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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*

First Green SEZ - Kandla

Kandla SEZ (KASEZ) became the 1st Green SEZ after it was awarded IGBC Platinum Rating for Existing Cities. Kandla Green SEZ achievement is envisaged towards Government of India's commitment towards ensuring environmentally sustainable development through a series of measures & efforts towards Green SEZs Mission under *India@75 - Azadi ka Amrit Mahotsav*.

DST launched Three compendiums i.e. HFC 2018, MES 2018 & MECSP 2017 for energy storage & conservation

Department of Science and Technology (DST), GoI, launched 3 compendiums called Hydrogen and Fuel Cell (HFC) 2018, Material for Energy Storage (MES 2018), and Material for Energy Conservation and Storage Platform (MECSP 2017) which would contribute towards energy storage & conservation. The three compendiums aim towards India's policy objective to achieve decarbonisation by utilization of renewables. DST also confirmed that a total of Twenty Six projects have been supported under this program, and Four MECSP centres set up at IIT Delhi, IISc Bangalore, NFTDC Hyderabad, and IIT Bombay.

Ministry of Science and Technology to set Centre for Bio-Resources and Sustainable Development in Northeast

Ministry of Science & Technology is to set up a first-of-its-kind "Centre for Bio-Resources and Sustainable Development as a Centre of Excellence" in Arunachal Pradesh. The Center of Excellence would provide the region to use its fruits and organic food potential to the maximum extent and help in exploring many vast areas & to find lesser known or unknown new species.

DRDO developed an indigenous Anti-Drone System

Scientists and Researchers at Defence Research and Development Organisation, (DRDO), Ministry of Defence, Govt. of India have developed an Anti-Drone System to neutralize enemy drone attack. The indigenous Drone Technology is also capable of counter attacks including detection, Soft Kill (for jamming the communication links of Drone) and Hard Kill (Laser based hard kill to destroy the Drone) of enemy Drones.

NABI Researcher developed Ultra-sensitive, sensor to detect arsenic in food & water

Researcher at National Agri-Food Biotechnology Institute (NABI), Mohali has an ultra-sensitive, easy to use sensor that can detect a wide range of arsenic- from 0.05 ppb to 1000 in food & water in 15 minutes. The sensor is developed on mixed metal (cobalt/molybdenum) based metal-organic frameworks and can be tested with three modes- spectroscopic measurements, colour intensity measurement with the help of colorimeter or mobile application, and with naked eyes.

Special Update: IITM Pune developed a state-of-the-art 'Earth System Model (ESM)' to predict the impact of climate change on monsoon

Ministry of Earth Sciences (MoES), GoI, reported that Scientists at Centre for Climate Change Research (CCCR), Indian Institute of Tropical Meteorology (IITM) has developed an indigenous climate model to predict the impact of climate change on monsoon in India. The Earth System Model (ESM) is a climate model with components of atmosphere, ocean including deep ocean circulation, Arctic and Antarctic sea-ice and ocean biogeochemistry. ESM is also known as IITM-ESM and is the 1st climate model from South Asia that has contributed to the Intergovernmental Panel on Climate Change (IPCC) sixth assessment report (AR6) and participated in the Coupled Model Inter-comparison Project -Phase 6(CMIP6) experiments. IITM-ESM has capabilities to address key questions concerning the science of climate change, including reliable projections of the global and regional climate, Indian monsoon, hydrological cycle, sea-level changes, tropical ocean-atmosphere processes in a changing climate.