

## EVERYDAY CURRENT AFFAIRS—FEBRUARY 7, 2022

### STATES

- The Kerala government - signed an MoU with Social Alpha to support innovative and clean energy technology programmes of start-ups through its Clean Energy International Incubation Centre (CEIIC)



- ✓ The agreement was signed through the Energy Management Centre (EMC) and Kerala Development and Innovation Strategy Council (KDISC)
- ✓ Set up in 2018 by Social Alpha, CEIIC is a joint initiative of Tata Trusts and the government of India
- ✓ The initiative is supported by the Department of Biotechnology, BIRAC, Tata Power and Tata Power-Delhi Distribution.
- ✓ Since its inception in 2016, Social Alpha has supported more than 150 start-ups including 60+ seed investments
- ✓ The program aligns with the goals of the Mission Innovation Platform and India's commitment towards Climate
- ✓ The focus of agreement is on clean energy technologies promoting smart grids, transition to renewables, and climate action by setting up a joint incubation centre

### NATIONAL

- The Indian Institute of Science (IISc) in Bengaluru - has installed one of the most powerful supercomputers in India

- ✓ Dubbed Param Pravega, the supercomputer was commissioned under the National Supercomputing Mission (NSM) of Department of Science and Technology and the Ministry of Electronics and Information Technology (MeitY).



- ✓ The NSM has so far established 10 supercomputer systems across India with a cumulative computing power of 17 petaflops
- ✓ Param Pravega has a supercomputing capacity of 3.3 petaflops (1 petaflop equals a quadrillion or  $10^{15}$  operations per second) and is the largest ever installed in an Indian academic institution
- ✓ It has been designed and developed by the Centre for Development of Advanced Computing (C-DAC)
- ✓ Many components of Param Pravega have been manufactured and assembled indigenously in India
- ✓ Param Pravega is a supercomputer part of the High-Performance Computing class of systems, with Intel Xeon Cascade Lake processors for the CPU nodes and NVIDIA Tesla V100 cards on the GPU nodes.
- ✓ The entire system is built to operate using Linux OS based on CentOS 7.x distribution
- ✓ It hosts an array of program development tools, utilities, and libraries for ease of development and execution of High-Performance Computing applications.
- ✓ Param Pravega is not the first supercomputer to be installed in the IISc campus.
- ✓ In 2015, the Institute procured and installed SahasraT, which was at that time the fastest supercomputer in the country.

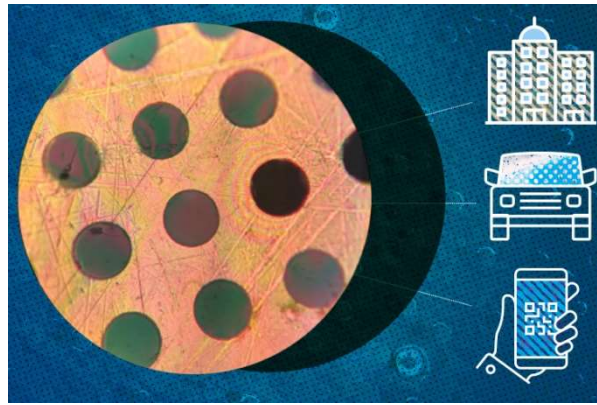
## SCIENCE, TECHNOLOGY & ENVIRONMENT

- **NASA - announced plans for the International Space Station to retire in 2030 and then crash it into an uninhabited area known as 'Point Nemo' into the Pacific Ocean in 2031**



- ✓ The International Space Station was the brainchild of former US President Ronald Reagan, who in 1984 proposed building a permanently inhabited spacecraft in cooperation with a few other countries
  - ✓ In 1998, the first piece of the space station, a control module, was launched into space on board a Russian rocket
  - ✓ Over the next two years, the space station was built piece by piece until it was ready to carry a crew onboard.
  - ✓ It was on November 2, 2000, that the first crew arrived.
  - ✓ Since then, the space lab has carried over 200 astronauts and cosmonauts from about 19 different countries — marking a continuous human presence in space.
  - ✓ According to NASA, the space station weighs about a million pounds on earth and is approximately the same size as an American football field.
  - ✓ It can support a crew of six people, along with visitors and houses laboratory modules from the United States, Russia, Japan and Europe.
  - ✓ Initially ISS was meant to be operative for 15 years but in 2014 its span was extended in space to another 10 years
  - ✓ Point Nemo, located 2,700 km away from any land, is a space cemetery where space debris is brought to rest.
    - ✓ The point is named after a character in Jule Verne's novel "Twenty Thousand Leagues under the Sea."
  - ✓ According to NASA, ISS will be replaced by "one or more commercially-owned and -operated" space platforms
  - ✓ In this regard, NASA had awarded contracts to three companies — Blue Origin, Nanoracks, and Northrop Grumman — to lead build private space stations in Earth orbit.
- **Researchers from Massachusetts Institute of Technology (MIT) - have developed a new two-dimensional polymer material called 2DPA-1 that is stronger than steel but light as plastic**





- ✓ The new polymer has twice the yield strength of steel and up to six times the deformation resistance of bulletproof glass.
- ✓ The material is capable of self-assembling into sheets, unlike other polymers that often form one dimensional chain.
- ✓ For destroying the material, the energy required is twice that of steel even though the material has just one-sixth the density of steel.
- ✓ With its novel properties, the new material can ultimately be used as thin but ultrahard protective coating for phones or car parts
- ✓ The research has been sponsored by the Center for Enhanced Nanofluidic Transport which is in turn funded by the U.S. Department of Energy Office of Science, and the Army Research Laboratory.

