**GOVERNMENT OF INDIA**

**MINISTRY OF SCIENCE AND TECHNOLOGY**

**DEPARTMENT OF SCIENCE AND TECHNOLOGY**

Technology Mission Division (Energy, Water & Others)

**Call for Proposals**

for

**Optimal Water Use in Industrial Sectors-2021**

**(Focus Areas: Water Conservation, Water Use efficiency,**

**Waste Water Recovery and Utilization of Residues)**

1. **Preamble**

The water resources scenario of the country is changing fast adversely in terms of access, quantity as well as quality. The situation is further aggravated by the looming impact of climate change- which will alter the paradigm of management of water resources. Water is a critical natural resource and is being affected by increasing industrialization, urbanization, pollution, deforestation and above all climate change. Addressing the growing demand for water to satisfy our imminent needs for drinking, sanitation, irrigation and industry would alone be possible by striking a judicious balance between collection, storage, consumption and innovative reuse. Industry is one of the important users of water and the optimal use of water in the various industrial sectors is going to be more crucial in the coming decades. There are three dimensions of the industrial optimality, *namely*: (1) minimum specific water footprint in all sectors, (2) incorporation of appropriate technologies to conserve water during production and consumption of the industrial products, and (3) incorporation of the best available technologies to achieve the so-called “circular economy” approach to treatment of wastewaters and sewages as well as by enhancing reuse of water.

1. **Objective of the Call**

The objective of the call is to develop knowledge through R&D and demonstration and developing solutions in the context of Water Conservation, Waste Water Treatment and Water use efficiency in Industry. The focus is on Research and Development proposals, where R&D and private sector work together to design generic solutions for optimal water management in industrial sector. These research leads and solutions are expected to generic best practices for wider adoption. The demand for intervention need to be evident and established clearly in the proposal.

The present call intends to prioritize the following four challenges:

1. Technological options leading to optimal use of water in industry.
2. Industrial waste water treatment and management.
3. Near Zero Liquid Discharge Options for effluents (including energy savings).
4. Balancing water demand and use utilizing technological tools.
5. Generation of energy, extraction of value products, etc. from waste water
6. **Scope of the Call**

The call would include following components:

* 1. **Research Stream** :

Leading to Establishment of Proof-of-Concept.

**Concept:** Participants should explore innovative ideas with a view to showcase the uniqueness/advantages of their idea/approach over existing alternatives and to demonstrate that their innovative idea has the ability to address a significant customer/end user need.

**Eligibility:** The proposals have to be submitted in the industry –institute partnership only. The proposals are to be led by faculties/ scientists working in regular position in recognized Academic Organization /Public funded R&D Institution/ Laboratories, DSIR recognized SIRO organization, state S&T councils in partnership with other academic/ R&D organisation, state line departments. The industry associations are encouraged to participate and partner. The industry should be interested to explore innovative ideas, Research and in encouraging the development of Concept. The company/industry may show willingness to involve in the project through industry attributable technical inputs and resources in-kind.

**Project Cost:** Not exceeding Rs. 50 lakh (indicative) where equipment cost is not expected to exceed 30% of the project cost. (There is limited funding available under this category. Only projects with novelty and innovation shall be considered)

**Project duration:** 2 years maximum

* 1. **Technology Stream:**

Leading to Lab Scale Demonstration.

**Eligibility:** The proposals have to be submitted in the industry –institute partnership only. The proposals are to be led by faculties/ scientists working in regular position in recognized academic institutions, public funded R&D Institution/ Laboratories, DSIR recognized SIRO organization, state S&T councils in partnership with other academic/ R&D organisation, state line departments, S&T based voluntary organisation etc. Participation of industries/ start-ups and industry association is strongly recommended. The role of industry in the proposal should be tangible and it should show interest in promoting or encouraging the developed technology. The company/industry has to be willing to contribute at least 10% of the project cost.

**Project Cost:** Lower the better because funds are limited (maximum 50 lakh). Exceptional projects may be considered for higher funding (but a clear justification for the budget and speedy implementation potential should be evident in the proposal). The pilot scale Demonstration plant costs will be admissible based on the project requirements. However, the other equipment costs should not exceed 30% of the project costs.

**Project Duration:** 2 years desirable (maximum 3 years)

* 1. **Technology Validation Stream*:***

Leading to Pilot Scale Demonstration for technology in industrial setting.

**Eligibility:** The proposals are to be led by Industry and have to be submitted in partnership mode only by any established company/ industry along with faculties/ scientists working in regular position in recognized academic institutions, public funded R&D Institution/ Laboratories, DSIR recognized R&D organization. The applicant company should have a valid R&D recognition from DSIR and have at least 51% of its shares held by Indian promoters.

**Project cost:** No ceiling. The Scheme provides grants to academic/R&D institute(s), technically supporting the applicant company as a partner for success of the project, for setting up of demonstration plant, provided the partner company demonstrates willingness to validate the technology through providing tangible inputs to the project.

**Project duration:** 18 months maximum

1. **Eligible Costs**

Equipment, Prototype design & fabrication, Manpower, Work to be outsourced, Consumables, National Travel, Contingency, Miscellaneous, Overheads

1. **Call Dates**

**Call Opening Date:** 07.10.2021 (October 07, 2021)

**Call Closing Date:** 10.01.2022 (January 10, 2022)

1. **Proposal Formulation**

The applicants are encouraged to identify current & emerging challenges on the identified topic in consultation with stakeholders, especially participating industry. The relevance of the research should be based on identified need. The formulation exercise would typically involve collecting site specific conditions and assessing holistic water requirement. The strategy for sustainability of intervention post intervention also needs to be explicitly stated.

# Criteria for evaluation

# The proposals would generally be evaluated based on the following criteria. However, weight age of each of these criterions will vary depending upon the anticipated output of each stream:

# Demand or need of proposed work

# Credibility Track Record and commitment of Project Team

# Novelty, feasibility and scientific merit of proposed work

# Superiority of proposed work over existing alternatives.

# Proposed formulation with clear definition of problem proposal is going to solve, why it is important, clear articulation of methodology and delineation of roles and responsibilities.

# Potential, Technical, social, environmental and economic viability of proposed work.

# DST at the behest of Expert Panel may introduce any other criteria considered to be critical for successful implementation of the project.

# General Terms and Conditions for the Grant

# 8.1 The Institution where the project will be implemented, will assume financial and other administrative responsibilities of the project. No financial support will be provided to the industry.

# 8.2 In case of multi-institutional project, the Principal Investigator has to obtain formal agreement from the collaborating Institutions/Scientists.

8.3 The manpower recruited for the project should be paid as per the rules of the institute and guidelines of the Government of India (**OM. No. SR/S9/Z-08/2018 dated 30.01.2019 and SR/S9/Z-05/2019 dated 10.07.2020)**. The posts which are not covered under the guidelines but permissible under projects at host institute are also permitted.

8.4 The temporary staff employed for the project by the organization is not treated as employees of Government of India and the deployment of such staff at the time of termination of the project will not be the concern / responsibility of the Government of India.

8.5 It is the policy of DST to maximize the use of equipment. In this light, investigator shall permit the use of spare or idle capacities of equipment procured under the project by bona fide users (research workers in other DST funded projects or other projects of the institute).

8.6 All the assets including equipment acquired and prototypes fabricated from the grant will be the property of Government of India and should not be disposed of, or utilized for purposes other than those for which the grant has been sanctioned, without the prior sanction of the Department of Science &Technology.

8.7 The Principal Investigator/ Organization will be required to furnish progress report every six months on the progress made on all aspects of the project including expenditure incurred on various approved items during the period.

8.8The Comptroller and Auditor General will have the right to access to the books and accounts of the organization for Grants received from the Government.

8.9 The organization would maintain separate account for the project. The grant should be kept in an interest earning bank account and the interest earned should be reported to the Department of Science & Technology. The grantee organization will have to enter & upload the Utilization Certificate in the PFMS portal besides sending it in physical form to this Division. The subsequent/final installment will be released only after confirmation of the acceptance of the UC by the Division and entry of previous Utilization Certificate in the PFMS.

8.10 The grantee organization will maintain separate audited account for the project and the entire amount of grant will be kept in an interest bearing bank account. For Grants released during F.Y. 2017-18 and onwards, all interests and other earnings against released Grant shall be remitted to Consolidated Fund of India (through Non-Tax Receipt Portal (NTRP), i.e. www.bharatkosh.gov.in), immediately after finalization of accounts, as it shall not be adjusted towards future release of Grant. A certificate to this effect shall have to be submitted along with Statement of Expenditure/ Utilization Certificate for considering subsequent release of Grant/ Closure of Project accounts.

8.11 Grant can be terminated by DST at any stage if it is convinced that the Grant has not been properly utilized or appropriate progress is not being made.

8.12 If the Principal Investigator wishes to leave the organization where the project is based, the organization/investigator will inform the same to DST and with its consultation evolve steps to ensure successful completion of the project, before relieving the Principal Investigator. The Investigator should submit three copies of complete and detailed report of the work done by them on the project before leaving the organization.

8.13 Sale proceeds, if any, of the components, prototypes, pilot plants etc. fabricated as a result of the development of the project arising directly from funds granted by the Department of Science & Technology shall be remitted to the Government of India. The Government of India, may, at its discretion allow a portion of such receipt to be retained by the organization.

8.14The know-how generated from the project would be the property of the Government of India and any receipts by way of sale of know-how, utilization of know-how for production, royalties etc. shall belong to the Government of India. The Government of India, may, at its discretion, allow a portion of such receipts to be retained by the organization.

8.15 The Principal Investigator / organization will prepare all the documents that would be required for the transfer of know-how to the production agency/agencies and submit them to DST as and when required. The organization will be responsible to transfer the know-how developed to the production agency/ agencies and supply all the needed information to the production agency/ agencies as and when required.

**Monitoring of the Project**

Implementation of the projects will be monitored regularly through Progress Reports, Financial Statements and Committee of Experts in Group review meetings and onsite as well. DST approved committee may visit the organization periodically to review the progress of the work being carried out and suggest suitable measures to ensure realization of the objectives of the project.

Fund support under non -recurring grant for required equipment’s will be given only if the same facility is not available in the PI’ institution or nearby institutions. The laboratories and institutions should be well-equipped and preferably have all the essential equipment and infrastructure for the prototype development. No major infrastructure will be funded.

# Proposal Format and Submission:

Proposals are accepted **only online** at e-PMS under Technology Mission Division in the prescribed format till office time on closing date of proposal. Proposal format can be downloaded from Website https://onlinedst.gov.in/Login.aspx . Go to: Schemes And Formats: Technology Mission Division:Optimal Water Use in Industrial Sectors-2021: Download Call format. The proposal in any other formats will be summarily rejected. Kindly comply with the instructions as mentioned below during online submission of proposal:

a) Under **Coordinator** tab: In **Co-coordinator List**- Please ensure to mention the details of all the persons involved in the project including collaborator.

b) Under **Suggested Referees** tab: At least 3 referees are mandatory to be mentioned

c) Under **Ongoing projects** tab: Declared those projects related to the Principle investigator**.**

d) Under **Submission** tab: **Certificate from PI (PDF Max 800 Kb)**: Please ensure certificate of all PI’s and Co-PI’s in the project team should be merged together and uploaded as a single pdf document.

e) Under **Submission** tab: **Endorsement from Head of Institute (PDF Max 800 Kb)**: Please ensure that certificate from relevant institutes (if any) of all PI’s, Co-PI’s, collaborators, Letter of Intent from beneficiary ( as applicable for selected stream) of project should be merged together and uploaded as a single pdf document.

f. Nomenclature for soft copy of Project proposal document: (PI first name –Institute -City) eg; if PI name is Dr. Anil Kumar and his affiliation is National Institute of Technology, Raipur then soft copy file name is Anil-NIT-Raipur.docx and Anil-NIT-Raipur.pdf .

