Proposals are invited for **Anvikshana** 



Grant-in- Aid Minor Research Project



# Rajiv Gandhi Proudyogiki Vishwavidyalaya

(University of Technology of Government of Madhya Pradesh) Bhopal Accredited with Grade 'A' by NAAC Airport Road, Bhopal. 462033

www.rgpv.ac.in

# RAJIV GANDHI PROUDYOGIKI VISHWAVIDYALAYA 'ANVIKSHANA': GRANT-IN- AID MINOR RESEARCH PROJECT

Rajiv Gandhi Proudyogiki Vishwavidyalaya is pleased to invite Research Proposals for the grant of Minor Research Projects during the current academic year i.e. 2023-24.

The proposal should reach the University on or before 15<sup>th</sup> December 2023.

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# **GUIDELINES FOR SUBMISSION OF MINOR RESEARCH PROJECT**

## **General Instructions:**

**Eligibility:** Faculty, Post-Doctoral Fellows, Doctoral Fellows, Post-Graduate Students, Under-Graduate Students of UIT and UTDs of Rajiv Gandhi Proudyogiki Vishwavidyalaya, Bhopal.

The Minor Research Proposal should be prepared strictly according to the format given in

the application for submission of proposal in the form of email to naac2022@rgpv.ac.in and onehard copy to The Director, IQAC, RGPV, Bhopal. The following documents should be enclosed with the proposal:

ANNEXURE – I – Latest Brief Resume

**ANNEXURE – II** – Forwarding of the Head of the Department (UIT) / Director (UTDs) on their official letter head.

**ENCLOSURE -I-** If facilities from Collaborating Laboratories/ Organizations are to be used, then a Letter of Consent from the Head of that institution/ organization allowing the use of such facilities.

**ENCLOSURE -II-** List of Publications (Papers & Books published / accepted) during the last five years.

#### **Guidelines for preparing Project Proposal:**

- Research work should not be repetitive of similar work done earlier either by the investigator or by any other person.
- The Project Proposal should have a *Brief Title* not exceeding one and halflines to clearly indicate its subject & aim.
- The introduction of the proposed research work must cover the Origin of Research Problem, Interdisciplinary Relevance, and Review of Research & Development in the subject (250 words).
- 4) Provide comprehensive background information about the project (500 words).
- 5) Review the published work in the area with appropriate references from national or international journals. Cite the major references most pertinent to the subject and justification to carry out the work in the light of the background information (1000 words).
- 6) The rationale behind carrying out the project should be clearly written as the justification for carrying out the proposed research. It should logically explain the reasons for carrying out the research work and explain how it will further add to our knowledge in the respective field or result in further application (250 words).
- Briefly describe the proposed Plan of Work. Describe in general the Techniques to be used (500 words).
- B) Give Details of Infrastructural Facilities like Water & Electricity, Laboratory Space, Equipment, Library, Administrative and Secretarial support, ICT Facilities, Computation and Documentation Facilities, etc (250 words).
- 9) List the facilities that will be extended to the investigator by implementing institution with details of available equipment and accessories to be utilized for the projects with the name of Equipment, Make, and Model. Mention whether it is available with investigator or

available in the Department or available elsewhere in the Institution or in the region with Collaborating Institutions (100 words).

- 10) If facilities from some other laboratories are to be used, mention the type of facilities and the name of the Collaborating institution where these will be available (100 words).
- 11) The investigator should write a brief conclusion of the project stating how completion of the project will enhance the understanding of the concerned subject and whether it will lead to any applications in the future (250 words).
- 12) Mention collaborations (Research institution/Industry), if intended (100 words).

