

## After Mynampally, now Wanaparthy MLA Megha Reddy says party senior leaders deceived him

Wanaparthy: After former MLA Mynampally Hanumanth Rao, now Wanaparthy MLA T Megha Reddy charged that a few senior leaders in the party had deceived him and ensured that Congress did win more Sarpanches posts in the Gram Panchayat elections.

Since Assembly elections, former MLA G Chinna Reddy and Megha Reddy have been at loggerheads over many issues. Differences between the two leaders came to the fore on several occasions.

There are about 140 gram panchayats in Wanaparthy. Of these, the Congress MLA claimed that the party had won 85 sarpanches and in about 10 to 15 gram panchayats, a few senior leaders deceived the party, Megha Reddy charged at a press conference here on Friday.

Citing the example of Tirumalapur village in Gopalpet mandal, the Wanaparthy MLA said a Congress-

backed candidate was fielded by the senior leaders. However, after the BRS-supported candidate won the elections, he was welcomed into the Congress party within one hour of the results being declared, he said.

"The senior leader personally called over 130 people in the village and I have all the proof. Similarly, at Chinnagumudam village in Pebbaip, when I went to campaign, locals informed me that a senior leader had called and directed them to support the BRS-backed candidate," Megha Reddy said, without disclosing the name of the senior leader.

It was not about these two villages, such backstabbing happened in Jangaiahpally, Upparpally, Appareddypally, Gopalpet and Polikapadu. These were not baseless allegations and all evidence has been secured, the MLA maintained.

Wanaparthy people were aware of the senior leader and his political tac-



tics. The issue would be taken up seriously with party leadership and a complaint would also be lodged with party high command. Political history books

Last week, former MLA

Mynampally Hanumanth Rao had charged that many BRS coverts were working in Congress and due to their presence, the Congress had lost elections in many villages in Siddipet, Medak and neighbouring areas.

## Winter session ends as Lok Sabha passes key Bills amid political debates

New Delhi: The Lok Sabha was adjourned sine die on Friday, drawing curtains on the 19-day-long Winter Session of Parliament, which saw the passage of crucial Bills, including one to repeal the 20-year-old MNREGA and another on opening up the civil nuclear sector for private participation.

The total sitting hours during the Winter Session were 92 hours and 25 minutes. As soon as the House met for the day, Speaker Om Birla read out his brief valedictory address, noting that the productivity of the Lok Sabha during the session was registered at 111 per cent, with members sitting till late hours to discuss crucial legislation.

He then adjourned the House sine die (for an indefinite period), drawing curtains on the brief session that commenced on December 1. When Birla was reading out his valedictory statement, some members were heard raising "Mahatma Gandhi ki jai" slogans.

Prime Minister Narendra Modi was present when the proceedings were adjourned. During the 15 sittings of the Winter Session, the House took up two politically-charged debates — one on the

150 years of Vande Matram and the other on election reforms.

The Prime Minister had initiated a discussion to commemorate the completion of 150 years of the national song. The House discussed the subject for 11 hours and 32 minutes, during which 65 members participated.

A debate on air pollution, which was to be initiated by Congress leader Priyanka Gandhi, could not take place. The opposition had been insisting on a debate on the Special Intensive Revision (SIR) of the voter list in 12 States and UTs, but the government made it clear that the poll panel and its functioning cannot be discussed in the House, and agreed to hold a debate on election reforms instead.

The issue was discussed for approximately 13 hours, with the participation of 63 MPs. The opposition, however, focused its attack on SIR, the new law on the appointment of the chief election commissioner and election commissioners, and the "vote chori" issue.

Eight Bills were passed during the session. The Viksit Bharat Guarantee

for Rozgar and Ajeevika Mission (Gramin) or VB-G RAM G Bill, assuring 125 days of guaranteed jobs for rural India, was passed amid opposition protests on Thursday, including tearing of papers. The Sustainable Harnessing and Advancement of Nuclear Energy for Transforming India (SHANTI) Bill, which seeks to open the tightly-controlled civil nuclear sector for private participation, was also passed during the session.

The Lok Sabha also passed a Bill to raise FDI in the insurance sector to 100 per cent from the current 74 per cent, which is expected to increase insurance penetration, lower premiums, and boost job creation.

The Sabka Bima Sabki Raksha (Amendment of Insurance Laws) Bill, 2025, was cleared by the Rajya Sabha with a voice vote, a day after it was passed by the Lok Sabha.

The House also passed a Bill to repeal 65 amendment Acts and six principal laws, which had lost relevance. The Manipur Goods and Services Tax (Second Amendment) Bill, 2025; the Central Excise (Amendment) Bill, 2025,

and the Health Security and National Security Cess Bill, 2025 were also among the Bills passed. The House also passed the Supplementary Demands for Grants – First Batch, 2025-26.

A Bill to set up a higher education regulator — the Viksit Bharat Shiksha Adhisthan Bill, 2025 — was referred to a joint committee of the two Houses. The Bill seeks to establish an overarching higher education commission along with three councils for regulation, accreditation, and ensuring academic standards for universities and higher education institutions in India.

Another bill on the market securities code was introduced and referred to a department-related standing committee for further examination. During the session, 300 starred questions were admitted, and 72 starred questions were answered orally. A total number of 3449 unstarred questions were admitted during the Session. A total of 408 matters of urgent public importance were raised by the members during the Zero Hour, and a total of 372 matters were taken up under Rule 377.



## 38th Book Fair to begin today at NTR stadium in Hyderabad

Hyderabad's NTR Stadium is gearing up to host the 38th Book Fair scheduled to be held for 11 days from December 19th to December 29th. Open daily from 1 PM to 9 PM, the event will welcome all book lovers, with free entry provided for students from kindergarten to postgraduate levels while other visitors will be charged a nominal fee of Rs. 10 for entry.

This year's fair will have 365 stalls, an increase from 350 last year, in response to overwhelming demand from national and international publishing houses. The Book Fair Committee Secretary, Vasu, announced that the fair will feature not only wide range of books but also book launches, cultural programmes, and discussions throughout the event.

