shall observe all financial norms and guidelines as prescribed by the AICTE/Government of India from time to time. Grantee institution must follow GFR guidelines in procuring the sanctioned items and maintain an audited record of assets acquired wholly or substantially out of the grant-in-aid and a register for assets shall be maintained by the Institute in the prescribed form i.e. GFR-19.
- Interest accrued on the sanctioned grant-in-aid will be reported and refunded to AICTE and not adjusted against the subsequent installment.

III. General Instructions:

- It should be ensured that no RPS project in favour of the same P.I. has been sanctioned during the last 03 years before
 utilizing this amount and the matter be brought to the notice of this Council immediately in case a faculty is sanctioned
 multiple RPS Projects.
- 2. The duration of Project is 03 years and the date of release of the grant by AICTE shall be taken as the date of commencement of the project. The Registrar/Director/Principal shall intimate about the receipt of the grant to AICTE. Any Expenditure, incurred prior to issuance of this Sanction Order, would not allowed to be adjusted in the grant and if the University/Institution do not take-up the project work within 6 months of the receipt of the grant, approval shall ipso facto lapse and the Institute has to necessarily refund the entire grant to AICTE along with interest within a month. In case the grant is not refunded within said duration 18% interest will be levied on it. The grant has to be refunded to AICTE, through RTGS as per details given below:

Account Number	55113199952
Name of the Account Holder	Member Secretary, AICTE, New Delhi
Bank Name	State Bank of India
Branch Name	Shashtri Bhawan, New Delhi
IFSC Code	SBIN0050203

- 3. The Institute may constitute a Project Monitoring Committee (PMC). The composition of the PMC shall be as under:
 - i. Principal/Director of the institution (Chairperson)
 - ii. Two HODs from institute (Members)
 - In case of private institute one subject expert from government institute, not below the rank of Associate Professor (Member)
 - iv. Coordinator of the project (Member Secretary)
- 4. The grant shall be utilized strictly for the purpose as specified in the sanction letter. Re-appropriation of funds from one Head to another is strictly not permitted viz. Recurring and non-recurring Heads. Further, the equipment(s)/item(s) purchased should be as per the specifications and individual item-wise costs sanctioned by AICTE, and not taking the total grant sanctioned as one entity. Item-wise purchase cost shall be matched with the sanctioned cost, and the cost of item purchased below the sanction cost shall be restricted as actual cost. If the item purchase cost is higher than its sanctioned cost, the cost shall be restricted to the sanctioned cost and the additional amount shall be met by the Institute from its own resources.
- Similarly, the recurring grant can be used for the items (non-recurring) sanctioned by the AICTE. No money be used for going abroad to attend Conference / seminars. However, for presenting a Paper in a Seminar / Conference within the country, the travel expenses may be met from the recurring grant.

- No request for additional grant over and above the sanctioned grant shall be considered by the AICTE. The additional amount, if any, expended beyond the sanctioned grant shall be met by the Institute from its own resources.
- The institute/University shall not charge any overheads on this Project and will provide all the administrative support and timely release of grant to PI for completion of the Project.
- 8. The grantee shall utilize grants only on approved items as per list of equipment attached. However, if the grantee wishes to recast the Project, approval of Council must be obtained for the revised item of expenditure and they will maintain proper accounts of the expenditure as per the norms/procedures of AICTE/Government of India. The revised proposal should be within the total grant sanctioned and duly supported with reasons and recommendations of the Project Monitoring Committee (PMC).
- The assets acquired wholly or substantially out of All India Council for Technical Education's grant shall not be disposed or encumbered or utilized for the purpose other than those for which the Grant was given without proper sanction of the All India Council for Technical Education.
- 10. Each project sanctioned by AICTE is assigned a specific Reference Number, which is given on pre-page. All correspondence address to AICTE regarding the project must quote this number alongwith year of sanction of the project, otherwise correspondence may not be entertained.
- 11. The grantee shall follow the terms and conditions of Research Promotion Scheme (RPS) as laid down by the Council time to time.

