

ARDB Materials and Manufacturing Panel

Workshop and the Second Call for Proposals

May 17, 2024, 05 PM

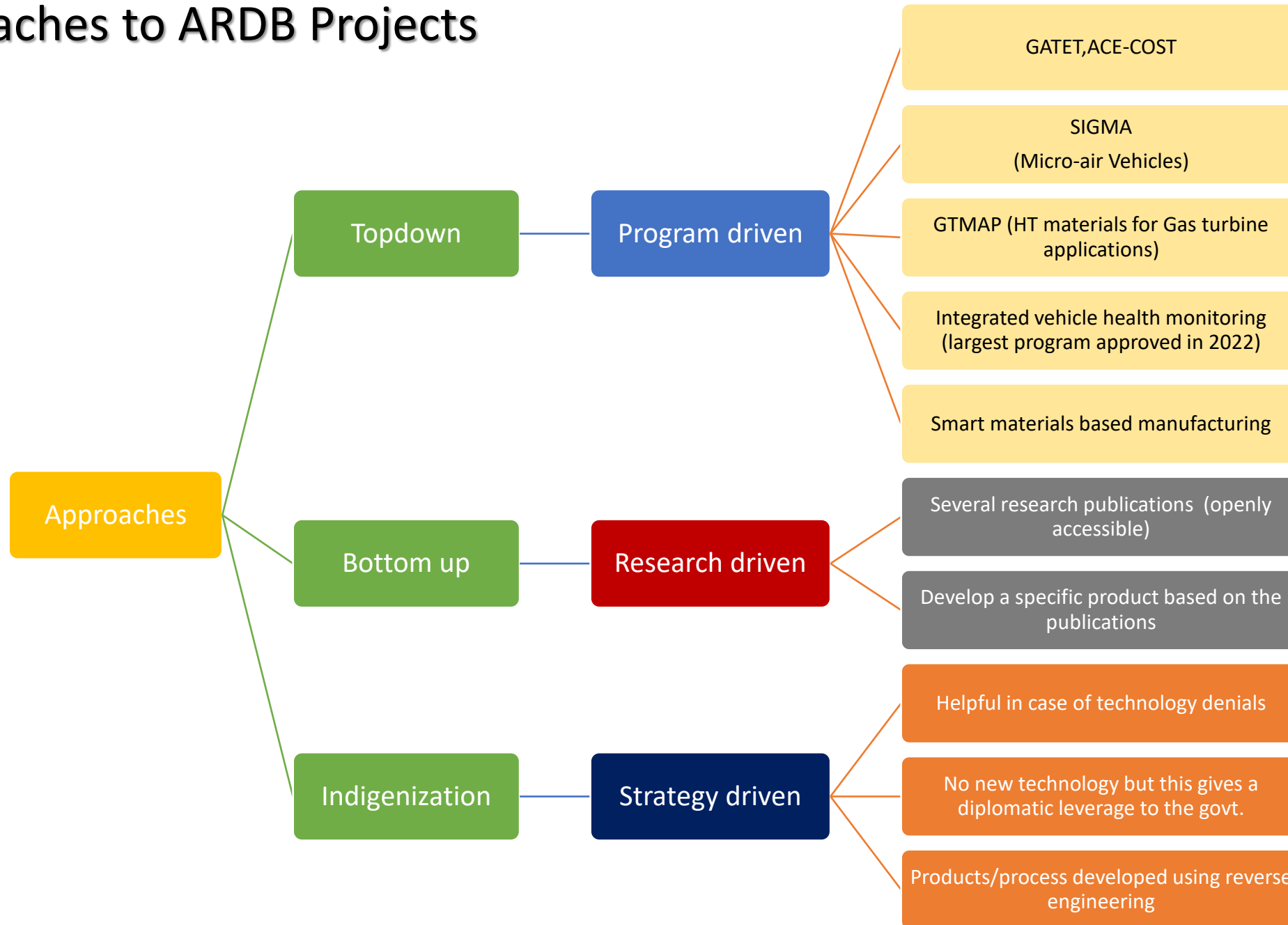
Indian Institute of Technology Guwahati

Prof. Suhas Joshi

Chairman, AR&DB, *Materials and Manufacturing* Panel

Director, Indian Institute of Technology Indore

Approaches to ARDB Projects



Materials Domains

Feedstock powder making for Additive Manufacturing

Nb/C103 powders

Ti alloy powders

Al 7XXX and 2XXX alloy powders

Inconel superalloy powders

Material characterization and mechanical properties

Ultra high temperatures

Cryogenic temperature

High strain rate loading

Static and dynamic loading conditions

Multiaxial loading

Ceramics and composites

SiC based ceramics and composites

TiB₂ based composites

Ceramic cores for aerospace components

Ceramic shell making

Smart materials

Self healing materials

Self reporting materials

Self repairing materials

Meta materials

Technical Textiles

Damping materials

Thermoelectric materials

Self cleaning materials

Sensors and actuator materials for SHM

Materials & Design

AI/ML based design

Computational materials design

Process modelling and simulation

Integrated computational materials design

Materials for quantum computing

Cellular materials

