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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

IIT Madras Developed AI-based Algorithm to Identify Cancer-Causing Alterations

To identify cancer-causing alterations in cells, Researchers at Indian Institute of Technology Madras (IIT Madras) developed an Artificial Intelligence based Mathematical Model (Algorithm) which uses a relatively unexplored technique of leveraging DNA composition to pinpoint genetic alterations responsible for cancer progression.

ISRO, to Launch the Geo-Imaging satellite "EOS-03" in 3rd Quarter of 2021

Indian Space Research Organisation, Dept. of Space, Govt. of India to launch the Geo-imaging satellite "EOS-03" in the 3rd quarter of 2021. The Geo-imaging satellite "EOS-03" would provide near-real time monitoring of natural disasters like floods & cyclones and would also enable monitoring of water bodies, crops, vegetation condition, forest cover changes etc and is capable of imaging the whole country 4-5 times daily.

DRDO successfully Flight-Tested the New Generation Akash Missile (Akash-NG)

From the Integrated Test Range (ITR) off the coast of Odisha, Defence Research & Development Organisation (DRDO) successfully flight-tested the New Generation surface to-air Missile Akash Missile (Akash-NG). Defence Research & Development Laboratory (DRDL), of DRDO developed the missile system and during the test, the missile demonstrated high manoeuvrability required for neutralising fast and agile aerial threats.

DRDO indigenously developed & successfully flight-tests the Missile - MPATGM

Defence Research and Development Organisation (DRDO) under the Aatma Nirbhar Bharat initiative, indigenously developed and successfully flight-tested the low weight, fire and forget Man Portable Anti-tank Guided Missile (MPATGM). DRDO's missile MPATGM is incorporated with state-of-the-art Miniaturized Infrared Imaging Seeker along with advanced avionics and the successful test brought the development of indigenous third generation man portable Anti-Tank Guided Missile close to completion. The test successfully validated the minimum range as all the mission objectives were met.

Indian Government planned to Commission More Nuclear Power Plants for Power Generation

The Govt. of India has planned to commission more nuclear power plants for power generation and in this regard has accorded administrative approval and financial sanction for construction of 10 indigenous 700 MW Pressurized Heavy Water Reactors (PHWRs) to be set up in fleet mode. The Government also confirmed that the nuclear capacity is expected to reach 22480 MW by 2031 as the Nuclear powerplants are designed, by adopting safety principles of redundancy, diversity and provide fail-safe design features following a defence-in-depth approach.

Special Update: Indian Govt. Approved PLI Scheme for Specialty Steel

Govt. of India, approved Production-linked Incentive (PLI) Scheme for Specialty Steel for five years i.e. from 2023-24 to 2027-28, with a budget outlay of INR 6322 crores. The PLI Scheme for Specialty Steel is expected to bring in investment of approximately INR 40,000 crores and capacity addition of 25 MT and would provide employment to about 5,25,000 people of which 68,000 will be direct employment. With this PLI Scheme the speciality steel production is expected to become 42 million tonnes by the end of 2026-27. By becoming Aatma Nirbhar in producing speciality steel, India will move up the steel value chain and come at par with advanced steel making countries like Korea and Japan.

The five categories of speciality steel which have been chosen in the PLI Scheme are:

- Coated/Plated Steel Products
- High Strength/Wear resistant Steel
- Specialty Rails
- Alloy Steel Products and Steel wires
- Electrical Steel