



National

Narendra Singh Tomar inaugurates world's second-largest refurbished gene bank

The Union Minister for Agriculture and Farmers Welfare, **Narendra Singh Tomar** has inaugurated the world's second-largest **National Gene Bank** at the **National Bureau of Plant Genetic Resources (NBGR), Pusa, New Delhi**.

The refurbished state-of-the-art National Gene Bank provides the facility for germplasm, to secure the heritage of seeds for years in minus **20 degrees Celsius temperature**.

The new facility will help in the conservation of the diversity of indigenous crops in the country, as well as benefit the farmers by making them self-reliant and providing a source of increasing their income.

PM Modi launches National Automobile Scrappage Policy

Prime Minister Narendra Modi on Friday launched the long-awaited National Automobile Scrappage Policy, describing it as a "significant step towards Aatmabirbhar Bharat."

The policy calls for private and commercial vehicles that are more than 20 and 15 years old, respectively, to undergo 'fitness tests.' In the absence of a "fitness certificate," registration of such vehicles will be automatically cancelled.

It further recommends mandatory scrapping of all government vehicles that are more than 15 years old but is applicable only on four-wheelers.

The scheme also proposes several incentives which the owners can avail after being given a scrapping certificate. This includes the scrap value for the old vehicle, which is expected to be around 5-6% of the price of a new vehicle.

Additionally, a road tax rebate of up to 25% for new personal vehicles, and 15% for new commercial vehicles, as well as a 5% discount against the scrapping certificate, have also been proposed under the policy.

Union Minister For Social Justice And Empowerment Dr. Virendra Kumar Flags Off 'Operation Blue Freedom' To Create A World Record At Siachen Glacier

Participating in a series of events organised by Dr. Ambedkar International Centre, a premier autonomous research body mandated to research and provide policy feed to empower marginalised communities and to bring in Socio Economic transformation in the society, Dr. Virendra Kumar flagged off a pioneering expedition 'Operation Blue Freedom'.

A team of people with disabilities from across the country undertook an expedition till Siachen Glacier to create a new World Record for the largest team of people with disabilities to reach the world's highest battlefield.

Recently, the Government of India had permitted a team of selected people with disabilities to scale Siachen Glacier.

This pioneering expedition has brought India on the global stage as a leader in empowering Divyangjan and set a benchmark for other nations to emulate.

Bharat Dynamics Ltd joins hands with MBDA to establish final assembly facility for ASRAAM missiles in India

Bharat Dynamics Limited (BDL) has joined hands with European multinational arms manufacturer MBDA to establish a facility for final assembly, integration and testing (FAIT) of advanced short range air-to-air missiles (ASRAAM) in India.

The new facility will also have the potential to conduct maintenance, repair and overhaul operations of ASRAAMs.

BDL and MBDA signed a licensing agreement to establish the manufacturing facility. As per the agreement, MBDA will transfer equipment and knowledge to BDL for the facility.

The facility is expected to commence operations by 2022-23 and work on establishing it will start immediately.

The ASRAAM is one of the within visual range missiles currently available. In the future, BDL will manufacture ASRAAMs at its unit in Telangana's Bhanur for domestic purpose as well as export through MBDA.

Union Minister Ashwini Vaishnaw launches 'Amrit Mahotsav Shri Shakti Challenge-2021'

Union Minister for Electronics and Information Technology Ashwini Vaishnaw yesterday launched the 'Amrit Mahotsav Shri Shakti Challenge-2021' to encourage technology solutions developed by Women Entrepreneurs that facilitate Women's Safety and Empowerment.

The aim is to empower women to help them achieve their full potential. Speaking at the Start-up Women Entrepreneurs' Awards function virtually, the Minister hoped for the enthusiastic participation in the Shri Shakti Challenge.

Talking about the entrepreneurship and innovation ecosystem in the country, Mr Vaishnaw said that the number of incubators and accelerators which is around 100 at present, is not sufficient for a country of over 130 crore population.

He said, the government will be scaling up the network of incubators and accelerators to phenomenally multiple levels in the next three years.

Justice BV Nagarathna in line to become first woman Chief Justice of India

The Supreme Court collegium, headed by Chief Justice of India (CJI) NV Ramana, has cleared nine names for appointment as judges in the court.

Justice BV Nagarathna, currently a judge in the Karnataka High Court, is in line to become the first woman Chief Justice of India (CJI) in 2027 if the government clears her name for appointment.

Her father E S Venkataramiah served as the Chief Justice of India between June 1989 and December 1989.

She was appointed as an Additional Judge of the Karnataka High Court in 2008 and as a permanent judge after two years.

Nagarathna, a judge of the Karnataka High Court, will likely have a month-long tenure as chief justice but her appointment will be a historic moment.

Cabinet approves MoU between India and Bangladesh on cooperation in the field of Disaster Management, Resilience and Mitigation

The Union Cabinet, chaired by Prime Minister Shri Narendra Modi, was apprised of the Memorandum of Understanding (MoU) signed on March, 2021 between the National Disaster Management Authority (NDMA), Ministry of Home Affairs, the Republic of India and the Ministry of Disaster Management and Relief, People's Republic of Bangladesh on Cooperation in the field of Disaster Management, Resilience and Mitigation.

Benefits:

The MoU seeks to put in place a system, whereby both India and Bangladesh will be benefited from the Disaster Management mechanisms of each other and it will help in strengthening the areas of preparedness, response and capacity building in the field of Disaster Management.