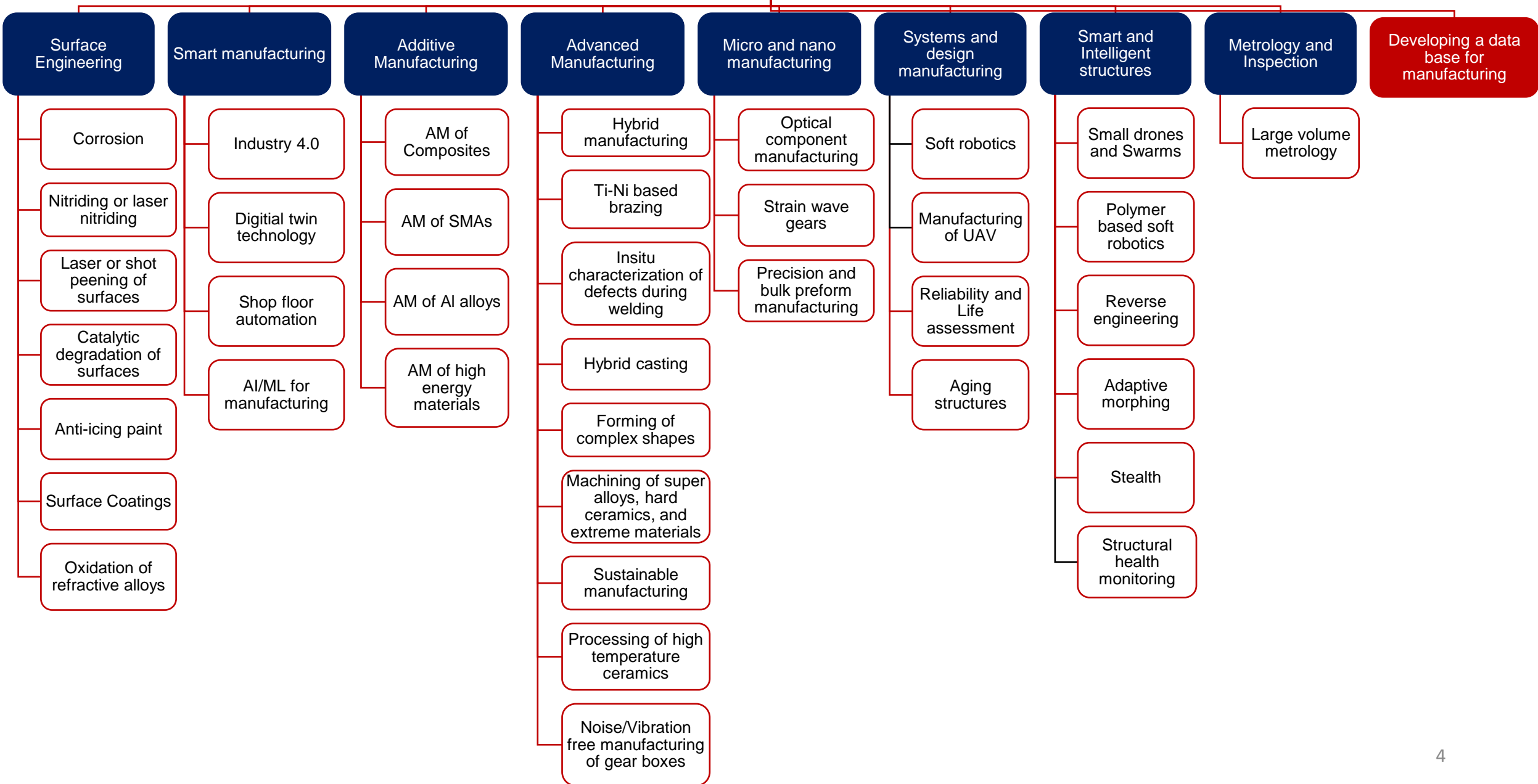
Protective Materials for CBRN threats

Radome materials

High density materials

Development of Mechanical properties database for metals and alloys

Manufacturing Domains



Proposal Submission Guidelines

- **Establishing Connect with DRDO**
 - Establishing connect is must for every proposal. But is the most difficult task.
 - Complete Proposal: If you have already established connect within DRDO, then you may submit the complete proposal
 - Conceptual Proposal: If you do not have specific connect within DRDO, we will help you to establish connect.
 - Upon review and acceptance of the conceptual proposal, you can submit the Full Proposal.
- **Nature of the Proposal**
 - Program Driven (Top-down)
 - Research Driven (Bottom-up)
 - Strategy Driven (Indigenization)
- **Aimed at solving a problem or an issue**
 - Clear definition of the problem you are trying to solve
 - How your solution will help resolve or alleviate the issue
- **Scientific Merit**
 - Detailed review of the issues (literature) relevant to the problem
 - Appropriate solution to the problem – clear definition of the methodology: experimental, numerical, mathematical or combinations
 - Results and analysis leading to the solution
- **Deliverables**
 - Clear definition of the deliverables

