



Presents

## Science and Technology Current Affairs May 2019

CURRENT AFFAIRS ▾ QUIZ ▾ PREVIOUS PAPER ▾ STUDY MATERIALS ▾ NOTIFICATIONS ▾ RESULTS ▾ ONLINE TEST

### Science and Technology

#### India's first mega science exhibition

- Vigyan Samagam, India's first mega science exhibition, kicked off in Mumbai recently. The travelling expo is organised by the Department of Atomic Energy and the Department of Science and Technology.

#### Google's New Privacy Tools

- Google announced new privacy tools intended to give people more control, The company also announced updates for its artificially intelligent voice assistant as well as a cheaper Pixel phone and a rebranding of his smart-home products.

#### Redefined units of measurement of kilogram, Kelvin, mole and ampere

- General Conference on Weights and Measures (CGPM) at BIPM has unanimously adopted the resolution to redefine four of the seven base units, the kilogram (SI unit of weight), Kelvin (SI unit of temperature), mole (SI unit of amount of substance), and ampere (SI unit of current).
- The new SI is being implemented worldwide from 20th May 2019 i.e. the World Metrology Day.

#### Coral bleaching observed near Mandapam, Keezhakkarai, Palk Bay

- The National Centre for Coastal Research, an institute under the Ministry of Earth Sciences, in India, has a field research station in the Gulf of Mannar region, and researchers have found an alarming pattern of bleaching in the reefs in Mandapam, Keezhakkarai and Palk Bay.

**FDA okays \$2M medicine, most expensive ever**

- The Food and Drug Administration approved the most expensive medicine ever, for the treatment, called Zolgensma, for a rare disorder that destroys a baby's muscle control and kills nearly all of those with the most common type of the disease within a couple of years.

**'World's rivers loaded with antibiotics waste'**

- Rivers worldwide are polluted with antibiotics that exceed environmental safety thresholds by up to 300 times, according to research unveiled at a conference on May 27.
- Scientists found one or more common antibiotics in two-thirds of 711 samples taken from rivers in 72 countries, they told a meeting of environmental toxicologists in Helsinki.

**Inventions / Discover****Robot from IIT Madras checks pipelines for leakage**

- Researchers from IIT Madras have developed a robot to check pipelines for leaks and other faults. Named Endobot, this robot is to be marketed by an IIT Madras incubated startup, Solinas Integrity, founded by the researchers.

**IIT Delhi 3D prints human skin**

- Researchers at the Indian Institute of Technology (IIT) Delhi have successfully 3D bioprinted human skin models that have certain anatomically relevant structural, mechanical and biochemical features similar to native human skin.

**IIT Kanpur identifies novel molecule to control hyper inflammation**

- Researchers at the Indian Institute of Technology (IIT) Kanpur have identified and characterised a novel small protein molecule that can effectively control inflammation leading to better treatment outcomes.

**India's newest pit viper found in Arunachal Pradesh**

- India has a fifth brown pit viper but with a reddish tinge. A team of herpetologists led by Ashok Captain have described a new species of reddish-brown pit viper, a venomous snake with a unique heat-sensing system, from a forest in West Kameng district of Arunachal Pradesh.

**IIT-B researchers develop 'Made in India' microprocessor**

- Engineers from the Indian Institute of Technology Bombay (IIT Bombay) have developed a microprocessor called AJIT, the first to be conceptualised, designed, developed and manufactured in India. The innovation, which has brought industry, academia and the government together, could reduce the country's dependence on imports.

**A lens that can turn smartphone into a microscope**

- Researchers from the Indian Institute of Technology (IIT) Bombay have devised low-cost lenses that will elevate smartphone cameras to the power of a microscope. The lens with a resolution of 1.4 micrometre, which has been prepared by using natural interface, has been successfully tested.

**Kolkata researchers use novel compound to kill cancer cells**

- Researchers at Kolkata's the Indian Institute of Chemical Biology (CSIR-IICB) and the Indian Association for the Cultivation of Science (IACS) have designed and synthesised about 25 quinoline derivatives that show potent anticancer activity.

**'Rain-loving' snake discovered in Mizoram**

- It's literally raining reptiles in the Northeast, and the latest to be discovered has a Mizo name that means rain-loving. This is new to science, the discovery is locally called Ruahlawmrul or rain-loving snake.

**IMTECH's novel compound treats colistin-resistant bacteria**

- A novel compound isolated from a soil bacterium shows promise in killing Gram-negative bacteria (Klebsiella pneumoniae and E. coli) that are resistant to colistin, a powerful, last-line antibiotic.

**Western Ghats yields a new species of Amaranthus**

- A team of researchers from three colleges in the State and the Regional Cancer Centre, Thiruvananthapuram, have reported a new edible plant species belonging to the genus Amaranthus from the southern Western Ghats of Kerala.

**IIT Bombay fabricates wearable supercapacitor**

- Researchers at the Indian Institute of Technology (IIT) Bombay have fabricated a wearable supercapacitor that can store and deliver power ranging from microwatt to milliwatt. The energy stored in the device can power GPS location-based transmitters or a 1.8 volt LED.

**IISc team confirms breakthrough in superconductivity at room temperature**

- Putting to rest all doubts and criticism, a team led by Prof. Anshu Pandey from the Indian Institute of Science (IISc), Bengaluru confirms that their material exhibits major properties of superconductivity at ambient temperature and pressure.