The inauguration will take place on Friday, led by the State Tourism and Culture Minister, Jupally Krishna Rao, alongside distinguished guests including Justice Sudarshan Reddy and Hyderabad Book Fair Committee President Kavi Yakub.

Last year's fair attracted approximately 12 lakh visitors, and this year, it is anticipated that over 15 lakh people will attend. The exhibition grounds will be honouring the late poet Andesri, alongside a cultural stage named after Anishetty Rajitha and a media stall in memory of journalist Swecha.

With 22 stalls specifically allocated to media and 9 to writers, the Book Fair promises to be a vibrant gathering for readers and literary enthusiasts alike.

## SIT formed to investigate phone tapping case

Hyderabad: The Telangana police has formed a special investigation team to investigate the phone tapping case. The team of nine officers were formed under overall supervision of VC Sajjanar, Commissioner of Police, Hyderabad City.

The officers include - Ambar Kishore Jha, (Commissioner of Police, Ramagundam), SM Vijay Kumar (Commissioner of Siddipet), Rituraj (DCP Madhapur), K Narayan Reddy (DCP Maheshwaram), M Ravinder Reddy (Group Commander, Greyhounds), K S Rao (Addl DCP Rajendranagar), P Venkatagiri (ACP Jubilee Hills IO), Ch Sridhar (DSP - TGANB), and Nagender Rao (DSP - HMRL).

The SIT shall complete investigation in the case and file charge sheet expeditiously.

# GHMC under fire over cap on 'complaint per day'

The Greater Hyderabad Municipal Corporation (GHMC) is facing mounting criticism after citizens discovered a system restriction that limits the number of

also alleged that the GHMC's new public dashboard displays artificially reduced numbers of issues and resolutions.



complaints a person can file in a single day. When attempting to report multiple issues, the GHMC system now displays a message stating: 'You have already raised a grievance for this category and sub-category at this location; you can raise it after 24 hours.'

The online complaint system was originally intended to streamline the grievance redressal mechanism. However, residents have now labelled it "illogical". Daily, a significant number of public grievances are raised by citizens via the GHMC app and social media, particularly on X. Netizens frequently tag the Mayor, GHMC, Ministers, and public representatives to highlight local issues.

Following the discovery of the one-complaint-per-day restriction, city-based activist Vinay Vangala questioned the legality of the move. Tagging the Greater Hyderabad Municipal Commissioner, he asked: "Under which law are you restricting citizens from reporting more complaints in one day?" Vangala

Hyderabad: Telangana BJP President N Ramchander Rao strongly condemned Chief Minister Revanth Reddy's statement alleging that the BJP had contested elections in alliance with the BRS.

In a statement on Thursday, Rao described the remarks as baseless and misleading, asserting that the BJP's electoral gains were achieved independently through the hard work of its cadre and the support of the people.

Rao highlighted that the BJP has emerged as a credible alternative to the ruling party by securing a large number of Sarpanch and Ward Member positions in the recent local body elections. He reiterated that the party's primary goal is to come to power in Telangana in the upcoming state elections, building on its grassroots vic-

Other netizens responded to the posts by calling the rule completely nonsensical, noting that restricting reports does not address widespread problems such as garbage dumping or waterlogging. Meanwhile, another activist, Mohamed Ahmed, noted that while the GHMC was previously proactive on social media, it has now become unresponsive to complaints raised on X. He stated that while officials used to provide swift responses to grievances posted by users, there is now a distinct lack of engagement.

Furthermore, Hyderabad Mayor Gadwal Vijayalakshmi has also reportedly stopped responding to public complaints on social media applications, leaving many grievances unattended. Ahmed further complained that higher authorities who were previously tagged in posts used to respond and direct their officers to solve issues immediately, but now none appear proactive.

The activist claimed that after repeated complaints remained unattended, some citizens have been forced to solve civic issues at their own expense. He described this as a complete failure of the municipal corporation. Ahmed pointed out that despite having multiple digital platforms such as the GHMC app, an online grievance system, X, and a helpline, the civic body has failed to meet public expectations. He also alleged that, in some instances, officials are misleading netizens by replying that an issue has been solved when the situation on the ground remains unchanged.

## BJP chief rubbishes Revanth's remarks on alliance with BRS

tories.

Criticising the Congress party, Rao said that if Congress and BRS are not one, then immediate action should be taken against defected MLAs. He accused the Congress of shielding BRS defectors by pressuring the Speaker to reject disqualification petitions, a move he claimed was evident to the public. Rao questioned the role of defected MLAs in the Lok Sabha elections and criticised the Chief Minister for defending them, calling it a sign of political bankruptcy.

On the issue of reservations, Rao alleged that the Congress government's proposal to revisit the 42 per cent BC reservations in the Assembly was part of a larger conspiracy to dilute the policy.



## KCR Mourns the Loss of Sculptor Ram Vanji Sutar

Former Chief Minister and BRS leader Kalvakuntla Chandrashekhar Rao (KCR) has expressed his condolences following the passing of world-renowned sculptor and Padma Bhushan awardee Ram Vanji Sutar, famed for his creation of the Statue of Unity in Gujarat and the 125-foot-tall statue of Dr B.R. Ambedkar in Hyderabad.

In an official statement, KCR hailed Sutar's immense contributions to the field of sculpture, referring to him as a "Kohinoor diamond" in the realm of art. He expressed pride that Telangana had benefited from Sutar's exceptional talent through the construction of the Baba Saheb Ambedkar statue, which was completed during the previous BRS government's tenure.

KCR noted that the Ambedkar statue, crafted to world-class standards, has become a significant landmark in Telangana's history. He remarked that Sutar would forever hold a special place in the hearts of the people of the state.

Describing the sculptor's passing as an irreparable loss to the art community, KCR acknowledged that Sutar had lived a remarkable life, reaching the age of one hundred. He extended his heartfelt condolences to the family members of Ram Vanji Sutar during this difficult time.

