

## **FORMATS FOR SUBMISSION OF R&D PROJECTS (To be filled by applicant)**

### **1. Project Title :**

Project title should be within 150 characters. (Underline the key words).

### **2. Broad Subject:**

### **3. Sub Area:**

### **4. Duration in months**

Expected total duration of the project may be expressed in months. Proposed duration should normally not exceed 36 months.

### **5. Total Cost**

### **6. Project Category: Basic Research Applied Research (Process/Product Development) Technology Development, Any other**

The Investigator should indicate the category of the project in order to peer review the proposal is a justifiable way.

### **7. Principal Investigators and Co-Investigators Designation, Address, Contact no.**

### **8. Project summary (maximum 150 words)**

(Written in telegraphic language. the summary should be a self-contained description of the research activity including (a) research objectives (b) methodology to be adopted and (c) expected outcome of the project.)

### **9. Key Words (maximum 10)**

Please suggest not more than ten keywords that best describe the project. This is to facilitate systematic information storage and retrieval.

## **10. Technical details**

## **11. Introduction (under the following heads)**

### **I. Origin of the proposal**

### **II. Definition of the problem**

Please give precise technical statement of only those problems which the project is expected to cover within the specified duration (normally 3 years).

### **III. Objective**

Instead of an essay, it is suggested that the objectives be spelled out point by point in telegraphic language keeping in view the definition of the problem outlined.

## **12. Review of status of Research and Development in the subject**

### **I. International status**

### **II. National status**

## **13. Importance of the proposed project in the context of current status**

The importance of the Project should be brought out in this section in the light of the international and national state of knowledge on the subject. This could be done in two parts:

(a) Matters relating to scientific and technical advancement of knowledge.

(b) Issues concerning application of the new knowledge to socio-economic advancement of the country.

## **14. Review of expertise available with proposed investigating group/institution in the subject of the project**

The section is essentially to summaries the background of the investigators to establish credential for undertaking the project and to highlight relevance of the project to the research already going on in the sponsoring institution.

## **15. Patent details (domestic and international)**

Mention may also be made of any patents being filed in the area along with its brief details including the patent no, title of the patent, assignee details, year of grant, country where granted.

## **16. Work plan**

### **16.1. Methodology**

It is essential that from this statement the other experts in the field should get a clear understanding of the research technique to be employed in the project as distinct from data/sample collection activities and routine activities. Further, the description should indicate precisely how the stated objectives will be achieved.

### **16.2. Organization of work elements**

In this section the entire project activity is to be broken down to specific work elements in consonance with the objectives and methodology defined in the earlier sections. While doing so, equal emphasis should be given to

(a) Technical work elements, such as designing the experiment/model, making observations/calculations, etc.

(b) Administrative work elements e.g. selection of equipment and obtaining quotations, obtaining certificates, recruitment of staff etc.

Further, for multi-institutional projects, this section should be utilized to indicate the distribution of functional responsibilities between the principal and collaborating institution(s) and the mechanism for coordination.

### **16.3. Time schedule of activities giving milestones**

On the basis of work elements identified earlier, the time schedule should be drawn. Here specific indications of milestones would be worthwhile. These milestones will help in periodic evaluation of the progress of the project.

### **16.4. Suggested plan of action for utilization of research outcome expected from the project.**

It is necessary to widely disseminate the research results and to facilitate their use by other teaching and research communities and industries. The intent of this section is to get an idea of how the interaction between researchers and potential users of research results could possibly be initiated, stimulated and maintained.

In this light therefore, a utilization plan is solicited.

## **17. BUDGET ESTIMATES: SUMMARY**

	Item	Budget			(in Rupees)
		1st Year	2nd Year	3rd Year	Total
<b>A.</b>	<b>Recurring</b>				
	<b>1. Salaries/wages</b>				
	<b>2. Consumables</b>				
	<b>3. Travel</b>				
	<b>4. Other costs</b>				
<b>B.</b>	<b>Equipment</b>				

	<b>Grand total (A+B)</b>				
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**N.B. Entries here should match; justification for each item is to be given as under:**

Summary of the budget may be prepared. The estimates of costs of different items involved should be as realistic as possible. All costs are to be expressed in Indian rupees.

