

Embassy of India, Berne 03 February 2020

INDIA SCIENCE AND INNOVATION WEEKLY

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

India to produce the world's most inexpensive nanowires

CSIR-National Chemical Laboratory (CSIR-NCL), Pune has developed a technology for manufacturing lowest-priced precision silver nanowires in large scale. Patents have been filed to protect the technology and the product has been tested for various applications including conducting inks in various forms.

Scientists extract bio fertilizer from human hair

Scientists from Central Salt and Marine Chemicals Research Institute (CSMCRI), Bhavnagar, India have come up with a solution to treat 300,000 tons of discarded waste human hair by extracting biofertilisers from it. Moreover, they have isolated Melanin, which can be used for cancer therapies and Keratin, which can be used in cosmetic industry. The market value of Melanin and Keratin is each worth Rs. 4000-5000 per gram and Rs. 15,000-20,000 per gram respectively.

ISRO readying for low-cost satellite launch vehicles

The Indian Space Research Organisation (ISRO) is readying low-cost satellite launch vehicles weighing 500 kg and costing about INR 30-35 crore each, to be put into orbit satellites. ISRO has set aside USD 1,600 million for launch vehicles, of which USD 870 million will be for Polar Satellite Launch Vehicles (PSLVs) and remaining for Geosynchronous Satellite Launch Vehicles (GSLVs). ISRO has planned some 500 PSLVs in the next five years.

IIT-Madras offer affordable data science course on 'PadhAI'

Indian Institute of Technology (IIT) Madras faculty are offering affordable courses on data science through their platform 'PadhAI.' This five-month course is affordably priced at INR 1,000 for students and faculty members alike.

India's first pioneer of rotavirus vaccine, Dr. M. K. Bhan passes away

Noted paediatrician and former DBT secretary, Dr. M K Bhan passed away on January 26. According to the current DBT secretary, Dr. Renu Swarup, Dr. M K Bhan is the "strong pillar" on which the Department of Biotechnology (DBT) stood today and that he was responsible for changing the landscape of the biotechnology sector and was among those scientists who were able to fulfil the dream of introducing a rotavirus vaccine, now part of the universal immunisation programme. Dr. Bhan promoted new biotechnology institutes in different parts of the country and involving scientists of multiple specialties to interact with each other under the umbrella of biotechnology.

ISRO gets 3% more fund than last year

The Government has allocated Rs 13,479 crore for the Indian Space Research Organisation (ISRO) for 2020. The Budget allocation is 3% higher than the revised allocation last year and comes at a time when ISRO is working on many ambitious missions and projects including Chandrayaan 3, Gaganyaan and a new port in Tamil Nadu for small satellite launch vehicles. ISRO, which has planned a slew of missions over the next two years, is also preparing itself for a Rs 10,000 crore human spaceflight programme or Gaganyaan in 2022 and two unmanned missions next fiscal year before the main human spaceflight.

CSIR and GEMS sign MoU to improve chronic kidney disease in Andhra

To understand the problem that affects the kidney health of the population in the Uddanam region of Andhra Pradesh, a Memorandum of Understanding (MoU) was signed between Council of Scientific and Industrial Research-Indian Institute of Toxicology Research (CSIR-IITR), Lucknow and Great Eastern Medical School and Hospital (GEMS and H), Srikakulam, Andhra Pradesh. Both the institutions will work together to collect samples of food and water in this region, where above-average national rate of people affected with Chronic Kidney Disease of unknown etiology (CKDu) were reported. The samples will be used to analyze the cause of kidney disease.

Special Update: National Center for Disease Control (NCDC)

The National Center for Disease Control (NCDC), formerly known as The National Institute of Communicable Diseases (NICD), had its origin as Central Malaria Bureau, established at Kasauli (Himachal Pradesh) in 1909 and following expansion was renamed in 1927 as the Malaria Survey of India. The organization shifted to Delhi in 1938 and was called the Malaria Institute of India (MII). In view of the drastic reduction achieved in the incidence of malaria under National Malaria Eradication Programme (NMEP), Government of India decided to reorganize and expand the activities of the institute to cover other communicable diseases. Thus, on July of 1963 the erstwhile MII was renamed as NICD to shoulder these additional responsibilities. The Institute has its headquarters in Delhi and has 8 out-station branches located at Alwar (Rajasthan), Bengaluru (Karnataka), Kozikode (Kerala), Coonoor (Tamil Nadu), Jagdalpur (Chattisgarh), Patna (Bihar), Rajahmundry (Andhra Pradesh) and Varanasi (Uttar Pradesh). The institute was established to function as a national centre of excellence for control of communicable diseases. The function of the institute also included various areas of training and research using multi-disciplinary integrated approach.

Further details can be found at: https://ncdc.gov.in/