## Actress Nikita Bisht Inaugurates National Silk Expo at Ameerpet

Hyderabad: Femina Miss India Finalist & Actress (Palle Gootiki Pandagochindhi fame) Nikita Bisht formally Inaugurated a 5-day National Silk Expo-2025 at Kamma Sangham Hall, Ameerpet, Hyderabad, which is organized by Jagdishwar Hastkala. Platforms

such as this are required to reach out women looking for well-designed handmade cotton, silk wear & exclusive, silk saris and handloom creations coming together under one roof,"

Nikita Bisht saidOrganizer of the Exhibition Jayesh Kumar, speaking to media said that, The Expo will be on till 23rd December 2025, Main social objective of the handloom exhibition was to promote weavers and encourage and provide a market to the handloom industry. Through these exhibitions, we have been able to create good market for the weavers and their handloom woven ware, even in places where exhibitions are not feasible. The exhibition motive is got pure silk & cotton products direct from weavers to costumer without merchant, he added.

# Devpt works taken up as per public needs: Tummala

Khammam: Agriculture Minister Tummala Nageswara Rao said development works in Khammam city are being undertaken in line with the needs of the public and stressed the importance of completing them within stipulated timelines.

The minister laid the foundation stone for BT roads, cement concrete roads and drainage development works in Ward No 14 of Khammam Municipal Corporation at Gopalapuram on Thursday, along with Municipal Commissioner Abhishek Agastya. The works are being taken up at an estimated cost of Rs 2.25 crore. Addressing the gathering, Tummala said the state government, under Chief Minister A Revanth Reddy, is extending full support for strengthening basic infrastructure in Khammam city. He said the government is committed to maintaining law and order and ensuring that illegal activities such as land encroachments, gambling, and drug trafficking are curbed. The minister said the works inaugurated in Gopalapuram should be completed within three months and warned that further funding would depend on timely completion and adherence to quality norms. He said



development works should be durable and benefit residents for years to come.

Noting that Khammam's population has crossed five lakh, Tummala said the government is focusing on expanding drinking water supply, improving drainage, upgrading road infrastructure, and providing housing for the poor in line with the city's growing needs. He urged officials to ensure optimal utilisation of funds allocated for these purposes.

## Review on maternal deaths held

Kurnool: The District Medical and Health Department conducted a maternal death surveillance and response (MDSR) sub-committee review meeting on Thursday, at the District Medical and Health Officer's

He also stressed the importance of educating pregnant women and lactating mothers on nutrition, stating that maternal and child health outcomes are closely linked to awareness and dietary support.



As part of the review, the committee analysed six maternal deaths reported between July and November 2025 from Maddikera, Pedda Hariwanam, Gonagandla, Gudur, Nandavaram, various Primary Health Centres, and the Stantonapuram Urban Health Centre.

The committee concluded that maternal mortality can be reduced significantly if ASHA workers, health staff and medical officers identify pregnancies early and ensure timely referrals and medical interventions. Continuous tracking of high-risk cases at the field level was identified as a critical preventive measure.

The committee instructed that high-risk pregnant women should be admitted to designated government hospitals at least three days prior to the expected date of delivery to avoid last-minute complications.

The meeting was attended by District Nodal Officer Dr Uma, DPMO Dr Shailesh Kumar, Adoni Deputy DMHO Dr Satyavathi, along with senior specialists from gynecology, anaesthesia, general medicine, nephrology and blood bank services, besides medical officers, nursing officers, field supervisors, health workers and ASHA staff, who reaffirmed their commitment to strengthening maternal and newborn healthcare services across the district.



# MP seeks vehicle underpass at Singanamala Cross

New Delhi: Anantapur Member of Parliament Ambika Lakshminarayana, along with Singanamala MLA Bandaru Sravani Sri, submitted a representation to Union Minister for Road Transport and Highways Nitin Gadkari, seeking the construction of a Vehicle Underpass (VUP) at Singanamala Cross on National Highway NH-544D.



During their meeting in New Delhi on Thursday, the MP and the MLA highlighted the ongoing highway development works and underscored the urgent need for an underpass at Singanamala Cross to ensure safe and smooth vehicular movement.

They informed the Union Minister that local residents, farmers, traders, and commuters are facing daily hardships due to traffic congestion and increased accident risks at the junction. The leaders emphasised that the proposed underpass is critical for improving connectivity and ensuring public safety, particularly for people crossing the highway for agricultural, commercial, and daily travel needs.

They urged the Centre to consider the issue on priority, given the strategic importance of the location and the growing traffic volume.

Responding to the representation, Union Minister Nitin Gadkari acknowledged the significance of the request and assured that the matter would be examined in coordination with officials of the National Highways Authority of India (NHAI).

He stated that appropriate action would be initiated after technical evaluation. MP Ambika Lakshminarayana reiterated that issues concerning infrastructure development and public safety in Singanamala constituency would continue to be taken up with the Central government until a permanent solution is achieved.

# Chandrababu meets Union Minister CR Patil, seeks supports for irrigation projects

Andhra Pradesh Chief Minister Nara Chandrababu Naidu is in Delhi today, engaging in a series of programmes amidst a tightly packed schedule. During his visit, he met with Union Minister for Jal Shakti, CR Patil, with the participation of Andhra Pradesh's Irrigation Minister, Nimmala Ramanaidu.

The discussions centred on several key irrigation projects pertinent to Andhra Pradesh. Chief Minister Naidu urged the central government to extend support for significant initiatives, including the Polavaram and Banakacherla projects, alongside new proposals. The Chief Minister highlighted the necessity of obtaining approvals and securing funding from the central government for



these irrigation schemes.

Naidu specifically called for immediate financial assistance for projects that were approved in alignment with the bifurcation commitments. He proposed a high-level meeting to address outstanding issues, underscoring that water security remains a critical concern for Andhra Pradesh. He implored the central government to make favourable decisions that would cater to the state's irrigation and drinking water require-

ments.

Furthermore, Chief Minister Naidu stressed the importance of enhancing coordination between the central and state governments to ensure the successful implementation of these projects.