### **18. BUDGET FOR SALARIES/WAGES**

		<b>BUDGET</b>			<b>(in Rupees)</b>
		<b>1st Year(m.m.*)</b>	<b>2nd Year (m.m.)</b>	<b>3rd Year (m.m.)</b>	<b>Total (m.m.)</b>
<b>Designation &amp; number of persons</b>	<b>Monthly Emoluments</b>				
<b>Total</b>					

**\*m.m.:man months to be given within brackets before the budget amount**

It is expected that the major part of the work would be carried out by the PI and the CO-PI. However, some additional scientific and technical manpower may be asked for working full/part time on the project. The manpower requirement may be carefully assessed taking into account the level of personnel required and their likely availability. The salary structure and emoluments etc. will be as prevalent at the parent Institution for that category of personnel.

### 19. Justification for the manpower requirement.

### 20. Budget For Consumable Materials

		BUDGET			(in Rupees)
Item		1st Year	2nd Year	3rd Year	Total
	Q*				
	B**				
Total	B				
	F				

**\*Q: Quantity or number, \*\* Budget**

The budget should clearly indicate the costly consumable items that would be required on a continuing basis or intermittently during the implementation of the project.

### 21. Justification for costly consumable

### 22. Budget For Travel

		Budget			(in Rupees)
		1st Year	2nd Year	3rd Year	Total
	Travel (Only inland travel)				

### 23. Justification for intensive travel, if any.

The Department provides grants under this head to cover the travel requirement of the Investigator, Co-Investigator and the research personnel, working on the project, in connection with the project work like literature survey, monitoring meeting, etc.

This travel is within the country. In case of projects involving intensive travel, the requirement may be justified by the PI.

## 24. BUDGET FOR OTHER COSTS/CONTINGENCIES

		BUDGET			(in Rupees)
		1st Year	2nd Year	3rd Year	Total
	<b>Other costs/Contingency costs</b>				

Some projects may have special requirements and these requirements could be of computer time, payments for using specialized instrumentation facilities etc. Costs for such requirements are to be indicated, based on realistic estimates, in this section specifying the items. Contingencies are meant to cover incidental and other miscellaneous expenditure.

## 25. Justification for specific costs under other costs, if any.

## 26. Budget For Equipments

Sl. No.	Generic name of the Equipment along with make & model	Imported/Indigenous	Estimated Costs (in Foreign Currency also)*	Spare time for other users (in %)

**\* includes transport, insurance and installation charges.**

Specifically list all items of permanent equipment costing Rs.50000/- or above, or requiring import. Other minor items

may be clubbed. Include provisions for installation charge, inland transport insurance etc. in the estimated cost.

In case of a demand for import of equipment, give reasons why indigenous models, if available cannot be used.

**27. Justification for the proposed equipment.**

**28. Time Schedule of Activities through BAR Diagram**

**29. List of facilities being extended by parent institution(s) for the project implementation.**

Basic infrastructural facilities and equipment that would be extended by the institute to the project should be recorded. Please make sure that these facilities and equipment will actually be available during execution of the project.

**A) Infrastructural Facilities:**

Sr. No.	Infrastructural Facility	Yes/No/ Full or sharing basis	Not
1.	Workshop Facility		
2.	Water & Electricity		
3.	Laboratory Space/ Furniture		
4.	Power Generator		
5.	AC Room or AC		
6.	Telecommunication including e-mail & fax		
7.	Transportation		
8.	Administrative/ support		Secretarial
9.	Information facilities like Internet/ Library		



<b>10.</b>	<b>Computational facilities</b>	
<b>11.</b>	<b>Animal/ Glass House</b>	
<b>12.</b>	<b>Any other special facility being provided</b>	

**B. Equipment available with the Institute/ Group/ Department/ Other Institutes for the project:**

<b>Equipment available with</b>	<b>Generic Name of Equipment</b>	<b>Model, Make &amp; year of purchase</b>	<b>Remarks including accessories available and current usage of equipment</b>
<b>PI &amp; his group</b>			
<b>PI's Department</b>			
<b>Other Inst. In the region</b>			

**30. Detailed Bio-data of the Investigator(s)/Co-Investigator(s) including Name, Address, Date of Birth, Institution's Address etc.**

**Academic Qualifications (University/College from where attained, year of passing, class, Thesis title etc.)**

**Publications list (Title of paper, authors, Journal details, pages, year etc.)**

## **Patent list, if any**

## **List of Projects implemented**

Detailed Biodata of the Principal Investigator and all other Investigators who are already in position and available for the project are to be given here.