The MoU seeks to put in place a system so that both the countries benefit from the Disaster Management mechanisms of each other. It will also help in strengthening the areas of preparedness, response and capacity building in the field of Disaster Management. The MoU envisages that India and Bangladesh will extend mutual support to each other at the time of large scale disaster in the field of relief, response, reconstruction and recovery.

Both the countries will also exchange relevant information, remote sensing and other scientific data. They will also share best practices in the field of disaster response, recovery, mitigation, capacity building for ensuring resilience, etc.

SC Passes Interim Order Allowing Women to Appear for NDA Exam, Slams 'Gender Discrimination'

The Supreme Court on Wednesday issued an interim order allowing women candidates to take the National Defence Academy examination, scheduled to be held on September 5, while questioning why “co-education is a problem” in the Armed Forces.

The Bench orally observed that it was “absurd” that women were not allowed to appear for the National Defence Academy (NDA) even after the Supreme Court, in a judgment, had directed permanent commission for women in the Army.

Dharmendra Pradhan inaugurates Centre for Research & Innovation in Artificial Intelligence set up at IIT-Hyderabad

Union Education Minister Dharmendra Pradhan has virtually inaugurated the Centre for Research and Innovation in Artificial Intelligence set up at the Indian Institute of Technology-Hyderabad (IIT-H) on Wednesday morning.

He also inaugurated the first Academic Building of the Department of Materials Science & Metallurgical Engineering, High-Performance Computing Centre and High-Resolution Electron Microscopy Facility.

Speaking on the occasion, the minister said the Centre for Research and Innovation in Artificial Intelligence in collaboration with Japan International Cooperation Agency-JICA is the best example of international Cooperation. The University has an agreement with Honeywell Technology Solutions for setting up the lab.

Rajnath launches Defence India Startup Challenge 5.0

Minister Rajnath Singh on Thursday launched the 5th edition of the Defence India Start-up Challenge (DISC) under Innovations for Defence Excellence - Defence Innovation Organisation (iDEX-DIO) meant to achieve self-reliance and foster innovation and technology development in the defence and aerospace sectors.

“Thirty-five problem statements – 13 from the Services and 22 from Defence Public Sector Undertakings (DPSUs) – were unveiled under DISC 5.0. These are in areas such as situational awareness, augmented reality, artificial intelligence, aircraft-trainer, non-lethal devices, 5G network, underwater domain awareness, Drone SWARMS and data capturing,” a Defence Ministry statement said.

Priyanka Chopra Jonas named Jio MAMI Mumbai Film Festival chairperson

Actor-producer Priyanka Chopra Jonas on Tuesday was announced as the chairperson of Jio MAMI Film Festival, almost four months after Deepika Padukone stepped down from the position.

The Mumbai Academy of Moving Image (MAMI) unveiled its plans for the coming year, edition and the change in leadership.

Chopra Jonas was unanimously nominated by MAMI's Board of Trustees which comprises Nita M Ambani (Co-Chairperson), Anupama Chopra (Festival Director), Ajay Bijli, Anand G. Mahindra, Farhan Akhtar, Isha Ambani, Kabir Khan, Kaustubh Dhavse, Kiran Rao, Rana Daggubati, Riteish Deshmukh, Rohan Sippy, Siddharth Roy Kapur, Vikramaditya Motwane, Vishal Bhardwaj and Zoya Akhtar.

CM Arvind Kejriwal inaugurates India's first smog tower in Delhi

Chief minister Arvind Kejriwal on Monday inaugurated India's first ever smog tower in the capital's Connaught Place area. The over 20-metre-tall structure has been set up to improve air quality in a radius of around 1km.

"To fight pollution, we have installed India's first smog tower in Delhi today. It can help clean air within one-kilometer range. It has been installed on an experiment basis and data from it will be analysed by IIT-Delhi and IIT-Bombay," said Kejriwal after the inauguration event.

President Ramnath Kovind gives assent to Constitution (105th Amendment) Act 2021

President Ramnath Kovind has given his assent to the Constitution (105th Amendment) Act 2021, which restores the power of State Governments to identify and specify Socially and Economically Backward Classes (SEBCs).

A notification to this effect was issued by Ministry of Law and Justice.

The Constitution (One hundredth and twenty-seventh amendment) Bill 2021 was passed by the Parliament on 11th of this month during the recently concluded monsoon session.

While speaking on the Bill in Lok Sabha Social Justice and Empowerment Minister Dr Virendra Kumar had informed that the bill should be considered as the 105th Constitution Amendment bill after being renumbered.

Nashik Is The First Non-Metro Indian City To Sign For 'Race To Zero' Pledge, Plans To Develop Carbon-Free Transport

Nashik has become the first non-metro city in Maharashtra to sign the 'Race To Zero' pledge for going net zero on greenhouse gas by 2040.

The pledge has already been signed by Bengaluru, Chennai, Delhi, Kolkata and Mumbai.

Net Zero is an ambitious target where an institution, a city or a country aims to attain a balance between the amount of greenhouse gas produced and the amount removed from the atmosphere.

The United Nations' 'Race to Zero' is the largest 'credible alliance' of companies, cities, states, regions, investors, universities and other actors, aiming to halve carbon emissions by 2030.