# Nellore Mayor Sravanthi's resignation accepted

Nellore: The general body meeting of Nellore Municipal Corporation held on Thursday headed by the newly elected in-charge chairman, Poluboina Roop Kumar Yadav, has unanimously accepted the resignation of Mayor Potluri Sravanthi.

As many as 40 corporators against the total 52 attended the meeting. Speaking on the occasion, Roop Kumar Yadav has clarified that he will act as the in-charge mayor till a new Mayor assumes office. He said that Mayor Sravanthi has resigned to her post on December 14 due to personal reasons.

He said that as per the Constitution, NMC Mayor post is allocated to woman from Schedule Tribe only, asserting that the coalition government will act in a democratic manner and there will be



no scope for second thought over the issue.

Informing that 11 months are left for the conclusion of the present body as per the guidelines, Roop Kumar claimed that during these

11 months, the newly elected body will take up several developmental activities headed by Municipal Administration Minister P Narayana and Nellore MP Vemireddy Prabhakara Reddy. He

appealed the public to extend their cooperation. Earlier, Roop Kumar Yadav assumed charge as the in-charge Mayor. Nellore Rural MLA Kotamreddy Sridhar Reddy and party leaders were present.

# 6 red sanders logs seized

Tirupati: The Red Sanders Anti-Smuggling Tasks Force (RSASTF) seized six red sanders logs and arrested a smuggler in Adavaram forest area of Srikalahasti on Thursday.

The special operation took place under the guidance of Task Force Head L Subba Rayudu and led by Task Force SP P Srinivas. Supervised by ASP J Kulasekhar and directed by DSP MD Sharif, ARSI Maheswar Naidu's team, along with local FBO Damodar Rao, started combing operations from Chellur Dam on Wednesday night.

The team reached Theerthalapala Kona in



Adavaram forest, where they spotted a group of people. Upon seeing the team, the suspects fled, but police nabbed one per-

son, who was from Karnataka.

A search nearby uncovered six red sandal logs and the suspect's

bike. They took the logs, bike, and smuggler to Tirupati Task Force station. SI Rafi registered a case and investigation is on.



# Protect children from early marriage and child labor

Tirupati: A one-day training programme for field staff focused on curbing child marriages and child labour held under Centre for Women's Studies and Extension Centre of Sri Venkateswara University along with Pragati NGO has commenced here on Thursday.

The event taught Behavioral Change Communication (BCC) and Counseling Techniques.

Director of the Centre for Women's Studies Professor D Sai Sujatha said Educated children are society's true wealth. Modern education builds a bright future. She stressed that no child should miss school or waste childhood in work. She guided staff on communication and counselling methods to bring change at village level.

Pragati NGO Director Ramana, who presided over the event, called for united efforts to uproot social evils like child marriages and child labor.

VINS NGO Director R Meera, guest speaker, advised the staff to closely watch parents' behaviour, adding that changing mindsets would make it easier to end these harmful practices.

The training covered modern counselling methods, challenges in child protection, and the right to education. Staff learned practical ways to overcome these issues.

Director of MASS organisation K Narayana, Dr Raja Rajeswari, Dr Sunitha Varalakshmi and others were present.

# Jeevan Sandesh selected for Fencing nationals

Vijayawada: K Jeevan Sandesh, a student of Sarada Educational Institutions, Vijayawada, brought laurels to his institution by winning a bronze medal in the 69th School Games Federation of Andhra Pradesh (SGFAP) Boys Under-19 Inter-District Fencing Championships held in Guntur from December 13 to 15. With this achievement, he has been selected to represent the state team at the School Games Fencing



Nationals.

Jeevan Sandesh is pursuing Senior Intermediate (BiPC) at Sarada Educational Institutions here. To mark his success, the management organised a felicitation programme at the college campus on Thursday. Congratulating the student, Chairman Dr Y Ramesh Babu and Managing Director Y Sarada Devi said the achievement was a proud moment for the institution.

They noted that participation in sports plays a crucial role in developing physical fitness, mental strength, and discipline among students, and encouraged youngsters to balance academics with sports. College Advisor ESRK Prasad and General Manager GV Rao also congratulated Jeevan.

Govt should not use court-related excuses for 42 pc BC reservations in ZPTC and MPTC polls: BC Commission

Hyderabad: The Telangana Backward Classes Commission asked the State government not to use court-related excuses and ensure that 42 percent reservations are provided to BCs in ZPTC and MPTC elections. The State Government should consult the Central Government on the issue. It should bring the Gram Panchayat election results to the Centre's notice and increase pressure, besides initiating steps to ensure that 42 percent reservations to BCs are included in the Ninth Schedule of the Constitution, the BC Commission said in a statement issued here on Friday. Hyderabad city guide The State Government should also challenge the five-judge Constitution Bench judgment in the Krishnamurthy case, which directed that reservations should not exceed 50 percent. It should file a review petition in the Supreme Court, seeking reconsideration by a larger seven-judge Constitution Bench, the Commission demanded.

# The science of tirzepatide, touted as a game-changing weight loss drug

The national drug regulation body, Central Drugs Standard Control Organisation (CDSCO), has reportedly authorised the use of the drug, tirzepatide, for treatment of diabetes. The use of tirzepatide for chronic weight management is still under review. The drug is being sold by the pharma company Eli Lilly under the brand names Mounjaro (for diabetes) and Zepbound (for obesity).