IV. Submission of documents by the institute/PI to AICTE:

A. Documents to be submitted within one month of completion of each financial year:

- Annual Progress Report, indicating therein the number of patents, publications or any other achievement.
- ii. Utilization Certificate, Audited Utilization Certificate, Receipt & Payments, Statement of Expenditure.
- Audited record of assets acquired wholly or substantially out of the grant-in-aid and a register for assets in the prescribed form i.e. GFR-19.
- Separate Bills/vouchers related to Non-recurring and recurring expenditures duly signed & stamped by the PI & Head
 of the institution.
- v. Stock entry register duly verified by the Store-in-charge and PI & counter signed by Head of institution.

B. Documents to be submitted within two month of completion of the Project:

- i. The consolidated Utilization Certificate (UC) and Receipt & Payment Account for the Project duration, duly audited.
- Consolidated audited statement of expenditure, to the effect that the grant has been utilized for the purpose for which
 it has been sanctioned. It should contain the head-wise break up of expenditure made from the grant-in-aid provided
 by the Council.
- Project Completion Report duly signed & stamped by the PI & Head of the institution and Project Evaluation Committee (PEC) Members.
- Principal Investigator/institute to submit the Feed Back Form in AICTE format.
- The prescribed formats for submission of necessary mandatory documents and Terms & Conditions may please be downloaded from www.aicte-india.org/schemes/research-innovations-development-schemes.

Note: Any deviation from the above said time schedule will cause serious action against the institute.

from

V. Approved List of Items under Non-recurring grant:

S. No.	Approved Items (As per proposal)	No. of Units	Amount recommended
A.	Non-recurring	The same of the same of	(in Rs.)
i)	ADVANCED MEASUREMENT KIT	1	
ii)	DISTANCE TO FAULT	1	
iii)	EMI MEASUREMENT KIT	1	
iv)	MODULATION ANALYSIS OPTIONS (ASK, FSK SVA 1000X- DMA & AM, FM SVA 1000X-AMA)	1	
v)	Mechanical Calibration Kit:	1	
vi)	Mechanical Calibration Kit:	1	D 44202251
vii)	Near Field Probe Kit SRFS030T	1	Rs. 1128375/-
viii)	RF ANECHOIC CHAMBER SMALL CUSTOMIZE	1	
ix)	SPECTRUM & VECTOR NETWORK ANALYZER 7.5 GHZ WITH EMI MEASUREMENT	1	
x)	UTILITY KIT	1	
xx)		1	
В.	Recurring i.e. 50% of total approved recurring grant) for Contingencies & Consumables only		Rs. 188062/-
	Grand Total (A) + (B)	ADMINISTRATION OF THE PARTY OF	Rs. 1316437/-

Copy forwarded for information and necessary action to:

REGISTRAR / DIRECTOR / PRINCIPAL,

NANDHA ENGINEERING COLLEGE, 28, CHENNIMALAIPALAYAM ROAD, PITCHANDAMPALAYAM (PO), ERODE-638052, TAMIL NADU

2. NAME OF PRINCIPAL INVESTIGATOR,

Dr. . MARIMUTHU,
(ELECTRONICS AND COMMUNICATIONS ENGINEERING)
NANDHA ENGINEERING COLLEGE,
28, CHENNIMALAIPALAYAM ROAD, PITCHANDAMPALAYAM (PO),
ERODE-638052, TAMIL NADU

- OFFICE OF DIRECTOR GENERAL OF AUDIT GENERAL REVENUES, AGCR BUILDING I.P. ESTATE, NEW DELHI-110002.
- 4. GUARD FILE

(Col. B. Venkat) Director (FDC)

ALL INDIA COUNCIL FOR TECHNICAL EDUCATION Nelson Mandela Marg, Vasant Kunj.

New Delhi-110070

RPS - Sanction Letter

File No. 8-222/RIFD/RPS (POLICY-1)/2018-19

Date: 22 November 2019

The Drawing and Disbursing Officer All India Council for Technical Education Nelson Mandela Marg, Vasant Kunj, New Delhi-110070,

Sub: Release of a sum of Rs.536921/- being the 1st installment of the total grant of Rs.545098/- for conduct of Project under Research Promotion Scheme (RPS) during the financial year 2019-20.

Sir.

