

## Leopards mistaken for tigers in Adilabad

Adilabad: Both forests and plains in erstwhile Adilabad district are seeing a considerable rise in movement of tigers and leopards following the onset of winter, considered the season of mating for big cats. However, people are mistakenly assuming leopards as tigers due to lack of familiarity with wildlife even as the risk factor is almost similar when they attack humans and cattle or are sighted. A leopard was sighted while crossing NH 363 road near Asifabad-Kagaznagar cross roads in Kumram Bheem Asifabad district on Wednesday. Motorists recorded the video of the leopard and shared it on social media platforms claiming that a tiger was seen on the national highway, triggering panic in surrounding villages. A few days ago, a leopard killed a wild boar in the forests of Ameenpur village in Rebbena mandal. However, locals presumed that it was a tiger. Forest officials who visited the spot and recorded the pugmarks clarified that it was a leopard. They said no tiger was moving in the forests of Ameenpur in recent times. On October 29 night, a leopard at-

tacked a herd of sheep between Rapelli and Gudipet villages in Hajipur mandal of Mancherla district. Shepherd and locals feared that it might be a tiger which killed the sheep. Forest officials had to step in again and clarify that it was a leopard after checking pugmarks.

Elsewhere in Adilabad and Nirmal districts, similar instances of mistaking leopards for tigers were reported in the month of October and November. Forest officials verified the claims of the locals and clarified that the wild animals which killed cattle were in fact leopards. People are apparently confused in identifying the carnivores due to lack of awareness over distinct patterns on coats, lifestyle, pugmarks, hunting styles of both leopards and tigers. Forest officials said pugmarks of leopards were smaller than that of tigers. However, the practice of mistaking leopards for tigers has become a headache for forest officials, who are forced to provide clarity over the movement of wild animals by inspecting the spot of the sighting and attack, when they are busy in tracking move-



ment of a tiger that had killed a woman and attacked a farmer. Similarly, they are struggling to control circulation of fake videos and messages going viral on social media plat-

forms, creating panic among locals. They have requested public to verify facts before sharing images and videos of a wild animal on WhatsApp or Facebook.

## World University of Design invites online applications for admissions into UG, PG courses



Hyderabad: The World University of Design (WUD), a University dedicated to education in the creative domain, is inviting online applications from candidates seeking admissions to its undergraduate and post-graduate programmes for the academic year 2025-26. The university is offering courses, including architecture, design, fashion, communication, visual arts, performing arts and management. Admissions are based on the WUD Design Aptitude Test (WUDAT 2025) scheduled for January 11 and 12, 2025. The entrance exam will be conducted online, enabling candidates to conveniently take the test from home. The two-hour exam will consist of sections with multiple-choice questions covering logical reasoning, verbal reasoning, general knowledge, and a drawing-based component. "The courses offered at WUD are structured to nurture both the ana-

lytical and imaginative sides of aspiring designers, and WUDAT plays a pivotal role in this rigorous selection process," said Dr. Sanjay Gupta, Vice Chancellor WUD. The university conducts the Design Aptitude Test (DAT), Art Aptitude Test (AAT) and General Aptitude Test (GAT) to evaluate candidates' suitability for creative education and to shortlist potential students.

The CUET scores are also applicable for admission into specific degree programs. Additionally, WUD shares a result partnership with IIT Bombay, which holds the national-level UCEED and CEED exams, the scores of which are also accepted for admission into B.Des and M.Des degree programs. The deadline for application submission is January 8, 2025. For details, visit the [website](http://worlduniversityofdesign.ac.in/) <https://worlduniversityofdesign.ac.in/>.

## Cops book case against Allu Arjun, others in Sandhya Theatre stampede incident

Hyderabad: The Chikkadpally police have registered a case against Telugu actor Allu Arjun, his security wing, owner of Sandhya Theatre and others in connection with the stampede during the premiere of the actor's latest movie 'Pushpa 2', resulting in the death of a woman and injuring a child. Speaking to the media on Thursday, Central Zone DCP Akansh Yadav said that based on the complaint from the victim's family, we have booked a case under sections of 105, 118(1) r/w 3(5) under BNS Act and are investigating. A woman, Revathi from

Dilsukhnagar died, while her 8-year-old son is battling for life following a stampede that took place at a theatre at RTC crossroads on Wednesday night. The actor came to the theatre to watch the screening of the movie. As soon as the actor entered the theatre and greeted the fans, all hell broke loose. Fans who had assembled to watch the premier show of the movie tried to go near the actor. In the melee, Revathi and her son were suffocated and collapsed. She died later and the boy who was injured was shifted to the hospital.





# Trump threat to BRICS over ditching the dollar: what he can do, what it will mean for US, India

Ever since the US chose to weaponise the global financial infrastructure by throwing Iran (in 2012) and Russia (in 2022) out of the Society for Worldwide Interbank Financial Telecommunication (SWIFT), key to international financial transactions, countries across the globe have been looking to reduce dependence on the US dollar as well as the US-led global financial system. Perceiving these growing attempts as a threat to the US dollar's domination, US President-elect Donald Trump has threatened Brazil, Russia, India, China, and South Africa (BRICS nations) with 100 per cent tariffs if they create a new BRICS currency or back any other currency to replace the US dollar as the world's reserve currency. "The idea that the BRICS countries are trying to move away from the dollar while we stand by and watch is OVER. We require a commitment from these countries that they will neither create a new BRICS currency nor back any other currency to replace the mighty U.S. dollar, or they will face 100 per cent tariffs and should expect to say goodbye to selling into the wonderful U.S. economy. They can go find another 'sucker!' There is no chance that the BRICS will replace the US dollar in international trade, and any country that tries should wave goodbye to America," Trump said in a social media post on Saturday.

This comes after Russian President Vladimir Putin at the BRICS summit in October said: "The dollar is being used as a weapon. We really see that this is so. I think that this is a big mistake by those who do this." However, Prime Minister Narendra Modi at the summit said that BRICS should not acquire the image of one that is trying to replace global institutions. India's efforts towards rupee internationalisation Trump's threat comes at a time when US sanctions on Russia resulted in Russian oil being redirected from Europe to Asia. In an effort to reduce reliance on the US dollar and to internationalise the Indian rupee, the Reserve Bank of India allowed invoicing and payments for international trade in Indian rupees in 2022, after sanctions were imposed on Russia amid the Ukraine war.

Notably, foreign exchange market turnover (daily averages), as per the BIS Triennial Central Bank Survey 2022, shows the US dollar is the dominant vehicle currency, accounting for 88 per cent of the global forex turnover. The rupee accounted for 1.6 per cent. The survey stated that if rupee turnover rises to equal the share of non-US, non-Euro currencies in global forex turnover of 4 per cent, it will be regarded as an international currency. However, India's trade with Russia in domestic currency remains low due to Indian banks' fear of US sanctions and an unbalanced trade relationship between the two countries. While there has been a multifold rise in India-Russia trade after the Ukraine war, it has been firmly in favour of Russia. India's exports to Russia stood at \$4.2 billion in FY24, but increasing oil imports from Moscow have widened the import bill to \$61 billion. As a result, Russia has a huge pile of rupee reserves that it has not been able to use to settle bilateral trade using domestic currency, and is instead using it to invest in Indian stocks and bonds. On the contrary, bilateral trade between Russia and China in domestic currency has jumped. A more balanced Russia-China trade has



helped transactions using the yuan and rouble. China-Russia trade in 2023 crossed a record \$240-billion mark. The Russian government said that over 90 per cent of the bilateral trade settlement is now in Russian roubles. "Not trying to target the US dollar" External Affairs Minister S Jaishankar in October said that while India is pursuing its trade interests, avoiding the use of the US dollar is not part of India's economic policy. Jaishankar said US policies often complicate trade with certain countries, and India is seeking "workarounds" without intending to move away from the dollar, unlike some other nations. However, the minister added that a multipolar world will eventually be reflected in "currencies and economic dealings".

