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*Ask the right questions, and nature will open the door to her secrets
- Dr. C.V. Raman, The Nobel Prize in Physics 1930*

Scientists at Raman Research Institute (RRI), Bengaluru extracted natural dye, which may protect eyes from harmful laser

Scientists & Researchers at Raman Research Institute (RRI), Bengaluru, and Kentsri School and College, Bengaluru have found that the natural indigo dye extracted from leaves of *Indigoferatinctoria* or the famed Indigo plants family is capable of protecting human eyes from harmful laser radiation. The Researchers found that by increasing the intensity of the laser pulse, the dye absorbs more light, that is, it is more opaque to higher intensity light and referred to such materials as an 'optical limiter'. Optical limiters are useful in weakening the potentially harmful radiation emitted by powerful lasers and protecting both eyes and sensitive optical instruments. The study was funded by the Department of Science and Technology, Govt. of India.

IIT Ropar developed IoT device AmbiTag that records real-time ambient temperature

Indian Institute of Technology, Ropar (IIT Ropar), Punjab developed India's first indigenous and a first-of-its-kind IoT device - AmbiTag that records real-time ambient temperature during the transportation of perishable products, vaccines and even body organs and blood. The IoT device - AmbiTag records temperature data logger for the cold chain management. That recorded temperature further helps to know whether that particular item transported from anywhere in the world is still usable or perished because of temperature variation. This information is particularly critical for vaccines including Covid-19 vaccine, organs and blood transportation. Shaped as USB device, AmbiTag continuously records the temperature of its immediate surroundings "from -40 to +80 degrees in any time zone for a full 90 days.

Bangalore Startup developed Recycling Carbon technology

Bangalore based Startup 'Breathe Applied Sciences' incubated at Jawaharlal Nehru Centre for Advanced Scientific Research (JNCASR) developed a Recycling Carbon technology for commercial solution and an efficient catalysts and methodologies for the conversion of CO₂ to methanol and other chemicals. 'Breathe Applied Sciences' received the National Award 2021 from Technology Development Board (TDB) for their development. The Startup signed an agreement with JNCASR, an autonomous institute of Department of Science and Technology (DST), Govt. of India for transfer of technology based on lab-scale research on reducing CO₂ to methanol and other useful chemicals and fuels. In the pilot mode, the current capacity of CO₂ conversion is 300 kg per day, which could be scaled up to several 100 tons in an industrial scale.

Indian farmer developed an innovative self-pollinating Low-chilling apple variety HRMN 99

An Indian farmer from Himachal Pradesh developed an innovative self-pollinating Low-chilling apple variety HRMN 99. The new variety HRMN 99 does not require long chilling hours for flowering and fruit setting and has spread to plain, tropical, and subtropical areas in various parts of India, where the temperature is as high as 40 - 45 °C during summer. The commercial cultivation of HRMN 99 apple variety has been initiated in Manipur, Jammu, low-lying areas of Himachal Pradesh, Karnataka Chhattisgarh, and Telangana, and fruit setting has been expanded to 23 states & UTs so far.

Special Update: Indian National AI Portal (INDIAai) celebrated 1st anniversary on 28 May 2021

The National AI Portal (INDIAai), which is a joint initiative by Ministry of Electronics and IT (MeitY), National e-Governance Division (NeGD) and NASSCOM. It serves as a central hub for AI related news, learning, articles, events and activities etc., in India and beyond celebrated its 1st anniversary on 28 May 2021. The anniversary event covered Launches, Fireside Chat Session, and 'AI PeCharcha', wherein key leaders from MeitY, NeGD, NASSCOM and knowledge partner Infosys conducted discussion on how India can become a global AI leader and explored ideas around implementing trustworthy AI solutions. In the past year, INDIAai has covered 550+ Articles, conducted 10 Webinars, 34 Podcasts, listed over 250 Start-ups, 23 Investment funds, 30 Colleges, 76 AI Case Studies, 75 Central and 30 State initiatives, and 48 Research Reports.