It is advised to submit the proposal at the earliest and not wait till last moment, as submission of proposal on the closing day of call may hamper due to congestion on server.

Two (2) hardcopies of uploaded proposal should also be sent to Dr. G.V Raghunath Reddy, Scientist 'F', Technology Mission Division (EWO), Department of Science & Technology (DST), Technology Bhavan, New Mehrauli Road, New Delhi- 110016 by Speed Post and reach before the closing date of the call. The envelope should be superscribed with the **“Call for proposals for Optimum Water Use in Industrial Sectors-2021”.**

**For online submission problem**: Contact Portal Help-Desk Executive at 011-26590604/384 (Preferably from 03:00 PM to 05:00 PM)

**For any other Information**: Contact Programme officers: Dr. G.V Raghunath Reddy, Scientist ‘F’, Technology Mission Division (EWO), Department of Science & Technology (DST), Technology Bhavan, New Mehrauli Road, New Delhi- 110016 (Phones 011-26590604 or 011-26526229).

**Note**

**Instructions to Project Investigator (PI)**

❖ PI need to submit consolidated budget table for all the collaborating partners.

❖ They also need to submit detailed budget table for each of the collaborating partners.

❖ Details and Justification of proposed expenditure should be provided for each head.

❖ All figures must be in Indian Rupees.

❖ Save the complete application form (consolidated proposal and other requisite information) as a single pdf file and upload it in e-PMS (<https://onlinedst.gov.in/>).

❖ PI is requested to kindly Note the TPN Number, which is auto generated after uploading the proposal on e-PMS portal.

**INSTRUCTIONS FOR FILLING ONLINE APPLICATION**

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| **1.** | Log on [onlinedst.gov.in](http://upsssc.gov.in/AllNotifications.aspx) to access the home page of the “DST e-PMS Portal”. |
| **2.** | **It is desirable that the Project Investigator may not have an ongoing project with remaining duration > 6 months, with the same or other scheme of DST or SERB** |
| **3.** | Before filling up the form candidates are advised to carefully go through the Relevant Advertisement published at the DST Website and also available under Proposal Formats in the e-PMS Portal. |
| **4.** | To save your time and avoid data loss please download the appropriate proposal format as suitable for your schemes, fill all the information required as per the format as a Word and PDF file (**max. size 5 Mb**) and then keep it ready for upload during submission of mandatory documents. |
| **5.** | Click on “Submit proposals” link which would take you to a page seeking multiple information starting with – General information, Principal investigator etc. Fill all the mandatory information sought against each menu. |
| **6.** | After filling all above particulars there is provision for preview your detail before final submissionofapplicationformonclickingon“Preview”button.Previewpagewill display all facts/particulars that you have mentioned on entry time if you are sure with filled details then click on “Submit” button to finally push data into server. |
| **7.** | Candidates are advised to carefully fill and verify the details filled in the online application  themselves as no change will be possible/ entertained after clicking the **FINAL SUBMIT BUTTON**. |

**PLEASE NOTE**

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| 1. | It is mandatory to submit the proposals through **online mode**. Submission of proposal only on offline through hard copy without online submission of the proposal would be summarily rejected and would not be considered for further processing under the **TECHNOLOGY MISSION DIVISION (EWO)** program. |
| 2. | Candidates are required to submit **only two hard copy as print out** of their online submitted application to the DST with the signatures and rubber stamps of the concerned persons/ officials. |
| 3. | Incomplete or wrongly filled up application format or application with lack of essential documentswillbesummarilyrejected.Anylegalproceedingsinrespecttoany matter of claim or dispute arising out of this advertisement and / or application can be lodged only in Delhi Courts/ Tribunals/ Forums and Delhi Courts / Tribunal/ forums only shall have the sole and exclusive jurisdiction to try any case /dispute. |
| 4. | Proposal submitted through e-mail will not be entertained**. Submission of proposal other**  **than the prescribed format shall summarily be rejected without any further processing as per program norms**. |

**FORMATS FOR SUBMISSION OF PROPOSAL UNDER VARIOUS STREAMS**

**COMPONENT/STREAMS: 1. Research Stream (RS)**

1. **Technology Stream (TS)**
2. **Technology Validation Stream (TV)**

**Please use appropriate proposal format for your choice of stream. The formats are given below:**

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| OPTIMAL WATER USE IN INDUSTRIAL SECTOR-2021  Research Stream -Establishment of Proof of Concept (POC)  **TECHNOLOGY MISSION DIVISION (ENERGY, WATER & OTHERS)**  **GOVERNMENT OF INDIA** |
| **COVER SHEET** |
| **Title of the POC Proposal:** |
| **Subject/Area:** |
| **Submitted by:**  **Name of the Proposer’s:**   |  |  |  |  | | --- | --- | --- | --- | | **PI Details** | **Name** | **Date of Birth** | **Category**  **(General/SC/ST/Others)** | |  |  |  | | **Co-PI Details** | **Name** | **Date of Birth** | **Category**  **(General/SC/ST/Others)** | |  |  |  | | **Industrial Partner** | **Name** | **Date of Birth** | **Category**  **(General/SC/ST/Others)** | |  |  |  |   **Full Official Postal Address of PI:**  **Phone: Mobile: Email:** |
| **Send to :**  Dr. G.V Raghunath Reddy Scientist 'F'  Technology Mission Division (EWO) Department of Science & Technology Technology Bhavan, New Mehrauli Road **NEW DELHI-110016**  *Tel. :011-26590604*  *E-mail :* [*raghunath.reddy@nic.in*](mailto:raghunath.reddy@nic.in) |

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| **1.0 PARTICULARS OF THE PROPOSER &PROPOSAL** | |
| 1.1 Concept/Approach Overview: | |
| 1.2 In what capacity were you associated with the lab scale work that has formed the basis of the present proposal (as faculty/scientist etc.) |  |
| 1.3 Status of work already carried out at lab scale that led you to conclude that concept is technically feasible. | |
| 1.4 List of Patents and Publications arising out of the above work | |
| 1.5 Your specific contributions to the above work | |

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| 1.6 Indicate how your approach to address the problem is better than the current approaches |
| 1.7 End Product/Process/Output resulting from the proposed proof-of-concept R&D with their target specifications clearly spelled out |
| 1.8 Potential major applications and users |
| 1.9 Justify why the lab-scale results are promising from the stand point of validation of a technology at pilot scale or industrial adoptability. |

***(use additional sheets, if necessary)***

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| **2.0 PROPOSALDETAILS** | | | | | |
| 2.1 POC Proposal Project Title: | | | | | |
| 2.2 Duration | | Years Months | | | |
| 2.3 TOTAL COST (Rs. in lakhs) (including proposed contribution, by the company and support sought from DST for the collaborating institute/s) | | Rs. lakhs  IN WORDS :Rupees | | | |
| 2.4 Project Implementation Site(s): (shall be normally the academic/R&D institute/s though some portion of the work could be done in the industry premises) | | | | | |
| 2.5 KEY INVESTIGATOR(S) who will work on the project (including proposer who shall be the Principal Investigator) | | | | | |
| A. Manpower(scientific and technical) already available with affiliate institution who will work in this project | | | | | |
| *Name(s)* | *Position* | | *% of time allotted to*  *this project (max 100%)* | *Skills/Experience* | *Role in the Proposal* |
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| B. Manpower (scientific and technical) proposed to be funded through this POC Proposal | | | | | |
| *Name(s)* | *Position* | | | *Skills/Experience* | *Role in the Proposal* |
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| 2.6 Methodology (Please highlight how success in the project execution will be ensured) | | | | | |

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| 2.7 Timelines/ Minimum Work Program/ Milestones for Quantifiable Outputs | | |
| *Period\** | *Achievable targets (Physical and Technical)* | *Required financial input (Rs. in lakhs) \*\** |
| 6 Months |  |  |
| 12 Months |  |
| 15 Months |  |  |
| 18 Months |  |
| 21 Months |  |  |
| 24 Months |  |
| **TOTAL** | |  |

\* Period of Study

\*\* The proposed total cost of the project may be taken into consideration while proposing above break-up. The total of this amount should match with the proposed total cost of the project.

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| 2.8 Budget Details (Rs. In Lakhs) | | | | |
| 2.8.1 Budget Summary | | | | |
| *S. No.* | *Item* | *Ist Year* | *IInd Year* | *Total* |
| *Support under POC Program* | *Support under POC Program* |  |
| *Grants-in-aid* | *Grants-in-aid* |
| **I.** | **Non Recurring** | | | |
| 1. | Equipment |  |  |  |
| 2. | Prototype design & fabrication |  |  |  |
|  | **Total – I** |  |  |  |
| **II.** | **Recurring** | | | |
| 1. | Manpower (as per DST norms) |  |  |  |
| 2. | Consumables |  |  |  |
| 3. | Work to be Outsourced |  |  |  |
| 4. | Travel |  |  |  |
| 5. | Contingency |  |  |  |
|  | **Total – II** |  |  |  |
| **III** | **Overhead** |  |  |  |
|  | **TOTAL PROJECT COST(I+II+III)** |  |  |  |
|  | **Contribution by the Company** |  |  |  |
|  | **Grant-in-Aid from DST** |  |  |  |
|  | **GRAND TOTAL** |  |  |  |

*Note: Please also note that Overheads will be provided by DST as per norms. You may, however, indicate the desired amount under Overheads.*

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| 2.8.2 Equipment/ Prototype Design & Fabrication -Justification | | | | | | | |
| A) Infrastructure and Equipment already available with affiliate institution/s and Industry which will be utilized for this project (if more than one collaborating institution involved, please attach similar format for each  institution to this summary sheet as Appendices. | | | | | | | |
| *Sl. No.* | **Infrastructure/equipment (with institute/s)** | | | **Infrastructure/equipment (with Industry)** | | | |
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| B) Equipment/Prototypes/ Proposed to be Designed and Built or Procured from POC Proposal Fund | | | | | | | |
| *Sl. No.* | *Equipment* | *Capacity &*  *Quantity* | *Use in the project* | | | *Estimated Value*  *(Rs. in lakhs)* | |
| **1st Year** | | | | | | | |
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| **2nd Year** | | | | | | | |
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| **TOTAL\*** | | | | | |  | |
| \* This figure should match with the total amount proposed on equipment/accessories in the budget details. | | | | | | | |
| 2.8.3 Manpower Details –Justification | | | | | | | |
| Manpower (scientific and technical) to be funded through this POC Proposal | | | | | | | |
| *Position* | | *No. of Positions Required* | *Period of Contract* | | *Proposed salary per month* | | *Total Salary for the Period of Contract* |
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| **TOTAL\*** | | | | |  | | |
| \* If manpower requirement or their salaries are different for each year of the project, then it is to be given separately for each year. Additional columns may be added for furnishing these details. **The amount proposed in budget details on manpower should be calculated based on the proposed salary as detailed above.** This amount should match with the amount proposed under budget details under Non-recurring Head. | | | | | | | |