#### **Guidelines for Preparing Budget:**

The Budget should be prepared for different heads of expenditure such as:

- 1) Consumables and Chemicals with information about their approximate costs.
- 2) Equipment: Request for small equipment (30% of the total cost of the project) will be considered.
- 3) Other expenditure such as Contingency and Travel within India, if needed, may be considered.
- The date of commencement of the Project will start from the date on which the University approves the Projects.
- 5) The Investigator/s will be governed by the rules and regulations of the University and will be under administrative control of the University for the duration of the Project.
- 6) The Investigator shall complete the project within the stipulated period. Head of the Institution will monitor the project and in case of failure to complete the Research Project, University may ask for the refund of the amount received as project grant.

Confine your project so as the study gets completed within the academic and financial Year.

Grant Utilization Certificate must be submitted to the University before  $31^{st}$  March and final project report must be submitted before  $30^{th}$  June of the Academic Year.

#### **Important Points:**

- After completion of the Research Project, Principal Investigator should submit report with a soft copy in the form of email to rgpvrdcell2023@gmail.com and two hard copies to The Director RGPV R & D Cell RGPV, Bhopal
- 2) Principal Investigators will be invited to give presentations of the proposed and completed projects before the Expert Committee.
- 3) The progress of the project will be monitored after six months of the commencement of the project. The utilization certificate and statement of expenditure should be submitted by the principal investigator. After the satisfactory progress of the project as reviewed by the Expert Committee, the next installment of the allocated grant will be released.
- Quality Research Projects recommended by the Expert Committee will be published on the website of the University along with one-page synopsis.
- 5) Researchers will be encouraged to publish their work in reputed National/International SCI Journals.
- 6) The Quality projects preferably incorporating Applied Research encouraging young researchers should be forwarded.
- Upper Limit of the Project Proposal duration should be up to 12 months and outlay should be up to Rs 5 Lakhs.
- 8) No Infrastructural Facilities will be granted.
- 9) Projects will be evaluated in the University by Expert Committee including two respective External Experts and Head/ Director of the concerned Department/ School under the Chairmanship of Honorable Vice Chancellor of RGPV, Bhopal.
- 10)The finalization of projects will be based on the order of merit of the evaluated proposals representing various branches.

- 11)Graduate students, Post Graduate Students, Doctoral Fellows, Post Doctoral Fellows, and Faculty members who have been awarded shall not apply in two consecutive years.
- 12) If the PI are Graduate students/ Post Graduate Students/ Doctoral Fellows/ Post Doctoral Fellows/ Contract Faculty, then a Mentor PI (Parmanent Faculty) is mandatory.

# **Project Submission:**

**One Copy** of the Research Proposal (**Application Format and ANNEXURE – I & II, ENCLOSURE- I & II**) along with the above documents and printout should be sent through **PROPER CHANNEL** (through Head of the Department/ Director) marking on the file with the following format.

1	Title of the Proposed Project	
2	Area of Research	
3	Approval Status of the Applicant (to be filled by the Head/Director of the Department/ School))	
4	Name of the Faculty	
5	Branch	
6	Name & Designation of the Principal Investigator with Full Address	
7	Email ID	
8	Mobile No.	
9	Grant Requested (Total Amount in Rs.)	

# APPLICATION FORMAT FOR SUBMISSION OF PROPOSAL FOR MINOR RESEARCH PROJECT

- ✓ In order to provide research support to Faculty from University this scheme of Minor Research Project is introduced.
- ✓ Researchers will be encouraged, under the scheme, to pursue research of high standard in frontier areas of Science, Engineering and Technology.

1	Basic Subject area of Research	
2	Title of the Proposed Project	
3	Approval Status of the Applicant (to be filled by the Head/Director of the Department/ School)	
4	Name of Faculty and Branch	
5	Name of the Principal Investigator	
6	Qualification of the Principal Investigator	
7	Designation of the Principal Investigator	
8	Total No. of Years of Service	
9	Teaching and Research Experience of Principal Investigator	
10	Name of the Co-Investigator	
11	Designation of the Co-Investigator	
12	Qualification of the Co-Investigator	