Proposal Submission Guidelines

- **Two-stage Review of the Proposals and Feedback**
 - Preliminary Review of short proposals: Experts from DRDO and Academia
 - Final Review full proposals: Experts from DRDO and Academia
- **Presentation to the Experts Committee**
 - Upon acceptance of the proposal in the review process, the PIs will be called to make a presentation.
 - Final Acceptance of the proposal and recommendation for the release of grants
- **Funding Available by AR&DB – M&M**
 - AR&DB – M&M Panel can recommend the proposals up to INR 1 Cr.
- **Proposals with Higher Funding Requirements**
 - Proposals with more than INR 1 Cr funding will be reviewed but recommended to the council for further review and approval.
 - Ideally, proposals with larger funding requirements (more than INR 1 Cr) may be submitted as a Conceptual Proposal at first.
- **Last date for submission of proposals under the Second call is June 20th 2024**

Please Refer to the website
<http://ardbmmpanel.iiti.ac.in/>

Link for ARDB MM Panel portal - <https://ardbmmpanel.iiti.ac.in/main>

ARDDB | IIT Indore Home - Google Drive

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ARDB M&M | IIT Ind... Preliminary evaluati...

रक्षा अनुसंधान एवं विकास संगठन
रक्षा मंत्रालय, भारत सरकार
DEFENCE RESEARCH & DEVELOPMENT ORGANISATION
Ministry of Defence, Government of India

Home Call for Proposal **Proposal Submission** Project Proposal Form

**Aeronautics Research & Development Board
Materials & Manufacturing Panel (DRDO)**

Click on Proposal Submission

Vision

Make India technologically strong by establishing world class cutting edge aeronautical science and technology base to provide our Defence, Space and Civil Aviation sectors a decisive edge by equipping them with internationally competitive systems and solutions.

Mission

To encourage and fund basic and applied research in pertinent scientific disciplines directly relevant to our aeronautical systems needed for future by enabling and supporting emerging talents, particularly in academic and research institutions to create and evolve a potential knowledge-base system applicable to future aeronautics needs of the country.

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रक्षा मंत्रालय, भारत सरकार
DEFENCE RESEARCH & DEVELOPMENT ORGANISATION
Ministry of Defence, Government of India

Home Call for Proposal Proposal Submission Project Proposal Form



Aeronautics Research & Development Board Materials & Manufacturing Panel (DRDO)

CREATE YOUR PROFILE

Note:

- 1. Kindly check your email for activation link to submit the proposal.
- 2. Please check SPAM folder also, in case activation link is not received in INBOX.

[Register](#) If registered [Login Here](#)



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LOGIN HERE

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Reset Password

NOT REGISTERED? [SIGN UP](#)

Login with your registered
email ID & Password

Date	<input type="text" value="01/05/2024"/>	First Name	<input type="text" value="Krishnpal Singh Tomar"/>
Email	<input type="text" value="kpstomar@iiti.ac.in"/>	Organization/Affiliation	<input type="text" value="Affiliation"/>
Contact Number	<input type="text" value="Contact Number"/>	Proposal Type	<input type="text" value="Select"/>
Project Title	<input type="text" value="Project Title"/>		
Type of Project	<input type="text" value="Select"/>		
Possible DRDO Laboratory where the proposed project could be useful	<input type="text"/>		
Aimed to solve which issue related to DRDO - M&M	<input type="text"/>		
Present status and Novelty of the proposed Project (National/International)	<input type="text"/>		
Project Details: (~300 words) [Problem Definition, Approach to the problem and Methodology, Key expected results / benefits to DRDO]	<input type="text"/>		



Present status and Novelty of the proposed Project
(National/International)

Project Details: (~300 words) [Problem Definition,
Approach to the problem and Methodology, Key
expected results / benefits to DRDO]

Deliverables [In terms of products / processes /
improvements / optimisation]

Approximate Budget and Duration

Names of PI & Co-PI [Department, Email, Mobile]
Separated by Comma

Co-Principal Investigator Name [Department, Email,
Mobile] Separated by Comma

Co-Principal Investigator Name-2[Department, Email,
Mobile] Separated by Comma

Co-Principal Investigator Name-3[Department, Email,
Mobile] Separated by Comma

Please upload an image related to your proposal <2 MB in JPG format only.

Choose File

No file chosen

I hereby declare that the submitted information is true and uploaded the proper format less than 2 MB in JPG format to the portal.

Submit Details

Logout



Aeronautics Research & Development Board Materials & Manufacturing Panel (ARDB M&M)

Dear Ashwin Wagh

You have successfully submitted your Proposal in the online portal.

Thank you so much.

[Logout](#)

ARDB M&M

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Useful Links

- [IIT Indore](#)
- [ARDB M&M](#)
- [DRDO](#)

Contact Us

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Total Visitor: **0021508**

Thank you for your attention and Q&A in the Chat Box !!