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| 2.8.4 Consumables Details -Justification | | | | | | | |
| *S.*  *No.* | *Items\** | | *Approximate Quantity* | *Approximate Cost (Rs. in lakhs)* | | *Justify the requirement* | |
| **1st Year** | | | | | | | |
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| **Total – I** | | | | | |  | |
| **2nd Year** | | | | | | | |
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| **Total – II** | | | | | |  | |
| **TOTAL - I & II\*\*** | | | | | |  | |
| \* Major consumable items should be given separately. Minor items may be clubbed together as “Other items”.  \*\* This figure should match with the total amount proposed on consumables in the budget details. | | | | | | | |
| 2.8.5 Details on Work to be Outsourced –Justification | | | | | | | |
| *Proposed work to be outsourced* | | *Name of the institution/organization to whom the PI will approach*  *for this job* | | | *Whether the PI has already tied up with this institution/ organization* | | *Estimated cost involved*  *(Rs. in Lakhs)* |
| **1st Year** | | | | | | | |
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| **2nd Year** | | | | | | | |
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| **TOTAL\*** | | | | | | |  |
| *% cost (of the total cost of the project) involved towards the outsourcing the work in the project* | | | | | | |  |
| \* This figure should match with the total amount proposed on work to be outsourced in the budget details. | | | | | | | |

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| 2.8.6 Details On Other Recurring Heads -Justification | | |
| **A. Travel** : [Total amount (i.e. for Principal Investigator and Project Staff) proposed in the project under this head  Justification: |  | *Estimated expenditure (Rs.)* |
| 1st Year |  |
| 2nd Year |  |
| **Total\*** | |  |
| **B. Contingency** : [Total amount (i.e. for Principal Investigator and Project Staff) proposed in the project under this head  Justification: |  | *Estimated expenditure (Rs.)* |
| 1st Year |  |
| 2nd Year |  |
| **Total\*** | |  |
| \* This figure should match with the total amount proposed on travel and contingency in the budget details. | | |

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| **3.0 DECLARATION** |
| I, the undersigned, participating in the project entitled" "  certify that the particulars submitted in the application are true and correct. We have read the guidelines, terms and conditions governing the scheme and undertake to abide by them. We would do our utmost to support and to ensure effective participation of scientists from respective organizations towards the goal oriented, time bound and progress of the said project. The financial assistance, if provided, shall be put to the declared use. We certify that   1. The research work proposed in the scheme/project does not in any way duplicate the work already done or being carried out elsewhere on the subject. 2. The same project proposal has not been submitted to any other agency for financial support. / the same project proposal has been submitted to … (Name of the Agency)…………. for financial support. (Give status of your application, if submitted to the other agency) 3. wherever applicable, national guidelines such as Ethical Guidelines of ICMR, GM Product Guidelines of Govt. of India should be strictly followed 4. if the project involves the utilization of genetically engineered organisms, we agree to submit an application through our Institutional Biosafety Committee. We also declare that while conducting experiments, the Biosafety Guidelines of the Department of Biotechnology would be followed intoto. 5. If the project involves field trials/experiments/exchange of specimens, etc. we will ensure that ethical clearances would be taken from concerned ethical Committees/Competent authorities and the same would be conveyed to the Head, Technology Mission Division (EW) before implementing the project. 6. The institution agrees that the equipment, other basic facilities and such other administrative facilities as per terms and conditions of the grant will be extended to investigator(s) throughout the duration of the project. 7. The institution assumes to undertake the financial and other management responsibilities of the project. 8. the institution agrees that the agreement, as per norms of the scheme, shall be executed with the department towards implementation of the project   i) The proposer hereby agrees that he will not take sabbatical during the proposal period. |
| **Signatories (Name, Designation, Signature & Seal)** |
| Proposer : |
| Key Investigator(s) : |
| Designated Authority from the Institution |

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| **4.0 BIOGRAPHICALSKETCH**  **To be submitted separately for the Proposer and each Key Investigator/s from R&D Institutions/Industry** | | | | |
| Name :  Designation :  Name of the Department/Institute/University or Industry :  Date of Birth: Sex (M/F): | | | | |
| **Education** (Graduation onwards) | | | | |
| **Sl No.** | **Institution** | **Degree Awarded** | **Year** | **Field of Study** |
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| **Professional Career** (Starting with the most recent employment) | | | | |
| **Sl**  **No.** | **Institution** | **Position** | **From (Date)** | **To (Date)** |
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| **Proof of Experience Related to Project** |
| **List of Publications** (in last 5 years)  1.Books : 2. Research Papers, Reports : 3.General articles:  4. Patents: 5. Others (Please specify): |
| **List of three selected publications/patents relevant to the proposed area of work (in chronological order) and attach copies of the same**  **1.**  **2.**  **3.** |
| **It is certified that the above particulars submitted are true and correct.**  Place: Signature:  Date : |

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| **Endorsement from the collaborating Industry**  (on the official letter head) |
| I/we have gone through the project proposal entitled" ”submitted  by ……….. (*Name of PI*) of ………………….(*Name of the Institute/ organization*) for DST funding and noted the obligations and responsibilities indicated in our name which are as below:   1. Contribution in financial terms (*mention amount in Rs*.) 2. Contribution in Kind (Please specifically elaborate)   I hereby affirm that my organization/industry is committed to participate in the project to the full extent as indicated including financial liabilities accruing there from as detailed above. A brief profile of my organization is summarized below:  Name of Organization Line of Business  No of employees Annual Turnover  The Annual Report for the last financial year is enclosed.  (**Head of the organization)**  **Seal/Stamp**  **Date: Place:** |

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| OPTIMAL WATER USE IN INDUSTRIAL SECTOR-2021  Technology Stream - Leading to Lab Scale Demonstration  **TECHNOLOGY MISSION DIVISION (ENERGY, WATER & OTHERS)**  **GOVERNMENT OF INDIA** |
| **COVERSHEET** |
| **Title of the TDP Proposal:** |
| **Subject/Area:** |
| **Submitted by:**  **Name of the Proposer’s:**   |  |  |  |  | | --- | --- | --- | --- | | **PI Details** | **Name** | **Date of Birth** | **Category**  **(General/SC/ST/Others)** | |  |  |  | | **Co-PI Details** | **Name** | **Date of Birth** | **Category**  **(General/SC/ST/Others)** | |  |  |  | | **Industrial Partner** | **Name** | **Date of Birth** | **Category**  **(General/SC/ST/Others)** | |  |  |  |   **Full Official Postal Address of PI:**  **Phone: Mobile: Email:** |
| **Send to :**  Dr. G.V Raghunath Reddy Scientist 'F'  Technology Mission Division (EWO) Department of Science & Technology Technology Bhavan, New Mehrauli Road **NEW DELHI-110016**  *Tel. :011-26590604*  *E-mail :* [*raghunath.reddy@nic.in*](mailto:raghunath.reddy@nic.in) |

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| **APPENDIX A** | | |
| **PARTICULARS OF THE COLLABORATING COMPANY** | | |
| **CONTACT DETAILS OF THE COMPANY /CO-APP**  **-LICANT:**  *(Name, Address, Phone, Mobile Number, Fax, E- mail, etc.)* | Year of establishment: Company’s Activities:  Staff Strength: Total: R&D:  Annual Turnover: (last financial year) | |
| **CERTIFICATION YES No**   1. Company has valid R&D recognition by DSIR 2. Public Limited / Private Limited / Closely held (Strike out irrelevant) 3. The company has at least 51% shares held by the Indian promoters, family and friends and the general public. 4. Whether previously applied under any of DST schemes 5. Patent/Licensing rights related to the proposed work | | |
| **ENCLOSURES**  *(label and number all the enclosures and attach with the application in sequence):*   1. The copy of Registration Certificate (Enclosure No………) 2. Certificate of R&D recognition by DSIR with date of issue/expiry (Enclosure No………) 3. List of (a) Patents granted to the company (b) Patents applied for by the Company (c) IPR’s licensed by the Company (with complete details) (Enclosure No………) 4. Names of Patent holder(s) and claims related to patent rights on the proposed work (Enclosure No………) 5. Annual Report of the Company for the previous financial year (Enclosure No………) 6. Promoters background (including association with other companies and contribution in those companies) (Enclosure No………) | | Check-list |

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| **APPENDIXB** |
| **PARTICULARS OF PREVIOUS COLLABORATION**  **(between Public Funded Academic/Research Institute and company/industry )** |
| **Subject/Area:** |
| Has there been a prior history of collaboration between the applicant institute and the collaborating industry? If so, provide details of collaborative efforts jointly undertaken in the past, indicating the specific output in each case: |
| Detailed technical justification outlining why the particular industry has been chosen by the institute for development of technology required |

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| **APPENDIX C** | | | |
| **PROPOSAL DETAILS** | | | |
| PROJECT TITLE : | | | |
| DURATION | Years Months | | |
| TOTAL COST (Rs. in  lakhs) (including proposed contribution, by the company and support sought from DST for the collaborating institute/s) | Rs lakhs  IN WORDS : Rs. --------------------------------------------------- | | |
| PROJECT IMPLEMENTATION SITE(s): (shall be normally the academic/R&D institute/s though some portion of the work could be done in the industry premises) | | | |
| KEY INVESTIGATOR(S) who will work on the project (other than PI and Co-PI/s) | | | |
| Name(s) | | Position Title(s) | Organization(s) |
| GIST OF THE PROPOSAL **(ABOUT 100 WORDS).** If the proposal is funded, this description, as is, will become public information. **Therefore, do not include proprietary/confidential information under this column.** | | | |

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| KEY WORDS (5 maximum) to identify the research or technology : |
| Indicate why the proposal merits consideration under Optimal Water Use in Industrial Sector Call of Technology Mission Division (Energy & Water) (ABOUT 100WORDS) |
| Current status of research and development on the subject (both international and national status) (ABOUT 200 WORDS) |
| The relevance and expected outcome of the proposed study. Also, indicate the possibility of developing new IPR and societal relevance of this project. (ABOUT 100 WORDS) |
| Summary of preliminary work done so far |

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| Indicate the innovativeness of the proposed work and market feasibility of the targeted product/process (ABOUT 250 WORDS) |
| Leadership perspective (Briefly describe the national as well as global positioning of the technology and resultant leadership position/economic benefits to the country, once the project is successfully accomplished.) (ABOUT 50 WORDS) |
| Viability analysis, if already carried out by the proposer |
| Methodology (Please highlight how success in the project execution will be ensured) |

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| **AppendixD** | |
| **TECHNICAL DETAILS** | |
| **Part III – Timelines/ Work Programme/ Milestones for Quantifiable Outputs** | |
| **Period of study** | **Achievable targets (Physical andTechnical)** |
| 6 Months |  |
| 12 Months |  |
| 15 Months |  |
| 18 Months |  |
| 21 Months |  |
| 24 Months |  |
| 27 Months |  |
| 30 Months |  |
| 33 Months |  |
| 36 Months |  |

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| **Appendix E (1)** | | | | | |
| **BUDGET DETAILS (Rs. in lakhs)** | | | | | |
| **For Collaborating Public Academic/R&D Institution/s** | | | | | |
| **Name of the Institution/s : (if more than one collaborating institution involved, please attach similar format for each institution to this summary sheet as Appendices E(1)(1), E(1)(2), etc.** | | | | | |
| **S.No.** | **Item** | **Ist year** | **IInd year** | **IIIrd year** | **Total** |
| **I.** | **Non-Recurring** | | | | |
| 1. | Equipment |  |  |  |  |
| 2. | Accessories |  |  |  |  |
|  | ***Total – I*** |  |  |  |  |
| **II.** | **Recurring** | | | | |
| 1. | Manpower (as per DST norms) |  |  |  |  |
| 2. | Consumables |  |  |  |  |
| 3. | Travel |  |  |  |  |
| 4. | Contingency |  |  |  |  |
| 5. | Cost of work to be outsourced to public funded R&D/academic institutions *(other than the collaborating R&D/ academic institution/s)* |  |  |  |  |
|  | ***Total – II*** |  |  |  |  |
| **III.** | **Overhead** |  |  |  |  |
|  | **TOTAL PROJECT COST (I+II+III)** |  |  |  |  |
|  | **Contribution by the Company (** |  |  |  |  |
|  | **Grant-in-Aid from DST** |  |  |  |  |
|  | **GRAND TOTAL** |  |  |  |  |

