

CHIEF MINISTER’S RESEARCH GRANT (CMRG)

Directorate of Technical Education (DoTE), Chennai – 600 025

Call for Research Proposals (2024-2025)

This scheme aims to promote quality research to enhance the rigor, reliability, robustness and transparency of research. The mission of this grant is to explore “Global Dynamics in Responsible Research”. It will provide platform for the perspectives of early researches on current challenges.

Bring Science to Society: Support researchers, innovators and start-ups to bring innovative technologies, products and business models from labs to community for better quality of lives and livelihood and help create sustainable and scalable social impact.

Bring Society to Science: inculcate to specific approach among communities through experience of trying and evaluating new tech, products and develop strong curiosity, capability and attitude to try new and adopt products and processes to improve society.

GENERAL GUIDELINES INCLUDING TERMS & CONDITIONS

1. CMRG invites applications addressing the research and other scientific/technical/practical problems of the State will be considered.
2. Priority will be given to translational R&D project proposals i.e., the projects that will be converted into a patent, a product or an industrial application or will result in higher socio-economic impact. Only those proposals which can be published in the high impact and peer reviewed journals listed out by UGC/AICTE or appropriate authority shall be accepted.
3. The application details, complete in all respect, should be made through Directorate of Technical Education website (DoTE) by the interested Principal Investigators (PIs – Students/Faculty/Scientist) attached or working in State Government Universities or State Government Academic Institutions under the higher education department of Tamil Nadu. The Prescribed formats and Guidelines are available in the website <https://dte.tn.gov.in>.
4. **Detailed guidelines for formulating project proposals:**
 - i. Projects, which are problem oriented and have short duration, will be preferred.
 - ii. While writing the proposal, ensure that scientific and technical details are clearly spelt out. Proposals should have specific, concrete, quantifiable objectives for sustainable development and human welfare. Towards this end, preference will be given to the proposals which is based on involvement of Industries and various stakeholders in problem identification and could propose a scientific/ technological solution to the problem.

- iii. The identified research areas should preferably have definite translational value and the potential to contribute to the socio-economic development of the state.
- iv. The proposal objective should be to a few specific outputs, which could be possible in duration of 36 months (max).
- v. The project proposal must be submitted in the format given in the website (Appendix I-III): All kinds of technology sources, references to quotations, annotations, etc. are to be clearly mentioned in the project proposal.
- vi. In case of multi-institutional project, formal agreement from the collaborating institutions/scientists should support the proposal.

5. Broad category of eligible subject areas:

- a. Aerospace Engineering
- b. Biological sciences & Biotechnology
- c. Chemical Engineering
- d. Chemical Sciences
- e. Civil Engineering
- f. Computer Science
- g. Earth, Atmosphere, Ocean Sciences
- h. Electrical, Electronics & Communication Engineering
- i. Environment, Ecology and Disaster Management
- j. Food & Agricultural
- k. Information Technology
- l. Instrumentation Engineering
- m. Material Science & Nanotechnology
- n. Mathematical Science
- o. Medical Science
- p. Physical Sciences
- q. Social Science
- r. Textile Engineering
- s. Veterinary & Fishery Sciences

6. General Terms and Conditions

- i. Principal Investigators (PIs – Students/Faculty) would be attached or working in State Government Universities or State Government Academic Institutions under the higher education department of Tamil Nadu. Co-Principal Investigator[Co-PI(s)] can be from same Institute as PI or from any other Institute(s). Same individual shall not be allowed to be PI for more than one project (including all subject areas in the format mentioned) and cannot act as Co-PI in more than two ongoing projects.
- ii. The students must put one Co-PI (Permanent Faculty) working in State Government Universities or State Government Academic Institutions under the higher education department of Tamil Nadu.

- iii. Research funding from SERB, DBT, DST, UGC, ICAR, CSIR etc shall be dovetailed. Likewise, start-up research funding shall be tied up from STARTUP India, Tamil Nadu Start-mission etc. However, projects already approved under other schemes cannot be considered for top-up funding or additional funding.
- iv. International travel is not permissible under the project.
- v. No Awareness Camp/ Seminar/ Workshop are allowed to be organized from any part of the project fund unless recommended by the CMRG expert committee.
- vi. Whether the project has already been submitted elsewhere for grant, must be explicitly mentioned in the proposal.
- vii. All funds will be disbursed to the PI's Institute as applicable and decided by CMRG office. The PI Institution (Grantee Institution) assumes financial and other administrative responsibilities of the project.
- viii. If project is to be collaborated by any industry or institution, names of collaborating industry/institutions may be listed.