Delhi-Chandigarh highway becomes India's first EV-friendly highway

The Union Heavy Industries Minister Dr. Mahendra Nath Pandey inaugurated the country's very first Solar Electric Vehicle (EV) Charging Station at the Karnal Lake Resort on Thursday.

About the Solar EV charging station:

With the inauguration of the first solar electric vehicle charging station at the Karnal lake resort, the Delhi-Chandigarh Highway has become the first e-vehicle friendly highway in India.

The EV charging station at the Karnal lake resort is strategically located at the midpoint of the Delhi-Chandigarh highway and is equipped to cater to all types of E-cars plying currently in the country.

Further, work is in progress for upgrading the other charging stations on this highway, within a year.

Set up by BHEL under FAME:

The network of Solar-based Electric Vehicle Charging stations (SEVCs) is set up by Bharat Heavy Electricals Limited (BHEL) under the FAME-1 [Faster Adoption and Manufacturing of (Hybrid) & Electric Vehicles in India] scheme of the Ministry of Heavy Industries.

Amitabh Bachchan Replaces Alexa, Becomes First Indian Celebrity to Give Voice on Amazon Alexa

Amazon Alexa and Amitabh Bachchan partnered in September last year and now a year later, Amazon Alexa has got the voice of Amitabh Bachchan. Amazon Alexa is now ready to answer your questions in Big B's voice.

The company announced that you can talk to Amitabh Bachchan through Alexa and ask him questions and answers. Amitabh Bachchan's voice has become available on Celebrity Voice Feature on Amazon Alexa.

Alexa users can now connect Amitabh Bachchan to any speaker or Echo Display and take advantage of this feature. However, this feature will only work on Android for now.

Exercise Konkan 2021 held between INS Tabar and HMS Westminster

- Konkan exercise witnessed the participation of integral helicopters of two ships and Falcon Electronic Warfare aircraft.
- Exercises like co-ordinated anti-submarine procedures, combined maritime picture compilation, firing drills, replenishment at sea and combat formation maneuvering were conducted during the exercise.
- These exercises and diverse professional engagements enabled Exercise Konkan 2021 in consolidating interoperability which in turn have helped in establishing a strong bond of friendship between both the navies.
- The naval exercise Konkan 18 is held in between the navies of India and United Kingdom. It is based on the long-term strategic relationship between them. This exercise provides a platform for the Navies to periodically conduct exercise at sea and in harbour in order to build interoperability and share best practices.

NTPC commissions the largest floating solar PV project in India

National Thermal Power Corporation Limited (NTPC) has commissioned India's largest 25 MW floating solar PV project at NTPC Simhadri, Andhra Pradesh. With this plant, the total installed capacity of NTPC has now reached 66,900 MW.

In July 2021, NTPC commissioned the initial 10MW. And recently, the rest 15 MW was also declared open by NTPC. Thereby, the floating solar PV project at NTPC Simhadri was declared for commercial operation w.e.f. 10:00 AM of August 21, 2021.

The floating solar PV project at NTPC Simhadri is spread over 75 acres in an RW reservoir. The solar installation is based on a unique anchoring design. The floating solar plant can generate electricity from more than 1 lakh solar PV modules.

The plant will power around 7,000 households and will reduce about 46,000 tons of CO₂e (carbon dioxide equivalent) from the environment every year during the lifespan of this project. As floating solar plants reduce evaporation, the plant will also be expected to save 1,364 million liters of water per annum. The water is adequate to meet the yearly water requirements of 6,700 households.

Hyderabad to get India's first international arbitration centre

Hyderabad is set to soon become the first city in India to establish an International Arbitration and Mediation Centre.

The trust deed of the International Center for Commercial Arbitration and Mediation in Hyderabad was executed on Friday, August 20 by Chief Justice of India NV Ramana, who said he had proposed the idea to Chief Justice of the Telangana High Court Hima Kohli back in June.

Noting that investors wish for litigations to be resolved peacefully, without huge expenses and time delays, the CJI said that the arbitration centre is a step towards strengthening the judiciary.

Senior BJP leader La. Ganesan appointed as new governor of Manipur

Senior BJP leader from Tamil Nadu La. Ganesan was on Sunday appointed as the new governor of Manipur.

The post of the governor had fallen vacant after the retirement of Najma Heptulla earlier this month.

A communique from the Rashtrapati Bhavan said Ganesan will be the new “Governor of Manipur with effect from the date he assumes charge of his office”.

Heptulla had demitted office on August 10 and on the same day the charge was given to Sikkim Governor Ganga Prasad.

India's first eco-habitat gated community in Nizamabad

By discovering nature, you discover yourself! This is what has happened in the case of a group of 15 doctors in Nizamabad.

Realising the need to preserve the green cover and live amidst nature, they are creating Rurban Nest, touted to be the first eco-habitat gated community in the country, designed by Hyderabad-based Organo Rurban Living.

The project, which aims to create a ‘prosumer’ (who produce and consume) community, is being developed in 9.2 acres of land, with ground coverage of 5,800 sq m. A total of 22 farm villas are being built to foster quintessential green living.

The environment-conscious community intends to deliver unique experiences & ambience and reinvent the way of ‘responsible living’ with this luxurious eco-habitat.

BHU starts India's first Hindu Studies course

Banaras Hindu University (BHU) started an MA course on Hindu Studies from this academic year.

This is India's first such course and it is being conducted at BHU's Bharat Adhyayan Kendra (BAK) in its Faculty of Arts.