*Note: Please also note that Overheads will be provided by DST as per norms. You may, however, indicate the desired amount under Overheads.*

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| **Appendix E (2)** | | | | | |
| **EQUIPMENT DETAILS** | | | | | |
| **A) Infrastructure and Equipment already available with collaborating institution/s and Company which will be utilized for this project** *(if more than one collaborating institution involved, please attach similar format for each institution to this summary sheet as Appendices E(2)(1), E(2)(2), etc.)* | | | | | |
| **Sl.**  **No.** | **Infrastructure/ equipment (with institute/s)** | | | **Infrastructure/ equipment (with company)** | |
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| **B) Proposed equipment from DST contribution (for public institution/s), with justification** | | | | | |
| **Sl.**  **No.** | **Equipment** | **Capacity & Quantity** | **Use in the project** | | **Estimated Value (Rs. in lakhs)** |
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| **Total\*** | | | | |  |

*\* This amount should match with the amount proposed under budget details under Non-recurring Head in*

Appendix E (1)

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| **Appendix E (3)** | | | | | | | |
| **MANPOWER DETAILS** | | | | | | | |
| **A) Manpower (scientific and technical) already available with collaborative institute/s who will work for this project** | | | | | | | |
| **Name** | **Position** | **Qualification** | **Age** | **Full time/Part time (Specify**  **hours per day)** | | **Work to be done by the person specific to the**  **project** | |
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| **B) Manpower (scientific and technical) already available with company who will work for this project** | | | | | | | |
| **Name** | **Position** | **Qualification** | **Age** | **Fulltime/Part**  **time (Specify hours per day)** | **Experience** | | **Work to be**  **attempted in the project** |
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| **C) Manpower (scientific and technical) proposed through TMD (EW) contribution who will work in this project (IN COLLABORATING INSTITUTE/S); remuneration should be as per DST norms (i.e. for JRF, SRF etc.)** | | | | | | | |
| **Position** | **No of Positions** | **Expected Qualification &Experience** | **Age limit, if any** | **Full time/Part time (Specify hours per**  **day)** | **Work to be attempted in the project** | | **Proposed salary per month** |
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***\**** *If manpower requirement or their salaries are different for each year of the project, then it is to be given separately for each year. Additional columns may be added for furnishing these details.* ***The amount proposed in budget details on manpower should be calculated based on the proposed salary as detailed above.*** *This amount should match with the amount proposed under budget details under Recurring Head at Appendix E (1). If more than one collaborating institution involved, please attach similar format for each institution to this summary sheet as Appendices E(3)(1), E(3)(2),etc.)*

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| **Appendix E (4)** | | | | |
| **CONSUMABLES’ DETAILS FOR COLLABORATING PUBLIC INSTITUTION /S** | | | | |
| **S.**  **No.** | **Items\*** | **Approximate Quantity** | **Approximate Cost (Rs. in lakhs)** | **Justification** |
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| **\*\*Total amount required for consumables** | | |  |  |

*\** ***Major consumable items should be given separately. Minor items may be clubbed together as “Other items”.***

*\*\** ***This figure should match the total amount proposed under the head “Consumables” in the Budget Details.***

*Note: If more than one collaborating institution involved, please attach similar format for each institution to this* summary sheet as Appendices E(4)(1), E(4)(2), etc.

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| **Appendix E (5)** |

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| **TRAVEL AND CONTINGENCY FOR COLLABORATING PUBLIC INSTITUTION/S** |
| Travel:[Total amount(i.e. for co-PI/s and other project staff) proposed in the project under this head is Rs lakhs]  Justification: |
| Contingency:[Total amount(i.e. for co-PI/s and other project staff) proposed in the project under this head is Rs lakhs]  Justification: |

*Note: If more than one collaborating institution involved, please attach similar format for each institution to this*

Summary sheet as Appendices E(5)(1), E(5)(2), etc.

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| **Appendix E (6)** | | | |
| **DETAILS OF WORK TO BE OUTSOURCED TO PUBLIC-FUNDED R&D/ACADEMIC**  **INSTITUTION/S OTHER THAN THE COLLABORATING PUBLIC INSTITUTION/S** | | | |
| **Proposed work to be outsourced** | **Name of the institution/organization to**  **whom the company will approach for this job** | **Whether the company has already tied up**  **with this institution/ organization** | **Estimated cost involved**  **(Rs. in Lakhs)** |
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| **Total** | | |  |
| **Cost of work outsourced to public funded R&D/academic institution/s other than the collaborating R&D/academic institution/s** | | |  |

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| **Appendix E (7)** | | | | | |
| **SUMMARY OF EXPENSES TO BE INCURRED BY THE COMPANY FOR PROJECT IMPLEMENTATION** | | | | | |
| **S.No.** | **Item** | **Ist year** | **IInd year** | **IIIrd year** | **Total** |
| **I.** | **Non-Recurring** | | | | |
| 1. | Equipment & Accessories |  |  |  |  |
| 2. | Fabrication including outsourcing |  |  |  |  |
|  | ***Total – I*** |  |  |  |  |
| **II.** | **Recurring** | | | | |
| 1. | Manpower |  |  |  |  |
| 2. | Consumables |  |  |  |  |
| 3. | Travel |  |  |  |  |
| 4. | Contingency |  |  |  |  |
| 5. | Cost of work to be outsourced to public funded R&D/academic institutions *(other than the collaborating R&D/ academic institution/s)* |  |  |  |  |
|  | ***Total – II*** |  |  |  |  |
|  | **GRAND TOTAL** |  |  |  |  |

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| **AppendixF** |
| **OTHER FINANCIAL DETAILS**  **(The following information should be given very clearly)** |
| **1. Expected source for the proposed contribution of the Company during project duration as indicated in Appendix E(1).** |
| **2. Details of the investments made by the Company in the project so far (excluding the amount as indicated at No. 3 below), if any.** |
| **3. Funding received so far/ approved by any of the Government Agencies for the work done so far related to this project or for the present proposed work (Give details like project title, funding agency, amount received/ approved, and status of the project). If any such proposal for funding is under consideration by another funding agency, give details thereof.** |
| **4. Funding received so far/ approved by any of the Government Agencies to the Company/ Companies to carry out any other activity (exclude the information given at No. 2 above) (Give details like project title, amount received/ approved, funding agency and status of the project) [OPTIONAL]** |

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| **Appendix G** |
| **DECLARATION BY PROPOSER AND KEY INVESTIGATORS** |
| We, the undersigned, participating in the project entitled" "certify  that the particulars submitted in the application are true and correct. We have read the guidelines, terms and conditions governing the scheme and undertake to abide by them. We would do our utmost to support and to ensure effective participation of scientists from respective organizations towards the goal oriented, time bound, progress of the said project. The financial assistance, if provided, shall be put to the declared use. We certify that the industry agrees to contribute Rs. (Rupees ) in cash to the over the  years project as indicated in We certify that   1. The research work proposed in the scheme/project does not in any way duplicate the work already done or being carried out elsewhere on the subject. 2. The same project proposal has not been submitted to any other agency for financial support. / the same project proposal has been submitted to … (Name of the Agency)…………. for financial support. (Give status of your application, if submitted to the other agency). 3. The emoluments for the manpower proposed are those admissible to persons of corresponding status employed in the institute/university or as per the Ministry of Science & Technology guidelines – *Applicable only for Public Partner/s.* 4. Necessary provision for the scheme/project will be made in the Institute/University/ Company/ budget in anticipation of the sanction of the scheme/project. 5. Wherever applicable, national guidelines such as Ethical Guidelines of ICMR, GM Product Guidelines of Govt. of India should be strictly followed. 6. If the project involves the utilization of genetically engineered organisms, we agree to submit an application through our Institutional Biosafety Committee. We also declare that while conducting experiments, the Biosafety Guidelines of the Department of Biotechnology would be followed in toto. 7. If the project involves field trials/experiments/exchange of specimens, etc. we will ensure that ethical clearances would be taken from concerned ethical Committees/Competent authorities and the same would be conveyed to the Head, Technology Mission Division (EW) before implementing the project. 8. The company and institution/s agrees that the equipment, other basic facilities and such other administrative facilities as per terms and conditions of the grant will be extended to investigator(s) throughout the duration of the project. 9. The institution/s and company assume to undertake the financial and other management responsibilities of the project. 10. The institution/s and company agree that the Agreement, as per norms of the scheme, shall be executed with the department towards implementation of the project. 11. The institution/s and company agree that any research outcome or intellectual property right(s) on the invention(s) arising out of the project shall be taken in accordance with the Agreement made in this regard among the collaborators of this project. |

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| **Signatories (Name, Designation, Signature & Seal)** | |
| Principal Investigator (from Institute) | Co-Principal Investigator/s (from collaborating institute/s) |
| Forwarding authorities Collaborating Institute/s: | Company: |
| **Endorsement by Head of Proposer’s Institution :**   1. Certified that the Institute welcomes participation of as the Proposer for the project and that in the unforeseen event of discontinuance by the Proposer, the Key Investigator will assume the responsibility of the fruitful completion of the project (with due information to DST). 2. Certified that the institution agrees that the equipment and other basic facilities and such other administrative facilities as per terms and conditions of the grant, will be extended to the investigator(s) throughout the duration of the project. 3. Institute assumes to undertake the financial and other management responsibilities of the project. | |
| Designated Authority from the Institution | |

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| **AppendixH** | | | | |
| **BIOGRAPHICAL SKETCH**  ***To be submitted separately for the Principal Investigator from Academic/R&D Institutions, and each of the Co-Principal Investigator/s from Academic/ R&D Institutions/ Industry and any other key***  ***Investigators*** | | | | |
| Name :  Designation :  Name of the Department/Academic/R&D Institute or Company:  Date of Birth: Sex (M/F) : | | | | |
| **Education** (Graduation onwards) | | | | |
| **Sl No.** | **Institution** | **Degree Awarded** | **Year** | **Field of Study** |
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| **Professional Career** (Starting with the most recent employment) | | | | |
| **Sl No.** | **Institution** | **Position** | **From (Date)** | **To (Date)** |
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| **Honors/ Awards**  1.  2.  3.  4**.** | | | | |

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| **List of Publications** (in last 5 years)   1. Books: 2. Research Papers, Reports: 3.General articles:   4.Patents : 5. Others (Please specify): |
| **List selected three publications or patents relevant to the proposed area of work (in chronological order)**   1. **Title, Authors, name of the Journal, issue & page no. year of publication or patent details Summary of the work reported in the above publication or patent (ABOUT 100 WORDS)** 2. **Title, Authors, name of the Journal, issue & page no. year of publication or patent details Summary of the work reported in the above publication or patent (ABOUT 100WORDS)** 3. **Title, Authors, name of the Journal, issue & page no. year of publication or patent details Summary of the work reported in the above publication or patent (ABOUT 100 WORDS)** |

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| **Professional Experience relevant to the Project (ABOUT 150 WORDS)** | | | | |
| **Ongoing Research Projects** | | | | |
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| **Sl No.** | **Title of Project** | **Source of Funds** | **Amount** | **Duration**  (from – to -- ) |
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| **Completed Research Projects** (State only major projects of last 3 year) | | | | |
| **Sl No.** | **Title of Project** | **Source of Funds** | **Amount** | **Duration**  (from – to -- ) |
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| It is certified that the above particulars submitted are true and correct.  Place: Signature:  Date : | | | | |