With reference to the proposal submitted by the institute, this is to convey the sanction of the Council for payment of Rs. 536921/ (Rupees Five Lakh ThirtySix Thousand Nine Hundred TwentyOne Only) as 1st installment out of a total approved grant-in-aid of Rs.545098/- for conduct of a Project under the Research Promotion Scheme (RPS), as per details given below:

L	Name and address of the Beneficiary Institution (University / College / Institution)	÷	REGISTRAR / DIRECTOR / PRINCIPAL. NANDHA ENGINEERING COLLEGE, 28, CHENNIMALAIPALAYAM ROAD, PITCHANDAMPALAYAM (PO), ERODE TAMIL NADU -638052	
TL.	Principal Investigator's Name & Dept./Course	:	Dr. KAVITHA S SUBRAMANIAM Electronics Engineering	
HI.	Grant-in-aid Sanctioned	:	Rs.5450987- (Rs.463333/- for non-recurring and Rs.81765/- for recurring expenditure)	
IV.	Amount to be Released during the year 2019-20 (as 1st installment)		Rs.536921/- (Rs.463333/- Full amount of non-recurring & Rs.73588/-90 % of recurring sanctioned)	
V.	Project Duration		3 Years	
VI.	Title of the Project	*	Experimental Investigation and modeling of WC ZnO and Graphene Nano particles in the field of E Medical applications	

I. Release of funds:

- The amount of the grant shall be drawn by the Drawing and Disbursing Officer (DDO), All India Council for Technical Education, New Delhi on the Grants-in-aid bill and shall be disbursed to and credited to the account of NANDHA ENGINEERING COLLEGE, 28, CHENNIMALAIPALAYAM ROAD, PITCHANDAMPALAYAM (PO), ERODE TAMIL NADU-638052 through RTGS/PMFS.
- The sanctioned grant-in-aid is debitable to the Major Head "601.12.a (RPS Plan)" Gen. and is valid for payment during the financial year 2019-20.
- The sanction issues in exercise of the powers delegated to the Council. It is also certified that grant-in-aid is being released in conformity with the rules and principles of the Scheme.
- The grant-in-aid is being released in conformity with the Terms & Conditions as well as norms of the scheme as already communicated and also being communicated in this letter.

II. Maintenance of account by the Institute/PI:

- Funds covered by this grant shall be kept separately and would not be mixed up with other funds so as to know the
 amount of interest accrued on the grant.
- The grant is intended to cover items of expenditure/equipment approved by AICTE.
- 3. Acknowledgement of receipt of grant and letter of acceptance of terms and conditions is to be submitted to AICTE within 15 days from the receipt of the grant to the following address:

Advisor (RIFD), AICTE, Nelson Mandela Marg, Vasant Kunj, New Delhi-110070

accounts of the grantee will be opened for test check by the Council or Comptroller & Auditor General of India or oy any officer designated by them.

5. The Principal and PL of the institute are requested to verify the correctness of the undermentioned bank account/RTGS/PFMS details submitted by them alongwith the Proposal, in which the grant is being released. In case of any omission, the same should be reported to AICTE immediately along with refund of entire grant:

Institute PAN No.	Bank Name	Bank Branc h	Bank Branch Address	Account Holder Name	Account Type	Account Number	IFSC Code
AAATN48 39J	INDIAN BANK	THOTT	NANDHA COLLEGE OF PHARMACY CAMPUS, PERUNDURAI MAIN ROAD, THOTTANI-638052, ERODE -638052	THE PRINCIPAL, NANDHA ENGINEERING COLLEGE, ERODE	Saving Account	970801700	IDIB000T13

- 6. The grantee Institution shall observe all financial norms and guidelines as prescribed by the AICTE/Government of India from time to time. Grantee institution must follow GFR guidelines in procuring the sanctioned items and maintain an audited record of assets acquired wholly or substantially out of the grant-in-aid and a register for assets shall be maintained by the Institute in the prescribed form i.e. GFR-19.
- Interest accrued on the sanctioned grant-in-aid will be reported and refunded to AICTE and not adjusted against the subsequent installment.