## What causes obesity and diabetes?

When we eat, we are stocking up on glucose, a molecule that is fundamental for our cells to function. Glucose is so crucial that our bodies evolved a mechanism to store it when food is available in plenty. The excess stock is stored in the form of lipid droplets that can be converted back to glucose at times when food is scarce. This is where the hormone insulin comes into play, explained Anil Gaikwad, a pharmacologist at Central Drug Research Institute, Lucknow. "Insulin secretion is a signal to cells to mop up excess glucose from the bloodstream. As long as the normal feeding and fasting cycles are maintained, our cells are functionally responsive to insulin." The trouble is when cells develop insulin resistance. With the Industrial Revolution, cheap quality food became easy to access. This, coupled with our sedentary lifestyles, has resulted in an imbalance between our energy intake and usage. This is likely why there is an obesity epidemic in the world — according to the World Obesity Federation Atlas, 11% of Indian adults will be obese by 2035. In such conditions, there is an oversupply of glucose in the bloodstream and the body is forced to maintain high levels of insulin to control the situation. Beyond a point, cells become desensitised to the insulin, a scenario known as insulin resistance. "With insulin resistance, there is an increased pressure on the beta cells of the pancreas to produce more insulin. This vicious cycle exhausts the beta cells, eventually leading to its death," said Gaikwad. This is the process that underlies the transition of a person from being insulin-resistant to prediabetic. "When approximately 40% of the beta cells are exhausted and unable to produce the required quantity of insulin, a person is declared diabetic," he added.

## How can the new drugs help?

The active component of the two Eli Lilly drugs Mounjaro and Zepbound is called tirzepatide. Tirzepatide is delivered subcutaneously via an injection given weekly. It works by acting as a 'dual agonist'. This means that it can mimic two naturally occurring molecules: gastric inhibitory polypeptide (GIP) and glucagon-like peptide-1 (GLP-1). "GIP and GLP-1 are peptides that are released following ingestion of fats and/or carbohydrates. They stimulate the release of insulin, and help increase insulin sensitivity in adipose and skeletal tissue," said RNV Krishnan Deepak, a computational structural biologist at Azim Premji University, Bengaluru. Being an agonist of these two peptides, tirzepatide can activate the same pathways as them.

Deepak added that GIP and GLP-1 (and therefore tirzepatide, their synthetic analogue), also have other physiological effects including slowing gastric emptying

and promoting satiety. "The patient feels fuller for longer and in turn eats less, resulting in weight loss," he says. This is how tirzepatide helps those with insulin resistance, a group that includes obese and diabetic individuals.

What sets tirzepatide apart? Tirzepatide is not the only drug to use this strategy to combat diabetes and obesity. Semaglutide, marketed by the company Novo Nordisk, is also a GLP-1 agonist. This drug is already available in India for diabetes management. Like tirzepatide, semaglutide is also effective for weight loss, but in a higher dose (known by its brand name Ozempic). However, its usage for obesity has not yet been approved in India. The edge that tirzepatide has over semaglutide is its property as a dual agonist; not only does it activate the GLP-1 receptor, it also activates the GIP receptor. Interestingly, there may already be a newer drug that goes one step further than tirzepatide in the offing. Called retatrutide, this works as a 'triple agonist', meaning it targets a third receptor, GCGR, besides the GIP and GLP-1 receptors. Studies show that retatrutide may be a better alternative to semaglutide and tirzepatide, but it has some way to go before being approved by a regulatory authority.

## Is tirzepatide a silver bullet?

No. "Tirzepatide has received marketing authorisation for type-2 diabetes mellitus in India as an adjunct to diet and exer-



cise to improve glycemic control in adults with type-2 diabetes," clarified a spokesperson for Eli Lilly. "Diet, exercise and lifestyle modification are the cornerstone of type-2 diabetes management and any active drug indicated for type-2 diabetes is an add-on to diet and lifestyle." So far, the most common side effects of taking tirzepatide seem to be nausea and vomiting. It is also important to know that the medications once launched are unlikely to be affordable to most Indians. When asked about affordability, the spokesperson commented: "We believe tirzepatide will be competitively and appro-

priately priced based on the efficacy of the medicine and overall lower risk-benefit ratio as observed in phase 3 clinical trials." While they declined to mention any specifics, a Business Insider report has said that it is likely to be priced at ₹20,000 for each weekly dose. Nandita Jayaraj is the co-author of Lab Hopping:

A Journey to Find India's Women in Science, which explores the gender gap in Indian science. The views expressed are personal. Catch every big hit, every wicket with Cricket, a one stop destination for Live Scores, Match Stats, Infographics & much more. Explore now!

## Prince Harry sent 'congratulate note' to Kate Middleton to convey how happy he was to....



Prince Harry had connected with his estranged sister-in-law, Kate Middleton, following the Princess of Wales' appearance at Wimbledon Tennis Championships on July 14 amid her ongoing cancer treatment, as per a new report. The Duke, who was previously known for his strong bond with Kate, has been in the limelight over straining ties with the Royal family since he stepped down of the Royal duties and moved to the US with Meghan Markle. Kate, 42, received a standing ovation at the yearly grand slam as she appeared in the ground four months after making her cancer diagnosis public. Harry sends congratulatory note to Kate Middleton. According to Heat Magazine, the Duke of Sussex reached out to Meghan and congratulated her on attending the tournament. "Harry was watching Wimbledon and was thrilled to see Kate looking so radiant," a source told the magazine.

Harry sent a "congratulate" note to Kate to tell her "how happy he was to see her out." "He's just so grateful that she's on the mend and able to get back to her duties after taking time off — as is Meghan," the source added. Royal fans were delighted when Kate arrived at the All England Lawn Tennis Club, with daughter Princess Charlotte and sister Pippa Middleton. The Princess of Wales "showed

a lot of courage and character, as she knew that the world was watching," stated renowned royal chronicler Robert Jobson. Meanwhile, the Palace insider confirmed his remarks, informing the outlet that she most certainly received "sustenance" from her outing. Kate says 'Great to be back' at Wimbledon. Following her Wimbledon outing, Kate shared her happiness at re-

turning to SW19 on XGreat to be back at @Wimbledon! There's nothing quite like The Championships," she wrote. It is being reported that the Waleses will spend the balmy summer at Anmer Hall, which is situated on the Sandringham estate in Norfolk, England. Later on, Kate and William and their three kids will meet the King and Queen Camilla at Balmoral Castle.