"What I will say is that we have a natural concern. We often have trade partners who lack dollars for transactions. So, we must decide whether to forgo dealings with them or find alternative settlements that work. There's no malicious intent towards the dollar," Jaishankar said in response to a question at the Carnegie Endowment for International Peace, an American think tank in Washington, during an interaction in October. "Threats impractical and counterproductive" International trade experts said that while the US dollar dominates global trade—accounting for over 90 per cent of transactions—it is not the only currency used internationally. Other convertible currencies like the Japanese yen, the euro, and the British pound are also integral to global commerce, and the United States has not objected to their use. The proposed BRICS currency is simply an extension of these existing alternatives. "It is the actions of the United States that have pushed many countries to seek alternatives to the US dollar. The US has a history of leveraging its influence over global financial systems, such as the SWIFT network, to impose unilateral sanctions. SWIFT is essential for secure and standardised international financial transactions. By blocking countries like Russia and Iran from accessing SWIFT, the US has effectively weaponised the global financial infrastructure, forcing other nations to find alternative payment mechanisms to continue legitimate trade," former trade officer and head of think tank Global Trade Research

Initiative, Ajay Srivastava, said. Srivastava said that a 100 per cent tariff on BRICS countries could backfire. "Imports into the US would simply shift to third countries, potentially increasing costs for American consumers without bringing manufacturing jobs back home. The US has become less competitive in manufacturing labour-intensive goods due to higher production costs, and tariffs are unlikely to reverse this trend," he said. "China keen to dominate" Federation of Indian Export Organisations (FIEO) Director General & CEO Ajay Sahai said that while supporting local currency initiatives, India should ensure the framework does not disproportionately favour China, given the asymmetry in economic power among BRICS nations. "China is very keen to assume a dominant role to use the bloc against the US, though India, Brazil, and South Africa are more keen to work with the US and settle the differences amicably through negotiations," Sahai said. He said that India should engage diplomatically with the US to explain its position, emphasising that diversifying trade mechanisms is not anti-American but a move towards multipolarity and financial stability. "We should accelerate the development and internationalisation of its digital currency (CBDC) and financial platforms like UPI to take a leadership role in BRICS currency initiatives. Trump's threat might amplify geopolitical tensions, but it is unlikely to deter BRICS nations from pursuing alternatives to the US dollar. For India, the best course is a

balanced approach: supporting financial reforms within BRICS that align with its interests while maintaining strong ties with the US to safeguard its broader strategic and economic priorities," he said. Meanwhile, the IMF's Currency Composition of Official Foreign Exchange Reserves (COFER) points to a gradual decline in the dollar's share of central bank and government foreign reserves. However, the reduced role of the US dollar over the past two decades has not been matched by corresponding increases in the shares of the other "big four" currencies—the euro, yen, and pound, according to the IMF. "Rather, this has been accompanied by a rise in the share of what we refer to as non-traditional reserve currencies, including the Australian dollar, Canadian dollar, Chinese renminbi, South Korean won, Singaporean dollar, and the Nordic currencies," the IMF said. The IMF in July this year said that one non-traditional reserve currency gaining market share is the Chinese renminbi, whose gains match a quarter of the decline in the dollar's share. "The Chinese government has been advancing policies on multiple fronts to promote renminbi internationalisation, including the development of a cross-border payment system, the extension of swap lines, and piloting a central bank digital currency. It is thus interesting to note that renminbi internationalisation, at least as measured by the currency's reserve share, shows signs of stalling out," IMF said.

## After US indictment, Adani Group stocks shed Rs 2.45 lakh cr market value

New Delhi: After US prosecutors charged billionaire Gautam Adani over his role in an alleged years-long scheme to pay \$250 million bribe to Indian officials in exchange for favourable terms for solar power contracts, the Adani group stocks faced heavy drubbing during the morning trade on Thursday, with the combined market valuation of all the listed firms getting eroded by Rs 2.45 lakh crore. The stock of the group's flagship firm Adani Enterprises plunged 22.99 per cent, Adani Ports dived 20 per cent, Adani

Energy Solutions tanked 20 per cent, Adani Green Energy plummeted 19.53 per cent and Adani Total Gas tumbled 18.14 per cent on the BSE. Shares of Adani Power slumped 17.79 per cent, Ambuja Cements cracked 17.59 per cent, ACC fell 14.54 per cent, NDTV dropped 14.37 per cent and Adani Wilmar declined 10 per cent. Some of the group firms also hit their lowest trading permissible limit for the day. The combined market capitalisation (mcap) of all the ten listed group firms eroded by Rs 2,45,016.51 crore during the morning deals.



# Attack on Sukhbir Badal: A Collusion between AAP Govt, Agencies & Terrorists, Alleges Akali Dal Leaders

Chandigarh (JAG MOHAN THAKEN), December 5: Shiromani Akali Dal (SAD) and Youth Akali Dal (YAD) leaders, strongly condemning the attack on Shiromani Akali Dal (SAD) president Sukhbir Singh Badal, termed it as the collusion between AAP Govt, Agencies & Terrorists and have demanded a judicial inquiry by the Supreme Court.

Senior Shiromani Akali Dal (SAD) leader Bikram Singh Majithia Thursday asked the Punjab Police as well as the Amritsar Police Commissioner to explain why SP Harpal Randhawa shook hands with Babbar Khalsa International (BKI) operative Narayan Singh Chaura when the latter conducted a recce of Sri Darbar Sahib on December 3, one day prior to the murder bid on S Sukhbir Singh Badal, and why the police force did not take the militant into custody even on the next day despite knowing about his antecedents.

Addressing a press conference here, the senior SAD leader displayed a footage reportedly from the Sri Darbar Sahib complex to show how SP Harpal Randhawa was on friendly terms with Chaura despite knowing that the latter was a hardcore militant who had more than 30 cases registered against him. "The SP and Chaura are from the same assembly constituency of Dera Baba Nanak". He also showed how police personnel seemed to be tracking Chaura but not taking any action to apprehend him which had put a question mark on the conduct of the Punjab Police. Mr Majithia said even yesterday SP Randhawa was seen going into the Information Office at Sri Darbar Sahib exactly three minutes before the attack on Mr Badal despite purportedly being in a state of high alert.

Mr Bikram Majithia, in a statement issued to media, also condemned Amritsar police commissioner Gurpreet Singh Bhullar of caving in under pressure from the Aam Aadmi Party (AAP) and deliberately calling one media person to his residence and giving a byte to give the impression that the attack on S Sukhbir Badal could have been engineering to create sympathy for the Akali leader. Stating that this was a lie and was done to divert attention from the complete failure of the Amritsar police to protect Mr Badal, the SAD leader said, "It would be better if the police commission tells Punjabis why none of the 175 personnel posted at Sri Darbar Sahib tried to even frisk Chaura, let alone apprehend him"? Mr Majithia also made it clear that the attack was averted by a security personnel posted with the Badal family who was not on duty officially yesterday. "Jasbir Singh, who is posted with Bathinda MP Harsimrat Kaur Badal, was sent to Amritsar on December 3 to facilitate his visit to Sri Darbar Sahib as he is a Gursikh who does 'sewa' in the shrine regularly". Mr Majithia also asserted that the Amritsar Police was threatening the Shiromani Committee staff for making CCTV footage of the day of the shootout public as it was exposing their failure to avert the attack.

