



Embassy of India, Berne

INDIA SCIENCE AND INNOVATION WEEKLY

10 May 2021

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

Biodegradable yoga mat from water hyacinth

Under the intervention and initiative triggered by the Department of Science & Technology (DST), GoI, autonomous body North East Centre for Technology Application and Reach (NECTAR), six girls from Assam, India developed biodegradable yoga mat from water hyacinth. The biodegradable yoga mat is called as Moorhen Yoga Mat' and would be soon introduced as a unique product to the market. The mat is 100% biodegradable and compostable, completely hand-woven and to be used for doing Yoga, which aimed to provide multiple ecological and social benefits to the society and environment as is based on the principle of 'Atamanirbhar'.

IIT Delhi generated hydrogen as a clean fuel at low-cost from water

IIT Delhi, Dept. of Chemical Engineering & Dept. of Physics generated hydrogen a clean fuel from water at low cost. The study was funded by Oil and Natural Gas Corporation Energy Centre (OEC) - India. The study highlighted that water was successfully split by a Sulphur-Iodine (SI) thermochemical hydrogen cycle to generate low-cost, clean hydrogen fuel for industrial consumption.

IIT Madras developed Mobile Phone App based on Blockchain Health Care Information Systems

Researchers at Remote Diagnostics, Center for Nondestructive Evaluation (CNDE), IIT Madras has developed a Mobile Phone App 'BlockTrack', which is based on Blockchain Health Care Information Systems. BlockTrack allows interoperability of systems from multiple hospitals, institutes, health-care and integrates medical supply chain management and proactive tracking of the spread of contagious infections.

Drugs Controller General of India approved DRDO's anti-COVID drug for emergency use

Defence Research and Development Organisation (DRDO), Institute of Nuclear Medicine and Allied Sciences (INMAS) in collaboration with Dr Reddy's Laboratories (DRL), Hyderabad, has developed an anti-COVID-19 therapeutic application of the drug 2-deoxy-D-glucose (2-DG). The drug has been approved by the Drugs Controller General of India for emergency use. The drug is also reduces hospital stay of Covid-19 patients.

India participated in the 3rd Arctic Science Ministerial (ASM3)

From 08-09 May 2021, India participated in the 3rd Arctic Science Ministerial (ASM3), which is the global platform for discussing research and cooperation in the Arctic region. Union Minister of Science and Technology, Health and Family Welfare, and Earth Sciences of India, Dr. Harsh Vardhan shared India's vision and long-term plans for research, work, and cooperation in the Arctic region and also expressed India's plans to contribute observing systems in the Arctic, both in-situ and by remote sensing. ASM1 and ASM2 were held in the USA in 2016 and Germany in 2018.

ARI, Pune developed a new variety of Soybean MACS (Max) 1407 in collaboration with ICAR

The autonomous institute of Department of Science and Technology, GoI, Agarkar Research Institute (ARI), Pune, in collaboration with the Indian Council of Agricultural Research (ICAR), has developed this high-yielding seed of soybean called as MACS (Max) 1407. ARI and ICAR have reported that this new variety is more resistant to pests with increased production and reduces water and fertilizer consumption. MACS (Max) 1407 is most suitable to the land of Assam, West Bengal, Jharkhand, Chhattisgarh and the north-eastern states and could yield up to 39 quintals per hectare. In the Kharif season of 2022, farmers would be provided the seeds of this new variety of soybean.

Special Update: Dept. of Telecom approved Telecom Service Providers for 5G Technology and Spectrum Trials

On 04 May 2021, Dept. of Telecommunications (DoT), GoI, approved and permitted the Telecom Service Providers (TSPs) for 5G Technology and Spectrum Trials. The approved TSPs includes Bharti Airtel Ltd., Reliance JioInfocomm Ltd., Vodafone Idea Ltd. and MTNL. The experimental spectrum is being given on various bands i.e. 3.2 GHz to 3.67 GHz; 24.25 GHz to 28.5 GHz; and 700 GHz. Along with this, TSPs are allow allowed to use the existing spectrum (800 MHz, 900 MHz, 1800 MHz and 2500 MHz) for the 5G trail. The duration of the trials, at present, is for a period of 6 months. The objectives of conducting 5G trials include testing 5G spectrum propagation characteristics especially in the Indian context and to test 5G phones and devices.