

About Lab

Armament Research Board (ARMREB) was setup in 1997 to enhance the intellectual inputs, physical infrastructure and scientific understanding in the field of armament to meet present & future challenges. The major aim of ARMREB is to promote sponsored research projects in various national academic centres of academic excellence, both in public and private domain. Some of the major areas of research under ARMREB are modelling & simulation, new energetic materials, materials required for armament application, sensors and related studies, blast wave & combustion studies & safety test and evaluation of armament systems.

ARMREB Projects:



ARMREB Panels:

- High Energy Materials
- Materials for Armament Applications
- ✓ Armament Design Mechanism & Ballistics
- Armament Sensor & Electronics
- Combustion Detonics & Shock Waves
- Safety Test & Evaluation

Where to Submit:

The project proposal may be submitted throughout the year. The project proposal to be submitted in Short Proposal Format as per thrust areas of the panel to the Member Secretary (MS ARMREB) in online mode only

(https://www.drdo.gov.in/armaments-research-board/about-us). MS ARMREB, in turn, will take the recommendation of respective User Lab and Panel and intimate PI to submit the detailed proposal

Who May Submit:

- Indian academic institutions of national importance/repute, national science and technology centres, research institutions, non-profit professional societies performing advance research, acclaimed scientists attached to approved research institutions, UGC/A-ICTE/MHRD recognized self-financing / private institutions
- Permanent faculty member / researcher as Principal Investigator (PI) of the institutes. PI will be able to take one research project at a time from DRDO funding.

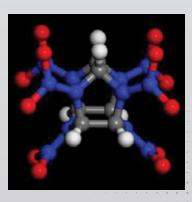
Thrust Areas of ARMREB Panels

High Energy Materials (HEM)

- ✓ Synthesis of New Class of Material
- Modelling & Physical Studies
- Propellants & Explosives
- ✓ Insensitive High Energy Materials Self-healing Polymers
- ✓ 3D Printing of Propellants



125mm_FSAPDS



ALANE

Materials for Armament Applications (MAA)

- Development of New Materials
- Advanced Composites
- ✓ Nano Composites
- ✓ Materials Processing Tech
- ✓ Smart Materials, their use & Dev





GRAPHENE COIL CELL MODULE

Armament Design Mechanism and Ballistics (ADMB)

- Armament Mechanism & Design
- ✓ Pilot safe ejection mechanism
- Ammunition handling systems
- ✓ Ballistics
- External & Aero ballistics
- Terminal ballistics
- ✓ Systems for pressure artillery guns



Combustion Detonics & Shock Waves (CDSW)

- Initiation of Explosives
- Overdriven Detonation Waves
- ✓ HazardAssessment,Sensitivity & Safety Related Responses
- Dynamic Shock Loading of Material
- Blast Damages, Effects & Scaling
- Micro Detonics



Armament Sensor & Electronics (ASE)

- Sensors
- Electro Potting Material
- ✓ Wireless Technology
- ✓ Signal Processing
- ✓ Motor Drive Electronics & Control
- ✓ Power Source







Da-Vinci-Setup

Safety and Test & Evaluation (STE)

- Explosive Safety
- ✓ Fire Safety
- ✓ Environment Safety
- ✓ Nano Safety
- ✓ Test and Evaluation







ARMREB

Armament Research Board

DRDO Hq Annexe, Old LASTEC Building(NTB) Metcalfe House, Delhi - 110054