The SAD leader also spoke about the sudden spike in terrorist activities. He said after the recovery of RDX from Ajnala recently, a grenade had been lobbed into the Majithia police station. He said despite the fact that images of broken window panes and shrapnel damage had appeared in the public realm the Majithia police was foolishly

claiming that the blast was actually a case of tire burst when a policeman was filling air into his motorcycle tire manually. "Today the claim of the BKI that it was responsible for the grenade attack has again exposed the Punjab Police", he added. The Akali leader also condemned the manner in which a paid hate campaign had been launched against the SAD and Mr Badal in the social media. He said the SAD would file cyber-crime complaints with the State police in this regard and would also take recourse to legal action against all those posting distorted and fake images on the social media. Sarabjeeet Singh Jhinjer, President of the Youth Akali Dal (YAD), has also strongly condemned the attack on Shiromani Akali Dal (SAD) president Sukhbir Singh Badal. In a statement issued to media, Jhinjer raised suspicion that the attack looks like a case of collusion between the Aam Aadmi Party (AAP) government, Agencies and terrorists. "It is shocking that a known terrorist, Narain Singh Chaura, with links to the ISI and a history of terror-related activities, was allowed to roam free despite the police admitting that Sukhbir Badal had a threat perception from him for the past 11-12 years," he said.

"The police have also admitted that they knew Chaura had visited the Golden Temple a day before the attack. In fact, CCTV footage clearly shows Chaura roaming free inside Darbar Sahib near Sukhbir Badal a day before the attack. Furthermore, it has been clearly shown that Chaura met, interacted and shook hands with an SP of Punjab police. The question remains, what did they in-



teract about? This raises serious questions about the police's intentions and their possible involvement in the attack," Jhinjer asked. Jhinjer demanded a thorough investigation into the incident and action against those responsible. "The people of Punjab demand answers. The AAP government instead of patting its back, must come clean on its role in this incident," he said. Given the severity of the lapse in security, Jhinjer demanded a judicial inquiry by the Supreme Court. "We cannot trust the police and the government to investigate this incident impartially. A judicial inquiry by the Hon'ble

Supreme Court is necessary to uncover the truth and ensure that those responsible are held accountable," he said. Jhinjer also stated that it seems like the Bhagwant Mann-led AAP government wanted to harm Sukhbir Badal, which is why the dreaded gangster was allowed to attack him and the police did nothing. "This is a clear case of the government's complicity in the attack. The people of Punjab demand answers and action against those responsible," he said. Jhinjer also appealed to the people of Punjab to remain vigilant and not let such incidents disturb the peace in the state.

## Why men and women need to have different breakfast foods

Discover how metabolic differences between men and women influence breakfast choices for weight management and energy. Discover how metabolic differences between men and women influence breakfast choices for weight management and energy. Recent research published in *Computers in Biology and Medicine* reveals that men and women benefit from distinct breakfast compositions due to differences in their metabolism. The study highlights that men's bodies are better equipped to process energy from high-carbohydrate breakfasts, while women respond more effectively to breakfasts rich in healthy fats. The findings elaborate on how tailoring meals to biological differences can optimise energy utilisation and weight management. Understanding metabolic differences in men and women. According to Susmita N., Clinical Nutritionist, Cloudnine Group of Hospitals, Bangalore, the metabolic differences between men and women are driven by hormonal, genetic, and physiological factors, which influence how the body processes carbohydrates and fats. Here's a breakdown of these differences: **Carbohydrate Metabolism** Insulin Sensitivity: Women: Premenopausal women generally have greater insulin sensitivity due to the influence of estrogen, making them more efficient at regulating blood sugar levels. Men: Men are more prone to insulin resistance, increasing their risk of



developing conditions like type 2 diabetes. **Glucose Utilization** Women utilize glucose more effectively for immediate energy, particularly during exercise. Men, on the other hand, tend to rely more on fat for energy during physical activity. **Carbohydrate Storage** Thanks to their higher muscle mass, men have larger glycogen reserves in muscles and the liver. Women conserve glycogen during prolonged activities, relying more on fat for energy. **chai and toast, breakfast, weight loss** The findings elaborate on how tailoring meals to biological differences

can optimise energy utilisation and weight management. (Source: Freepik) **Women:** Estrogen encourages fat storage in subcutaneous areas like the hips and thighs, which is essential for reproductive health. **Men:** Tend to store fat around organs (visceral fat), which poses higher health risks. **Fat Utilization** Women excel at fat oxidation, especially during low-intensity exercise and recovery periods. Men are less efficient at burning fat, relying more on carbohydrates. **Post-Exercise Fat Burning** Women's bodies shift toward burning fat post-exercise.



# Headaches to Eye Pain in 90% of users: How your smartphone screen's low-frequency flicker is harming you

Hyderabad:OPPO Find X8 Series' 2160Hz high-frequency display reduces flicker, ensuring smoother viewing and less eye strain. If you experience headaches, eye strain, or even dizziness after using your smartphone, you probably suffer from Digital Eye Strain (DES). A 2022 study, Digital Eye Strain: A Comprehensive Review (1), by Indian researchers showed that DES has soared to 80–94% among adult users today, compared to 5–65% before the pandemic when extensive use of smartphones became commonplace. Children, in particular, are gravely affected, as their developing eyes are more vulnerable to brightly-lit (blue light) screens and screen flicker. Another study titled Binocular Accommodation and Vergence Dysfunction in Children Attending Online Classes During the COVID-19 Pandemic: Digital Eye Strain in Kids (DESK) Study-2 that looked specifically at DES among children (2) noted that nearly 65% of children who used smartphones for online classes during the Covid pandemic faced these issues. There is a growing understanding that the flickering of LEDs responsible for backlighting on a smartphone can cause headaches and eye strain when set to low brightness levels. According to industry reports, this risk is also found to be high among pregnant women and individuals

prone to epilepsy. Adding to the concern is asthenopia, or eye fatigue, characterised by aching eyes, difficulty focusing, and sensitivity to light.

Dr Venkateshwar Rao, a Pediatric Ophthalmologist, explains, "With the growing reliance on devices like smartphones and tablets, exposure to blue light has increased, raising concerns about its potential impact on eye health. Blue light and excessive screen time present specific risks for children, including the development of myopia, symptoms of digital eye strain such as dry eyes and blurred vision, and sleep disturbances. While blue light is not conclusively proven to cause permanent eye damage, responsible screen habits remain crucial for maintaining eye health, particularly for children." Low-frequency Pulse Width Modulation (PWM) in traditional smartphones—typically below 200Hz or even less than 500Hz—exacerbates these symptoms, with invisible flicker triggering migraines and, in severe cases, seizures. As screen time increases, so does the risk of DES, threatening eyesight and overall well-being for both children and adults. This is why it's important to have a smartphone with high frequency PWM, as it significantly reduces flicker and minimizes eye strain, ensuring a more comfortable viewing experience.