## **PART – A : GENERAL INFORMATION**

13	Name of the Department/ School	
10	-	
	where the proposal will be executed	
14	Full Address of the	
	Department/ School	
	a. Name of the Department/ School	
	b. Email-id of the Department/ School	
	c. Contact Number of the	
	Department/ School	
	Department/ School	
15	Details of Facilities provided / to be	
	made available at the Department/	
	School	
16	Whether the project or part of the	
	project is approved by the University	
	for the Doctoral Degree?	
	o Yes	
	○ No	
17	If Yes, Give details of Project	
	approved for Doctoral Degree	
	(Support with the necessary	
	document/s).	
18	Details of the Research project and	
	Research Funding received	
	(Major/Minor) from the last five years	
	(completed/ongoing projects).	
19	Grant Requested (Total Amount in	
	Rupees)	

PART -	<b>B</b> :	PROJECT	DETAILS
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1.	Details of the proposed project to be undertaken: (Attach additional Pages if required)							
	a) Origin, Need and Objective of the Research Proposal							
	b) Rationale for taking up the proposed project and its interdisciplinary							
	relevance							
	c) Review of Research and Development in thefield							
	d) Relevance to social benefit by this R&D in the proposed area							
	e) Work plan (including Detailed Methodology and Time Schedule)							
	f) Expected Results, Conclusion and Future plans							
2.	Collaboration for the proposed project (if any)							
3.	Details of financial requirements with justification							
	S. Head with justification Amount in Rs.							
	1. Equipment (minor) up to 30% of the proposed budget							
	2.     Consumables and Chemicals							
	3. Travel (within India)							
	4. Books & peripheral							
	5. Contingency							
	Total							
4.	Any other information in support of the proposed project							

# **PART C : Resume and Endorsement**

1.	Detailed Resume of the Principal Investigator as per Annexure - I
2.	Forwarding from the Head/ Director of the Department/ School as per Annexure – II.
3.	Forwarding from the Director of the UIT, RGPV, Bhopal for the applicants of UIT, RGPV, Bhopal as per Annexure-III

# ANNEXURE- I

# **Detailed Resume**

1	Name of the Applicant							
2	Mailing Address (Indicate Telephone, Fax, E-mail, etc.)							
3	Date of	f Birth						
4	Educat	ional Qualifica	tion (St	tarting fro	m Grad	luation	onwards)	
	Degree		Year	Subjects		entage		
5	Details period	of Professiona	l Train	ing and R	lesearch	n Expe	rience, specifying	
	S.No.	Professional Training/ Research Experience	Orga	anization	Peri	iod	Supporting document/s	
		<b>I</b>			From	То		
	Details of Employment (past & present)							
	S.No. Designation Organization Period Supporting docur					Supporting document/s		
					From	То		

	List of significant publications (Research Papers and Books) during last five years with details						
	S.No.	Title of the Paper/ Book	Name of t Journal/ Publicatio		r S	Supporting document/s/ Doi/ URL	
ss 6	Professional recognition, awards, fellow				ships rec	ceived	
	S.No.	Name of the Professiona recognition awards, fellowships	1	Organization		Supporting document/s	
7	Any ot	her informatio	on				

Place & Date

Signature of the applicant

# **ANNEXURE- II**

# (Forwarding from the Head of the Department/ Director of the School on their official letterhead)

#### Certified that

\_\_\_\_\_. And he /

she will assume full responsibility for implementing the project.

- II. The above research project / part of project is not funded by any other funding agency.
- III. The grant-in-aid received for the Research Project will be used to meet the expenditure of the project and the period for which the project has been sanctioned.
- IV. Institute undertakes the financial and other management responsibilities of the Project and undertake to submit Grant Utilization Certificate and Project Report to the University.
- V. The Institution will provide in-house equipment and basic infrastructure and other required facilities like administrative facilities to the investigator.

Place & Date

Signature with Seal of the Head of Department/ Director of the School

## **ANNEXURE-III**

(Forwarding from the Director of the UIT, RGPV on their official letterhead) (Applicable for the UIT applicants only)

#### Certified that

I. The Department/ School welcomes participation of Prof. / Dr. / Mr. / Ms. - \_\_\_\_\_\_, as the Principal Investigator in the Proposed Anvikshna Minor Research Project entitled

. And he /

she will assume full responsibility for implementing the project.