It will be run by the Philosophy, Sanskrit, Archaeology, and Vedic Veda Vigyan departments, and the Bharat Study Centre.

International

Malaysian PM Muhyiddin resigns as political crisis escalates

- Malaysian PM Muhyiddin to stay on as caretaker prime minister, palace says.
- Palace says election is not the best option amid pandemic.
- No obvious successor as biggest blocs split
- Malaysia must reboot pandemic-hit economy, rein in infections

Belfast's Linen Hall Library becomes first in world to be awarded diversity and inclusion certificate

The Linen Hall Library in Belfast has become the first library in the world to be awarded a diversity and inclusion certificate.

The Centre for Assessment awarded the certificate following a rigorous assessment process involving staff and volunteer interviews and an in-depth examination of current and historical Linen Hall policies and procedures.

The assessment process was based on the British Standard for diversity and inclusion which encompasses people management and development; the evolution of more inclusive policies, and the building of productive relationships with others, including customers, clients and communities.

The centre's report noted that the library "remains a unique institution and the values and traditions fully embrace inclusion and diversity".

Vietnam's first consul office in India opens in Bengaluru

Vietnam opened its first-ever consul office in India in Bengaluru and appointed N.S Srinivasa Murthy as its consul.

India is the 26th investment partner of Vietnam and the latter is looking at expanding this collaboration further, said Phan Sanh Chau, Ambassador of Vietnam in India, on Wednesday. Mr. Chau said the consul was opened to improve investment ties between the two countries.

Pharmaceuticals, manufacturing of automobile parts and information technology were some of the sectors where Bengaluru and Vietnam could collaborate, the ambassador said. Vietnam is already India's fourth-largest trading partner in the Association of South-East Asian Nations (ASEAN), said Mr. Murthy.

India, Vietnam carry out bilateral maritime drill in South China Sea

India and Vietnam navies have carried out bilateral maritime exercise in the South China Sea, the Indian Navy said on Wednesday.

Accordingly, Indian Naval Ship (INS) Ranvijay and INS Kora undertook bilateral maritime exercise with the Vietnam People's Navy frigate VPNS Ly Thai To (HQ-012).

"The bilateral interaction aims to consolidate the strong bond shared by the two navies and would be another step towards strengthening India-Vietnam defence relations," the force said.

The Indian naval ships arrived at Cam Ranh, Vietnam, on August 15 for harbour phase, which included professional interactions with the Vietnam People's Navy, maintaining all Covid-19 protocols. The sea phase included surface warfare exercises, weapon firing drills and helicopter operations.

Regular interactions between the two navies over the years have enhanced their interoperability and adaptability. This has ensured a quantum jump in the complexity and scale of professional exchanges.

India, Australia sign 'Joint Guidance' for naval cooperation

To further bilateral and multilateral cooperation and interoperability in the maritime domain, Indian Navy and Australian Navy on Wednesday signed a 'joint guidance for Navy to Navy relationship' document.

"The Joint Guidance would serve as a guideline document to showcase the intent of both the Navies to work together bi/multilaterally. The broad scope of the guidance is focussed on developing mutual understanding, cooperate for regional security, collaborate in mutually beneficial activities and to develop interoperability," the Navy said in a statement.

The signing ceremony for the 'Joint Guidance for the Australia – India Navy to Navy Relationship' document was held virtually between Indian Navy Chief Adm Karambir Singh and Australian Navy Chief Vice Admiral Michael J Noonan, the Navy said. "The document would be pivotal in consolidating the shared commitment to promote peace, security, stability and prosperity in the Indo - Pacific region," the Navy said.

Afghanistan's first VP Amrullah Saleh declares himself caretaker president

Citing the provisions of the Constitution of Afghanistan, Saleh said that the first vice president automatically becomes the caretaker president in the event of the president's absence, escape or resignation.

Afghanistan's first vice president Amrullah Saleh on Tuesday added a new twist to the ongoing crisis, claiming he is now the caretaker president after Ashraf Ghani fled the war-torn country.

Saleh has not accepted the takeover by the Taliban, saying he will never be under "one ceiling" with the Islamist fundamentalists.

Hunger spreading in Afghanistan: UN food agency

The UN food agency says it has been able to negotiate access with the Taliban to distribute aid in one provincial capital in Afghanistan but hasn't been able to resume food deliveries to three other provincial capitals it supplies.

The World Food Program, headquartered in Rome, has said that some 14 million people are facing severe hunger in the nation of some 39 million. A second drought in three years, combined with fighting, had afflicted Afghanistan even before the Taliban takeover of the country on Sunday.

According to WFP estimates, some 2 million children are malnourished in Afghanistan.

India and Qatar conduct joint naval exercise in Persian Gulf

The second edition of the joint naval exercise, Zair-Al-Bahr, between the Indian Navy and Qatar Emiri Naval Force (QENF) was conducted between August 9 and 14 in the Persian Gulf.

This edition of the exercise included a three-day harbour phase followed by a two-day sea phase. The sea phase comprised of tactical maritime exercises involving surface action, anti-piracy exercises, air defence, maritime surveillance, boarding operations and SAR exercises.

In the sea phase of the exercise, the Indian Navy's Stealth Frigate INS Trikand, QENF's missile boats of Barzan and Damsah class, fast-attack crafts of MRTP 34 class and Rafale fighter aircraft participated.

