**DRDO/DFTM/DR/Form-02**

**SUMMARY OF PROPOSAL FOR DIRECTED RESEARCH GRANT**

**Directorate of Futuristic Technology Management (DFTM)**

Defence Research & Development Organisation (DRDO), Ministry of Defence,

3rd Floor, Old LASTEC Building, Metcalfe House, Delhi -110054

**(All fields are mandatory)**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Proposal (Title): | | | **(For DRDO Use Only)** | | | | | |
| Key words (4-5): | | | Received Date:……/……/……. | | | | | |
| Centre Affiliation: | | |
| Research Vertical: | | | DFTM File No: | | | | | |
| Project Category: | | |
| Project Duration: | | | Centre: | | | | | |
| Proposed Total Cost (Rs in Lakh): | | |
| Institute:  Type of institute: | | | Stake Holding DRDO lab(s): | | | | | |
| Collaborating Institutes:  Type of institute: Govt / Non-Govt / Private (\*) | | |
| **(\*)** For Private institute, attach recognition certificate from UGC/AICTE/Govt. bodies valid for at least 3 Years. | | | | | | | | |
|  | Principal Investigator (PI):  Name:  Designation:  Department:  Institution:  Date of Birth:  Email:  Phone: Fax:  Mobile:  Address: | 1. Co-Principal Investigators (Co-PI): NIL  |  | | --- | | 1. Name: | | Institute: | | Phone: | | E-mail: |  |  | | --- | | b) Name: | | Institute: | | Phone: | | E-mail: | | | | | | | | |
|  | **Executive Proposal Summary:** indicating, proposal synopsis, objectives, Goal & Impact, research methodology/approach, key technological challenges & innovative solutions, measurable milestones, deliverables (Appendix ‘A’ - 300-350 words) Attached | | | | | | | | |
|  | Project Deliverables/Output: | | 1. Name of collaborating/stake holding DRDO lab andScientist: | | | | | | |
| 7. | Two best publications in the field by the PI in last five years and brief references to any patents filed or technologies developed | | | | | | | | |
| 8. | If Startup/ Industry participation required, provide scope and justification. | | | | | | | | |
| 9. | Foreign Collaboration / travel for the PI and research fellow: No | | | | | | | | |
| 10. | Proposed expenditure on (in lakhs) | Year 1 | | | Year2 | Year3 |  |  | Line total |
|  | a) Staff: |  | | |  |  |  |  |  |
|  | b) List of Equipment (including spares thereof) |  | | |  |  |  |  |  |
|  | c) Operation and maintenance of equipment |  | | |  |  |  |  |  |
|  | d) Expendables |  | | |  |  |  |  |  |
|  | e) Workshop (Specific to project) |  | | |  |  |  |  |  |
|  | f) Travel |  | | |  |  |  |  |  |
|  | g) Contingencies |  | | |  |  |  |  |  |
|  | h) Visiting Faculty or Research Consultant(s) |  | | |  |  |  |  |  |
|  | i) Procured services (other than (g)) and metered utilities |  | | |  |  |  |  |  |
|  | j) Industry/ Startup Research |  | | |  |  |  |  |  |
|  | k) Institutional overheads @10% |  | | |  |  |  |  |  |
|  | **Column Total** |  | | |  |  |  |  |  |
| 11 | References to other ongoing projects with, or proposals made to, DRDO/other (including foreign) agencies/ DRDO centres :  Funding agency Amount (Rs.) Period Title | | | | | | | | |
| 12 | Cheque to be issued in favor of / ECS details: Attached | | | | | | | | |
|  | Administrative authority of host institution  forwarding proposal  (SIGNATURE WITH SEAL)  Name:  Designation:  Date: | | Principal Investigator (PI):  (SIGNATURE WITH SEAL)  Name:  Designation:  Date: | | | | | | |

**APPLICATION FOR FUNDING OF RESEARCH PROJECT**

Two hard copies, duly signed by PI & concerned administrative authority at appropriate places, to be submitted to:

The Director

Directorate of Futuristic Technology Management (DFTM)