7. The processing of the received proposals shall be as follows :

- i. The received project proposals will initially be screened based on the terms and conditions of CMRG office.
- ii. The eligible proposals will undergo plagiarism checking for further shortlist.
- iii. The shortlisted proposals will be subjected to preliminary appraisal by the screening committee members. If needed the PI of the shortlisted proposals may require to make detailed presentation before the committee.
- iv. The recommendation of the screening committee experts will be placed before the Peer Review Panel Evaluation (PRPE) Committee for taking a decision for funding the proposals.
- v. The hard copies of the proposals will not be retained in this CMRG office after the process.

8. Engagement of Manpower:

- i. For engagement of project personnel, the Institute should publish an advertisement. The prescribed and relevant minimum qualification(s) should be as per CMRG rules from time to time.
- ii. The selection of manpower should be done by a Selection Committee formed by the Institute for engagement of the fellows.
- iii. Details of the selected fellows (qualification, experience, etc.) are to be kept by the Institute and informed to CMRG office.
- iv. The manpower engaged (if any) for the project shall be paid remuneration as

per the latest rules and guidelines of the CMRG office.

- v. It may be clearly noted that any engagement such as fellows etc. in CMRG sponsored project(s) is purely temporary and only for the project, subject to all other qualifications being met. Any engagement under the project shall strictly be contractual and temporary in nature and will cease automatically as soon as the project is over/ terminated.

9. Equipment/Software

- i. Proposals for the acquisition of software or equipments are generally not encouraged. However, if essentially required, equipment/ software proposed for purchase/ hiring using project funds should be bare minimum and adequately justified in detail and documented to reveal how the equipment/ software will be used to fulfill the objectives of the project. Furthermore, the PI must endorse that the equipment/software is not available at the Institute.
 - ii. Necessary quotations for equipment/software need to be submitted as applicable with the proposal. Procurement of generally available equipment's/ software/ accessories like desktop/ work Station/ laptop/ printer/ UPS/external HDD/ Scanner/ refrigerator or any such items will not be entertained from any part of the project fund. For any special case in this regard (giving justifications by the PI & Co PI), recommendation of the CMRG expert Committee is compulsory.
 - iii. Lab equipment and machine purchases from the CMRG research grant shall be used in the PI educational institution concerned only and shall be recorded in the institution's assets registers accordingly.
 - iv. State Government procedures should be followed when purchasing Equipment/Software/Consumable or Service. Equipment/services recommended by the CMRG expert Committee alone should be procured. Equipment purchased should be engraved/ superscripted with CMRG Project Number.
 - v. The Investigator shall permit the use of spare or idle capacities of equipment procured under the project by bonafide users (research workers in CMRG funded projects or other projects of the institute).
 - vi. Principal Investigator must submit the list of equipments required for the project so that while sanctioning, a conscious decision should be taken regarding assets, which will remain with the institutes conducting the research after the project is completed.
10. For projects involving trial on humans or animals, all institutional ethical clearance(s) must be submitted within 6 (six) months from the approval of the project and abiding

by extant Acts and Law. The Department shall not be responsible for any legal complications arising out of non-compliance of this clearance if not submitted.

11. Deliverables

- i. Investigators wishing to publish technical/ scientific papers based on the research work done under the project should acknowledge the assistance received from CMRG.
- ii. The Investigator(s) should not enter into collaboration with a foreign party (individual/industry) without prior approval of CMRG office.
- iii. This grant encourages patenting (IPR), technology transfer and commercialisation from the outcome of the R&D projects. Any patenting (IPR), technology transfer and commercialisation arising from sanctioned Project work (if any) should be intimated to this office and get the terms/agreements/MoU for filing IPR, ownership and licensing issues from CMRG office.
- iv. Any violation of the rules in respect of IPR, publication matter, technology transfer etc. while making the CMRG office a legal partner shall be considered as a serious offence and will invite suitable action.