III. General Instructions:

- It should be ensured that no RPS project in favour of the same P.I. has been sanctioned during the last 03 years before utilizing this amount and the matter be brought to the notice of this Council immediately in case a faculty is sanctioned multiple RPS Projects.
- 2. The duration of Project is 03 years and the date of release of the grant by AICTE shall be taken as the date of commencement of the project. The Principal/Director/Registrar shall intimate about the receipt of the grant to AICTE. Any Expenditure, incurred prior to issuance of this Sanction Order, would not allowed to be adjusted in the grant and if the University/Institution do not take-up the project work within 6 months of the receipt of the grant, approval shall ipso facto lapse and the Institute has to necessarily refund the entire grant to AICTE along with interest within a month. In case the grant is not refunded within said duration 18% interest will be levied on it. The grant has to be refunded to AICTE, by way of a demand draft in favor of 'Member Secretary, AICTE payable at New Delhi.
- As AICTE needs adequate time for depositing the demand draft in the bank, the same be immediately dispatched to avoid any lapse of the validity period.
- 4. The Institute may constitute a Project Evaluation Committee (PEC) The composition of the PEC shall be as under:
 - i. Principal/Director of the institution (Chairperson)
 - ii. Two HODs from institute (Members)
 - In case of private institute one subject expert from government institute, not below the rank of Associate Professor (Member)
 - iv. Coordinator of the project (Member Secretary)
- 5. The grant shall be utilized strictly for the purpose as specified in the sanction letter. Re-appropriation of funds from one Head to another is strictly not permitted viz. Recurring and non-recurring Heads. Further, the equipment(s)/item(s) purchased should be as per the specifications and individual item-wise costs sanctioned by AICTE, and not taking the total grant sanctioned as one entity. Item-wise purchase cost shall be matched with the sanctioned cost, and the cost of item purchased below the sanction cost shall be restricted as actual cost. If the item purchase cost is higher than its sanctioned cost, the cost shall be restricted to the sanctioned cost and the additional amount shall be met by the Institute from its own resources.
- 6. Similarly, the recurring grant shall be used for the items sanctioned by the AICTE. No money be used for going abroad to attend Conference / seminars. However, for presenting a Paper in a Seminar / Conference within the country, the travel expenses may be met from the recurring grant.
- No request for additional grant over and above the sanctioned grant shall be considered by the AICTE. The additional amount, if any, expended beyond the sanctioned grant shall be met by the Institute from its own resources.
- The institute/University shall not charge any overheads on this Project and will provide all the administrative support and timely release of grant to PI for completion of the Project.

The grantee shall utilize grants only on approved items as per list of equipment attached. However, if the grantee wishes to recast the Project, approval of Council must be obtained for the revised item of expenditure and they will maintain proper accounts of the expenditure as per the norms/procedures of AlCTE/Government of India. The revised proposal should be within the total grant sanctioned and duly supported with reasons and recommendations of the Project Evaluation Committee.

- 10. The assets acquired wholly or substantially out of All India Council for Technical Education's grant shall not be disposed or encumbered or utilized for the purpose other than those for which the Grant was given without proper sanction of the All India Council for Technical Education.
- 11.Each project sanctioned by AICTE is assigned a specific Reference Number which is given on pre-page. All correspondence address to AICTE regarding the project must quote this number alongwith year of sanction of the project, otherwise correspondence may not be entertained.
- 12. The grantee shall follow the terms and conditions of Research Promotion Scheme (RPS) as laid down by the Council from time to time.

IV. Submission of documents by the institute/PI to AICTE:

- A. Documents to be submitted within one month of completion of each financial year:
 - Annual Progress Report, indicating therein the number of patents, publications or any other achievement.
 - ii. Utilization Certificate, Audited Utilization Certificate, Receipt & Payments, Statement of Expenditure.
 - Audited record of assets acquired wholly or substantially out of the grant-in-aid and a register for assets in the prescribed form i.e. GFR-19.
 - Separate Bills/vouchers related to Non-recurring and recurring expenditures duly signed & stamped by the PI & Head of the institution.
 - v. Stock entry register duly verified by the Store-in-charge and PI & counter signed by Head of institution.
- B. Documents to be submitted within two month of completion of the Project:
 - The consolidated Utilization Certificate (UC) and Receipt & Payment Account for the Project duration, duly audited.
 - Consolidated audited statement of expenditure, to the effect that the grant has been utilized for the purpose for which it has been sanctioned. It should contain the head-wise break up of expenditure made from the grant-inaid provided by the Council.
- iii. Project Completion Report duly signed & stamped by the PI & Head of the institution and Project Evaluation Committee (PEC) Members.
- Principal Investigator/institute to submit the Feed Back Form in AICTE format.
- The prescribed formats for submission of necessary mandatory documents and Terms & Conditions may please be downloaded from www.aicte-india.org/schemes/research-innovations-development-schemes.