Indian Navy's INS Ranvijay, INS Kora carry out maritime exercise with Philippines

Two ships of the Indian Navy, INS Ranvijay and INS Kora, carried out a maritime partnership exercise with BRP Antonio Luna of the Philippine Navy on Monday in the West Philippine Sea.

The navies of India and the Philippines carried out a maritime partnership exercise in the West Philippine Sea on Monday.

INS Ranvijay (Guided Missile Destroyer, D55) and INS Kora (Guided Missile Corvette, P61) carried out the maritime exercise with BRP Antonio Luna (Frigate, FF 151) of the Philippine Navy.

The joint evolutions conducted during the exercise included several operational manoeuvres and the participating ships of both navies were satisfied with the consolidation of interoperability achieved through this exercise.

INS Ranvijay and INS Kora are currently deployed to the Western Pacific with an aim to strengthen maritime security collaboration with partner nations.

Malaysia's Ismail Sabri Yaakob sworn in as new PM

Malaysia's Ismail Sabri Yaakob was sworn in as the country's ninth prime minister on Saturday, capping a week of political turmoil that forced his predecessor to resign amid a continuing health emergency because of the raging COVID-19 pandemic.

Ismail Sabri is a veteran politician from the country's longest-ruling party United Malays National Organisation (UMNO), but analysts say he is a stop-gap leader with little chance of ending long-running turbulence.

The 61-year-old was named prime minister on Friday after the collapse of Muhyiddin Yassin's administration this week. He is Malaysia's third new leader in less than four years.

Ismail Sabri is from UMNO, the main party in a coalition that governed Malaysia for decades after independence from Britain.

Science & Technology

New enzyme that infects plants identified, says new study

By discovering previously unexplored ways in which crop pathogens breakthrough plant cell walls, scientists have opened up opportunities for developing effective disease control technologies.

A new research has identified an unusual enzyme that plays a major role in the infection of plants - and has shown that disabling this enzyme effectively stops plant disease in its tracks.

The research described a family of enzymes found in a microorganism called *Phytophthora infestans*. The enzymes enable crop pathogens to degrade pectin -- a key component of plant cell walls, thereby enabling the pathogens to break through the plant's defenses to infect the plant.

The findings of the research were published in the journal 'Science'.

Rare orchid species found in India for the first time

A research paper on the new addition to Indian flora has been published in *Nelumbo*, the six-monthly journal of BSI and volumes listing the orchid species of India will soon be updated.

A rare orchid species -- *Cephalanthera erecta* var. *oblanceolata* -- has been found for the first time in India in Uttarakhand's Chamoli district at an altitude of 1870 metres, said experts from Botanical Survey of India (BSI) and Uttarakhand forest department.

India's first cattle genomic chip launched in Telangana

To conserve indigenous breeds of cattle like Gir, Kankrej, Sahiwal and Ongole, the National Institute of Animal Biotechnology (NIAB) has developed India's first cattle genomic chip, 'IndiGau'.

The chip was officially inaugurated by Union Minister of State for Science and Technology Dr Jitendra Singh, here on Monday.

This chip technology will help in the selection of high yielding cattle and improvement of characteristics.

With 11,496 markers, IndiGau is touted as the largest cattle chip in the world.

IIT Kanpur develops 'Sanjeevani' oxygen concentrator

To ensure a sufficient supply of oxygen and prevent future crisis amid the probable third wave of the Covid-19 pandemic, the Indian Institute of Technology, Kanpur (IIT-K), has developed an advanced oxygen concentrator named 'Sanjeevani', experts from the top institute said.

Equipped with the pressure swing adsorption (PSA) technique, the technology has been transferred and licensed to a Bengaluru-based company Albot Technologies Private Limited.

The oxygen concentrator works at a flow rate of 10 litres per minute (LPM) with an oxygen purity of 92% ±3. The concentrator has an adjustable capacity of 1 to 10 LPM which can be used for both medical as well as personal uses.

IIT Guwahati Researchers make Breakthrough in Memory Architectures

Indian Institute of Technology Guwahati (IIT) researchers have made fundamental contributions to memory architectures by preventing redundancy in data values and improving slow and frequent writes in the multi-core processor systems.

To handle this non-uniformity, IIT Guwahati researchers developed methods to evenly distribute the accesses across the overall memory capacity to reduce the wear-out pressure on heavily written locations and also worked in the area which avoids writing redundant values thus prolonging the wear-out.

India Makes First Scientific Estimate of Elephant Population in 2022

On Elephant Day (12th August 2021), Minister of Environment, Forest and Climate Change (MoEFCC) Bhupender Yadav announced that India will carry out the first scientific estimates of elephant populations and will also carry out a tiger census.

This estimate is scheduled to be made in 2022, and the ministry has announced protocols that must be followed during the census.

India conducts censuses, but the method is not always scientific and can be thought of as more personnel than the actual census.

NS India conducts censuses, but the method is not always scientific and can be thought of as more personnel than the actual census.

NS Conducted in 2017, it was concluded that there are more than 27,000 elephants in India.

Delhi University scientists discover new species of frog in Arunachal Pradesh

A team of researchers from Delhi University (DU), along with biologists from the Wildlife Institute of India and North Carolina Museum of Natural Sciences, USA, have discovered a new species of cascade frog in Arunachal Pradesh. It has been named after the indigenous Adi tribe and the hills they inhabit.