12. Eligibility and Age limit

- i. The research grant is open to all the government higher educational institutions and State Government universities under higher education department in Tamil Nadu.
- ii. Principal Investigators (PIs – Master Degree Students/Faculty) attached or working in State Government Universities or State Government Academic Institutions under higher education department of Tamil Nadu.
- iii. The PI should be a permanent working employee of State Government Universities or State Government Academic Institutions under higher education department of Tamil Nadu.
- iv. The PI should have at least five (5) clear years left prior to retirement as per the norms of the concerned institution, at the point of submission of a project proposal.
- v. Those who received CMRG fund for the year 2023-24, will not be considered for funding until the ongoing project is completed.

13. Project Cost: There shall be ceiling of Rs.20 lakh for students led projects and Rs.40 lakh for faculties led projects.

14. Conflict of Interest: The PI/ Co-PI should ensure that there are no Conflict of Interest.

15. How to apply:

- a. The guidelines for formulation/submission of project proposals

including prescribed format can be downloaded from the Directorate of Technical Education website (www.dte.tn.gov.in). Candidates are encouraged to adhere to the instructions and complete their profiles by filling out the Google form in the following link: https://docs.google.com/forms/d/e/1FAIpQLSefoT13SGfFYy1u0mHBp4PhyIOmnKgMebuHDH3dd09KT6-x4A/viewform?usp=sf_link

- b. Five (05) copies of research proposal in the prescribed format may be sent to the “Project Officer, Chief Minister’s Research Grant, Directorate of Technical Education, Guindy, Chennai – 600 025” by Speed Post.
- c. The envelope and the hard copy of the proposals should be superscribed with "CMRG Acknowledgment Number” that generates after filling the above google form.
- d. Project proposal submitted after last date through e-mail/ hardcopy will generally not be entertained.

APPENDIX -I

APPLICATION FORMAT FOR SUBMISSION OF RESEARCH PROPOSAL

(GENERAL INFORMATION)

1. Project Title:

2. Project summary (maximum 500 words):

3. Keywords (maximum of five):

4. Broad Subject Category : Choose from the Broad category of eligible subject area in the Guideline

5. Application Area (includes Thrust areas of Industrial policy)

<input type="checkbox"/> Aerospace & Defense	<input type="checkbox"/> Agro & Food processing	<input type="checkbox"/> Automobile
<input type="checkbox"/> Basic Science	<input type="checkbox"/> Biotechnology	<input type="checkbox"/> Climate Change
<input type="checkbox"/> Digital Technologies	<input type="checkbox"/> Electronics & Hardware	
<input type="checkbox"/> Electric Vehicles, EV Cell & Battery Manufacturing		
<input type="checkbox"/> Entrepreneurship & innovation	<input type="checkbox"/> Green Fuel	<input type="checkbox"/> Healthcare
<input type="checkbox"/> Infrastructure & Transportation	<input type="checkbox"/> Machinery & engineering goods	
<input type="checkbox"/> Petrochemicals & Specialty Chemicals		
<input type="checkbox"/> Pharmaceuticals, Bulk Drugs & Nutraceuticals	<input type="checkbox"/> Paper and Printing	
<input type="checkbox"/> Renewable Energy	<input type="checkbox"/> Rubber, Plastics, Leather & related	
<input type="checkbox"/> Service	<input type="checkbox"/> Security	<input type="checkbox"/> Textiles
<input type="checkbox"/> Waste Management	<input type="checkbox"/> Land/Water resource	
<input type="checkbox"/> Any other (specify)		

6. Project Category : Basic Research Applied Research Technology Development

7. Duration (in months):

8. Total cost (in Rupees and Words):

9. Name of University/Institution to be considered for funding– Principal Investigator Institution (with details of affiliation) :

10. Name and details of Collaborating Industry/Institutes (if any)

Name :

Designation :

Address :

Telephone, Mobile No, E-mail :

11. Bio data of Principal Investigator & Co-Investigator justifying their technical competence to carry out the project:

(With all details in Annexure – I)

12. Whether this project has already been submitted for grant elsewhere:

APPENDIX - II

APPLICATION FORMAT FOR SUBMISSION OF RESEARCH PROPOSAL (BUDGET ESTIMATES)

