

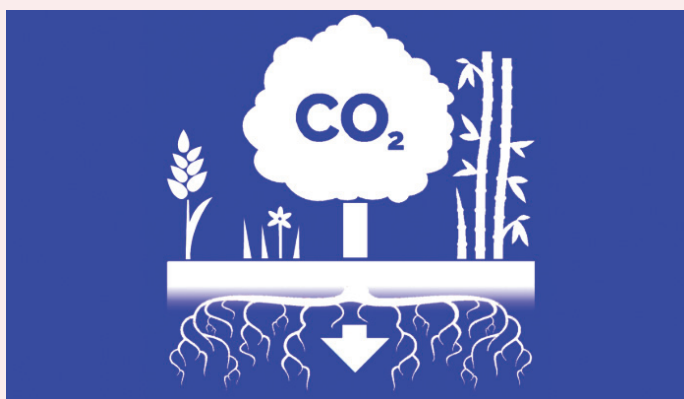
Cardiac Imaging by Wearable Ultrasound Device



THERE is a widespread increase in fatalities due to cardiac-related diseases. And for a long time, researchers have been working hard to find various solutions and to monitor the heart as easily and quickly as possible. Now researchers from the University of California, San Diego developed a wearable, non-invasive heart monitor device that can be worn easily for 24 hours. This portable wearable system uses ultrasound to continuously capture high-quality images and provide real-time data of the human heart. According to researchers, this device provides less exposure to radiation in comparison to current available devices. Furthermore, the device works during exercise also and is about the size of a postage stamp. The work has been described in the journal *Nature*.

Source: *University of California-San Diego*

Cost Efficient Carbon Capture System



THE need for technology that can capture, remove and repurpose carbon dioxide grows stronger with every CO₂ molecule that reaches the Earth's atmosphere. To meet that need, scientists at the Department of Energy's Pacific Northwest National Laboratory have cleared a new milestone in their efforts to make carbon capture more affordable and widespread. They have created a new system that efficiently captures CO₂ — the least costly to date — and converts it into one of the world's most widely used chemicals, methanol. It holds many uses as a fuel, solvent, and an important ingredient in plastics, paint, construction materials and car parts. The studies were published in the journal *Chemical Sciences*.

Source: *Pacific Northwest National Laboratory, News Release*

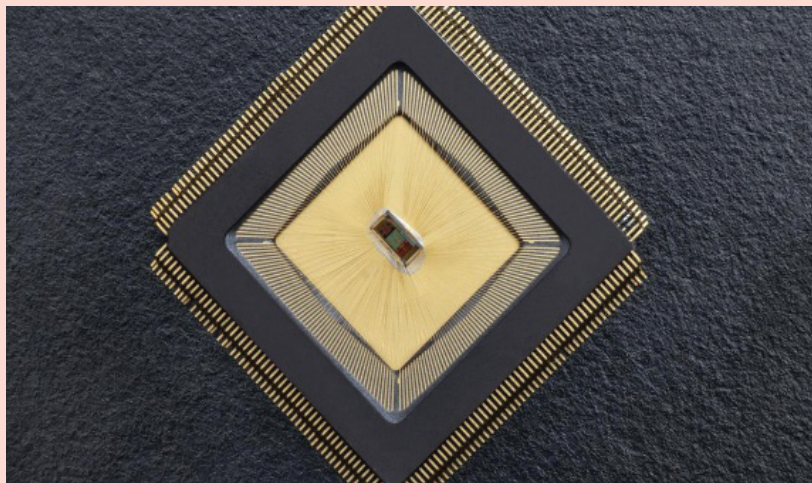
‘BharOS’ — Indigenous Mobile Operating System



AN Indian Institute of Technology Madras incubated firm has developed an Indigenous Mobile Operating System called ‘BharOS’. This software can be installed on commercial off-the-shelf handsets. BharOS comes with No Default Apps (NDA). This means that users are not forced to use apps that they may not be familiar with or that they may not trust. Additionally, this approach allows users to have more control over the permissions that apps have on their device, as they can choose to only allow apps that they trust to access certain features or data on their device. BharOS provides access to trusted apps from organisation-specific Private App Store Services (PASS).

Source: IIT Madras, Press Release

Skin-integrated Wireless Haptic Interface Device



WITH the combination of low-power chip design, machine learning algorithms, and soft implantable electrodes, EPFL (Ecole Polytechnique Fédérale de Lausanne) researchers have developed a neural interface that can identify and suppress neurological symptoms. This was published in the *IEEE Journal of Solid-State Circuits*.

Source: EPFL, News