- II. The above research project / part of project is not funded by any other funding agency.
- III. The grant-in-aid received for the Research Project will be used to meet the expenditure of the project and the period for which the project has been sanctioned.
- IV. Institute undertakes the financial and other management responsibilities of the Project and undertake to submit Grant Utilization Certificate and Project Report to the University.
- V. The Institution will provide in-house equipment and basic infrastructure and other required facilities like administrative facilities to the investigator.

Place & Date

Signature with Seal of the Director of the UIT, RGPV, Bhopal

# **EVALUATION CRITERIA**

Scientific Thoughts and Principles (20%)	<ul> <li>A hypothesis or project design that is clear and well stated based on study and observation.</li> <li>An experimental procedure that is effective in testing the hypothesis, or an innovative design that is an effective solution to the problem posed, or a study designed to produce significant new insights.</li> <li>A demonstration of the deep knowledge of the scientific and/or</li> </ul>
	<ul> <li>engineering principles involved.</li> <li>A careful extrapolation from what was learned to the subject in general or to related subjects.</li> </ul>
Originality and Creativity (20%)	<ul> <li>An original problem or an original approach to an old problem.</li> <li>A creative approach to the design of the experiment, the innovation or the project overall.</li> <li>A creative use of materials and equipment.</li> <li>Creative or original thinking in the application and the interpretation of any data obtained.</li> </ul>
Thoroughness (10%)	<ul> <li>The purpose carried out to completion within the scope of the original intent.</li> <li>Complete covering of the problem.</li> <li>Familiarity with scientific literature in the studied field.</li> </ul>
Skill (10%)	<ul> <li>Design and Development</li> <li>Use of instruments/tools</li> <li>Has requisite skills</li> </ul>
Relevance (20%)	• Fundamentally suited to achieve the goals associated with the project.

	• Whether the project appropriately addresses an important development goal, took into account the strategic requirements.			
Cost-effectiveness (10%)	<ul> <li>Whether the proposed methodology is the cheapest way to arrive at the desired result.</li> <li>Consideration of the costs and expected benefits.</li> </ul>			
Communication (10%)	A good display providing the information of the project in a logical progression. Logical and enthusiastic oral presentation. Appropriate project report.			

## **Power Point Presentation Format**

- Introduction (1-5 slides)
- Rationale (1-2 slides)
- Objective/s (1 slide)
- Hypotheses (1-2 slides)
- Materials and Methods (1-5 slides)
- Expected outcomes (1-2 slides)
- Significance (1 slide)
- Budget Allocation (1 slide)
- References (1-2 slides)

# **Budget Allocation**

Sanction of the budget will be based on the following terms and conditions:

- 1. The below-listed items are **not** to be permitted under this Scheme:
  - ➤ Manpower.
  - Laptops, Computers, Workstations, etc.
  - > Free source license version software available with the University.

Facilities are already available in the respective Department/ School in the form of Equipment, Books, Periodicals, etc.

2. Software should be developed by the PI/ Mentor PI/ Co-PI and not outsourced to any company.

3. The license software should be procured on a perpetual basis, not a yearly basis.

4. Budget proposal should be based on the **justification in detail with Documentary Proof** in the form of a Budgetary Quote (at least one) of the recommended projects under Anvikshana (Grant-in-Aid) Minor Research Project according to the following table:

Heads (with justification)	1-6 Months (in Rs.)	7-12 Months (in Rs.)	Total (in Rs.)
Minor Equipment	(Up to 30% of the total cost)		
Consumables	(Up to 20% of the total grant)	(Up to 15% of the total grant)	
Contingency	(Up to 10% of the total grant)	(Up to 10% of the total grant)	
Travel within India	(Up to 5% of the total grant)	(Up to 10% of the total grant)	
Grand Total			