Low-frequency PWM in traditional smartphones can worsen symptoms, with invisible flicker triggering migraines and even seizures in severe cases

Technology companies like OPPO are increasingly addressing health concerns alongside traditional priorities like productivity and entertainment. OPPO devices feature adaptive colour temperature adjustments based on environmental lighting. This means that the screen's colour tone changes to match the surrounding light, ensuring that there is no stark contrast that could lead to visual discomfort. The OPPO Find X8 features 2,160Hz high-frequency Pulse Width Modulation (PWM), significantly reducing screen flicker in low-brightness settings for a more eye-friendly experience. By minimising flicker, it helps mitigate eye strain, fatigue, and discomfort for sensitive users like children and pregnant women, ensuring

visual comfort even during extended use. Research shows that displays with high frequencies, like 2,160Hz, are far more comfortable for people prone to headaches or migraines compared to traditional low-PWM displays."

Here at OPPO, our vision is that technology should benefit mankind. We know it's a long journey with constant fine-tuning. By integrating advanced features like high-frequency PWM dimming at 2160Hz in the OPPO Find X8 Series, we are improving performance, enhancing user well-being, reducing eye strain, and making the digital experience more comfortable" said Peter Dohyung Lee, Head of Product Strategy at OPPO.

## Ajit Pawar breaks records as deputy CM, but his long quest for the top job remains unfulfilled



Ajit Pawar took oath as Maharashtra Deputy Chief Minister for a record sixth time on Thursday (December 5, 2024), having demonstrated the invaluable political lessons learned from his uncle — veteran politician, current Opposition leader, and four-time Chief Minister Sharad Pawar — even though the top job still remains elusive. Six months ago, the 65-year-old Nationalist Congress Party chief was being labelled the "weakest link" in the State's ruling BJP-led Mahayuti coalition, following a poor performance in the Lok Sabha election, winning just one seat. Now, Mr. Ajit Pawar has emerged as the "strongest player", securing 41 Assembly seats while almost wiping out his uncle's rebel faction, known as the NCP (SP), which managed to win only 10 seats. He will share

the Deputy Chief Minister's title with outgoing Chief Minister Eknath Shinde of the Shiv Sena. Mr. Ajit Pawar holds the record for most appointments to this position since its creation in 1978, and has played second fiddle to CMs across the political spectrum, from the Congress to the BJP, and both sides of the Shiv Sena split. This is his second stint as deputy to the BJP's Devendra Fadnis. New allies

The BJP, with its strong ties to the Rashtriya Swayamsevak Sangh (RSS), and the 'Hindutvavadi' Shiv Sena have traditionally aligned with right-wing values, while Mr. Ajit Pawar, who rebelled against his uncle, has historically championed secular and progressive ideals. The Pawar brand of politics, inspired by 'Shahu, Phule, Ambedkar', is

deeply rooted in the State's political and social fabric and aligned with the Congress to counter the BJP and Shiv Sena. After the Lok Sabha election, in which his wife Sunetra Pawar lost to his cousin Supriya Sule in the family stronghold of Baramati, Mr. Ajit Pawar found himself in a difficult position with his relatively new right-wing allies. Tensions surfaced when an article in the RSS mouthpiece Organiser blamed the BJP's lacklustre performance on its alliance with the NCP. The RSS-linked Marathi weekly Vivek echoed these views, asserting that public opinion had turned against the BJP after its 2023 tie-up with the NCP. Despite this, Mr. Ajit Pawar maintained a 'strategic silence' for over five months, even through the seat-sharing negotiations among the Mahayuti allies, right until the Assembly election results were announced when the Mahayuti coalition secured a commanding majority of 230 out of 288 seats in the State Assembly. "Dada [Mr. Ajit Pawar] stayed silent because he knew he has more influence in the Assembly elections, which are hyper-local compared to the 'Delhi polls' [as the Lok Sabha election is known]," said a senior NCP leader. "Our party has nearly wiped out [Sharad] Pawar Saheb's electoral influence in western Maharashtra and other NCP strongholds across the State." Mr. Ajit Pawar was elected as MLA from the family bastion of Baramati for the eighth time, defeating his nephew Yugendra Pawar of the NCP (SP), and surpassing his uncle's record as a six-time MLA from the constituency between 1967 and 1990. Mr. Sharad Pawar served as Chief Minister of Maharashtra four times, first at the age of 38, making him the young-

est to hold the position. Widely referred to as Dada (elder brother in Marathi) by his supporters, Mr. Ajit Pawar began his political journey in the 1980s, mentored by his uncle. His first electoral victory came in 1991 when he won the Baramati Lok Sabha seat. However, he soon resigned to facilitate Mr. Sharad Pawar's appointment as Defence Minister in P.V. Narasimha Rao's government. He is known as an "able administrator" for his ability to take along bureaucrats in decision-making. Unfulfilled quest Despite climbing the ranks in Maharashtra politics, Mr. Ajit Pawar has long felt sidelined, particularly in his quest to become Chief Minister. Since 2004, he believes he has been "unfairly" overlooked for the position by his uncle.

His frustration with being consistently passed over culminated in a rebellion, where he allied with the BJP and secured the Deputy Chief Minister's post yet again last year. On July 2, 2023, after months of speculation, Mr. Ajit Pawar orchestrated a dramatic split within the NCP, joining the Eknath Shinde-Devendra Fadnis government with over 40 MLAs. His aspiration to become Chief Minister remains unfulfilled, however, despite multiple stints as Deputy Chief Minister. However, NCP leaders believe the Baramati stronghold has not given up. "His ultimate goal is to become Chief Minister. It hasn't happened this time, but we will wait for it, as he has waited all these years," said a senior party leader. While Sharad Pawar is often hailed by his supporters as "the best Prime Minister India never had," Ajit Pawar is determined not to be remembered as "the best Chief Minister Maharashtra never had."



# Manaksia Coated Metals & Industries Limited to raise funds via Preferential Issue of Equity Warrants

Hyderabad: Manaksia Coated Metals & Industries Limited (NSE: MANAKCOAT, BSE: 539046), A leading manufacturer and exporter of high-quality coated metal products, has announced the approval of a preferential warrant issue to raise ₹134.55 crore. The board of directors approved the issuance of 2,07,00,000 warrants at ₹65 per warrant during its meeting on December 02, 2024. This move will support the company's ambitious plans for capacity expansion and a major technology upgrade.

The funds raised will be utilized to undertake a technology upgrade project whereby the company will be transitioning to production capability of making Alu-Zinc Coated Steel products. The production capacity will be enhanced from 132,000 MTPA to 180,000MTPA enabling a 36% increase in output and corresponding revenue. The CAPEX being planned by the company also

includes a forward integration project whereby the company would be investing in a new and state of the art steel coil coating line which would catapult the capacity of Pre-painted Steel from 86,000MTPA to 236,000MTPA. Additionally, a portion will be allocated to optimize the working capital cycle and establish a captive solar power plant in a phased manner, reflecting the company's commitment to sustainable and energy-efficient practices. This strategic move will benefit the company by moving to a more value added and premium product enabling higher margins along with significant growth in production capacity. With the expanded capacity and focus on energy efficiency, the company aims to better meet increasing market demand while reducing its carbon footprint.

Commenting on this achievement Mr. Karan Agrawal Whole Time Director, Manaksia Coated Metals & Industries Lim-



ited said, " We are pleased to announce the approval of the preferential equity warrant issue, which will play a pivotal role in driving our growth and operational improvements. The funds raised will enable us to significantly expand our production capacity, particularly in Alu-Zinc, which will allow us to cater to the growing demand in the market more efficiently. This expansion will also streamline our operations, improve profitability, and ensure that we continue to deliver high-quality products to our customers. By streamlining

our working capital cycle, we will improve liquidity and strengthen financial flexibility. The phased development of a captive solar power plant will not only support the sustainability goals but also help reduce long-term energy costs.