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| OPTIMAL WATER USE IN INDUSTRIAL SECTOR-2021  Technology Validation - Pilot Scale Demonstration in Industrial Setting  **TECHNOLOGY MISSION DIVISION (ENERGY, WATER & OTHERS)**  **GOVERNMENT OF INDIA** |
| **COVER SHEET** |
| **Title of the Proposal:** |
| **Subject/Area:** |
| **Submitted by:**  **Name of the Proposer’s:**   |  |  |  |  | | --- | --- | --- | --- | | **PI Details**  **(from Industry)** | **Name** | **Date of Birth** | **Category**  **(General/SC/ST/Others)** | |  |  |  | | **Academic Partner Co-PI 1 Details** | **Name** | **Date of Birth** | **Category**  **(General/SC/ST/Others)** | |  |  |  | | **Academic Partner Co-PI 2 Details** | **Name** | **Date of Birth** | **Category**  **(General/SC/ST/Others)** | |  |  |  |   **Full Official Postal Address of Principal Investigator (from Industry):**  **Phone: Mobile: Email:** |
| **Send to :**  Dr. G.V Raghunath Reddy Scientist 'F'  Technology Mission Division (EWO) Department of Science & Technology Technology Bhavan, New Mehrauli Road **NEW DELHI-110016**  *Tel. :011-26590604*  *E-mail :* [*raghunath.reddy@nic.in*](mailto:raghunath.reddy@nic.in) |

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| **APPENDIXA** | | |
| **PARTICULARS OF THE APPLICANT COMPANY** | | |
| **CONTACT DETAILS OF THE COMPANY/APPLICANT:** |  | |
| *(Name, Address, Phone, Mobile Number, Fax, E-mail, etc.)* | Year of establishment: | |
|  | Company’s Activities: | |
|  | Staff Strength: Total: R&D: | |
|  | Annual Turnover: | |
|  | (last financial year) | |
| **CERTIFICATION YES No**   1. Company has valid R&D recognition by DSIR 2. Public Limited / Private Limited / Closely held (Strike out irrelevant) 3. The company has at least 51% shares held by the Indian promoters, family and friends and the general public. 4. Whether previously applied under any of DST schemes 5. Patent/Licensing rights related to the proposed work | | |
| **ENCLOSURES**  *(label and number all the enclosures and attach with the application in sequence):*   1. The copy of Registration Certificate (Enclosure No………) 2. Certificate of R&D recognition by DSIR with date of issue/expiry (Enclosure No………) 3. List of (a)Patents granted to the company(b) Patents applied for by the Company(c) IPR’s licensed by the Company (with complete details) (Enclosure No………) 4. Names of Patent holder(s) and claims related to patent rights on the proposed work (Enclosure No………) 5. Annual Report of the Company for the previous financial year (Enclosure No………) 6. Promoters background (including association with other companies and contribution in those companies) (Enclosure No………) 7. Details of loans outstanding against the applicant. It is to be clearly stated if the company   is a defaulter in repayment of any of the loans/ interests as per the agreed schedule. (Enclosure No………) | | Check-list |

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| **APPENDIXB** |
| **PARTICULARS OF THE COLLABORATOR**  **(from Public Funded Academic/Research Institute)** |
| Contact details of the PI from Collaborating Institute:  *(Name, Address, Phone, Mobile Number, Fax, e-mail, etc.)* |
| Has there been a prior history of collaboration between the institute and the applicant industry? If so, provide details of collaborative efforts jointly undertaken in the past, indicating the specific output in each case: |
| Detailed technical justification outlining why the particular institute has been chosen by the industry for Pilot scale demonstration of technology. |

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| **APPENDIXC** | | | |
| **PROPOSAL DETAILS** | | | |
| PROJECT TITLE : | | | |
| DURATION | Years Months | | |
| TOTAL COST (Rs. in lakhs) (including proposed contribution, by the company and support sought from DST to the  collaborating institute) | Rs. lakhs  IN WORDS : Rs. --------------------------------------------------- | | |
| PROJECT IMPLEMENTATION SITE(s): (shall be normally the Industry though some portion of the work could be done in the academic institute) | | | |
| KEY INVESTIGATOR(S) who will work on the project (other than PI and Co-PI) | | | |
| Name(s) | | Position Title(s) | Organization(s) |
| GIST OF THE PROPOSAL **(ABOUT 100 WORDS).** If the proposal is funded, this description, as is, will become public information. **Therefore, do not include proprietary/confidential information under this column.** | | | |

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| KEY WORDS (5 maximum) to identify the technology or process: |
| Indicate why the proposal merits consideration under Industrial Water Use Efficiency Scheme of Technology Mission Division (Energy & Water) (ABOUT 100 WORDS) |
| Current status of technology developed (both international and national status) (ABOUT 200 WORDS) |
| The relevance and expected outcome of the proposed Pilot scale Demonstration. Also, indicate the possibility of developing new IPR and societal relevance of this project. (ABOUT 100 WORDS) |
| Summary of preliminary/ demonstration and validation work done so far |
| Indicate the innovativeness of the proposed and market feasibility of the targeted product/process) (ABOUT 250 WORDS) |

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| Leadership perspective (Briefly describe the national as well as global positioning of the technology and resultant leadership position/economic benefits to the country, once the project is successfully accomplished. (ABOUT 50 WORDS) |
| Viability analysis, if already carried out by the proposer |
| Methodology (Please highlight how success in the project execution will be ensured) |

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| **AppendixD** | | |
| **TECHNICAL DETAILS** | | |
| **Part III – Timelines/ Work Programme/ Milestones for Quantifiable Outputs** | | |
| Period of study | Achievable targets (Physical and Technical) | Required financial input (Rs. in lakhs) **\*** |
| 6 Months |  |  |
| 12 Months |  |  |
| 15 Months |  |  |
| 18 Months |  |
| Total | |  |

\* The proposed total cost of the project (including contribution by the Company) may be taken into consideration while proposing above break-up. The total of this amount should match with the proposed total cost of the project.

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| **Appendix E (1)** | | | | |
| **BUDGET DETAILS (Rs. in lakhs)** | | | | |
| **For Collaborating Industry/ Company** | | | | |
| **Name of the Industry :** | | | | |
| **S.No.** | **Item** | **Ist year** | **IInd year** | **Total** |
| **I.** | **Non -Recurring** | | | |
| 1. | Pilot Scale Plant design & fabrication, process equipment, test rigs etc. (to be specified) |  |  |  |
| 2. | Laboratory Equipment & Accessories |  |  |  |
|  | **Contribution by the Company** |  |  |  |
|  | **Grants-in-Aid from DST** |  |  |  |
|  | ***Total – I*** |  |  |  |
| **II.** | **Recurring** | | | |
| 1. | Manpower (as per industry norms) |  |  |  |
| 2. | Consumables |  |  |  |
| 3. | Travel |  |  |  |
| 4. | Contingency |  |  |  |
| 5. | Overhead |  |  |  |
|  | ***Total – II*** |  |  |  |
|  | **TOTAL PROJECT COST** |  |  |  |

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| **Appendix E (2)** | | | | | |
| **EQUIPMENT DETAILS - Justification** | | | | | |
| **A) Infrastructure and Equipment already available with Company and collaborating institution which will be utilized for this project** | | | | | |
| **Sl.**  **No.** | **Infrastructure/ equipment (with company)** | | | **Infrastructure/ equipment (with institute)** | |
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| **B) Proposed equipment from TMD contribution (for public institution)** | | | | | |
| **Sl.**  **No.** | **Equipment** | **Capacity &**  **Quantity** | **Use in the project** | | **Estimated Value**  **(Rs. in lakhs)** |
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| **Total\*** | | | | |  |

*\* This amount should match with the amount proposed under budget details under Non-recurring Head at Appendix E (1)*

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| **Appendix E (3)** | | | | | | | |
| **MANPOWER DETAILS - Justification** | | | | | | | |
| **A) Manpower (scientific and technical) already available with company who will work in this project** | | | | | | | |
| **Name** | **Position** | **Qualification** | **Age** | **Full time/Part time (Specify hours per day)** | **Experience** | | **Work to be attempted in the project** |
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| **B) Manpower (scientific and technical) already available with collaborative institute who will work in this project** | | | | | | | |
| **Name** | **Position** | **Qualification** | **Age** | **Full time/Part**  **time (Specify hours per day)** | | **Work to be done by the**  **person specific to the project** | |
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| **C) Manpower (scientific and technical) proposed through DST contribution who will work in this project (IN COLLABORATING INSTITUTE); should be as per DST norms (i.e. JRF, SRF etc.)** | | | | | | | |
| **Position** | **No of Positions** | **Expected Qualification &Experience** | **Age limit, if any** | **Full time/Part time (Specify**  **hours per day)** | **Work to be attempted in the project** | | **Proposed salary per month** |
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***\**** *If manpower requirement or their salaries are different for each year of the project, then it is to be given separately for each year. Additional columns may be added for furnishing these details.* ***The amount proposed in budget details on manpower should be calculated based on the proposed salary as detailed above.*** *This amount should match with the amount proposed under budget details under Non-recurring Head at Appendix E(1)*

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| **Appendix E (4)** | | | | |
| **CONSUMABLE DETAILS - Justification** | | | | |
| **S.**  **No.** | **Items\*** | **Approximate Quantity** | **Approximate Cost (Rs. in lakhs)** | **Justify the requirement** |
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| **\*\*Total amount required for consumables** | | |  |  |

*\** ***Major consumable items should be given separately. Minor items may be clubbed together as “Other items”.***

*\*\** ***This figure should match with the total amount (i.e. for applicant and other collaborators, if any) proposed on consumables in the budget details.***

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| **Appendix E (5)** |
| **DETAILS ON OTHER RECURRING HEADS - Justification** |
| Travel : [Total amount (i.e. for applicant and other project staff)proposed in the project under this head is Rs lakhs]  Justification: |
| Contingency : [Total amount (i.e. for applicant and other project staff) proposed in the project under this head is Rs lakhs]  Justification: |
| Overhead : [Total amount proposed in the project under this head is Rs lakhs]  Justification: |

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| **Appendix E (6)** | | | |
| **DETAILS ON WORK TO BE OUTSOURCED, if any in the project** | | | |
| **Proposed work to be outsourced** | **Name of the institution/organization to whom the company will**  **approach for this job** | **Whether the company has already tied up with this institution/**  **organization** | **Estimated cost involved**  **(Rs. in Lakhs)** |
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| **Total** | | |  |
| **%cost (of the total cost of the project) involved towards the outsourcing the work in the project: %** | | | |

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| **AppendixF** |
| **OTHER FINANCIAL DETAILS**  **(The following information should be given very clearly)** |
| **1. Expected source for the proposed contribution of the Company during project duration as indicated in Appendix E(1).** |
| **2. Details of the investments made by the Company in the project so far (excluding the amount as indicated at No. 3 below), if any.** |
| **3. Funding received so far/ approved by any of the Government Agencies for the work done so far related to this project or for the present proposed work (Give details like project title, funding agency, amount received/ approved, and status of the project). If any such proposal for funding is under consideration by another funding agency, give details thereof.** |
| **4. Funding received so far/ approved by any of the Government Agencies to the Company/ Companies to carry out any other activity (exclude the information given at No. 2 above) (Give details like project title, amount received/ approved, funding agency and status of the project)[OPTIONAL]** |

