

UPES, Dehradun develops OXY-ALL emergency ventilator

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The OXY-ALL Ventilator was manufactured for only Rs 4500



Final year students of B Tech Mechatronics from University of Petroleum and Energy Studies (UPES), Dehradun, have developed a cost-effective rapidly manufacturable and deployable emergency ventilator named OXY-ALL emergency ventilator.

The OXY-ALL Ventilator is a non-invasive positive pressure ventilator. It is compact and can be used in an emergency when there is no other option available as per the patient requirement.

The OXY-ALL Ventilator can be used for respiratory distress, obstructive sleep apnea, low-mild asthma, pulmonary oedema, low-mild pneumonia (SARS-CoV-2) virus that causes COVID-19.

It is a simple device that pumps oxygen when the patient is unable to breathe naturally. Artificial Manual Breathing Unit (AMBU) bags are used to pump oxygen directly to the nose and mouth of the patient. The AMBU has to be pressed either manually by the medical professional or can be pressed using an automation mechanism.

The OXY-ALL Ventilator was manufactured for only Rs 4500. The students of UPES are still working on improving the design and efficiency of the ventilator.