

## **NPOL'S CONTRIBUTION TO KERALA IN THE WAR AGAINST COVID-19**

The Naval Physical and Oceanographic Laboratory (NPOL), Kochi has been exploring various ways to use their technical expertise, as well as the expertise of their sister laboratories in DRDO to equip and aid the state and district administration in the fight to combat COVID-19.

Shri S Vijayan Pillai, Director NPOL handed over 20,000 bottles of sanitizers made at NPOL along with ready-to-eat food items, developed by DRDO, to Adv V S Sunil Kumar, Hon'ble Minister for Agriculture, Kerala during his visit to NPOL on 9<sup>th</sup> April. As the Minister in charge of Ernakulam District for COVID-19 pandemic management activities, Shri. Sunil Kumar was given a quick brief on the various steps being taken by DRDO to address the COVID-19 pandemic.

On 8<sup>th</sup> April, bulk production of alcohol-based hand rubs / sanitizers were accomplished in-house in accordance with WHO guidelines, promulgated by DRDO HQ. The lab had made 1500 liters of sanitizers in three days. These were packaged in 100 ml bottles.

These were distributed to various agencies in Kochi including Kochi Police, Southern Naval Command, District Collectorate and Excise Division, for use by their personnel deployed on field. The Kochi Police in particular were given 10,000 sanitizer bottles, to endure the requirements on field for at least a month. On 8<sup>th</sup> April, 2000 bottles of sanitizers were handed over to the Southern Naval Command. This was received by Cmde Arati Sarin, the Command Medical Officer, in the presence of Commanding Officer, INS Venduruthy (the naval base at Kochi) and Commanding Officer, INHS Sanjivani (the naval hospital at Kochi). This is in addition to the 500 bottles handed over earlier to the Southern Naval Command on 31<sup>st</sup> March 2020, and the 100 bottles handed over to INS Sagardhwani for use by the crew, before the ship sailed out on 7<sup>th</sup> April 2020.

Around 4000 'ready to eat' food packets specially developed by DRDO laboratory – DFRL, Mysore was sourced by NPOL, and were handed over to the district administration for distribution to health professionals working round the clock in Kochi city. These are carefully made, high nutrition, long shelf life food packets of various types, and will be especially useful to personnel deployed on field, working continuously with little time to spare.

1500 kilo of 'ready-to-eat' food items reached NPOL on April 8<sup>th</sup> from DFRL, Mysore. The consignment comprised various types of meals produced at DFRL and was brought to Kochi in NPOL vehicle. The food packets were handed over to the district administration the next day.

Re-usable masks (washable) were procured and distributed to all personnel on essential duty at NPOL, as well as to essential service providers in the campus. On 8<sup>th</sup> April, 2000 reusable and washable masks were also distributed by NPOL to the police personnel on duty in Kochi.

NPOL is currently developing thermal body scanners to identify people with fever, as they enter any establishment. This product, based on non-contact IR sensors is currently under development. This is in addition to the 'Body Temperature Probes' already developed using high-resolution thermal contact sensors. The lab is also in the process of developing paper disinfectant, walk-in-swab booth for INHS Sanjivani, SNC and automated UV-exposure kiosk for disinfecting handbags/items by all around sanitization of the object surface.



NPOL scientists with Shri Suhas S, District Collector, Ernakulam after handing over DRDO's 'ready to eat' food packets



Shri S Vijayan Pillai, Director NPOL hands over sanitizer bottles developed by NPOL to Hon'ble Minister for Agriculture, Kerala



NPOL Scientists hands over sanitizer bottles developed by NPOL to the Indian Navy



NPOL personnel engaged in the preparation of hand sanitizers



NPOL Scientists hands over sanitizer developed at the lab