# Surprising 'dark oxygen' discovery could ensnarl deep-sea mining | Explained

An unknown process is producing oxygen deep in the world's oceans, where it is too dark for photosynthesis, scientists reported on July 22 in the journal *Nature Geoscience*. The finding has important implications because oxygen helps support life and the discovery implies the existence of previously unknown ecosystems. Many governments are also bound to take notice since one explanation for the oxygen is that polymetallic nodules are transporting electric charges that split water molecules around them, releasing oxygen. Polymetallic nodules are lumps of iron, manganese hydroxides, and rock partially submerged in many parts of the ocean floor. If their concentration exceeds 10 kg per sq. m, mining them is considered to be economically feasible — and many countries are planning to do so as a new resource.

On July 22, Reuters reported an unnamed "top government scientist" saying India is planning to "apply for licences to explore for deep-sea minerals in the Pacific Ocean". India's Ministry of Earth Sciences is also currently building a submersible vehicle that will look for and mine similar resources in the Indian Ocean as part of its 'Deep Ocean Mission'. The oxygen discovery raises questions about how deep-sea mining to extract polymetallic nodules will affect marine ecosystems. The scientists behind the study, from Germany, the U.K., and the U.S., were studying the Clarion-Clipperton Zone, a part of the ocean floor off Mexico's west coast. Covering an area larger than India, the Zone is considered to have the world's highest concentration of polymetallic nodules, including 6 billion tonnes of manganese and more than 200 million tonnes each of copper and nickel.

When the scientists were conducting experiments at a depth of 4 km, they noticed the oxygen concentration in some places rapidly increased instead of decreasing. They conducted follow-up studies in 2020 and 2021. In each case, they released a device from the surface that would land on the ocean floor, where it would isolate a small volume of the floor along with some sea water and measure the oxygen levels. This underwater region is called the abyssal zone. It receives too little sunlight for photosynthesis to be feasible. Instead, life-forms here get oxygen from water carried in by a global circulation called the 'Great Conveyor Belt'. Still, the amount of oxygen is low and without any local production, the device should have measured the oxygen levels dropping as small animals consumed it. But the scientists found the opposite: it increased, sometimes tripling in just two days. They double-checked the finding by recreating the conditions on the ocean floor in their lab, and found the oxygen levels to increase up to a point before dropping.

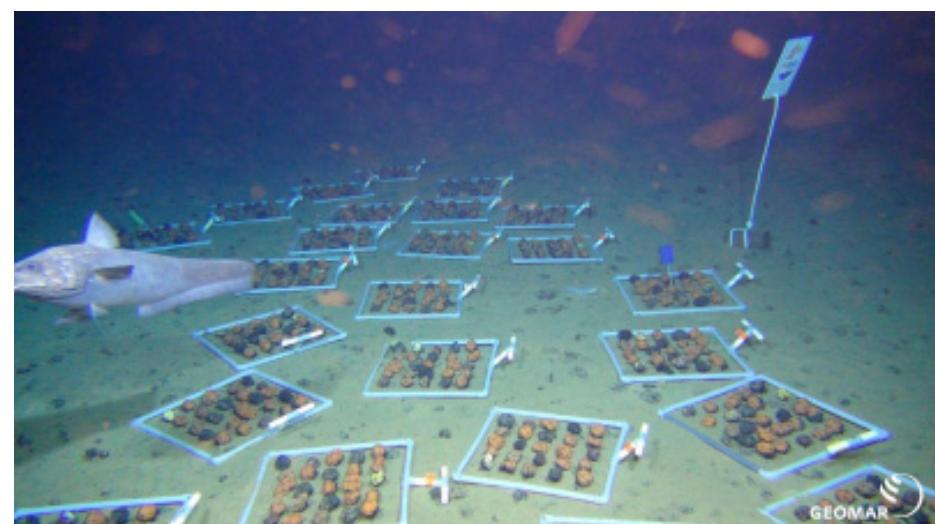
What is the source of the oxygen?

When they measured the physical characteristics of the nodules, they found their surfaces to have a voltage of up to 0.95 V. Splitting one water molecule requires 1.5 V, but the researchers have suspected the voltage could build up if many nodules are close together, like the cells of

a battery. Andrew Sweetman, an ecologist with the Scottish Association for Marine Science in the U.K. and a coauthor of the study, told *Nature*, "We have another source of oxygen on the planet, other than photosynthesis." His team is calling it 'dark oxygen'. Oxygen sources are valuable because they allow life to survive. But as the lab experiment indicated, the nodules could only produce oxygen as long as they could muster a sufficient voltage. The nodules' own energy source is also not clear.

What is deep-sea mining?

Given the quantity of metals polymetallic nodules on the ocean floor hold, deep-sea mining is expected to be a major marine resource extraction activity in the coming decades. The International Seabed Authority has established 15-year contracts with at least 22 contractors — including the Government of India — to look for polymetallic nodules, polymetallic sulphides, and cobalt-rich ferromanganese crusts in the deep seabed. China alone is expected to mine 17% of the Clarion-Clipperton Zone. The new finding raises the possibility of such mining damaging ecosystems that require 'dark oxygen' to survive. Experts have found deep-sea mining itself could be harmful to the marine environment, 'dark oxygen' or not. In 1989-1996, scientists from Germany conducted the Disturbance and Recolonisation (DISCOL) Experiment in the Peru Basin as the world's "first large-scale impact assessment" to assess the "environmental impacts originating from the mining of polymetallic nodules". They built a device that disturbed the sea floor like a deep-sea mining exer-



cise might have and collected data about how the disturbances changed local oceanographic and sedimentological profiles, among other things. A 2019 study in the journal *Scientific Reports* reported that "the effects of simulated mining impacts induced during the DISCOL [Experiment] were still evident in the megabenthos of the Peru Basin after 26 years."

How will deep-sea mining be affected? The same study also reported "significantly lower heterogeneity diversity in disturbed areas" and added that "if the results of this experiment ... can be extrapolated to the Clarion-Clipperton Zone, the impacts of polymetallic nodule mining there may be greater than expected, and could potentially lead to an irreversible loss of some ecosystem functions". In November

2023, *Nature* reported based on a paper published then that deep-sea mining "for minerals could harm deep-sea jellyfish, according to the first study of mining impacts on animals living in the water column." Scientists also know less about ecosystems in the abyssal zone than they do about many of those aboveground, which means the models scientists use to predict their fate and their role in global climate processes could be unreliable. With these and other issues in mind, on July 20, three major European insurance companies said they would exclude deep-sea mining from their underwriting portfolios. 'Dark oxygen' adds to these challenges. If deep-sea mining doesn't find sustainable ways to respond to them, it may be rendered altogether infeasible.

