

DRDO's Ladakh lab set to be highest research centre

By Vijay Mohan

The Extreme Altitude Research Centre (EARC), set up at Chang La in Ladakh by the Defence Research and Development Organisation (DRDO), is set to enter the Guinness Book of Records for becoming the world's highest terrestrial research laboratory.

Located at an altitude of 17,601.71 ft, EARC is about 1,000 ft higher than the current record holder, Pyramid Laboratory, which is at an altitude of 16,571.52 feet at the base of Mt Everest in Nepal.

Inaugurated in October 2015, EARC, located between Leh and the Pangong Tso lake, is the only facility of its kind to test extreme altitude-related technologies for military applications. Experiments relating to non-conventional sources of energy, electronic equipment and batteries, human physiology, mountain sickness, soilless micro farming and portable greenhouses, bio-digestors and conservation and propagation of endangered extreme-altitude medicinal plants, aimed at improving human performance and habitability at extreme altitudes, are among activities mandated for the centre.

According to Dr Bhuvnesh Kumar, Director of the Defence Institute of High Altitude Research that operates EARC, this will not only help in evaluating the efficiency of new technologies but also expedite user trials and induction in the Army as the equipment will undergo rigorous testing in actual climatic conditions which it is supposed to be deployed. DRDO plans to test the equipment developed by it for the strategic Siachen sector at EARC. Winter temperatures at Chang La can fall as low as minus 40°C.

The altitude will be measured publically on November 5 by GPS-based instruments that have been pre-calibrated and sealed by the University Institute of Engineering and Technology, Panjab University, Chandigarh. Survey engineers from the local administration and the Border Roads Organisation will be the judges and given the altitude, climate and terrain, Guinness requires video evidence of the event.