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| **AppendixG** |
| **DECLARATION** |
| We, the undersigned, participating in the project entitled" "  certify that the particulars submitted in the application are true and correct. We have read the guidelines, terms and conditions governing the scheme and undertake to abide by them. We would do our utmost to support and to ensure effective participation of scientists from respective organizations towards the goal oriented, time bound and progress of the said project. The financial assistance, if provided, shall be put to the declared use. We certify that the industry agrees to contribute Rs. (Rupees ) in cash to the  over the years project as indicated in   1. The Pilot Scale Demonstration for Technology Assessment and Validation work proposed in the scheme/project does not in any way duplicate the work already done or being carried out elsewhere on the subject. 2. The same project proposal has not been submitted to any other agency for financial support. / the same project proposal has been submitted to …(Name of the Agency) for financial support.(Give status of your   application, if submitted to the other agency)   1. The emoluments for the manpower proposed are those admissible to persons of corresponding status employed in the institute/university or as per the Ministry of Science & Technology guidelines – *Applicable only for Public Partner/s.* 2. Necessary provision for the scheme/project will be made in the Company/Institute/University budget in anticipation of the sanction of the scheme/project. 3. Wherever applicable, national guidelines such as Ethical Guidelines of ICMR, GM Product Guidelines of Govt. of India should be strictly followed. 4. If the project involves the utilization of genetically engineered organisms, we agree to submit an application through our Institutional Biosafety Committee. We also declare that while conducting experiments, the Biosafety Guidelines of the Department of Biotechnology would be followed in toto. 5. if the project involves field trials/experiments/exchange of specimens, etc. we will ensure that ethical clearances would be taken from concerned ethical Committees/ Competent authorities and the same would be   conveyed to the Head, Technology Mission Division (Energy & Water) before implementing the project. |

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| 1. The company/institution agrees that the equipment, other basic facilities and such other administrative facilities as per terms and conditions of the grant will be extended to investigator(s) throughout the duration of the project. 2. The company/institution assumes to undertake the financial and other management responsibilities of the project. 3. the company/institution agrees that the agreement, as per norms of the scheme, shall be executed with the department towards implementation of the project | |
| **Signatories** (Name, Designation, Signature & Seal) | |
| Principal Investigator (from industry) | Co-Principal Investigator (from collaborator’s institute) |
| Forwarding authorities Company: | Collaborating Institute |

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| **AppendixH** | | | | |
| **BIOGRAPHICAL SKETCH**  ***To be submitted separately for the Principal Investigators from Industry Co-Principal Investigator from Academic Institution and any other key investigators*** | | | | |
| Name :  Designation :  Name of the Company or Department/Institute/University :  Date of Birth: Sex (M/F): | | | | |
| **Education** (Graduation onwards) | | | | |
| **Sl No.** | **Institution** | **Degree Awarded** | **Year** | **Field of Study** |
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| **Professional Career** (Starting with the most recent employment) | | | | |
| **Sl**  **No.** | **Institution** | **Position** | **From (Date)** | **To (Date)** |
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| **Honors/ Awards**  1.  2.  3.  4**.** | | | | |

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| **Research & Technological Outputs** (in last 5 years)  1.Books : 2. Research Papers, Reports : 3.General articles:  4.Patents: 5.Technologies developed: 6. Processes optimized: |
| **List selected three publications or patents relevant to the proposed area of work (in chronological order)**   1. **Title, Authors, name of the Journal, issue & page no. year of publication or patent details Summary of the work reported in the above publication or patent (ABOUT 100 WORDS)** 2. **Title, Authors, name of the Journal, issue & page no. year of publication or patent details Summary of the work reported in the above publication or patent (ABOUT 100 WORDS)** 3. **Title, Authors, name of the Journal, issue & page no. year of publication or patent details Summary of the work reported in the above publication or patent (ABOUT 100 WORDS)** |

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| **Professional Experience relevant to the Project (ABOUT 150 WORDS)** | | | | |
| **Ongoing Research Projects** | | | | |
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| **Sl No.** | **Title of Project** | **Source of Funds** | **Amount** | **Duration**  (from – to -- ) |
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| **Completed Research Projects** (State only major projects of last 3 year) | | | | |
| **Sl No.** | **Title of Project** | **Source of Funds** | **Amount** | **Duration**  (from – to -- ) |
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| It is certified that the above particulars submitted are true and correct.  Place: Signature:  Date : | | | | |

### Conflict of Interest

**Format for Conflict of Interest**

**FINAL (Approved by Secretary DST)**

**DEPARTMENT OF SCIENCE AND TECHNOLOGYPOLICY ON CONFLICT OF INTEREST**

**FOR REVIEWER & COMMITTEE MEMBER or APPLICANT or DST OFFICERASSOCIATED/ DEALING WITH THE SCHEME/ PROGRAM OF DST**

Issues of Conflicts of Interest and ethics in scientific research and research management have assumed greater prominence, given the larger share of Government funding in the country's R & D scenario. The following policy pertaining to general aspects of Conflicts of Interest and code of ethics, are objective measures that is intended to protect the integrity of the decision making processes and minimize biasness. The policy aims to sustain transparency, increase accountability in funding mechanisms and provide assurance to the general public that processes followed in award of grants are fair and non-discriminatory. The Policy aims to avoid all forms of bias by following a system that is fair, transparent and free from all influence/ unprejudiced dealings, prior to, during and subsequent to the currency of the programme to be entered into with a view to enable public to abstain from bribing or any corrupt practice in order to secure the award by providing assurance to them that their competitors will also refrain from bribing and other corrupt practice and the decision makers will commit to prevent corruption, in any form, by their officials by following transparent procedures. This will also ensure a global acceptance of the decision making process adopted by DST.

### Definition of Conflict of Interest:

Conflict of Interest means "any interest which could significantly prejudice an individual's objectivity in the decision making process, thereby creating an unfair competitive advantage for the individual or to the organization which he/she represents". The Conflict of Interest also encompasses situations where an individual, in contravention to the accept ednorms and ethics, could exploit his/her obligatory duties for personal benefits.

### Coverage of the Policy:

1. The provisions of the policy shall be followed by persons applying for and receiving funding from DST, Reviewers of the proposal and Members of Expert Committees and Programme Advisory Committees. The provisions of the policy will also be applicable on all individuals including Officers of DST connected directly or indirectly or through intermediaries and Committees involved in evaluation of proposals and subsequent decision making process.
2. This policy aims to minimize aspects that may constitute actual Conflict of Interests, apparent Conflict of Interests and potential Conflict of Interests in the funding mechanisms that are presently being operated by DST. The policy also aims to cover, although not limited to, Conflict of interests that are Financial (gains from the outcomes of the proposal or award), Personal (association of relative / Family members) and Institutional (Colleagues, Collaborators, Employer, persons associated in a professional career of an individual such as Ph.D. supervisor etc.)

### Specifications as to what constitutes Conflict ofInterest.

Any of the following specifications (non-exhaustive list) imply Conflict of Interest if,

* 1. Due to any reason by which the Reviewer/Committee Member cannot deliver fair and objective assessment of the proposal.
  2. The applicant is a directly relative # or family member (including but not limited to spouse, child, sibling, parent) or personal friend of the individual involved in the decision making process or alternatively, if any relative of an Officer directly involved in any decision making process / has influenced interest/ stake in the applicant’s formetc.
  3. The applicant for the grant/award is an employee or employer of an individual involved in the process as a Reviewer or Committee Member; or if the applicant to the grant/award has had an employer-employee relationship in the past three years with that individual.
  4. The applicant to the grant/award belongs to the same Department as that of the Reviewer/Committee Member.
  5. The Reviewer/ Committee Member is a Head of an Organization from where the applicant is employed.
  6. The Reviewer /Committee Member is or was, associated in the professional career of the applicant (such as Ph.D. supervisor, Mentor, present Collaborator etc.)
  7. The Reviewer/ Committee Member is involved in the preparation of the research proposal submitted by the applicant.
  8. The applicant has joint research publications with the Reviewer/Committee Member in the last three years.
  9. The applicant/Reviewer/Committee Member, in contravention to the accepted norms and ethics followed in scientific research has a direct/indirect financial interest in the outcomes of the proposal.
  10. The Reviewer/Committee Member stands to gain personally should the submitted proposal be accepted or rejected.

# The Term “Relative” for this purpose would be referred in section 6 of Companies Act, 1956.

### Regulation:

The DST shall strive to avoid conflict of interest in its funding mechanisms to the maximum extent possible. Self-regulatory mode is however recommended for stake holders involved in scientific research and research management, on issues pertaining to Conflict of Interest and scientificethics. Any disclosure pertaining to the same must be made voluntarily by the applicant/Reviewer/Committee Member.

### Confidentiality:

The Reviewers and the Members of the Committee shall safeguard the confidentiality of all discussions and decisions taken during the process and shall refrain from discussing the same with any applicant or a third party, unless the Committee recommends otherwise and records for doing so.

### Code of Conduct

* 1. **To be followed by Reviewers/Committee Members**:

1. All reviewers shall submit a conflict of interest statement, declaring the presence or absence of any form of conflict of interest.
2. The reviewers shall refrain from evaluating the proposals if the conflict of interest is established or if it is apparent.
3. All discussions and decisions pertaining to conflict of interest shall be recorded in the minutes of the meeting.
4. The Chairman of the Committee shall decide on all aspects pertaining to conflict of interests.
5. The Chairman of the Committee shall request that all members disclose if they have any conflict of interest in the items of the agenda scheduled for discussion.
6. The Committee Members shall refrain from participating in the decision making process and leave the room with respect to the specific item where the conflict of interest is established or is apparent.
7. If the Chairman himself/herself has conflict of interest, the Committee may choose a Chairman from among the remaining members, and the decision shall be made in consultation with Member Secretary of the Committee.
8. It is expected that a Committee member including the Chair-person will not seek funding from a Committee in which he/she is a member. If any member applies for grant, such proposals will be evaluated separately outside the Committee in which he/she is a member.

### To be followed by the Applicant to the Grant/Award:

1. The applicant must refrain from suggesting referees with potential Conflict of Interest that may arise due to the factors mentioned in the specifications described above in Point No.2.
2. The applicant may mention the names of individuals to whom the submitted proposal should not be sent for refereeing, clearly indicating the reasons for the same.

### To be followed by the Officers dealing with Programs in DST:

While it is mandatory for the program officers to maintain confidentiality as detailed in point no. 6 above, they should declare, in advance, if they are dealing with grant applications of a relative or family member (including but not limited to spouse, child, sibling, parent) or thesis/ post-doctoral mentor or stands to benefit financially if the applicant proposal is funded. In such cases, DST will allot the grant applications to the other program officer.

### Sanction for violation

* 1. **For a) Reviewers / Committee Members and b)Applicant**

Any breach of the code of conduct will invite action as decided by the Committee.

### For Officers dealing with Program in DST

Any breach of the code of conduct will invite action under present provision of CCS (conduct Rules), 1964.

### Final Appellate authority:

Secretary, DST shall be the appellate authority in issues pertaining to conflict of interest and issues concerning the decision making process. The decision of Secretary, DST in these issues shall be final and binding.