## OBITUARY

- **Legendary singer Lata Mangeshkar - passed away in Mumbai at the age of 92 due to multi-organ failure on February 6**



- ✓ After testing positive for Covid-19 in early January, the iconic vocalist was admitted to Mumbai's Breach Candy hospital
- ✓ Hailed as the Nightingale of India, the versatile singer has lent her voice to thousands of songs in 36 languages in a career spanning almost eight decades.
- ✓ The singer was laid to rest with full state honours at Mumbai's Shivaji Park
- ✓ As a mark of respect, a two-day national mourning has been announced.

- ✓ The National Flag will fly at half-mast for two days and there will be no official entertainment.
- ✓ Born on September 28, 1929, in Madhya Pradesh, Lata was mentored by Master Vinayak, a filmmaker of the 1930s and Ghulam Haider after moving to Mumbai
- ✓ Apart from lending her voice to several popular tracks, Lata Mangeshkar has also been credited as a music director for four Marathi movies, apart from producing few movies in Hindi and Marathi
- ✓ She was the first Indian to play in the Royal Albert Hall in 1974
- ✓ Lata has received several awards, including three National Film Awards, 15 Bengal Film Journalists' Association Awards, four Filmfare Best Female Playback Awards, two Filmfare Special Awards, and the Filmfare Lifetime Achievement Award.
- ✓ Lata was conferred the Dadasaheb Phalke Award in 1989 and the highest civilian honor (Officer of the Legion of Honour) of French government in 2007
- ✓ In 2001, she was awarded the Bharat Ratna for her contribution to the arts, thereby becoming the second vocalist to receive this honour apart from late Carnatic music giant M S Subbulakshmi.
- ✓ She was also honoured with the Padma Vibhushan (1999) and Padma Bhushan (1969)
- ✓ Lata is also a recipient of honorary doctorates from Sangeet Natak Akademi (1989), Indira Kala Sangeet Vishwavidyalaya, Khairagarh, and Shivaji University in Kolhapur.
- ✓ In addition to these achievements, Lata Mangeshkar has the Guinness World Record for being the most recorded performer in the history of Indian music, set in 1974
- ✓ Lata was also nominated as a member of the Rajya Sabha in 1999 and a perfume brand name was also launched named Lata Eau de Parfum in 1999
- ✓ On her 90th birthday in September 2019, the Indian government honored her with the Daughter of the Nation award
- ✓ Lata also established the Master Deenanath Mangeshkar Hospital in Pune in 2001, which was managed by the Lata Mangeshkar Medical Foundation.
- ✓ She launched her own music label 'LM Music' on 28 November 2012 with an album of bhajans

## SPORTS

- **India - won a record-extending fifth U-19 World Cup title after defeating England by four wickets in the final at the Sir Vivian Richards Stadium in North Sound, Antigua on February 5**
- ✓ Earlier, India had won the U-19 World Cup in 2000, 2008, 2012, and 2018.
- ✓ Yash Dhull becomes the fifth Indian captain to win the title after Mohammad Kaif, Virat Kohli, Unmukt Chand and Prithvi Shaw.



- ✓ Dewald Brevis of South Africa is the Player of the tournament for scoring 506 runs in six games.
- ✓ India's Raj Bawa is the Player of the Match for his 5/31 and scoring 35 with the bat as well.
- ✓ In the semi-finals, India defeated Australia by 96 runs, while England prevailed over Afghanistan

## RANKINGS

- **At least six journalists were killed and 121 journalists/media houses including 108 journalists and 13 media houses/newspapers - were targeted in India, as per the "India Press Freedom Report 2021" released by the Rights and Risks Analysis Group**
- ✓ The highest number of journalists/media organisations targeted was in Jammu and Kashmir (25), followed by Uttar Pradesh (23); Madhya Pradesh (16); Tripura (15); Delhi (8); Bihar (6); Assam (5); Haryana and Maharashtra (4 each); Goa and Manipur (3 each); Karnataka, Tamil Nadu and West Bengal (2 each); and Andhra Pradesh, Chhattisgarh and Kerala (1 each).
- ✓ Uttar Pradesh reported the highest registration of FIRs with nine; followed by six each in Delhi and J&K; and three in Bihar; among others
- ✓ The maximum number of attacks by non-State actors took place in Tripura with attacks on 10 journalists and 5 (five) media houses followed by Uttar Pradesh (3) and Tamil Nadu (2).
- ✓ Out of the 17 journalists arrested or detained in the country, five were from J&K, followed by Delhi (3), Maharashtra, Manipur and Tripura (2 each), and Assam, Chhattisgarh and Haryana (1 each)

