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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 make polished surgical instrument for health sector

Scientists at National Aerospace Laboratories (NAL) in collaboration with Sutures India used electropolishing technology to remove irregularities and defects on the surface of needles using a mixture of phosphoric acid and sulphuric acid as an electrolyte. The needles will be deployed at Cervical Cancer Screening Camp in Bengaluru.

E-waste recycling with zero waste concept

National Metallurgical Laboratory (NML) has signed a Memorandum of Understanding (MoU) for technology transfer with Unique India Private Limited, Firozabad, for the extraction of cobalt metal and salt from the black powder of lithium batteries. The process consists of physical beneficiation, leaching, solvent extraction, precipitation and electro-winning processes for recycling of spent LIBs to get value-added product (metal or salts) and protect the environment based on zero waste concept.

Edible coating to improve shelf-life of fruits

Scientists at Department of Biotechnology's Mohali-based National Agri-Food Biotechnology Institute have developed non-toxic and edible composite coatings based on wheat straw hemicellulosic polysaccharide (WP) and stearic acid derivatized oat bran polysaccharide (SAOP) that promises to overcome the perishability of fruits. The formulation helped to increase shelf-life of apples, peaches and bananas without significant blackening.

Aromatic plants prove profitable to Himachal Farmers

The cultivation of aromatic crops has proven to be profitable for farmers in Himachal Pradesh (HP). Aromatic crops are more resistant, less prone to pests and yield higher revenue per acre to farmers than traditional crops.

PM Modi chairs CSIR meet: Focus on 5G, AI, battery and renewable

Prime Minister Modi chaired a meeting of the Council of Scientific & Industrial Research (CSIR) society in New Delhi, where he was given an overview of the work done by CSIR. PM Modi stressed on the importance of developing virtual labs so that science can further be taken to all segments of students in every corner of the country. PM Modi listed 5G, Artificial Intelligence (AI), and affordable, long lasting batteries for renewable energy storage as some of the emerging challenges which the scientists need to focus on.

Telangana gets first eco-friendly sewage treatment plant (STP)

The first Phytoid- Scientific Wetland with Active Biodegradation (SWAB) based sewage treatment plant (STP) in Telangana was formally inaugurated on 11 February. In order to treat the sewage before it is discharged to the environment, and to use the water efficiently CSIR-NEERI developed a patented Phytoid technology based on the concept of engineered constructed wetland. Phytoid technologies is currently gaining prominence due to its inherent advantages such as mimicking the natural wetland ecosystem, low cost, low energy consumption and reuse of water for floriculture, washing roads, flushing and gardening.

Convention on the Conservation of Migratory Species of Wild Animals

The 13th Conference of Parties (COP) of the Convention on the Conservation of Migratory Species of Wild Animals (CMS), an environmental treaty under the aegis of United Nations Environment Programme, will be hosted by India during 17 to 22 February at Gandhinagar, Gujarat. The mascot for CMS COP13 is 'Gibi – The Great Indian Bustard'. It is a critically endangered species which has been accorded the highest protection status under the Wildlife Protection Act, 1972. The Indian sub-continent is also part of the major bird flyway network – the Central Asian Flyway (CAF) that covers areas between the Arctic and Indian Oceans, and covers at least 279 populations of 182 migratory waterbird species, including 29 globally threatened species. India has signed a non-legally binding Memorandum of Understanding (MoU) with CMS on the conservation and management of Siberian cranes (1998), marine turtles (2007), dugongs (2008) and raptors (2016).

Special Update: National Institute of Virology

The National Institute of Virology was established at Pune, Maharashtra in 1952 as Virus Research Centre (VRC). Its research activities were made more meaningful and self-reliant by organizing new areas of research, such as Cell repository, Electron microscopy, Rickettsioses, Hepatitis, Influenza and related viruses, Clinical virology, Biochemistry, Virus registry, and Biostatistics. The Institute was designated as one of the collaborating laboratories of the World Health Organization (WHO) in 1967 and it started functioning as the regional centre of the WHO for South-East Asia for arbovirus studies from 1969. Since 1974, it has been functioning as a WHO collaborating centre for arbovirus reference and research. In 1995 it has been re-designated as the WHO Collaborating Centre for Arbovirus and Haemorrhagic Fever Reference and Research and Rapid Diagnosis of Viral Diseases. NIV is also the National Centre for Hepatitis and Influenza.

Further details can be found at:
<http://niv.co.in/>