### Declaration

**I have read the above “Policy on Conflict of Interest” of the DST applicable to the Reviewer/ Committee Member/ Applicant/ DST Scheme or Program Officer # and agree to abide by provisions thereof.**

I hereby declare that I have no conflict of interest of any form pertaining to the proposed grant \*

I hereby declare that I have conflict of interest of any form pertaining to the proposed grant

\*

\* & # (Tick whichever is applicable)

### Name of the Reviewer/ Committee Member or Applicant or DST Officer

*(****Strike out whichever is not applicable****)*

(**Signature with date**)

**Annexure I**

**Terms & Conditions of the Grant**

1. Approval of the Research Proposal and the grant released for it is for the specific Project sanctioned and the released grant should be exclusively spent on the Project within the stipulated period. The Institution may use funds obtained from any other Organisation with the concurrence of DST, for the Project. **Any un-spent balance out of the amount sanctioned must be surrendered to the Government of India through a crossed Cheque/ Demand Draft drawn in favour of Drawing & Disbursing Officer, DST.**
2. For permanent, semi-permanent assets acquired solely or mainly out of the project grant, an audited record in the form of a register shall be maintained by the Institute. The term “Assets” include (a) the immovable property acquired out of the grant; and (b) movable property of capital nature where the value exceeds Rs 1000/-. The Institute is required to send to the Department of Science & Technology a list of Assets acquired from the grant. The grant shall not be utilised for construction of any building unless specific provision is made for that purpose. Full infrastructural facilities by way of accommodation, water, electricity, communication, etc. for smooth implementation of the project shall be provided by the Institute.
3. All the Assets acquired from the grant will be the property of the Government of India and should not be disposed off or encumbered or utilised for purposes other than those for which the grant had been sanctioned, without the prior sanction of the DST.
4. At the conclusion/ termination of the project, the Government of India will be free to sell or otherwise dispose off the Assets which are the property of the Government. The Institute shall render to the Government necessary facilities for arranging the sale of these assets. The Government of India has the discretion to gift the Assets to the Institutions or transfer them to any other Institution if it is considered appropriate.
5. The Institution/PI will furnish Six Monthly Progress Report (Annexure-V) (5copies) of the work on the Project on half-yearly basis (i.e. if the date of start of a project is 12.09.07 the first Six Monthly Technical Progress report shall be for the period 12.09.07to31.03.08, the next will be from 01.04.08 to 30.09.08 and so on). In addition, the DST may designate a Scientist/Specialist or an Expert Panel to visit the Institution periodically to review the progress of the work being carried out and to suggest suitable measures to ensure realisation of the objectives of the Project. During the implementation of the Project the Institution will provide all facilities to the visiting scientist/ specialist or the Expert Panel by way of accommodation, etc. at the time of their visit. In case of exceptional circumstances, request for extension for time period must be submitted to DST six months prior to the approved date of completion of the project (Annexure-VII). On completion of the Project, submit the final statement of Expenditure (Annexure–II) along with utilization certificate (Annexure –III) and ten copies of self contained Project Completion Report (Annexure-VI ) as per DST format.
6. At the time of seeking further installment of the grant, The Institution/PI has to furnish the following documents:
   1. Statement of Expenditure (SE) (Annexure- II) and Utilisation Certificate (UC) (Annexure-III) for financial year upto 31st March (in original or copy if sent earlier)
   2. An authenticated up-to-date Statement of Expenditure (annexure-II ) including Committed Expenditure for the Project on the date of seeking further installment.
7. Request for specific approval of the Department to **carry forward** the un utilized grant to the next financial year for utilisation for the same Project, should be sent along with SE & UC, after completion of the financial year.

### The Comptroller & Auditor General of India, at his discretion, shall have the right of access to the books and accounts of the Institution maintained in respect of the grant received from the Government of India.

1. The Institution will maintain separate audited accounts for the Project. If it is found expedient to keep a part or whole of the grant in a bank account earning interest, the interest thus earned should be reported to the DST and should be reflected in the Statement of Expenditure.TheinterestthusearnedwillbetreatedasacredittotheInstitutiontobeadjusted towards further installment of the grant.
2. The Institution will not entrust the implementation of the work (except the out-sourced part as approved) for which the grant is being sanctioned to any other institution nor will it divert the grant receipts to other institutions as assistance. In case the Institution is not in a position to implement or complete the Project, it should, forth with, refund to the DST the entire grant received by it or the balance grant with it in favour of DDO, DST.
3. All the personnel including Research personnel appointed under the project, for the full/ part duration of the project, are to be treated as temporary employees and will be governed by the Administrative rules/ service conditions (for leave, TA/DA etc) of the implementing Institute.TheyarenottobetreatedasemployeesoftheGovernmentofIndiaandtheDSTwill have no liability, whatsoever, for the project staff after the completion of the Project duration.
4. For the expeditious implementation of the research Project, the PI will take the assistance of the Institution in the process of selection and appointment of staff and payment to them. Scale and emoluments for the posts not covered under DST’s OM are governed by the norms prevalent in the implementing Institution or as agreed upon in consultation with the DST.
5. **The DST reserves the right to terminate the project at any stage if it is convinced that the grant has not been properly utilized or satisfactory progress is not being made**.
6. **The Project becomes operative with effect from the date on which the Draft/ Cheque is received by the implementing Institution.** This date should be intimated by the Institution authorities/ Principal Investigator to the DST. *It will, in no case be later than one month after the receipt of the draft/ cheque by the Institution.*
7. If the Principal Investigator (PI) to whom a grant for a project has been sanctioned wishes to leave the Institution where the project is based, the PI/Institution will inform the DST of the same and in consultation with the DST, evolve steps to ensure successful completion of the Project, before the PI is relieved
8. The data pertaining to the project should be systematically collected, scientifically documented and submitted to DST which later would be placed in public domain. This clause would not be applicable for the projects where legal protection of the know–how generated is felt necessary.
9. Investigators wishing to publish technical/scientific papers based on the research work done under the project should acknowledge the assistance received from the DST, indicating the scheme. Investigators are expected to publish some of the research papers emerging out of the Project work in leading Indian Journals.
10. If the results of research are to be legally protected, the results should not be published without securing legal protection for the research results. For projects identified to have a distinct potential for generating know-how, in the form of product/ process, that could be protected through patenting, copyrights etc., the PI should carefully follow the “**Guidelines/Instructions for Technology Transfer and Intellectual Property Rights”** provided in the **Guidelines for Implementing Research Projects** booklet issued by the DST. [ [http://www.tifac.org.in](http://www.tifac.org.in/)] For further information/ clarification on this subject- The Director, Technology Information, Forecasting and Assessment Centre (TIFAC), Patent Facilitating Cell, Vishwakarma Bhawan, Shaheed Jeet Singh Marg, New Mehrauli Road, New Delhi- 110016, E-mail: [tifac@nda.vsnl.net.in,](mailto:tifac@giasdl01.vsnl.net.in) may be contacted.

# STATEMENT OF EXPENDITURE: GRANTS-IN-AID GENERAL (REVENUE)

REQUEST FOR ANNUAL INSTALMENT WITH UP-TO-DATE STATEMENT OF EXPENDITURE

1. Sanction Letter/ Order No and date of sanctioning the project:
2. Total Project Cost:

(Sanctioned/ Revised Project Cost, if applicable)

1. Date of Commencement of Project:
2. Date of Completion of Project:
3. Statement of Expenditure:

(Month wise expenditure incurred during current FY)

|  |  |
| --- | --- |
| **Month & Year** | **Expenditure incurred/committed** |
|  |  |

1. Grant received in each year (financial year):
   1. 1st Year :
   2. 2nd Year:
   3. 3rd Year:
   4. 4th Year:
   5. Interest, if any:
   6. Total (a+b+c+d):

**Statement of Expenditure**

## **(to be submitted financial yearwise ie. DOS\* to 31st March of that financial year say20XX, 01-04-20XX till 31.03.20XX+1year and so on)**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Sr No**  **(I)** | **Sanction Heads**  **(II)** | **Funds Allocated (Indicate sanctioned or revised)**  **(III)** | **Funds Released by DST RS.**  **(IV)** | **Expenditure Incurred** | | | **Total (V+VI+VII)**  **Rs.** | **Balance as on date Rs.** | **Requirement of funds**  **Rs.** | **Remarks (If any)** |
| **1st Year (DOS to 31st March next year)**  **(V)** | **2nd Year (1st April to 31st March next year) (VI)** | **3rd Year (1st April to 31st March next year) (VII)** |
| **1.** | **Manpower costs** |  |  |  |  |  |  |  |  |  |
| **2.** | **Consumables** |  |  |  |  |  |  |  |  |  |
| **3.** | **Travel** |  |  |  |  |  |  |  |  |  |
| **4.** | **Contingencies** |  |  |  |  |  |  |  |  |  |
| **5.** | **Others, if any** |  |  |  |  |  |  |  |  |  |
| **6.** | **Overhead expenses** |  |  |  |  |  |  |  |  |  |
| **7.** | **Total** |  |  |  |  |  |  |  |  |  |
| **8.** | **Bank Interest received FY XX to XX** |  |  |  |  |  |  |  |  |  |

**Amount to be refunded/ reimbursed (whichever is appropriate): Rs**

Name and Signature of Principal Investigator: Date:

## **\* DOS : Date of Start of Project**

Signature of Competent financial/ audit authority: (with seal) Date:

# STATEMENT OF EXPENDITURE: GRANTS FOR CREATION OF CAPITAL ASSETS

REQUEST FOR ANNUAL INSTALMENT WITH UP-TO-DATE STATEMENT OF EXPENDITURE

1. Sanction Letter/ Order No and date of sanctioning the project:
2. Total Project Cost:

(Sanctioned/ Revised Project Cost, if applicable)

1. Date of Commencement of Project:
2. Date of Completion of Project:
3. Statement of Expenditure:

(Month wise expenditure incurred during current FY)

|  |  |
| --- | --- |
| **Month & Year** | **Expenditure incurred/committed** |
|  |  |

1. Grant received in each year (financial year):
   1. 1st Year :
   2. 2nd Year:
   3. 3rd Year:
   4. 4th Year:
   5. Interest, if any:
   6. Total (a+b+c+d):

**Statement of Expenditure**

## **(to be submitted financial yearwise ie. DOS\* to 31st March of that financial year say20XX, 01-04-20XX till 31.03.20XX+1year and so on)**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Sr No**  **(I)** | **Sanction Heads**  **(II)** | **Funds Allocated (Indicate sanctioned or revised)**  **(III)** | **Funds Released by DST RS.**  **(IV)** | **Expenditure Incurred** | | | **Total (V+VI+VII)**  **Rs.** | **Balance as on date Rs.** | **Requirement of funds**  **Rs.** | **Remarks (If any)** |
| **1st Year (DOS to 31st March next year)**  **(V)** | **2nd Year (1st April to 31st March next year) (VI)** | **3rd Year (1st April to 31st March next year) (VII)** |
| **1.** | **Equipments** |  |  |  |  |  |  |  |  |  |
| **2.** | **Total** |  |  |  |  |  |  |  |  |  |
| **3.** | **Bank Interest received FY XXXX-**  **XX** |  |  |  |  |  |  |  |  |  |

**Amount to be refunded/ reimbursed (whichever is appropriate): Rs**

Name and Signature of Principal Investigator:

Date:

Signature of Competent financial/ audit authority: \_\_\_\_\_\_

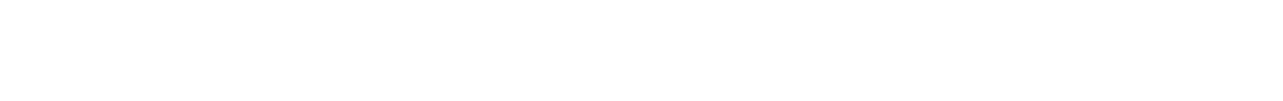
(with seal) Date: \_

## **\* DOS : Date of Start of Project**

**\* Indicate sanctioned /revised allocation as applicable.**

1. **Expenditure under the sanctioned heads, at –any point of time, should not exceed funds allocated under that head, without prior approval of DST i.e. Figures in Column (V) should not exceed corresponding figure in Column(III).**
2. **Utilisation Certificate for each financial year ending 31st March has to be enclosed, along with request for carry-forward permission to nextyear.**

