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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*

MoES launched India's First and Unique Manned Ocean Mission Samudrayan at Chennai

To carry out deep ocean exploration of the non-living resources such as polymetallic manganese nodules, gas hydrates, hydrothermal sulphides and cobalt crusts, located at a depth between 1000 and 5500 meters, Ministry of Earth Sciences, MoES launched India's First and Unique Manned Ocean Mission Samudrayan at Chennai. MoES also informed that the manned submersible is designed to carry three persons in 2.1 meter diameter Titanium Alloy Personnel Sphere with an operational endurance of 12h and systems to support emergency endurance up to 96h. With this launch India has joined the elite club of nations such as USA, Russia, Japan, France and China to have such underwater vehicles.

Indian scientists developed Low-cost process to synthesize silver Nano-wires

Indian scientists at the Council of Scientific and Industrial Research - National Chemical Laboratory, Pune (CSIR-NCL) under the Advanced Manufacturing Technologies Program of the Department of Science & Technology, Govt. of India, developed a process for large-scale manufacturing of nano-materials (Silver nanowires) that could bring down the costs as the process could produce silver nanowires at the scale of 500 grams per day at the cost of 20\$/gm, when compared to 250\$/gm to 400\$/gm of market price.

DBT-NBRC developed SWADESH, World's First Multimodal Brain Imaging Data and Analytics

Department of Biotechnology, under the Ministry of Science and Technology, National Brain Research Centre (DBT-NBRC), Haryana developed World's First Multimodal Brain Imaging Data and Analytics 'SWADESH', which is a unique brain initiative focusing on certified neuroimaging, neurochemical, neuropsychological data and analytics that are made accessible to researchers for managing brain disorders. SWADESH is the first large-scale multimodal neuroimaging database designed specifically for Indian population which provides analytics for various disease.

DRDO & IAF successfully tested indigenously developed Long-Range Bomb (LRB)

Defence Research and Development Organisation (DRDO) and Indian Air Force (IAF) successfully tested the indigenously developed *Long-Range Bomb (LRB)*. The successful flight test of the indigenously developed LRB marked an important milestone in indigenous development of this class of systems. The flight of LRB and performance was monitored by a number of range sensors including Electro Optical Tracking System (EOTS). The LRB bomb was designed and developed by Research Centre Imarat (RCI), a DRDO laboratory located at Hyderabad in coordination with other DRDO laboratories.

Special Update: C-CAMP launched Innovation hub to reduce the Anti-Microbial Resistance (AMR)

To tackle world's major healthcare emerging challenges *Anti-Microbial Resistance (AMR)*, Centre for Cellular and Molecular Platforms (C-CAMP), at Department of Biotechnology, launched a global collaborative platform **India AMR Innovation Hub (IAIH)**, to help reduce the Anti-Microbial Resistance (AMR) burden in India. IAIH would focus on human-animal interface, and neglected tropical diseases and aim to create a globally connected ecosystem that includes an experienced scientific and clinical knowledge base, regulatory expertise, capability, and capacity building support i.e. such as funding and advanced R&D infrastructure, multi-pronged policy measures for public health and improving access. IAIH has to outline specific interventions and prioritize focus areas in alignment with the National Action Plan on AMR.