Combined with the increased production capacity, these initiatives will enhance the market position, drive greater operational efficiency, and ensure competitiveness, all while contributing positively to the environment."

## Strong growth in international student enrolments in New Zealand



Hyderabad :New Zealand's international education sector is rebounding strongly, up 24 per cent year-on-year and 6 per cent above 2023 totals, Tertiary Education and Skills Minister Penny Simmonds says. Hon Penny Simmonds | Tertiary Education and Skills "With 73,535 enrolments between January to August 2024, more enrolments have been achieved in just two terms this year than we saw in all of last year," Ms Simmonds says. "This strong growth in international student enrolments is a testament to New Zealand's global reputation for high-quality education. These students not only enrich our

economy, contributing to jobs, local businesses, and communities nationwide. "With historical trends pointing to further enrolment increases before year-end, these are really positive results for our education providers. International education is not just about numbers - it's about building lasting global connections, fostering innovation, and positioning New Zealand as a leader in education and research. "The enrolments show national recovery as well as significant regional gains from 2023. Gisborne has experienced remarkable growth with an increase of 126 per cent, Marlborough has had an increase of 45 per cent, Hawke's Bay has increased of

28 per cent, and Waikato is up 26 per cent. "Universities and schools are driving growth, with universities enrolling 31,345 international students, a 14 per cent increase, and schools rising by 33 per cent to 16,815 students, including 69 per cent surge in primary school enrolments. Funded private training establishments also grew by 80 per cent on last year. "Diversity in source markets strengthens our education sector. While China and India lead, enrolments have grown from the US, Thailand, Germany, Sri Lanka, and the Philippines, each now contribute 3 per cent of international students. "Every funded part of the sector has seen growth this year, with universities now just 7 per cent below pre-pandemic levels, reflecting the resilience and adaptability of New Zealand's education providers," Ms Simmonds says. Notes to Editors: About Education New Zealand (ENZ) <https://www.enz.govt.nz/Edu->

cation New Zealand Manapou ki te Ao (ENZ) is the government agency dedicated to helping Aotearoa New Zealand realise the social, cultural, and economic benefits of international education. Our role is to promote New Zealand as a high-quality education destination offering excellent education and students experiences and to encourage New Zealand students to study overseas. With approximately 110 staff in 16 locations around the world, ENZ works closely with New Zealand's diverse education sector which includes schools, English language providers, Private Training Establishments, Institutes of Technology and Polytechnics (Te Pukenga), and universities. Internationally, we work with a range of education stakeholders, including government agencies and education providers to identify and encourage sustainable growth opportunities for New Zealand's education sector.

## Hyundai Motor India to hike prices up to Rs 25,000 across models from Jan 1

New Delhi: Hyundai Motor India Limited (HMIL) on Thursday announced to increase prices across its model range effective from January 1, 2025, owing to an increase in input costs and other factors. The price increase will be done across models, and the extent of increase will be up to Rs 25,000. The price increase has been necessitated owing to an increase in input costs, adverse exchange rate and increase in logistics costs, the automaker said in a statement. "At Hyundai Motor India Limited, our endeavour is always to absorb rising costs to the extent possible, ensuring minimal impact on our customers," said Tarun Garg, Whole-time Director and Chief Operating Officer, HMIL. However, with the sustained increase in input cost, "it has now become imperative to pass on a part of this cost escalation through a minor price adjustment," he added. The price increase will be effective

from January 1, 2025 on all MY25 models. In April-September period (H1 FY25), the company sold a total of 3,83,994 units of passenger vehicles. This includes 2,99,094 units in the domestic market with a strong contribution from SUV segment. The export volume stood at 84,900 units. In November alone, Hyundai Motor India registered total monthly sales of 61,252 units. The company's domestic sales were at 48,246 units while export sales stood at 13,006 units during the month. The automaker reported a 16 per cent decline in its consolidated net profit to Rs 1,375 crore for the July-September quarter of the current financial year on the back of lower car sales both in the domestic and export markets. The country's second-largest car manufacturer had reported a consolidated net profit of Rs 1,628 crore in the year-ago period.



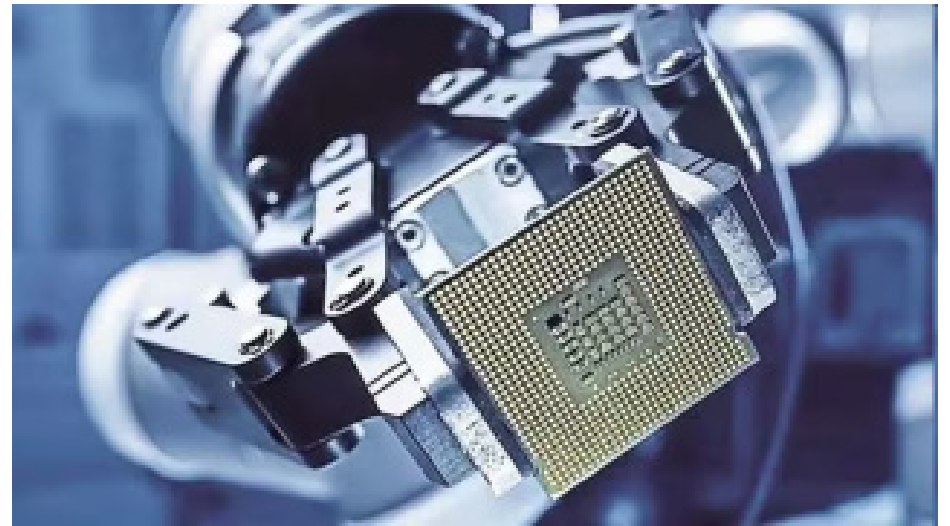
# A 'designed in India' 5G chip, fabbed at TSMC, is facing fund crunch, low commercial uptake

A first of its kind 'designed in India' 5G and Internet of Things (IoT) chip, which has been allocated funding of close to Rs 45 crore by the Indian government, is facing mass production issues owing to a lack of funds, and an inability to draw commercial orders, The Indian Express has learnt. The Narrow Band IoT (NB-IoT) chip, which has been designed by WiSig Networks – a startup incubated at IIT Hyderabad – and fabricated using the 40 nanometre process of Taiwan Semiconductor Manufacturing Company (TSMC), is targeted primarily for smart metres used in the electricity distribution sector. WiSig Networks has also been approved by the IT Ministry under its Design Linked Incentive (DLI) scheme for the chip. Hyderabad-based technology and engineering company Cyient collaborated on the tapeout process for the chip, while WiSig Networks is commercialising it. Multiple tapeouts have resulted in hundreds of chips fabricated and successfully completing 3GPP-compliant testing, and drive testing on Reliance Jio's NB-IoT network is ongoing at the IIT Hyderabad campus. The tapeout process is the final stage in the design phase of semiconductor manufacturing. This is the first time a 3GPP compliant modem system-on-chip (SoC) has been indigenously designed and made working.

