Scientists from DRDO & IIT Delhi receive National Award for Young Women Showing Excellence through Application of Technology for Societal Benefits

Dr Shweta Rawat from Defence Institute of Physiology and Allied Sciences (DIPAS), DRDO, Timarpur, Delhi has developed a female-specific Full Body Protector (प्रबला) to safeguard the Female troops deployed in riot control actions.

This gear has been developed in collaboration with the Rapid Action Force using the ergonomic design principle based on anthropometric dimensions specific for female troops. The full Body Protector has unique properties, including anti-stab, anti-puncture, flame retardant and acid resistance. It is designed to assure greater comfort and flexibility to the women forces while deployed in law and order maintenance duties.

Dr. Shalini Gupta, Department of Chemical Engineering, Indian Institute of Technology (IIT), Delhi, has successfully led the development of a technology SeptifloTM, which offers fast and affordable assay for point-of-care diagnosis and treatment of bacterial septicemia, one of the biggest in-hospital killers worldwide.

This has led to the incubation of the start-up Nano DX Healthcare Pvt. She is pursuing unconventional approaches to design novel bio-systems for medical diagnosis, drug delivery, and biomaterials fabrication on a chip. A prototype diagnostic kit, using naturally amplified pathogen-derived endotoxins for early bedside diagnosis of bacteremia has been developed, which is currently undergoing clinical trials. In drug delivery systems, cancer and bacterial therapies have been combined into a single delivery platform in order to co-eliminate cancer and bacterial infections residing inside cancer.