Signature of Competent financial/ audit authority: (with seal) Date:



**Annexure III**

**FORM GFR 12A**

**GENERAL FINANCIAL RULES2017**

**Ministry ofFinance Department ofExpenditure**

**GFR 12 – A**

[(See Rule 238 (1)]

**FORM OF UTILIZATION CERTIFICATE**

**FOR AUTONOMOUS BODIES OF THE GRANTEE ORGANIZATION**

UTILIZATION CERTIFICATE FORTHEYEAR in respect

of recurring/non-recurring

GRANTS-IN-AID/SALARIES/CREATION OF CAPITAL ASSETS

1. Name of the Scheme......................................................................................

2. Whether recurring or non-recurring grants.......................................................

1. Grants position at the beginning of the Financial year
   1. Cash in Hand/Bank
   2. Unadjusted advances
   3. Total
2. Detailsofgrantsreceived,expenditureincurredandclosingbalances:(Actuals)

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Unspent Balances of Grants received years [figure as at Sl. No.  3  (iii)] | Interest Earned thereon | Interest deposited back to the Govern- ment | Grant received during the year | | | Total Available funds (1+2-  3+4) | Expenditure incurred | Closing Balances (5-6) |
| 1 | 2 | 3 | 4 | | | 5 | 6 | 7 |
|  |  |  | Sanction No. (i) | Date  (ii) | Amount  (iii) |  |  |  |
|  |  |  |  |  |  |  |  |  |

Component wise utilization of grants:

|  |  |  |  |
| --- | --- | --- | --- |
| Grant-in-  aid– General | Grant-in-  aid– Salary | Grant-in-aid–  creation of capital assets | Total |
|  |  |  |  |
|  |  |  |  |

Details of grants position at the end of the year

1. Cash in Hand/Bank
2. Unadjusted Advances
3. Total

Certified that I have satisfied myself that the conditions on which grants were sanctioned have been duly fulfilled/are being fulfilled and that I have exercised following checks to see that the money has been actually utilized for the purpose for which it was sanctioned:

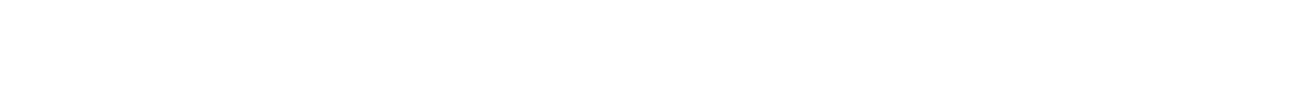
1. The main accounts and other subsidiary accounts and registers (including assets registers) are maintained as prescribed in the relevant Act/Rules/Standing instructions (mention the Act/Rules) and have been duly audited by designated auditors. The figuresd epicted abovetally with the audited figures mentioned in financial statements/accounts.
2. There exist internal controls for safeguarding public funds/assets, watching outcomes and achievements of physical targets against the financial inputs, ensuring quality in asset creation etc.& the periodic evaluation of internal controls is exercised to ensure their effectiveness.
3. To the best of our knowledge and belief, no transactions have been entered that are in violation of relevant Act/Rules/standing instructions and scheme guidelines.
4. The responsibilities among the key functionaries for execution of the scheme have been assign edinclear terms and are not general in nature.
5. The benefits were extended to the intended beneficiaries and only such areas/districts were covered where the scheme was intended to operate.
6. The expenditure on various components of the scheme was in the proportions authorized as per the scheme guidelines and terms and conditions of the grants-in-aid.
7. It has been ensured that the physical and financial performance under (name of the scheme has

been according to the requirements, as prescribed in the guidelines issued by Govt. of India and the performance/ targets achieved statement for the year to which the utilization of the fund resulted in outcomes given at Annexure–I duly enclosed.

1. The utilization of the fund resulted in outcomes given at Annexure–II duly enclosed (to be formulated by the Ministry/Department concerned as per their requirements/specifications.)
2. Details of various schemes executed by the agency through grants-in-aid received from the same Ministry or from other Ministries is enclosed at Annexure–II (to be formulated by the Ministry/Department concerned as per their requirements/specifications).

Date: Place:

Signature



**FOR GFR12A**

**GENERAL FINANCIAL RULES 2017**

**Ministry of Finance Department of Expenditure**

Name..........................................................

Chief Finance Officer (Head of the Finance)

(Strike out inapplicable terms)

Signature

Name.......................................................

Head of the Organisation

### Annexure – IV

**COST DETAILS OF PERMANENT EQUIPMENT/ ASSESTS**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Sl. No | Name of Equipment Asset with model Name, etc and data  of procurement | Sanctioned amount Rs. | Actual Expenditure (\*) FE Rs. | Other Expenses (\*\*) *If any* | Utilisation Rate (%) |
|  |  |  |  |  |  |

(\*) This should include only the cost of equipment, insurance and freight charges.

(\*\*) Other expenses such as bank charges agency commission etc should be avoided through appropriate negotiations. If unavoidable expenses incurred, the same may be indicated.

### Annexure- V

**Optimal Water Use in Industrial Sector**

**SIX MONTHLY PROJECT PROGRESS REPORT**

*(Five copies to be submitted)*

### DST File No.:

* 1. **Project Title:**
  2. **Principal Investigator:**
  3. **Date of Commencement:**
  4. **Approved Date of Completion:**
  5. **Progress Report Serial No:**
  6. **Reporting Period:**
  7. **Approved objectives:**
  8. **Accomplishments in Terms of Activities for the Review Period:**

|  |  |  |
| --- | --- | --- |
| **Activity** | **Progress** | **Responsible Organisation** |
|  |  |  |
|  |  |  |
|  |  |  |

* 1. **Accomplishment in Terms of Milestone for the Review Period:**

|  |  |  |
| --- | --- | --- |
| **Milestone** | **Target month** | **Progress** |
|  |  |  |
|  |  |  |
|  |  |  |

* 1. **A brief Description of Technical/Scientific Achievement for the period:**

*( Give 200 word Summary in bulleted format)*

### Shortfalls in Achievements of Activities for the Period:

|  |  |  |
| --- | --- | --- |
| **Activity** | **Shortfall (***if any***) in Specific**  **Terms** | **Responsible Organisation** |
|  |  |  |
|  |  |  |
|  |  |  |

* 1. **Journal publication during the period:**

|  |  |  |
| --- | --- | --- |
| **Title of the paper** | **Journal, Issue, etc.** | **Authors** |
|  |  |  |
|  |  |  |
|  |  |  |

* 1. **Presentations in Symposia/ Conferences during the period**

|  |  |  |  |
| --- | --- | --- | --- |
| **Title of the paper presented** | **Symposium/**  **Conference** | **Dates of the**  **Symp/Conf.** | **Authors** |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

* 1. **Patents Filed during the period:**
     1. **:** Title:
     2. Inventors:
     3. Filed on:
     4. Granted on:

### Other Achievements during the period:

*(New Facilities created, HRD, Demonstrations, Social Benefits, Notable Service Rendered)*

### Any other comment of Significance:

* 1. **Financial Status on the Day of Reporting:**
     1. Amount Sanctioned:
     2. Amount Received:
     3. Manpower Sanctioned:
     4. Manpower in position:

### Action taken on the observation of the Project Review Committee in its preceding Meeting

|  |  |
| --- | --- |
| **Observation** | **Action Taken** |
|  |  |
|  |  |
|  |  |

**21. Status of Shortfalls of all the preceding Reviews:**

**Signature of the PI: Name of the PI :**

**Place :**

**Date :**

**Annexure- VI**

PROJECT COMPLETION REPORT

Ten bound copies of the Project Completion Report be submitted. Each copy should consist of part A- Summary Report and Part- B Comprehensive Report. Also submit one soft copy of the completion report and a poster of approx. size (4 feet X 6 feet) of the salient features of the achievements made in the project.

The Cover page should have following details: DST File No.

1. Project Title:
2. Duration of Project: From To
3. Principal Investigator: Name :

Institute :

1. Co- Principal Investigator: Name :

Institute :

1. Collaborating Organizations:

|  |  |  |
| --- | --- | --- |
| Organization | Team members | Activities/Tasks Assigned |
|  |  |  |
|  |  |  |
|  |  |  |

### Part A- Summary Report

1. Project Objectives:

|  |  |  |
| --- | --- | --- |
| Objectives as per the approved Project | Fully/Achieved/Partially  Achieved *(indicated shortfall)* | Reason for partial Achievement |
|  |  |  |
|  |  |  |
|  |  |  |

1. Deliverables:

|  |  |  |
| --- | --- | --- |
| Objectives as per the  approved Project | Fully/Partially/ Not  Achieved | Reason for partial Non  Achievement |
|  |  |  |
|  |  |  |
|  |  |  |

1. Specific Benefits/Outcome:
2. Patent, if any
3. Product/Process developed
4. List of Publications arising from the project

*(Indicate Impact Factors of the Journals: attach Copies of the Papers)*

1. Linkages developed
2. Manpower trained, give details.
3. Summary of significant S&T Achievements

*(Provided in bullet form)*

1. Project Budget*(Final)*
2. SuggestionsforUtilizationofProjectOutcome,*(Givetangibleroadmap,namespecific Industrial Units)*

Date ( Signature of PI)

Annexure VI Contd.

PROJECT COMPLETION REPORT

Part B- Comprehensive Report

(The Comprehensive Report should be precise in details and self contained)

* 1. Project Title:
  2. Product/Process as an outcome of the project, identify Beneficiaries.
  3. Scientific Description of the Product/Process. Give Specifications/Standards for the same.
  4. Methodology adopted for Development of the product/process (State briefly in 300words).
  5. Scientific/Technological Formulation giving underlying Basis (Provide sufficient details)
  6. Further Work required, if any to get full Benefits or enhance Utilization.
  7. Recommendations for Utilization of the product/process. Give Concrete Steps.

### Signature of the PI ………………………………………..

**Date …………………………………………………………..**

**Name of the PI …………………………………………….**

**Email :**

**Telephone no.**

**Place ………………………………………………………..**

**Annexure - VII**

# REQUEST FOR EXTENSION

*(5 Copies to be Sent Six Months Prior to the Date of Expiry of the Project)*

1. **DST Reference No :**
2. **Name of the Investigator :**
3. **Title of the Project**

**4 Approved duration of the Project from------------------------------to---------------**

**5 Requested extension from--------------------------------------------------to-----------**

1. **Original objectives (quoted from projectproposal) a**

**bc**

1. **Results achieved so far (in relation to attainment of objectives)**
2. **Clear statement of objectives that have not been achieved so far but will be achieved during the extended period with Milestones.**
3. **Financial implications:**
   1. **Total Sanctioned Amount:**
   2. **Total Expenditure upto last month:**
   3. **Expected Expenditure during extended period:**
      1. **Salaries (at the existing level)**

**Existing level means average of last 6 to12 months expenditure**

* + 1. **Consumables (at the existing level)**
    2. **Travel (if absolutely necessary)**
    3. **Contingencies**
  1. **Expected amount to be refunded to DST**

**OR**

**Expected amount in addition to sanctioned amount**

**Name & Signature of the PI Date:**

*(\*Please refer to DST website for latest updates on manpower emoluments and rest.)*