Volume production of the chip includes the development of a package, production test solution suited for volume production, organisation of silicon fabrication, volume testing of the integrated circuit (IC), and the management of supplying the chip. The Department of Telecommunications' (DoT's) 5G testbed project allocated Rs 40 crore for two chip revisions, and an additional Rs 5 crore grant was awarded to WiSig Networks for refining the third tapeout. The IT Ministry has allocated Rs 13 crore to extend the chip's functionality for satellite connectivity, this paper has learnt. However, a 12,000-unit production tapeout and the development of a production test program are required, as per an internal government assessment. But, it is understood that WiSig Networks has a shortage of funds as well as commercial orders to complete the remaining activities. Among the policy interventions that the government is considering to boost commercial uptake of the chip include the Ministry of Power requiring that a share of the smart meter procurements by discoms be those that have domestically designed chips, and for the IT Ministry to introduce design-linked-manufacturing scheme for locally made smart metres, among other things. Cyinet did not respond to a request for comment until publication. Explained Crucial part of semiconductor ecosystem India wants to create an indigenous chip design ecosystem, where its domestic companies hold intellectual property. Chip designing is a crucial part of the semiconductor ecosystem, and one that takes years of sustained research, and funding. Having domestic chip making capabilities is also expected to help New Delhi strategically, where it can prescribe use of domestically designed chips for use in certain sensitive sectors. "WiSig Networks has licensed the chip from IIT Hyderabad for commercialisation, WiSig received a Rs 5 crore DCIS Grant for Rev 3 tapeout of the chip, which has been completed and chip samples are in working in the lab, we are further evaluating the same...

As the chip is still under customer evaluation and qualification, we can complete the production tapeout once it is completed and production orders are received... Regarding availability of funds, it is a matter of going concern, which will be addressed as part of our business plans (sic)," WiSig Networks told The Indian Express in an emailed statement. The DLI scheme is part of the overall \$10 billion incentive scheme for the semiconductor ecosystem, which was rolled out by the government in December 2021. The design scheme aims to offer financial incentives and infrastructure support across various stages of development and deployment of semiconductor design for integrated circuits, chipsets, and system on chip over a period of five years. India is a major force in chip designing, with all major semiconductor companies having their design offices in the country. However, these engineers have traditionally designed systems for foreign companies, which has resulted in zero to little intellectual property creation by Indian entities. The chip DLI scheme is an attempt at plugging that gap, as it incentivises a crucial part of the chip supply chain — the IP.

As of September 2024, the IT Ministry had approved chip design related proposals



from at least 12 Indian start-ups and has committed more than Rs 130 crore to their projects, which span from developing integrated circuits for telecommunication applications, to artificial intelligence (AI) hardware accelerators, The Indian Express had reported. In total, the approved projects will cost Rs 342 crore, and the government has so far released close to Rs 7 crore. It re-

ceived 59 applications under the DLI scheme, with 15-20 applications currently under review. However, the run rate of the scheme seems to be slower than the Centre's initial projections. The government wants to fund at least 100 start-ups over five years under the DLI scheme, which would be an average of 20 entities per year. That run rate has not been met yet.

## A chess contest that bucked all predictions

There were predictions of a "massacre" and a "bloodbath" leading up to the World Championship match. What we have on our hands after six games though is a 3-3 tied score between reigning world champion Ding Liren and challenger D Gukesh. Ding won only his first classical game in 304 days in this match. Gukesh, too, has only one win in six games so far and the tension is alive in the match. Miraculous escape and missed chances! It's fair to say that Ding, contrary to expectation, has had more chances so far in this match than Gukesh. Bafflingly, barring Game 1, which he won, the reigning world champion appeared to have held back in the opportunities he got thereafter.

In Game 5, Ding had a positional advantage. The kind that Magnus Carlsen has juiced into many a win. Ding somehow didn't end up taking it and what could have been a dangerous scenario for Gukesh turned into a miraculous escape and half a point. In Game 6, Ding had a good position out of the opening, was comfortably up on the clock before he burned right through it, and then was the first to offer a draw. Ding has been quizzed about it, rather crudely, at post-game press conferences, about whether it's a crisis of confidence or health issues that have led him to not pursue the advantage on the board. His response has been that he didn't realise he had an edge in Game 5. Five-time world champion Viswanathan Anand has been, like the rest of us, baffled at Ding's decision to go for a draw in Game 5, while clearly in a better position with no risks. "Though we see it quite often in this match, you're not supposed to get chances like this. If you get one, you're supposed to sit there and work," he said on the Fide live broadcast on Sunday, "The only explanation I could come up with is that he simply didn't realise that he was better... that's the only way you can continue the way he did." "My

impression is that he's still finding his feet, his confidence. I don't know if it came from reading what everyone else was saying about him... But he can objectively look at his games this year and understand that 'okay this is not what I need to be' and perhaps that has affected him. If you contrast Game 1 and Game 5, in Game 1 he took the smallest chance he got, and in Game 5 it was even less to calculate. There were so many pleasant ways to play on with no risk. I still don't have a complete understanding of why he gave up." Power moves On move 26 of Game 6, Gukesh spurned Ding's three-fold repetition offer despite being the one with an inferior position and no clear path to a win and forced his opponent to play on. Though Gukesh insists he did it for the love of chess and to explore counterplay, it can be counted as a power move in a match such as this one. Part of it could be rooted in Gukesh's takeaway from Game 5, that Ding seems content with a draw and isn't playing for a win.

Ding was gobsmacked by Gukesh's decision, which could have ended badly for the Indian teen, but did not. Psychologically, to emerge unscathed from what may not have been the most prudent call must do Gukesh good. Viewers aren't complaining. It's the chess they signed up for. In a match like this you want players to do more than show up, blitz out preparation and shake hands after 25 moves. Ding Chilling! If you must know, there's an hour-long video of Ding, seated motionless on a chair in the players' lounge area, his hands tucked to his sides – set to Lofi beats, on YouTube. The lounge or rest area is where players can catch a break between moves, and is monitored by cameras, and arbiters. The camera feed is shown on the broadcast feed. Ding has been seen munching on nuts, brownie chips and bananas in the room and some-

times just sitting looking straight ahead or with hands covering his ears. "At some point they started filming the players' lounge room and I was very opposed to it," former world champion Magnus Carlsen said on the Take Take app. "Of course, the arbiter should be able to see what players are doing in the rest area but I'd no desire for the public to see that... I understand why it has interest... and Ding looks pretty chill but I still feel that it would be better if the area is private for the players." Opening surprises Ding has so far been pretty solid with White, while steering clear of risks and his reprisal of the London System from last year's match in Game 6 did seem to surprise Gukesh, who spent over 50 minutes for the first 20 moves. In his three White games so far, Ding has opened with, e4, Nf3, and d4, and much like Carlsen predicted before the match, he could well have seven different first openings prepared for seven White games. Gukesh, who lost with White in his first game, made a rather curious call to play the quiet Exchange French in Game 5 and didn't get what he wanted out of it. Not only was Ding never in any danger in the game, he was also the one with an advantage. It remains to be seen how Gukesh approaches his next game with the White pieces (Game 7) on Tuesday. Ambition and strategy Ding has so far been risk-averse in this match, while Gukesh has the one who's pressing even if hasn't been precise enough to get too much out of it. Contrastingly, while the reigning world champion can undermine his own prospects, the Indian can tend to over-evaluate his position. "Gukesh has generally not impressed me," Carlsen said after Game 5, "For Ding, it's generally gone better than we thought and Gukesh has probably been a little bit worse." Ding not going for his chances, seemingly content to draw his games even in superior positions, can seem puzzling.



# At home of IIT Delhi researcher who died in Lothal pit, a box filled with soil samples and unending questions

"This is all we have now," says Maheshwari Verma. On the centre table in front of her is an open black suitcase with plastic bags of mud samples that her daughter Surabhi Verma collected during her study of the Harappan site of Lothal. Last week, on November 27, Surabhi, a 26-year-old PhD student at IIT Delhi's Centre for Atmospheric Sciences, died when a trench she was working in near Lothal collapsed on her. While Surabhi was buried alive, her Associate Professor Yama Dixit was pulled out of the trench.