### **31. Details of Research Projects being implemented/ completed/ submitted by the Investigator(s)/ Co-Investigators including Investigator(s) Name & Institute Project Title**

#### **Project Status:**

**Completed-duration, period (from.... to.....), funding agency and total cost**

**On-going-duration, date of start, funding agency and total cost**

**proposed-duration, funding agency where submitted and total cost**

#### **Summary of the project**

**Major Results/ Highlights of the project including achievement (publications, patents etc.), for completed projects**

### **32. Any other relevant matter.**

**File No\*\* \_\_\_\_\_**

**1. Title :**

**2. Proposed Budget for 3 years :**

**2.1 Total :**

**2.2 Equipment:**  
(Please give list of major/  
minor equipment)

**2.3 Staff (proposed research staff) :**

**2.4 Other Recurring costs:**

**Consumable:**

**Travel:**

**Contingency:**

**Any other expenses:**

**3. Date of receipt\*\* :**

**4. PI Name, Designation & Address:**

**5. Date of Birth:**

**6. Co-Investigator(s) details:**

**7. Date of Birth(s) :**

**8. Other projects with the PI/Co-PI(s) :**

<b>Sr.No.</b>	<b>Title</b>	<b>Cost Rupees)</b> (in	<b>Duration</b>	<b>Agency</b>

**Cover sheet to be filled in by the Investigator**

**\*\* to be filled by CWDB.**

Annexure-1

**DOCUMENTS/ ENCLOSURES REQUIRED WITH THE PROPOSAL**

<b>ITEM</b>	<b>Number of copies</b>
a) Endorsement from the Head of Institution (on letter head)-	One
b) Certificate from Investigator(s)	One
c) Details of the proposal from section 1 to 32 (stitched) + one soft copy on	Two
d) Name and address of experts/institution interested in the subject/ outcome of the project.	One
e) Sheet containing sections 1 to 16	One
f) Cover Sheet by the Investigator	One

## ANNEXURE-2

Certificate from the Investigator

Project Title:

1. I/ We agree to abide by the terms and conditions of the **CWDB** research grant.
2. I/ We did not submit the project proposal elsewhere for financial support.
3. I/ We have explored and ensured that equipment and basic facilities (enumerated in **Section 29** ) will actually be available as and when required for the purpose of the projects. I/ We shall not request financial support under this project, for procurement of these items.
4. I/ We undertake that spare time on permanent equipment (listed in **Section 26**) will be made available to other users.

5. I/We have enclosed the following materials:

<b><u>Items</u></b>	<b><u>Number of copies</u></b>
a) Endorsement from the Head of Institution (on letter head)	One
b) Certificate from Investigator(s)	One
c) Details of the proposal from <b><u>Section 1 to 32 (stitched)</u></b> + one soft copy	<b>Two</b>
d) Name and address of experts/institution interested in the subject/outcome of the project.	One
e) Sheet containing <b><u>sections 1 to 16</u></b>	One
f) Cover sheet by the Investigator	One

Date:

Place:

Name and signature of Principal Investigator

## **Endorsement from the Head of Institution**

(To be given on letter head)

### **Project Title :**

1. Certified that the Institute welcomes participation of \_\_\_\_\_ as the Principal Investigator and \_\_\_\_\_ as the Principal Co-Investigator for the project and that in the unforeseen event of discontinuance by the Principal Investigator, the Principal Co-Investigator will assume the responsibility of the fruitful completion of the project (with due information to **CWDB**).

2. Certified that the equipment and other basic facilities as enumerated in **Section 29** 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.

Date:

Name and Signature of Head of Institution

Place:

NB : In regard to the research proposals emanating from scientific institutional laboratories under various scientific departments, the Head of institution is required to provide a justification indicating clearly whether the research proposal falls in line with the normal research activities of the institution or not and if not, the scientific reasons which merit its consideration by CWDB .