## WazirX crypto exchange hack and its bounty programme: what it means to India's crypto investors?

On July 18, Indian cryptocurrency exchange WazirX was hit by a cyberattack that led to a loss of digital assets worth more than \$230 million from one of its wallets. The exchange responded by pausing normal trading activities and reported the incident to the Indian authorities and other crypto exchanges. The company also launched two bounty programmes aimed at ethical hackers who can help the exchange track, freeze and recover the stolen funds. WazirX said there was a cyberattack against a multi-signature wallet it managed through a digital asset custody service known as Liminal. Multi-signature wallets have a built-in security feature that requires several parties to sign off on transactions.

"The impact of the over \$230M cyberattack is on the digital assets of our customers," said WazirX in a blog post, adding that INR funds were not affected. The company strongly denied that WazirX itself was breached, and brushed aside rumours that it was duped by a phishing attack. The exchange also noted that it was "certain" that its hardware keys were not compromised, adding that an external forensic team would be engaged to further investigate the matter. But Liminal, after

completing investigations at its end, said "It is evident that the genesis of this hack stems from three compromised devices at WazirX's end." Meanwhile, WazirX founder and CEO Nischal Shetty said that the attack was only possible if there had been four points of failure in the digital signing process.

Who is behind the hack?

WazirX has not yet revealed the suspected parties or perpetrators responsible for the hack. However, news reports have emerged that North Korean hackers were responsible for the incident. On-chain analysis and other information indicate "that this hack was perpetrated by hackers affiliated with North Korea," said blockchain analytics platform Elliptic. In response to *The Hindu*'s queries to WazirX about the North Korean hackers, the crypto exchange WazirX directed us to its blog and said it was working with law enforcement officials to see if any known threat group might be behind the attack. "This incident has affected the Ethereum multisig wallet, which consists of ETH and ERC20 tokens. Other blockchain funds are unaffected," said WazirX in its official blog, specifying that approximately 45% (as per preliminary workings) of crypto assets were affected

by the attack. The company has largely shifted the blame to the process of securing multisig Ethereum wallets, and claimed the vulnerability was not unique to WazirX.

How important is WazirX in the crypto sector?

WazirX calls itself India's largest cryptocurrency exchange by volume. As of June 10, it reported total holdings of ₹4,203.88 Crores, or USDT 503.64 Million. Tether [USDT] is a stablecoin, or a cryptocurrency that is pegged to the value of the U.S. Dollar but is not an official U.S. currency. When *The Hindu* tried to access WazirX's public and real-time proof of reserves after the cyberattack, we were welcomed by the page was under maintenance notice. WazirX has received both positive and negative press in India. The Directorate of Enforcement froze the exchange's assets in 2022, lambasting its operating procedures and loose Know-Your-Customer (KYC) and Anti-Money Laundering (AML) norms.

"By encouraging obscurity and having lax AML norms, it has actively assisted around 16 accused fintech companies in laundering the proceeds of crime using the crypto route."

# Between Distance and Voyage, musician Dhruv Ghanekar is at home with the world

Once celebrated for its novelty, somewhere down the line, "fusion" became a dirty word. Over the decades, it had found its utterances in jazz, which witnessed the emergence of jazz fusion, a sub-genre in the late 1960s that incorporated instruments and arrangements from rock and funk; and cuisine, where in the 1980s, in Florida, USA, a group of classically trained chefs used the term when they began creating dishes that combined Asian or Caribbean ingredients in typically European offerings; and it spread like a rash in the British-Asian and Indian music scene in the early 1980s and all through the 1990s, before remix culture took over in the early 2000s. "There was a period of time during which 'fusion' was a very misused word, not unlike 'world music.' The Grammys recently changed the name of that category to global music — which sort of summarises what I've been trying to do with the last two albums," said Dhruv Ghanekar, a few days after the release of his latest album, *Voyage 2* — which could also be described as fusion music. "I'm ambivalent about that term because I'm not a purist," he added.

Now that's one word one would never associate Ghanekar with. The 50-year composer, songwriter, and entrepreneur from Mumbai has always found ways to merge his innate talent with his growing interests. Trained in Hindustani classical music in his formative years, during which time he also found himself facing the camera, in a handful of films and shows directed by the family friend and noted filmmaker Shyam Benegal, including *Katha Sagar* (1986), *Susman* (1987) and *Bharat Ek Khoj* (1988). In his teens, Ghanekar began training as a guitar player, which led to the formation of his first rock band, Chakraview, in college in 1993. Three years later, the band would break up and Ghanekar would join forces with Ashutosh Pathak to form Smoke Music, a one-stop joint that produced over 3,000 commercials, scored music for six films, composed music for nearly every television network, music for indie artists. In 2007, they set up Blue Frog, a premier live music venue in Lower Parel, Mumbai, that gradually spread to three cities — Delhi, Bangalore, Pune — before shutting shop in 2016. Ghanekar founded Wah Wah Records in 2012 and has released *Voyage* and *Voyage 2* under his own label. His first solo album was *Distance* in 2009; *Voyage* followed in 2015, and nine years later, *Voyage 2* — it's safe to say there's a theme here. "These albums, especially *Voyage* and 2, are a culmination of so many influences. I'm as interested in Brazilian choro music as I am in ghazals from the north or Natya Sangeet from Maharashtra; my curiosity is leading the way for me," he said. *Voyage* was a deft exercise in sonic mapmaking and collaboration — Ghanekar invited singer-guitarist Raul Midon, French-Cameroonian bassist/vocalist Etienne Mbappe, percussionist Trilok Gurtu and drummer Ranjit Barot, along with vocalists Ila Arun and Kalpana Patowary, to explore a variety of sounds from North and West Africa, merged with Rajasthani and Assamese folk. In *Voyage 2*, Ghanekar continues his cartographic journey with Arun and Patowary, who are

now joined by Nandini Srikanth, Asha Saperia, Vaishali Samant, bassists Mohini Dey and Tim Lefebvre, drummer? Gino Banks, percussionist? Taufiq Qureshi, trumpet player Sam Dechenne, ?and rapper Illa Straight.