Discovered on the Adi hills in Arunachal Pradesh, the new frog species has been named Adi Cascade Frog (*Amolops Adicola*). The hills are home to the Adi tribe. The literal meaning of Adi is “hill” or “mountain top”, the researchers said.

The findings were published in the *Journal of Natural History*, London, in a scientific article titled ‘Phylogenetic position of the poorly known montane cascade frog *Amolops Monticola* (Ranidae) and description of a new closely related species from Northeast 2 India’.

India Decides to Ratify the Kigali Amendment

Recently, the Union Government approved the ratification of the **Kigali Amendment to the Montreal Protocol on phasing down climate-damaging refrigerant Hydrofluorocarbons (HFCs)**.

It comes close on the heels of similar decisions by the United States and China, the world’s largest producers and consumers of HFCs. 122 countries had ratified the Kigali Amendment by the end of July 2021.

The United States, China and India are in separate groups of countries, with different time schedules to phase out their HFCs and replace them with climate-friendly alternatives.

India has to reduce its HFC use by 80% by the year 2047, while China and the United States have to achieve the same target by the year 2045 and 2034 respectively. India will complete its phasedown of HFCs in four steps from 2032 onwards with a cumulative reduction of 10% in 2032, 20% in 2037, 30% in 2042 and 80% in 2047.

Amendments to the existing legislation framework, the **Ozone Depleting Substances (Regulation and Control) Rules** to allow appropriate control of the production and consumption of hydrofluorocarbons to ensure compliance with the Kigali Amendment **will be done by mid-2024**.

Zycov-D, India’s first COVID-19 vaccine for those above 12, gets nod

The Drug Controller General has granted emergency approval to the Zycov-D, a COVID-19 vaccine developed by the Ahmedabad based Zydus Cadilla group, on Friday, making it the first vaccine in India that can be administered to adults as well as those 12 and above.

It’s also the only DNA-based vaccine in the world and can be administered without a needle, purportedly minimising chances of reactions.

Interim results from Phase-III Clinical Trials, in July, in over 28,000 volunteers, showed a primary efficacy of 66.6 % for symptomatic RT-PCR positive cases.

The rings around Neptune

We now know that Neptune has at least five main rings and four prominent ring arcs. Starting from the ring nearest to the planet, these are named Galle, Leverrier, Lassell, Arago, and Adams.

While the rings are currently thought to be short-lived and relatively young, the arcs are clumps of dust that are peculiar to Neptune's ring system.

The outermost ring, Adams, is where four prominent arcs Liberty, Equality, Fraternity, and Courage can be found.

Rainfall at Greenland ice summit for first time

Rain fell at the highest point on the Greenland ice sheet last week for the first time on record, another worrying sign of warming for the ice sheet already melting at an increasing rate, scientists said on Friday, August 20.

"That's not a healthy sign for an ice sheet," said Indrani Das, a glaciologist with Columbia University's Lamont-Doherty Earth Observatory. "Water on ice is bad... It makes the ice sheet more prone to surface melt."

Not only is water warmer than the usual snow, it is also darker – so it absorbs more sunlight.

The rain fell for several hours at the ice sheet's 3,216-metre summit on August 14, where temperatures remained above freezing for around nine hours, scientists at the U.S. National Snow and Ice Data Center said. Temperatures at the ice cap almost never lift above freezing, but have now done so three times in less than a decade.

India's highest herbal garden at 11,000 feet altitude inaugurated in Uttarakhand

India's highest herbal garden, located at an altitude of 11,000 feet, was inaugurated near Badrinath shrine in Uttarakhand on Saturday.

The garden, located in Mana village of Chamoli district, has been developed by the research wing of state forest department on a three-acre land given by Mana Van Panchayat.

The garden, inaugurated by Mana sarpanch Pitambar Maulfa, has been developed in three years under the central government's Compensatory Afforestation Fund Management and Planning Authority (CAMPA) scheme.

It displays around 40 species, including important medicinal herbs, found in the high-altitude alpine areas of the Himalayan region.

Indian scientists discover 'mermaid' plant species

Indian scientists have discovered a new plant species in India's Andamans archipelago.

Biologists found a marine green algae during a trip to the island in 2019.

Identification is laborious, and it took the scientists nearly two years to confirm that the species had been discovered for the first time.

Scientists say this as the first discovery of a species of algae in the islands in nearly four decades.

Scientists from the Central University of Punjab have named the specie *Acetabularia jalakanyakae*.

Jalakanyaka in Sanskrit literally means mermaid and a goddess of oceans. The scientists say they were influenced by the fictional character Little Mermaid in the eponymous fairy tale by Danish writer Hans Christian Anderson.

IIT Madras Develops Country's First Indigenous Motorized Wheelchair Vehicle

Called 'NeoBolt', it has a maximum speed of 25 kmph and travels up to 25 km per charge. It empowers wheelchair users with a convenient, safe, and low-cost mode of outdoor mobility when compared to cars, auto-rickshaws or modified scooters. The wheelchair is powered by a Lithium-Ion Battery that will give 25 Kms for every charge.

Throughout the development process, the IIT-M Researchers collaborated extensively with organizations and hospitals working among people with locomotor disability and built the products factoring in their experiences and making constant design adjustments.

BUSINESS & ECONOMY

RBI unveils Financial Inclusion Index

A Financial Inclusion Index (FI-Index) to capture the extent of financial inclusion is now ready. The index will be published annually in July every year.

