

DEFENCE RESEARCH LABORATORY (DRL-DRDO), TEZPUR, ASSAM

Inviting Proposals from Academia/ R&D Institutions/ Industries / Start-Ups for Collaboration

Defence Research Laboratory (DRL-DRDO) is a premier R&D Laboratory working under the aegis of Defence R&D Organization (DRDO), Ministry of Defence, Govt. of India. DRL is the only DRDO laboratory in the North Eastern Region (NER) of India, which is aimed at R&D of products and technologies for soldier support, protection, and emergency survival in different geo-strategic locations.

Academia/ R&D Institutions/ Industries/ Start-Ups are invited to team-up with DRL for cutting-edge targeted R&D in highly exciting and challenging areas of military research, for an excellent opportunity to be a part of the '*AatmaNirbhar Bharat Abhiyan*'.

The following list highlight current R&D priority areas, but is NOT exhaustive. There is ample scope for dialogue on novel ideas/ products/ technologies/ knowledge relevant to soldier support, protection, and survival under emergency conditions.

1. Specialized fabric imparted with protection against various hematophagous/ biting animals (e.g. snakes, leeches, mosquitoes, ticks etc.) for use in tropical/ rain forests.
2. Safe formulations for maintaining general health & hygiene in high humidity regions, e.g. alternative to bathing/ oral hygiene practices etc.
3. Odourless/ signature-free, skin-friendly formulations for protection against various hematophagous/ biting animals (e.g. snakes, leeches, mosquitoes, ticks etc.).
4. Rapid blood coagulating formulation with antimicrobial properties for combat wounds.
5. Human waste management in low temperature, high altitude, remote, resource-poor locations.
6. Database of wild-edibles (WEs) in selected regions for use during emergency survival conditions.
7. Database of vectors & vector-borne disease in selected regions.
8. Multiplex, on-site, rapid differential diagnostics for vector-borne/ food/ water borne pathogens.
9. Emergency water purification device/ water-balls/ hydration tablets/ light weight hydration backpacks.
10. Light weight, water-resistant/ hydrophobic fabric for multipurpose products- rain-coats/ poncho/ shelter/ hammock in regions receiving heavy to very heavy rainfall.
11. Light weight, highly breathable/ sweat wicking fabric for use as uniform in high humidity conditions.
12. Light weight flexible fabric for extremely low temperature, high altitude regions.
13. Light weight, mine-proof, anti-spike, anti-skid/ slip, abrasion-resistant, anti-static, ankle protecting all-weather footwear.
14. Light weight water repellent/ easy drying footwear & socks with antimicrobial properties for use in swamps/ monsoons.
15. Ergonomic, all-weather abrasion-resistant gloves to meet slithering & weapon use requirements.
16. Skin friendly (e.g. pigmented body paints) formulations/ materials (tapes/ nets/ suits) for adaptive/ deceptive camouflage, chemical/ multi-spectral (eg. visible/ IR/ thermal etc.) signature mitigation.
17. Anti-freeze water storage systems/ solutions.
18. Remotely operated devices for search & surveillance operations, e.g. to detect human-activity, weapons, landmines inside dense vegetation.
19. Offline, secure, encrypted, untraceable A/V communication system for closed group users.
20. Offline, real-time translator system for selected languages.
21. Light weight, reusable stoves with multiple fuel options.

For further discussion and funding opportunities, please contact:

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