Imagine a sarai, a resting place where travellers gather and mingle, sharing conversation and cultures — this album sounds familiar and foreign in equal measure, and with a sound so robust that every song lends itself to a terrific live performance. "Voyage was a slightly more introspective and brooding album. We toured with it at a number of jazz festivals, which are now really genre-agnostic, and people want to be moved, they want to dance. *Voyage 2* was designed in response to that: I wanted it to be fun, a joyous celebration. It will translate brilliantly on stage," said Ghanekar. The opening track, *Suprabhatam* sets the tone without hesitation: Sanskrit shlokas meet drum and bass with a jangly sitar and Dey's bass keeping time in the background. "What is interesting for me as a composer is to bring in something new to known forms, otherwise it's just a remix. Indian regional folk is so vast and so deep, I will need several lifetimes to explore it fully. But I still want to expand my own vocabulary and conduct a deeper exploration of Indian folk melodies as seen through my unique global lens," said Ghanekar, who returns to explore Rajasthani and Assamese folk with Arun and Patowary; this time, he's introducing rhythms from funk, reggae, dub, electronica and rap in tracks like *Bego*, *O Sorothia*, and *Jadu*, respectively. *Voyage 2* is also a tip of the hat to Arun (who happens to be his mother-in-law as well) — across four songs, one simply marvels at her incred-



ible range and ability to evoke different moods and take the listener on multiple sonic journeys. "She's a one or two-take artist. She'll give you long stretches of the song at one go, and you keep recording. Later on, I take the best parts and stitch them together, which is unlike how most recordings go these days. All the singers on the album are women, and they are so unique and in complete command of their craft and genres. Every voice on? *Voyage 2* is an authority on the culture she represents. So, I'm not thinking of correcting them, I can solely focus on how we can take these sounds to the next level," said Ghanekar. Now what should anyone who finishes listening to *Voyage 2* move on to next? "Oh, I know! When I was recording my first album, *Distance*, I was working with someone who introduced me to an Algerian drummer named Karim Ziad. He has an incredible album, *Ifrikyia* (2001), which combines the music of the Berber people with jazz — it blew me away! It changed the way I thought about how I could present Indian music to the world. And then, Ziad came and played on *Voyage*!" After a few promotional shows in September in Mumbai and some other cities, Ghanekar will go on tour with the album at the end of the year. But he's wasting no time to get started on his next project. What's it gonna be? "Pop! It's going to be a radical departure from *Voyage 2*, and I need to return to my singer-songwriter avatar. It'll be sort of introspective, I'm not trying to be young. There's a fair amount of material that I can draw from," he said, adding, "I spent too long waiting between solo projects, and I don't want to make that mistake again."

## How a software glitch disrupted global businesses

In the early hours (IST) of July 19, reports emerged that Microsoft's Azure cloud service was facing an outage, affecting users in the Central U.S. area. Within the next few hours, the service outage spread like wildfire to several other countries, including India, disrupting flight operations and air traffic, forcing airports to shift to manual operations. Brokerages and stock exchanges were also hit, throwing the digital lives of many out of gear. The Indian Computer Emergency Response Team, CERT-In, has issued a severity rating of "Critical" for the incident.

Microsoft, while acknowledging the outage in a blog post noted that "Virtual Machines running Windows Client and Windows Server, running the CrowdStrike Falcon agent, may encounter a bug check". The tech giant estimated the approximate time of impact to be as early as 4.09 a.m. UTC (9.39 a.m. IST) on July 19, when this update started rolling out. While Microsoft has not fully revealed what caused the outage on its cloud service, one incident seems to have triggered this cyber event — a glitch in the software update of CrowdStrike's endpoint protection programme, Falcon Sensor. CrowdStrike is a cybersecurity firm that deploys unified security programme to stop breaches in

real time. The Falcon Sensor platform runs with high privileges and is built to protect endpoints (basically, any devices connected to a computer network). A mishap in this security platform can cause the operating system to crash, like what several users faced globally on July 19 with the Blue Screen of Death (BSOD). Once BSOD flashes on a user's screen, they will be caught in a boot loop cycle, which simply means that they won't be able to access their devices linked to CrowdStrike's Falcon platform. This is because the security solution is deployed at the BIOS level.

### What does BSOD mean?

BSOD is a warning that users see on their computer when the system interrupts operations and displays it on a blue screen. This is what many users saw today when they tried to access their affected devices during the outage. Officially referred to as the "Stop Error", the warning is issued when a critical problem forces Windows to reboot. Before rebooting the system, the Windows operating system saves a file on the computer, carrying some data about the error. This file is called a 'minidump' and is crucial in determining the cause of the error. BSOD warnings have many causes and include problems caused by

hardware drivers, incompatible software like apps, or programs which may cause conflicts that result in BSOD. Additionally, faults in the hardware systems like RAM, hard disk drive (HDD), Solid-State Drive (SSD), motherboard, or other physical components in a system can also lead to a BSOD screen. A malware injected by threat actors could also corrupt system files in a computer, causing it to show the Blue Screen of Death. In order to fix the error screen, it is essential to find out the cause and troubleshoot the issue, based on the alphanumeric code shown in the message.

### What could have caused this malfunction?

According to CyberArk's CIO, Omer Grossman, there are range of possibilities, starting from "human error - for instance, a developer who downloaded an update without sufficient quality control - to the complex and intriguing scenario of a deep cyberattack, prepared ahead of time and involving an attacker activating a 'doomsday command' or 'kill switch'."

And it is anyone's guess until CrowdStrike's own analysis and updates are out in the coming days. Most cybersecurity experts will be keen on understanding what could have gone wrong here.