1. Budget Estimates: summary

	Item	BUDGET (in Rupees)			
		1 st Year	2 nd Year	3 rd Year	Total
A.	Recurring				
	1.Remunerations for Assistantship/Fellowship				
	2. Consumables				
	3. Travel				
	4.Other costs				
B.	Non-recurring Equipment/Software				
C.	Institutional Charges				
	Grand Total(A+B+C)				

** Please provide brief justification for each Head of expenditure. In case of purchase of equipment/ software, the PI will have to certify that the said equipment/software is not available in the Institute. Equipment/ software proposed for purchase using project funds should be adequately justified and documented to reveal how the equipment/software will be used to fulfil the objectives of the project.

a. Detailed Budget for Remunerations

Designation & number of persons	Monthly Emoluments	BUDGET (in Rupees)			
		1 st Year	2 nd Year	3 rd Year	Total
Project Fellow					
Technical Assistant					
Total					

Justification:

b. Detailed Budget for Consumable Materials

Item	BUDGET (in Rupees)			
	1 st Year	2 nd Year	3 rd Year	Total
Total				

Justification:

c. Detailed Budget for Travel

Item	BUDGET (in Rupees)			
	1 st Year	2 nd Year	3 rd Year	Total
Travel 1. Local *				
2. Outstation *				
Total				

Justification:

* Details with breakup and justification regarding the number of tours in respect of field work/any tour related to project work indicating tentative cost for each items needs to be clearly mentioned.

d. Detailed Budget for Other Costs/Contingencies

Item	BUDGET (in Rupees)			
	1 st Year	2 nd Year	3 rd Year	Total
1. Contingencies				
2. Others				
Total				

Justification for specific costs under other costs, if any:

e. Detailed Budget for Equipment/Software

Si. No.	Generic name of the Equipment along with make & model/Software *	Imported/Inland Purchase	Estimated Costs	Spare time for other users (in %)
1.				
2.				
Total				

*Please provide justification and documents for each of the equipment(s). Please also provide an endorsement that the equipment is not available in the Institute. No Desktop PC, Laptop, UPS, External HDD, Printer, Cartridge, Ink, Scanner, Work Station, Software, Refrigerator or any Capital items is allowed from any part of the Budget.

2. Instruments/facilities available in the implementing Institution related to the project proposal:**a. Equipment available with the Institute/Group/Department/Other Institutes for the project:**

Equipment available with	Generic Name of Equipment	Model, Make & year of purchase	Remarks including accessories available and current usage of equipment
PI & his group			

PI's Department			
Other Institute in the region			

b. Infrastructural Facilities by parent institution(s) for the project implementation.

Sr.No.	Infrastructural Facility	Yes/No/Not required Full or sharing basis
1.	Workshop Facility	
2.	Water & Electricity	
3.	Laboratory Space/Furniture	
4.	Power Generator	
5.	AC Room or AC	
6.	Tele communication including – mail & fax	
7.	Transportation	
8.	Administrative/Secretarial support	
9.	Information facilities like Internet/Library	
10.	Computational facilities	
11.	Animal/Glass House	
12.	Any other special facility being provided	

APPENDIX - III

APPLICATION FORMAT FOR SUBMISSION OF RESEARCH PROPOSAL (TECHNICAL DETAILS)

- 1. Project Title:**
- 2. Background** (precise and preferably quantified process parameters in the bullet form):
 - a) Description of the problem
 - b) National and International scenario of the defined problem
 - c) Research gap between the current status and the proposed work
 - d) Innovative Elements/Components of the Project
 - e) Relevance to State/National priorities
 - f) Relevant References
 - g) Two best publications by the PI in last five years and brief references to any patents filed or technologies developed (*Restrict only in the proposed field of work*)
- 3. Description of the proposal :**
 - a) Objective of the proposal
 - b) Methodology detailing stepwise activities and sub – activities
- 4. Work Plan :**
 - a) Organization of work elements
 - b) Phase-wise plan of action up to post project activities detailing time schedule
 - c) Time schedule of activities with milestones.
- 5. Outcome/ Deliverables of the project** (precise and preferably quantified terms in bullet form) :
- 6. Significance of the project** (precise and preferably quantified terms in bullet form) :
 - a) Scientific Importance of the project
 - b) Expected Impact
 - c) Target Beneficiaries
- 7. Social/Techno/Economic implications of the proposed work, if any :**
- 8. Parameters for monitoring effectiveness of project**[Please describe in detail the Key Performance Indicators (KPIs) by which the success of the project can be measure]:
- 9. Role of Industry (if any) :**