Defence Research & Development Organisation (DRDO), Ministry of Defence

3rd Floor, Old LASTEC Building, Metcalfe House, Delhi -110054

**Appendix ‘A’**

**Executive Proposal Summary**

**Proposal Synopsis:**

**Objectives / Goals & Impact:**

**Research Methodology/Approach:**

**Key technological challenges & innovative solutions**:

**Potential Contribution and Relevance to DRDO:**

**Measurable Milestones:**

**Special Equipment/Facilities details, if any with features and justification:**

**Deliverables:**

**Section 'A'**

**(Detailed Information)**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1. | **Research Proposal Title (Make the title concise and Specific)** | | | | | | | |
| 2. | **Short Name or Acronym**  . | | | | | | | |
| 3. | **Type of Project:** | | | | | | | |
| 4. | **Centre Affiliation:** | **Research Vertical:** | | | | | | |
| 5. | **Proposed Duration with Justification** | | | | | | | |
| 6. | **Collaborating /Stake holding DRDO lab(s) and Scientist(s):**  Name & Designation of scientist: | | | | | | | |
| 7. | **Technical Appreciation:** | | | | | | | |
| a) | **Aim of the Research Proposal** | | | | | | | |
| b) | **Objectives/Scope** | | | | | | | |
| c) | **Scientific Importance of the Project** | | | | | | | |
| d) | **Relevance of the Project to DRDO** | | | | | | | |
| e) | **Brief review of the state-of-art in the field (National &International)** | | | | | | | |
| f) | **Competence Level /Previous work done in this or related fields:** | | | | | | | |
| g) | **Technical Plan/Methodology:** | | | | | | | |
| h) | **Key Technical Challenges of Research work**: | | | | | | | |
| i) | **Activity Bar chart and Milestones:** | | | | | | | |
| j) | **Innovation in Research Work:** | | | | | | | |
| k) | **Goals/Impact of Research Proposal**: | | | | | | | |
| l) | **Is the Proposal related to DRDO futuristic Applications**: | | | | | | | |
| 8. | **Deliverables/Outcome Specific to Project**: | | | | | | | |
| 9. | **Amount of grant proposed:** | | | | | | | |
| 10. | **Cost Break-up (with Justification):** | | | | | | | |
| Proposed expenditure on (in lakhs)⇓  during ⇒ | | | Year1 | Year2 | Year3 |  |  | Line Total |
| a) Staff : | | |  |  |  |  |  |  |
| b) List of Equipment  (including spares thereof) | | |  |  |  |  |  |  |
| c) Operation and maintenance of equipment | | |  |  |  |  |  |  |
| d) Expendables | | |  |  |  |  |  |  |
| e) Workshop (Specific to project) | | |  |  |  |  |  |  |
| f) Travel | | |  |  |  |  |  |  |
| g) Contingencies | | |  |  |  |  |  |  |
| h) Visiting Faculty or Research Consultant(s) | | |  |  |  |  |  |  |
| i) Procured services (other than (g)) and metered utilities | | |  |  |  |  |  |  |
| j) Industry/ Startup Research | | |  |  |  |  |  |  |
| k) Institutional overheads | | |  |  |  |  |  |  |
| Column Totals | | |  |  |  |  |  |  |

**Detail Justification:**

1. Staff (justification for hiring particular Designation and number of staff with pay and duration):
2. List of equipment proposed with budgetary quotations (Refer para 12 also):
3. Operations and Maintenance:
4. Expendables (Chemicals, Substrates, Glassware, photographic materials etc.):
5. Workshop (Specific to project):
6. Travel (only Domestic):
7. Contingencies (Postage, Stationary, typing, Misc. etc.):
8. Visiting Faculty, if any:
9. Procured services:
10. Industry/ Startup Research:
11. Institutional overheads:

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| 11. | **Facilities available for carrying out the proposed research work in Applicant's (a) Group, (b) Department, (c) Institution and (d) co-located DRDO lab** | | | | | | | | | |
| 12. | **Additional equipment required for the proposed work with price, budgetary quotations & justification (Refer Col 10 b. also)** | | | | | | | | | |
| 13. | **Facilities available for carrying out the proposed research work in Applicant's (a) Group, (b) Department, (c) Institution and (d) co-located DRDO lab** | | | | | | | | | |
| 14. | **Biographical sketch of investigator(s)** | | | | | | | | | |
| a) | Name: | | | | | | | | | |
| b) | Designation: | | | | | | | | | |
| c) | Date of Birth: | | | | | | | | | |
| d) | Education and Experience: | | | | | | | | | |
| e) | (Academic Qualifications (begin with bachelor degree) | | | | | | | | | |
| f) | Degree | | | University | | Subjects(s) | | Year | | |
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| g) | Other research training and experience especially establishing research qualification in area covered by this application including previous and present position.(two highlights) | | | | | | | | | |
|  | Institution | | Topic of work done | | | | | | Year | |
|  |  | |  | | | | | |  | |
|  |  | |  | | | | | |  | |
| i) | Field of major scientific interest: | | | | | | | | | |
| j) | Additional information (if any): | | | | | | | | | |
| 15. | **Research support for other projects (related to DRDO) /latest five projects of the applicant from various sources. (List all recent other research support to PI & Co-PI) (eg. DST, ISRO).** | | | | | | | | | |
| Name of Agency | | Title of Project | | | Total Amount | | Period of Support | | | Completed/on-going |
|  | |  | | |  | |  | | |  |
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| 16. | **Following Additional Information required for approval** | | | | | | | | | |
| (a) | Foreign travel for the PI and research Fellow with detailed justification and expenditure. | | | | | | | | | |
| (b) | Inviting and paying to NRI/Foreign Faculty/Researcher(s) placed at Institutes abroad | | | | | | | | | |
| (c) | Non-disclosure agreement with PI | | | | | | | | | |
| 17. | If start-up/ industry participation required, provide detailed scope and justification. | | | | | | | | | |
| 18. | For life sciences project a certificate to be attached ”I certify that Institutional ethical clearance and project approval (b) Clearance from the nuclear medicine committee of BARC and (c) Clearance from Institutional Bio safety committee have been obtained and relevant document are attached”  Projects involving DNA/genetic engineering work should be examined and certified by the Institutional Bio-Safety committee (IBSC), Lodhi Road, Delhi. | | | | | | | | | |
| 19. | A certificate to the effect that the Grantee institution shall maintain an account of its incomes arising out of commercial use and any royalty income shall be shared equally between DRDO and grantee institution. | | | | | | | | | |
| 20. | **List of Enclosures** :  **Certificate:** | | | | | | | | | |

**Section 'B'**

1. Name of institution submitting application:
2. Address:
3. Name, designation and full address of the official to whom cheques are to be mailed. / Provide ECS details.

**CERTIFICATE**

The undersigned agree to abide by the terms and conditions set forth for the Directed Research Grant and certify that basic necessary facilities for the proposed work are available and the same can be extended to the investigator. The proposal has not been submitted to or under consideration by any other funding agency, simultaneously.

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| --- | --- |
| Administrative authority of host institution  forwarding proposal  (SIGNATURE WITH SEAL)  Name:  Designation:  Date: | Principal Investigator (PI):  (SIGNATURE WITH SEAL)  Name:  Designation:  Date: |

Official stamp

University/institution