

# TRENDS & TECHNOLOGY

## HEMOLUNG RAS- Fully Integrated Respiratory Dialysis System

This system Combines advanced technology with user-centered design to provide simple, effective, and minimally invasive extracorporeal CO<sub>2</sub> removal (ECCO<sub>2</sub>R) for therapy in respiratory failure. Removing carbon dioxide and delivering oxygen directly to the blood avoids intubation and facilitates protective ventilation. It has three integrated parts:



**Hemolung Cartridge** - Integrated centrifugal pump creates blood flows and active mixing technology enhances CO<sub>2</sub> removal at low blood flow rates. Advanced dual-layer membrane coating (siloxane/ heparin) ensures steady gas exchange.

**Hemolung Catheter** · 15.5 Fr diameter with low resistance and kink resistant. Available in femoral (26 cm) and jugular (17 cm) versions

**Hemolung Controller** Intuitive user interface with on-screen instructions. Has real-time display of CO<sub>2</sub> removal and blood flow with automatic gas switching (O<sub>2</sub> /air) and membrane condensation removal for steady gas exchange .

Source: ALung Technologies, Pittsburg, PA, USA  
Website: [www.alung.com](http://www.alung.com)

## Dechoker sucks the food stuck in the Airways

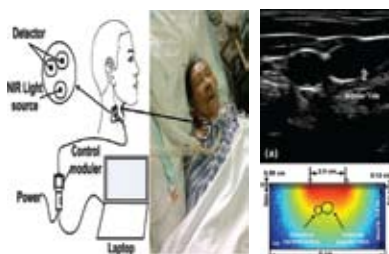
Dechoker is a device that applies negative pressure to the mouth creating



a vacuum, thus , sucking out whatever is blocking the airway. The vacuum pulls the lodged object towards the device. The device can be used by struggling persons on themselves too. The adult as well as toddler version is available.

Source : Dechoker LLC, 13011 W Hwy 42 Suite 103, Prospect , KY 40059  
e-mail- [www.dechoker.com](http://www.dechoker.com)

## Optical Probe to Monitor blood oxygen saturation



Central venous oxygen saturation (SCvO<sub>2</sub> ) is frequently monitored for evidence of hypovolemic and septicemia shock by taking blood sample from internal jugular vein. This non- invasive optical probe measures continuous tissue blood oxygen saturation (StO<sub>2</sub>) over the jugular vein area with the help of infrared detectors and LED illumination that produces light at three different wavelengths. It is placed over the jugular vein with the help of ultrasound.

Source : University of Science and Technology of China.  
e-mail: [www.osa.org](http://www.osa.org)

Mask that Keeps Waste Anesthesia Gas Away from Clinicians in PACU



**Teleflex Medical** (Research Triangle Park, NC) received FDA clearance for its ISO-Gard anesthesia mask that recovers much of the exhaled gas and sends it to the vacuum exhaust. The system works by running oxygen through the breathing area in one direction while exhausting using a negative pressure tube at the

bottom of the mask, effectively separating the inhaled gas from the exhaled. Provide unidirectional flow of oxygen through mask to ensure maximum FIO<sub>2</sub> and has a separate port for CO<sub>2</sub> monitoring.

E mail- [www.teleflex.com](http://www.teleflex.com)  
Source: **Teleflex** 3015 Carrington Mill Boulevard Morrisville, NC

## RescQUECPR device

A system device comprising of impedance threshold device and active compression decompression device to be used in CPR has received FDA approval. It provides optimal chest compressions and pulls off chest after each compression thus, maximizing effectiveness.

Source : Zoll Medical Corporation, USA  
Website: [www.zoll.com](http://www.zoll.com), [degan@zoll.com](mailto:degan@zoll.com)



## Air Purge System for Removing Air Bubbles from IV Lines

**Anesthesia Safety Products**, a Woburn, MA firm, introduced Air Purge System which is the device for automatic removal of air bubbles from IV lines. It is able to detect air bubbles moving through the line and sends them to a reservoir that is emptied into a collection bag. It is capable of removing bubbles as small as 25 micro-liters at infusion rates up to 600 ml/min.



Source: **Anesthesia Safety Products, LLC**  
300 Trade Center, Suite 5400,  
Woburn, MA 01801  
Website :<http://www.aspamerica.com/>