Hours later, at their house in Sitapur district, as the family got a call from an "official in Gujarat" informing them of the accident, it was decided that two of Surabhi's cousins from Delhi would go to Lothal to collect her belongings and bring back the body. In the days since then, Maheshwari's heart has been bursting with questions. "I still don't understand. What was the hurry to do this digging in such a short time? Why did the pit have to be so deep? My nephew who saw the pit told me water was still seeping into it. And they got an excavator to dig? Who gave them permission for all this? I don't know who can tell me all this. Do you know?" Surabhi's father R K Verma, who teaches at the government primary school nearby, is just back from Naimisharana, a religious site in Sitapur, after dispersing his daughter's ashes in the Gomti river.

He slumps onto the bed in front of the still-open suitcase and talks about how, seven years ago, Surabhi, the second of his four children, made a journey he is proud of — from the congested lanes of Sitapur's Sri Nagar colony to Allahabad University, where she did her BSc and MSc in Geology and later an MTech in Earth Sciences, before joining IIT Delhi last year for her PhD. "I always wanted Surabhi to join the IAS. In fact, I was the one who pushed her to take up Geology as her third subject for BSc, hoping it would help her score better. But then, she developed a keen interest in the subject. The rest of it was her decision — to do MTech, apply for the scholarship and do research in the field. Still, somewhere, I wanted her to be an IAS officer and she would often tell me, 'Papa, don't worry, I'll appear for the UPSC exams as well. But let me first settle down in my field. She was always very clear about what she wanted,'" says Verma, his tears flowing freely. Surabhi, IIT Delhi researcher, died in Lothal pit, Indian Express. On November 27, Surabhi, a 26-year-old PhD student at the Centre for Atmospheric Sciences at IIT Delhi, died when a trench she was working in collapsed on her. (Special arrangement)

Maheshwari says she lived her own life through Surabhi's. "I did an MA in Economics from Lakhimpur Kheri but my father never let me work. After I got married, my children were my sole focus. We were all very proud of Surabhi — she was the topper and vice-captain of her school (Sacred Hearts School in Sitapur)," she says. She says Surabhi had applied for the Prime Minister's Research Fellowship. "She told me that soon she would start getting Rs 70,000 a month. She would tell me that once she got the money, she would call me to Delhi and take me to a lot of places. I don't want any of that now... I only want my daughter," says Maheshwari, breaking down. As her younger daughter

Devyanshi leafs through the family album — its plastic sheets holding several photographs of Surabhi on stage, receiving medals and certificates over the years — she says "didi" was her "guiding light". "I would always turn to her when I needed help. She was the one helping me for the IBPS PO (bank probationary officers') examination," says Devyanshi.

After clearing the preliminaries, Devyanshi appeared for the main exam on November 30, the day after Surabhi's body was brought home. "I had no strength left in me but I travelled to Lucknow for the exam because that is what didi would have wanted," she says, adding, "Her sole focus was to attain financial independence... That's something she wanted from me and my siblings too." Devyanshi's eldest sister Suprabha, who has a BEd, teaches in a private school in Sitapur and her younger brother Ankush is preparing for his JEE. Devyanshi says that around 10.30 pm on November 26, the night before the accident at Lothal, she had made a video call to Surabhi. "We had a long call then. She spoke to our mother too. Then, I called her again at 12.30 at night because I needed help with something I was studying. She said she had a long day at the site and was very tired. She had to wake up early too, so she hung up," she says. A day after her death, the family



got another call — from IIT Delhi. Surabhi had topped her second semester. "The professor told us Surabhi had got an A throughout... aur use pata hi nahi chala (she did not even get to know). Wherever she went, she brought medals. Woh research scholar thi jo climate change jaise vishaya par research kar rahi thi... Woh ghar ki hi nahin nation ki treasure thi (She was a research scholar

who studied subjects like climate change. She was not just our treasure, but the nation's too)," says Verma. He, too, has questions, "No other child should lose their life because of such negligence. I am also a teacher — every student in my class is my responsibility and I am accountable if something happens to them. Who is accountable for my daughter's death?" says father.

## 40 years after tragedy struck Bhopal, no end to suffering

Just after midnight as poisonous plumes of smoke wafted through Madhya Pradesh's capital city Bhopal four decades ago, Gas Devi was born, gasping for every breath. Her feeble cries were drowned out by the screams of men, women and children as they ran to escape the cloud of highly toxic methyl isocyanate gas leaking from the Union Carbide factory on the night of December 2, 1984, engulfing large swathes of residential pockets. Some 5,295 people were killed in the immediate aftermath, and up to 25,000 are estimated to have died overall in the world's deadliest industrial disaster that continues to haunt the lives of those like Devi and countless others born with deformities since that fateful night. Devi, a daily wage labourer, has constant pain in her chest, one of her lungs is not developed fully and she keeps falling sick. "My life is a living hell," Devi told news agency AFP, speaking at her shanty in Bhopal, the capital of the central state of Madhya Pradesh. Even if she wanted, she cannot forget the night she was born. "My parents named me Gas," she said, her eyes welling up. "I believe this name is a curse. I wish I had died that night". Nathuram Soni, now 81, was among the first to rush out. "People were frothing from their mouths. Some had defecated, some were choking in their own vomit," said Soni. A handkerchief tied over his nose, Soni used his pushcart to carry his wailing neighbours, many of them infants, to hospital. In 1985, the Centre enacted the Bhopal Gas Leak Disaster (Processing of Claims) Act, granting itself exclusive rights to represent the victims and handle compensation claims. Despite initial

demand of \$3.3 billion, the government settled, albeit out of court, with Union Carbide in 1989 for \$470 million. As a consequence, 93% of the around 522,000 survivors received only around \$50,000 each, that too after waiting for eight to 20 years. The government sought additional compensation (₹13,998.54 crore in 2022) through curative petitions, but the Supreme Court dismissed them in March 2023, noting it would be inappropriate to impose a higher liability on the now-defunct American MNC than what had been originally agreed upon. Lingering health concerns

A study published in July 2023, titled 'Survival Analysis for Cohort of Bhopal Gas Disaster Victims During 1985-2015', after examining 92,320 victims revealed that men above the age of 21 were more impacted than others. Over the 30-year study period, 6,609 deaths were recorded, equating to a mortality rate of 7.2%, the study anchored by Indian Council for Medical Research (ICMR) said. "Individuals exposed to the gas had a 1.30 times higher risk of death compared to those who were not exposed," it said, adding that between 1986 and 2000, respiratory illnesses were the leading cause of death among the victims. Those exposed to the gas, the study pointed out, had a shorter lifespan as compared to those not exposed. On Monday, an organisation working with survivors of the Bhopal Gas Tragedy, Sambhavna Trust Clinic, presented analysis of clinical data of 16,305 gas-exposed and 8,106 unexposed patients who received care at the clinic in the last 16 years, reiterating what ICMR study had found. Dr

Usha Arya of the clinic said both obstructive and restrictive types of respiratory diseases were 1.7 to 2 times higher in the gas-exposed group compared to the unexposed population. "Similarly, depression was observed to be 2.7 times more prevalent in the gas-exposed group," she added. Gynaecologist Dr Sonali Mittal pointed out that several diagnoses were more prevalent in gas exposed women. "Hormonal conditions such as early and premature menopause were 2.6 times more frequent in gas-exposed women compared to those not exposed," Mittal added. Rashida Bee, co-founder of the Chingari Trust charity that offers free treatment to children of gas-affected families, believes those who died were fortunate. "At least their misery ended," she told AFP. "The unfortunate are those who survived". "This tragedy is showing no signs of relenting," said Rashida, 68, who has lost several members of her family to cancer since the accident. The soil and water here are contaminated — that is why kids are still being born with deformities. "Waste disposal remains a challenge. Forty years on, the Union Carbide plant continues to haunt Bhopal residents, with over 330 metric tonnes of hazardous waste remaining in a shed of the now defunct factory despite ₹126 crore being given to the Madhya Pradesh government by the Centre for disposal. "The factory could be converted into a museum only after clearing poisonous debris. The process of it is going on," a senior official of Bhopal gas tragedy relief and rehabilitation department said, requesting anonymity. Legal struggles of victims continue



