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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

Team of researchers discover phenomena to link unlike fields

Team of Indian and International researchers have uncovered a universal phenomenon, called spectral condensation, that occurs during transitions from random patterns to well-ordered periodic patterns in complex systems, which is known as aeroelastic instability, will shed light on self-organisation evolution, that will lead to better management of engineering and non-engineering phenomena. Universal behaviour of spectral condensation, specifically the emergence of oscillations, can help control the parameters of stability in engineering systems like rocket motors, boilers and gas turbine as well as non-engineering phenomena like earthquake or emergence of disease, thus avert damage.

ISRO develop 'green propulsion' for human space mission

Indian Space Research Organisation (ISRO) chairman Dr. K Sivan has remarked that the space agency is developing 'green propulsion' for its ambitious human space flight mission, 'Gaganyaan'. ISRO will be looking to limit the environmental damage by adopting green technologies such as the space grade lithium-ion batteries, which will be useful for mass adoption of electric vehicle.

NIO to ink MoU with Navy

The Indian Navy and the National Institute of Oceanography (NIO) will be signing a Memorandum of Understanding virtually to collaborate and exchange expertise in the field of ocean studies. As part of the agreement, NIO and the Navy will undertake joint studies in the field of oceanography, particularly ocean modelling, ocean data collection and other professional engagements with the latest developments in the field of oceanography.

National Mathematics Day

In honour of birth anniversary of self-taught Indian mathematician, Srinivasa Ramanujan, who contributed around 3500 mathematical formulas to the world, 22 December has been celebrated as National Mathematics Day.

Winners of National Bio Entrepreneurship Competition (NBEC) for 2020

Bengaluru-based life science incubator Centre for Cellular and Molecular Platforms (C-CAMP), which organized the fourth National Bio Entrepreneurship Competition (NBEC 2020) announced 14 innovators as the winners. Of the 14 winners, 11 were bio-entrepreneurs and three were student-led teams, that were selected out of more than 3,100 applications after the four-months-long competition. The bio-entrepreneurs were Carditek Medical Devices, Cyclops Medtech, Avisa, Agdhi Tech, Accord Innovations, Aduvo Diagnostics, Nanopore, Sascan Meditech, Qzense, Godaam Innovations. The winners in the student-team innovation category were Mr. Tanish T Sridhar, Mr. Chandan Kumar Jha and Mr. Abduljabbar Khan.

International Science Film Festival (IISF) for 2020

Hon'ble Prime Minister Shri Narendra Modi inaugurated the sixth edition of the International Science Film Festival of India (ISFFI), a vital platform to attract enthusiasts and young film-makers towards science film making and contribute to science popularization. The platform received 634 science films entries from 60 countries. The theme of IISF-2020 was 'Science for Self-Reliant India and Global Welfare'. Four educational films by Post Graduate Institute of Medical Education and Research (PGIMER), namely 'War Against Covid-19', 'Breast Cancer', 'Hypoglycaemia' and 'Badlaav' were nominated under different categories in the IISF 2020.

AstraZeneca's Fasenra gets green signal for asthma treatment in India

AstraZeneca has received marketing authorisation from the Drugs Controller General of India (DCGI) for use of Fasenra for the management of patients with severe asthma. Fasenra is not an inhaler or a steroid and is administered once in eight weeks under the skin via injection as maintenance therapy. It is an add-on maintenance treatment for patients with severe eosinophilic asthma. It is designed to target cells in the body called eosinophils, which are a key cause of the eosinophilic subtype of asthma. Studies have also shown that patients on Fasenra could reduce their oral steroid intake significantly, thereby reducing the potential steroid-related side-effects.

Special Update: Central Institute of Petrochemicals Engineering & Technology (CIPET)

Central Institute of Petrochemicals Engineering & Technology (CIPET) (formerly known as Central Institute of Plastics Engineering & Technology (CIPET)) was established in 1968 by Government of India with the assistance of United Nations Development Programme (UNDP) at Chennai. The main objective of setting up of this specialized institute was to develop manpower in different disciplines of Plastics Engineering & Technology as no similar institute was in existence in the country. International Labour Organization (ILO) served as the executing agency. During the initial project period between 1968 and 1973, the institute achieved the targets envisaged and was rated as one of the most successful UNDP projects implemented worldwide. CIPET operates from various locations spread across the country to cater the needs of the Polymer and allied industries.

Further details can be found at:

<https://www.cipet.gov.in/>