**Seawater from Ice Age tucked in rocks discovered in Indian Ocean**

- In a first, scientists have discovered the remnants of seawater dating back to the Ice Age, tucked inside rock formations in the middle of the Indian Ocean. Researchers from the University of Chicago in the U.S. made the discovery on a months-long scientific mission exploring the limestone deposits that form the Maldives.

**New geological epoch — the Anthropocene**

- On May 21, a 34-member panel of the Anthropocene Working Group (AWG) voted 29-4 in favour of designating a new geological epoch — the Anthropocene. The decision reflects how various facets of the Earth have been shaped by human activity.
- The vote signals the end of the Holocene Epoch, which began 11,700 years ago.

**New species of wasp identified in Goa**

- A new species of wasp from the genus Kudakrumia has been recently identified by scientists in Goa. The wasp, Kudakrumia rangnekari, has been named after Goa based researcher Parag Rangnekar.

**Space Science****SpaceX to send organs on a chip to the International Space Station**

- SpaceX is reportedly set to send microchips embedded with living human cells or so-called organs on a chip to help understand how space travel affects humans.
- The set of tissue chips modelling kidneys, bone and cartilage, blood-brain barrier, and lungs is scheduled to arrive at the International Space Station (ISS) in the next few days.

**Chandrayaan-2**

- Chandrayaan-2, the lunar lander mission planned to be launched during July 9-16, will have 14 Indian payloads or study devices. The 3,800-kg spacecraft includes an orbiter which will circle the moon at 100 km; a five-legged lander called Vikram that will descend on the moon on or around September 6; and a robotic rover, Pragyan, that will probe the lunar terrain around it.

**Shrinking Moon generating lunar quakes**

- The Moon is shrinking as its interior cools, getting over 50 metres skinnier through the last several hundred million years and causing quakes on the lunar surface. The Moon is steadily shrinking, causing wrinkling on its surface and quakes, according to an analysis of imagery captured by NASA's Lunar Reconnaissance Orbiter.

**All-seeing radar imaging satellite**

- RISAT-2B, the satellite due to be launched before dawn on May 22 from Sriharikota, will mark the resumption of a vital ring of Indian all-seeing radar imaging satellites after seven years. RISAT-2B is to be followed by RISAT-2BR1, 2BR2, RISAT-1A, 1B, 2A and so on.

**SpaceX launches first satellites for Musk's Starlink internet service**

- High-tech entrepreneur Elon Musk's SpaceX company launched a Falcon 9 rocket on Thursday on a mission to carry the first batch of five dozen small satellites into low-Earth orbit for his new Starlink internet service.

**PSLV-C46 successfully launches RISAT-2B**

- India's Polar Satellite Launch Vehicle (PSLV-C46) successfully launched the RISAT-2B satellite from Satish Dhawan Space Centre (SDSC) SHAR, Sriharikota in Andhra Pradesh. This was the 72<sup>nd</sup> launch vehicle mission from SDSC SHAR, Sriharikota and 36<sup>th</sup> launch from the First Launch pad.
- RISAT-2B is a radar imaging earth observation satellite weighing about 615 kg. The satellite is intended to provide services in the field of Agriculture, Forestry and Disaster Management.

**ISRO, IAF ink pact for astronaut training**

- The Indian Air Force and the Indian Space Research Organisation signed an MoU for getting Indian astronauts trained for ISRO's Gaganyaan. The development formally involves IAF's Bengaluru-based medical arm, the Institute of Aerospace Medicine (IAM), in the programme as the nodal centre to train the first set of Indian astronauts.
- The 10,000-crore Gaganyaan is planned for 2022, the 75th year of Indian independence.

**'Forbidden' planet discovered in Neptunian Desert**

- Astronomers said they have discovered a rogue exoplanet with its own atmosphere in the Neptunian Desert. NGTS-4b, nick-named 'The Forbidden Planet' is smaller than Neptune but three times the size of Earth, said researchers led by the University of Warwick in the UK.

**App/ Web Portal/ Toll Free**

**Amazon Pay enables instant money transfer on Android**

- Amazon Pay launched person-to-person (P2P) payments for Android users who can now make instant bank-to-bank transfers using the UPI platform on the Amazon app.

**Bharti Airtel launches Wynk Tube music app**

- Bharti Airtel launched a music application Wynk Tube an extension of its existing Wynk Music app. Wynk Tube will allow users to stream audio and video of popular tracks within the same interface.

**PayPal integrates One Touch with Google Smart Lock in India**

- PayPal introduced its One Touch experience by Google Smart Lock in India. The feature, supported on Android, allows users to register their devices with PayPal.

**Website of Lokpal inaugurated**

- The Website of the Lokpal was inaugurated by the Chairperson, Justice Shri Pinaki Chandra Ghose in presence of all the Members of Lokpal. The Website can be accessed at <http://lokpal.gov.in>. The Lokpal is the first institution of its kind in independent India, established under the Lokpal and Lokayuktas Act, 2013.
- The Government appointed Justice Shri Pinaki Chandra Ghose, as the first Chairperson of the Lokpal who was administered oath on 23rd March, 2019 by the President of India.

**Kochi City start-up launches taxi aggregation app**

- City-based technology start-up Mindmaster Technologies has developed a GPS-based application for the unorganised taxi-auto sectors called PIU. It aims to unite taxi-auto drivers in the unorganised sector on the lines of the existing online taxi aggregators.

**General Knowledge Study Materials [Click Here for Download](#)**

**All subject Study Materials [Click Here for Download](#)**

**2019 Current Affairs Download – [Click Here](#)**

**Whatsapp Group  [Click Here](#)**

**Telegram Channel  [Click Here](#)**