Annexure – I

BIO DATA OF PRINCIPAL INVESTIGATOR & CO-PRINCIPAL INVESTIGATOR(S)[to fill separately by PI and Co-PI(s)]

1. Name :
2. Designation :
3. Department :
4. Institute Name
5. Address :
6. Telephone (office) : Mobile :
7. E-mail :
8. Date of Birth:
9. Sex (M/F) :
10. Academic Career :

S.No	Institution Place	Degree Awarded	Year	Field of Study

11. Professional Career :

S.No	Institution Place	Position	From (Date)	To (Date)

12. Books and Patents List :

	Books	Patents
Number		
Titles		

13. Publication List :

- a. Selected Peer-reviewed publications (Ten best publications in chronological order)
- b. Five recent publications relevant to the proposed area of work:

	Research papers, Reports	General Articles	Others (Please Specify)
Number			
Titles			

14. Honours and Awards Received:

15. List of Completed/Ongoing/Submitted projects :

S.No	Title of the Project	Duration		Total Cost (Rs.)	Name of Funding Agency	Status
		From	To			

- Major Results/ Highlights of the project including achievement (publications, patents etc.), for *completed projects*
- Up-to date Technical progress report for *on-going projects*.

16. Justification of Professional Competence to carry out the Project :

Annexure – II

ENDORSEMENT FROM THE HEAD OF INSTITUTION

(To be given on letter head)

Project Title:

1. Certified that the Institute welcomes participation of Dr./Mr./Mrs./Miss._____ as the Principal Investigator and Dr./Mr./Mrs./Miss._____ as the Co-Investigator of the project mentioned above. The Co-Investigator will assume the responsibility of the fruitful completion of the project if the Principal Investigator is unable to do (with due intimation to CMRG office).
2. Certified that the equipments, software other basic facilities and such other administrative support required as per terms and conditions of the grant, will be extended to the investigator(s) throughout the duration of the project.
3. Institute will undertake the financial and other management responsibilities of the project and will ensure compliance with the terms and conditions laid down, in case the project is sanctioned.
4. Institute agrees to indemnify the CMRG office against any legal action or liability of any kind that may arise in connection with the undertaking of the project.

Name and Signature of Head of Institution

Date:

Place:

Annexure – III

CERTIFICATE FROM THE INVESTIGATOR (S)

Project Title:

1. I/We agree to abide by the terms and conditions of the CMRG office.
2. I/ We accept that the current proposal submitted to CMRG office is not selected by any other funding agency.
3. I/We declare that this R&D project proposal is a new one and unique of its kind. This type of project has not been conducted elsewhere so far as my knowledge is concerned.
4. The project proposal is original and the outcome will usher new light in this particular field.
5. In case any item of the project proposal is found to be plagiarized, I/We shall be liable for the consequences.
6. I/ We have explored and ensured that equipment and basic facilities will actually be available from our institution as and when required for the purpose of this project no financial support under this project will be requested or utilised for procurement of these items.
7. I/ We undertake that the permanent equipments will be kept within the PI institution and the same will be made available to other users of the Institution.
8. I/ We undertake to submit progress report, statement(s) of accounts, utilization certificates etc., periodically and at the end of each financial year.
9. I/We accept the term that the decision for rejection of the project submitted, at any stage, will be at the sole discretion of CMRG office.
10. I/We accept the project proposal provided to the CMRG office will not be retained in the Department after the process.
11. I/We have enclosed the following materials:

<u>Items</u>	<u>Number of copies</u>
a) Endorsement from the Head of Institution (on letter head)	One
b) Certificate from Investigator(s)	One
c) Details of the proposal along with Annexures	Five

Date:

Place:

Name and Signature of Principal Investigator

Date:

Place:

Name and Signature of Co- Principal Investigator