The information on various aspects of financial inclusion will be measured in a single value ranging between 0 and 100, where 0 represents complete financial exclusion and 100 indicates full financial inclusion.

The index will be responsive to ease of access, availability and usage of services, and quality of services, comprising 97 indicators. It will also capture the quality aspect of financial inclusion as reflected by financial literacy, consumer protection, & inequalities & deficiencies in services.

It will capture the details of banking, investments, insurance, postal as well as the pension sector details to understand the extent of financial inclusion.

RBI revises lockers rules: Bank liability limited to 100 times of annual rent

The Reserve Bank on Wednesday came out with revised guidelines for the hiring of lockers under which the liability of banks will be limited to 100 times its annual rent in case of fire, theft, building collapse or frauds by bank employees.

As per the revised guidelines, which shall come into effect from January 1, 2022, banks will be required to incorporate a clause in the locker agreement prohibiting the hirer from keeping anything illegal or hazardous in lockers.

The revised instructions will be applicable to both new and existing safe deposit lockers and the safe custody of articles facility with the banks.

India ranks second in Chainalysis's 2021 Global Crypto Adoption Index

India ranked second in a list of 20 countries with the highest cryptocurrency adoption rate, according to crypto analysis platform Chainalysis. Vietnam secured the first spot, and Pakistan came third.

Chainalysis's 2021 Global Crypto Adoption Index ranked 20 countries to measure the level of cryptocurrency adoption and usage by individuals between July 2020 and June 2021.

According to the report, which ranked 154 countries, worldwide crypto adoption grew by over 881% in the last year. Global adoption has grown by over 2,300% since the third quarter of 2019, it said. Emerging markets led ahead of the United States and European nations, driven by peer-to-peer (P2P) platform, the report revealed.

Wipro, Asian Paints, HCL in Hurun Global 500 list

Wipro Ltd, Asian Paints Ltd, HCL Technologies Ltd and nine other Indian firms found a place among the world's 500 most valuable companies in 2021, while ITC Ltd dropped out of the Hurun Global 500 list.

iPhone maker Apple Inc. retained its position as the world's most valuable company, with a 15% increase in market capitalization to \$2.4 trillion. The next five most valuable companies are Microsoft, Amazon, Alphabet, Facebook and Tencent, and they have also remained unchanged from last year. Reliance Industries Ltd topped the list of Indian companies with a market capitalization of \$188 billion. Tata Consultancy Services Ltd with \$164 billion in market value and HDFC Bank Ltd with \$113 billion followed.

Sweden's HYBRIT delivers world's first fossil-free steel

Swedish green steel venture HYBRIT said on Wednesday that it had made the world's first customer delivery of steel produced without using coal as it looks to revolutionize an industry that accounts for around 8% of global greenhouse gas emissions.

HYBRIT, owned by SSAB ([SSABa.ST](#)), state-owned utility Vattenfall ([VATN.UL](#)) and miner LKAB, said it would deliver the steel to truck-maker Volvo AB ([VOLVb.ST](#)) as a trial run before full commercial production in 2026.

It aims to replace coking coal, traditionally needed for ore-based steel making, with fossil-free electricity and hydrogen. Hydrogen is a key part of the EU's plan to reach net zero greenhouse gas emissions by 2050.

FM launches Ubharte Sitaare Fund; says MSMEs are the backbone of the economy

Union Finance Minister Nirmala Sitharaman on Saturday, addressing the launch of the 'Ubharte Sitaare Fund' said the micro, small and medium enterprises (MSMEs) are the backbone of the economy, and that the government has given the sector its rightful place.

The 'Ubharte Sitaare Fund' has been set up by Exim Bank and SIDBI. The fund is expected to identify Indian enterprises with potential advantages by way of technology, products or processes along with export potential, but which are currently underperforming or unable to tap their latent potential to grow.

The fund is a mix of structured support, both financial and advisory services through investments in equity or equity like instruments, debt, and technical assistance to the Indian companies

Nirmala Sitharaman Launches National Monetisation Pipeline On August 23, 2021

Finance Minister Nirmala Sitharaman on Monday unveils the Centre's ambitious National Monetisation Pipeline (NMP), which is a four-year pipeline for those infrastructure assets that the government plans to monetise for generating funds.

NMP has also been designed to attract more investors to the country and encourage alternative financing for infrastructure assets.

Under NMP, the Centre is finalising ₹ 6 lakh crore worth of infrastructure assets, including national highways, mobile towers, stadia, railway stations as well as power grid pipelines among other key assets, which it plans to monetise.

Paytm, HDFC Bank in payments tie-up

Fintech major Paytm and the country's largest private bank HDFC Bank Ltd have entered into a strategic partnership for delivering financial solutions to end consumers and merchants across India.

The fusion of HDFC Bank's network, products, and credit appraisal capabilities and Patym's technological platform will accelerate digital transformation in semi urban and rural India, while bringing more people into formal banking channels.

The strategic partnership with the country's largest private bank comes ahead of the proposed initial public offering (IPO) of Paytm, through which the company plans to raise ₹16,600 crore before the end of the calendar year. The strategic partnership will see the two institutions launch innovative products across digital payments, lending and point of sale (POS) solutions.