Note: Any deviation from the above said time schedule will cause serious action against the institute.

(Dilcep N. Malkhede) Advisor (RIFD)

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Approved List of Items under Non-recurring grant:

S.No.	Approved Items (As per proposal)	VANCOUS CONTRACTOR CON		
A.	Non-recurring (equipments)	Amount recommended		
i)	Spectrophotometer			
ii)	Muffle Furnace			
iii)	Ultrasonic Cleaner			
iv)	Personal Computer	Rs. 463333/-		
V)	EEG Electrode			
vi)	ECG Machine			
B.	Recurring (for contingencies & consumables only)	Rs. 81765/-		
		KS. 01703/-		
	Grand Total (A) + (B)	Rs. 545098/-		

Copy forwarded for information and necessary action to:

1. REGSITRAR / DIRECTOR / PRINCIPAL,

NANDHA ENGINEERING COLLEGE, 28, CHENNIMALAIPALAYAM ROAD, PITCHANDAMPALAYAM (PO), ERODE, TAMIL NADU -638052

- NAME OF PRINCIPAL INVESTIGATOR, Dr. KAVITHA S SUBRAMANIAM, NANDHA ENGINEERING COLLEGE, 28, CHENNIMALAIPALAYAM ROAD, PITCHANDAMPALAYAM (PO), ERODE, TAMIL NADU -638052
- OFFICE OF DIRECTOR GENERAL OF AUDIT GENERAL REVENUES, AGCR BUILDING I.P. ESTATE, NEW DELHI-110002.
- 4. GUARD FILE

(Dileep N. Malkhede) Advisor (RIFD)

IN 2 DEC 2019

தமிழ்நாடு அறிவியல் தொழில்நுட்ப மாநில மன்றம்



TAMILNADU STATE COUNCIL FOR SCIENCE AND TECHNOLOGY

(Established by Government of Tamilnadu)

Directorate of Technical Education Campus, Chennal – 600 025.

Ph : 044-22301428, www.tanscst.nic.in

Dr.R. SRINIVASAN, M.Sc., Ph.D., F.I.C.S., M.A.C.S. (USA).

Member Secretary

Lr.No.TNSCST/SPS/BS/2022-2023

03.03.2023

To The Principal Nandha Engineering College, Erode - 638 052

Sir/Madam.

Sub:

TNSCST - Student Project Scheme - 2022-2023 - approval intimation-grant release- reg.

With respect to the above scheme, the list of projects approved by the State Council is enclosed along with terms and conditions. You are requested to adhere to terms and conditions such as submission of UC and Seminar Paper on Time.

1.	Dr.E.K.Vellingiriraj, Professor and Head, Department of MCA, Nandha Engineering College, Erode - 638 052	Tamil speech interactive public fransport ticket reservation system for visually imparied people	V.Divya, M.Sneka, K.Swathi, K.Varshini	CSE-1015	The Principal	Rs 7500/-
2	M.Prabu M.E. Associate Professor, Department of EEE, Nandha Engineering College, Erode – 638 052	Design and development of wireless charging technology for hybrid wireless sensor networks of solar energy harvesting	Gunasekaran S, Gowtham M, Gokulraj S, Karthikeyan A	EEE-1233	The Principal	Rs 7500/-
	Total					Rs 15000/-

Herewith enclosed the cheque for the approved grant and disburse the grant to the concerned students through the guides at the earliest

Kindly send the utilisation certificate (format enclosed) and seminar paper (Ref.T&C) on completion of the project.

Thanking you,

Yours faithfully,

Member Secretary.

Encl: a) Terms & Conditions (T&C)

b) Format of Utilisation Certificate (UC)

c) Cheque for Rs.15000/- Cheque No:574917 dt.03.03.2023

Copy to: Individual Guides

(II) Dean RAD
(III) Hops of McAdakk
(IV) Grands. Fele

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