

IIT Ropar develops oxygen rationing device AMLEX

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The Indian Institute of Technology (IIT), Ropar has developed a first-of-its-kind oxygen rationing device – AMLEX that supplies a required volume of oxygen to the patient during inhalation and trips when the patient exhales CO₂. This process saves oxygen which otherwise unnecessarily get wasted.

“The device can operate on both portable power supply (battery) as well as line supply (220V-50Hz)”, said Director, IIT, Ropar, Prof Rajeev Ahuja.

“Made specifically for oxygen cylinders, AMLEX can be easily connected between the oxygen supply line and the mask worn by the patient. It uses a sensor which senses and successfully detects inhalation and exhalation of the user in any environmental condition,” said Dr Sahani, Assistant Professor, Department of Biomedical Engineering.

This ready to use device works with any commercially available oxygen therapy masks having multiple openings for airflow.

Prof Rajeev Arora said that the country now needs rapid but safe solutions to combat COVID-19. Since the virus is affecting the lungs and subsequently breathing system of the patient, the institution has not intended to go in for patenting of the device. He said rather the IIT would be happy to transfer this technology free of cost, in the interest of the nation, to those interested to go in for mass production of the device.