# Indian justice system needs to be fair — not just fast

Shailaja Chandra's article, 'Leaner, Faster, Fairer' (IE, November 22), highlights several reasons behind the high number of pending cases across Indian courts and proposes two main solutions — measuring judge's performance by the case disposal rate and recruiting retired officials. It also pointed out the absence of video conferencing facilities in several district courts. We started the project 'System dynamics modelling of the pendency of undertrials' with a focus on speeding up the disposal of cases. However, after talking to several stakeholders in the judicial system for a year and a half, we realised that a fair trial is as important as a speedy trial. One must be careful while talking about faster case disposal since reducing the number of pending cases requires a delicate balance. The pursuit of speed should not come at the cost of fairness.

Categorising judges, on their disposal performance, could push them to choose cases that have a high likelihood of faster disposal. This might negatively impact the hearings of sensitive cases where judges might not have enough time left on the listing days. Hasty judgments can increase the likelihood of appeals, further clogging the judiciary. The article also mentions, "In an average district or subordinate court, about half of the 90 cases listed daily reportedly get adjourned." Keeping the fairness aspect in mind, we need to ask why are there such frequent adjournments. Which type of cases are adjourned frequently? Is it justified to put a permissible limit for adjournments? During our research, multiple advocates told us

that they demand adjournments to get more time to gather evidence, research the law, file motions, or wait for certain events that can have a significant impact on the verdict. Refusing these adjournments in such cases could be unfair.

The judicial system is complex with numerous actors — with judges, lawyers, litigants, and court employees having their own mental models. Delegating administrative tasks to retired officials who are not familiar with and sensitive towards judicial procedures, might create new inefficiencies and increase the unfairness. A system's behaviour is a function of its structure. Delayed disposals and high pending case counts are due to the justice-system structure and cannot be improved by tweaking without addressing structural issues. Each case passes through multiple stages: Charge sheet filing, charge framing, trial (evidence presentation), arguments, and judgment. Each stage has a different source of delay. For example, investigation officers can take time to gather evidence; police and public prosecutors usually keep issuing summons instead of a non-traceable report if a witness is not responding; the roznama has inaccurate or misleading information about the case stage; case files get misplaced or are not available since the case has been pending for long. It is necessary to identify the critical stages where there are bottlenecks and focus on reducing the delays in those specific stages. Several experts we spoke to raised concerns about video proceedings. During such proceedings, the accused are often surrounded by jail officers creating an envi-



ronment of intimidation. If they are mistreated in jail, say they have been tortured, they fear saying so; judges cannot see their physical condition clearly. During the physical trial, the accused are under the custody of judges, not jailers. Coming out of jail to the court for trial is the only chance for an accused to breathe free air.

They can meet their family members and talk to their lawyers confidentially. Video conferencing trials take away these particularly important rights of

undertrials. Accessing prompt legal advice and assistance is critical for ensuring a fair trial and the rule of law. However, researchers at National Law University Delhi's Project 39A have shown that undertrials from poor socioeconomic backgrounds cannot get the desired legal assistance due to unawareness about free legal aid, and the poor quality of the legal aid system. We urge allocating more resources to strengthen the legal aid system to ensure that the judicial system is both efficient and fair.

## Scientifically Speaking: When machines become poets

I want to start off this science column in a slightly different way this week, with a poem. Please bear with me, because we will get to science very soon. Here's a short poem that seems like it was written by the American poet, Sylvia Plath. The poem is written in Plath's characteristic confessional style with striking imagery. For example, "a fragile, broken yolk" conveys vulnerability with an unexpected, startling intimacy reminiscent of Plath's poetry. You wouldn't be in the minority if you thought the poem was written by Plath. But here's the twist: this poem wasn't written by Sylvia Plath or any other human poet. It was created by OpenAI's GPT-3.5, an artificial intelligence trained to mimic language and tone, including the emotionally charged Plath. Researchers Brian Porter and Edouard Machery from the University of Pittsburgh used AI to mimic Plath, William Shakespeare, and Walt Whitman, and other poets to test if people could tell the difference between poems written by people and those written by AI trained to mimic them. They published their findings in a recent study published in Scientific Reports.

Given that I'm writing about this paper

in my science column you might have guessed the outcome already. People couldn't reliably tell the difference between poetry created by human poets and those created by AI. What's more, they often believed that the AI-generated poems were human-authored often rating them more beautiful and rhythmic than poems from real poets!

So, what did Porter and Machery actually test? First, they presented over 1,600 participants with a mix of poems from ten notable poets. Half of the poems were genuine; the other half were generated by GPT-3.5, designed to capture each poet's distinctive style. The participants were tasked with identifying which poems were human-authored and which were AI-generated. Surprisingly, they identified the source correctly only 46.6% of the time (which is worse than chance). Many participants found the AI poems so convincingly "human" that they assumed they were real, particularly because these verses tended to be simpler and easier to understand. In a second experiment, the researchers had another group of around 700 participants rate the poems on qualities such as rhythm, imagery, emotional depth, and

sound. Some participants were told the poems were human-written, others were told they were AI-generated, and a third group was given no information on authorship. Predictably, participants rated poems labeled as human higher, even if they were actually written by AI. But when the participants didn't know the origin, AI poems often outscored their human counterparts, especially on qualities like rhythm and accessibility. The simplicity of the AI poems, free from messy metaphors or complex allusions common in human poetry, seemed to appeal to many readers. While human poets, like Plath, pour personal struggles and life experiences into their art, AI doesn't feel the weight of sorrow or joy, or anything at all. It reassembles language patterns based on probabilities. So, is it game over for poets, philosophers, artists, and their ilk? Certainly, the ability of AI to produce convincing poetry raises philosophical questions about creativity and authenticity. But Plath didn't write poems with words for maximum popularity, she wrote to express her pain and her doubts. Every poem she penned was shaped by a lifetime of experiences, emotional turmoil, and creative struggle. In contrast, an AI-generated poem above is an arrangement of learned patterns,

an echo without a soul. This study was conducted with GPT-3.5, and we're now well into the era of GPT-4, with even more advanced models on the horizon. AI will keep improving at capturing the subtleties of human tone, rhythm, and style. But for human poets, the struggle with language will remain. And that's kind of the point. We will continue to wrestle with "the clay of language," shaping raw emotion into words through a process that is vulnerable and unpredictable.

I'm a scientist, but I also read and write poetry. I recall John Keating's memorable line in *Dead Poets Society*, "We don't read and write poetry because it's cute. We read and write poetry because we are members of the human race. And the human race is filled with passion. And medicine, law, business, engineering—these are noble pursuits and necessary to sustain life. But poetry, beauty, romance, love—these are what we stay alive for." Human poetry is irreplaceable because art can never be separated from the artist. Anirban Mahapatra is a scientist and author, most recently of the popular science book, *When The Drugs Don't Work: The Hidden Pandemic That Could End Medicine*. The views expressed are personal.