Mashreq Bank and NIPL to offer acceptance of UPI in the UAE

NPCI International Payments Ltd (NIPL), the International arm of National Payment Corporation of India has partnered with Mashreq, one of the leading financial institutions in the UAE, to offer acceptance of its mobile-based real-time payment system, Unified Payments Interface (UPI), in the UAE. UPI is an instant real-time payment system developed by National Payments Corporation of India facilitating inter-bank transactions.

This partnership will enable over 2 million Indians who travel to UAE for business or leisure purposes every year to pay for their purchases seamlessly using UPI-based mobile applications across shops and merchant stores in the UAE.

The strategic tie-up between the two entities will provide a considerable boost to the digital payment ecosystem in the UAE and will prove to be a major stepping stone for the wider reach of UPI in the international markets.

SPORTS

India register their third-ever Test victory at Lord's: Records broken

India pulled off a historic victory against England in the second Test of five-match series at Lord's.

The Virat Kohli-led side successfully defended 271 runs on the final day.

A game-changing partnership between Mohammed Shami and Jasprit Bumrah helped India gain the edge. Hostile spells from Indian fast bowlers did the rest. Notably, India have registered their third-ever Test win at Lord's.

Virat Kohli has become the third Indian captain to win a Test match at Lord's. Before this, India last won here in 2014, under MS Dhoni. Ishant Sharma took a seven-for as India won by 95 runs. This time as well, Ishant was lethal in the second innings. India had registered their first-ever Test win at Lord's in 1986 (under Kapil Dev).

2021 edition of World Athletics U20 Championships to be held in Nairobi

The 2021 edition of the World Athletics U20 Championships scheduled to be held in Nairobi, Kenya today.

The tournament will continue till 22 August at the Nyayo Sports Complex.

Javelin Thrower Kunwar Ajai Raj Singh Rana and Long Jumper Shaili Singh will lead the Indian challenge in the World Athletics U20 Championships.

The Indian squad left for the Kenyan capital late on Saturday evening, as per the Athletics Federation of India.

India has had a champion at the U20 Athletics World Championships in each of the last two editions.

Neeraj Chopra threw the javelin longer than any man in his age group in 2016 for his first major international breakthrough while Hima Das clinched gold medal in the women's 400m in Tampere in 2018.

Princepal Singh first Indian to be part of NBA championship

Just 20 years and 6-foot-9 from Firozpur, Princepal Singh Bajwa is turning heads at the right place and right time. The cager became the first Indian to lay hands on precious NBA title when his team Sacramento Kings defeated Boston Celtics 100-67 to bag the Summer League in Las Vegas on Tuesday.

The last time, the Kings tasted success was in 2014. The Punjabi lad played the final exactly for 4:08 minutes in the game of 48-minute duration and made history by making first Indian in NBA history to be part of a championship roster at any level of the NBA.

Satnam Singh Bhamra also from Punjab was the first Indian to play in the NBA for Dallas Mavericks in 2015.

Manika Batra, G Sathiyam win mixed doubles title at WTT Contender Budapest

India's rising pair of G Sathiyam and Manika Batra outplayed home favourites Nandor Ecseki and Dora Madarasz 11-9, 9-11, 12-10, 11-6 to clinch the mixed doubles title at World Table Tennis Tour Contender Budapest 2021 on Friday.

Sathiyam and Manika had stormed into the final with a 11-6, 11-5, 11-4 win over Aleksandr Khanin and Daria Trigolos of Belarus. The Indian pair stunned the World No. 7 and top seeded duo of Barbora Balazova and Lubomir Pistej from Slovakia 11-4, 3-11, 6-11, 11-6, 11-9 in the quarterfinals and to enter pre-quarters, they got the better of compatriots Manav Thakkar and Archana Kamath 3-0.

Manika had won the Asian Games bronze with veteran Sharath Kamal and more recently; they played together at the Tokyo Olympics.

U-20 World Athletics Championships: Amit Khatri braves breathing difficulties to claim silver in 10,000m race walk

Amit Khatri won a silver in the men's 10,000m race walk event to clinch India's second medal at the World U-20 Athletics Championship in Nairobi on Saturday after the 4x400m mixed relay team won bronze a few days back.

The 17-year-old Khatri, the national record holder and world U-20 season leader, clocked 42 minute 17.94 seconds to finish second behind Kenya's Herstone Wanyoni (42:10.84) on the fourth and penultimate day of the championships. Paul McGrath of Spain won the bronze with a timing of 42:26:11 minutes.

Khatri was leading after the 9000m mark but the local athlete, Wanyoni, pulled ahead with less than two laps left in the race to win gold with a personal best time.

The high altitude conditions in the Kenyan capital affected Khatri's performance as he struggled for breath during the race. Nairobi is at an altitude of around 1800m from sea level.

17-yr-old Shaili Singh leaps to silver at World U20

Long jumper Shaili Singh, 17, brought up by a single mother who learnt tailoring to earn a living, won a silver at the World U20 Championships in Nairobi on Sunday. Mentored by long jump great Anju Bobby George and coached by her husband Robert, Shaili missed out on gold by a centimetre but established herself as a star to watch out for.

In her third jump, Shaili leaped to her personal best of 6.59 metres to move into provisional first place after dropping to fourth at the end of the second round.

Sweden's European Junior Champion Maja Askag, however, edged her out in the fourth round by the narrowest of margins to eventually win the gold. Shaili's previous best jump was 6.48m.

Mariia Horielova of Ukraine was third with 6.50 metres.

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