

IN BRIEF



Sudha Murty to come up with trilogy on her pet

NEW DELHI
Writer and Infosys Foundation chairperson Sudha Murty will soon come up with *The Gopi Diaries*, a three-book series told from the viewpoint of her pet dog. The series will be published by HarperCollins India. **PTI**



Rome's garbage crisis sparks health fears

ROME
Landfills in flames and rats feasting on waste in the streets have sparked health fears in Rome. Due to a garbage crisis, Rome's chief physician Antonio Magi has issued a "hygiene alert" that could be upgraded into a health warning. **AFP**



U.S. growing largest crop of marijuana for research

NEW YORK
The U.S. government is growing the largest crop of medical research marijuana in five years. The government said it plans to grow 2,000 kg this year at the University of Mississippi, which holds the sole federal contract for producing marijuana. **AP**



China's manned space lab to re-enter atmosphere

BEIJING
China's manned space lab Tiangong-2 has finished experiments and will re-enter Earth's atmosphere on July 19. A small amount of debris will fall into the designated safe waters of the South Pacific Ocean, the China Manned Space Engineering Office said. **REUTERS**

U.S. sets \$5 bn fine for Facebook

Probe investigated harvesting of user data in the Cambridge Analytica scandal

AGENCE FRANCE-PRESSE
WASHINGTON

U.S. regulators have approved a \$5 billion penalty to be levied on Facebook to settle a probe into the social network's privacy and data protection lapses, the *Wall Street Journal* reported on Friday.

The newspaper said the Federal Trade Commission (FTC) approved the settlement in a 3-2 vote.

According to the report, the deal, which would be the largest penalty ever imposed by the FTC for privacy violations, still needs approval from the Justice Department before it is finalised.

Although details have not yet been released, the deal will likely include restrictions on how Facebook is able to use personal data.

Charlotte Slaiman of the consumer group Public Knowledge thinks it is unlikely the restrictions will be overly harsh.

"We don't yet know key aspects of the settlement: whether Facebook must



Online safety: Some critics of Facebook have argued that the company should face tougher sanctions. **AFP**

make any changes to its business model or practices as a result," said Charlotte Slaiman, the group's Competition Policy Counsel. "By itself, this fine will not be sufficient to change Facebook's behaviour."

'Privacy is key'

The outlook was more optimistic at the Center for Democracy and Technology, whose president Nuala O'Connor said the fine underscored the importance of "data stewardship" in the digital age.

"The FTC has put all companies on notice that they must safeguard personal information," Ms. O'Connor said.

The FTC announced last year it reopened its investigation into a 2011 privacy settlement with Facebook after revelations that personal data on tens of millions of users was hijacked by the political consultancy Cambridge Analytica, which was working on the Donald Trump campaign in 2016.

Facebook has also faced questions about whether it

improperly shared user data with business partners in violation of the earlier settlement. The leading social network with more than two billion users worldwide has also been facing inquiries on privacy from regulators around the world.

The fine is unlikely to hurt Facebook, which logged a profit of \$2.4 billion on revenue that climbed 26% to \$15.1 billion in the first three months of this year.

Some Facebook critics have argued the company should face tougher sanctions including monitoring of its data practices.

Faced with criticism, Facebook's head of global affairs, Nick Clegg, called on governments to do more to regulate social networks, instead of leaving the work to companies. "It's not for private companies, however big or small, to come up with those rules. It is for democratic politicians in the democratic world to do so," Mr. Clegg had said in an interview with the BBC.

Extinct bird had an extra long toe, shows study

Fossil discovered in Myanmar

BECKY FERREIRA

Some 99 million years ago, a small creature with a weird elongated toe died and became partially entombed in amber. Its lower leg and foot remained undisturbed in the hardened tree resin until amber miners eventually discovered the fossil in Myanmar's Hukawng Valley in 2014.

The preserved toe measures less than half an inch from knuckle to claw-tip, making it 41% longer than the next longest digit on the creature's foot. When traders showed the curious specimen to Chen Guang, a curator at China's Hupuge Amber Museum, they suggested that it probably belonged to an extinct lizard.

Mr. Chen thought that the remains looked more like an avian species, so he looped in Lida Xing, a palaeontologist at China University of



An artist's conception of *Elektorornis chenguangi*. **ZHONGDA ZHANG**

Geosciences who specialises in Cretaceous birds.

Named *Elektorornis chenguangi*, the specimen is described in a study, led by Mr. Xing, published in *Current Biology*.

Its elongated toe structure has never been observed in other birds, living or extinct. Mr. Xing's team speculated that *E. chenguangi* may have used the long, sensitive digit to probe cracks in trees for insects and grubs. **NY TIMES**

Lights for the soul



Honouring the dead: A man wearing yukata (summer kimono) poses with a mask as thousands of lanterns are lit up during the Mitama festival at Yasukuni Shrine in Tokyo, Japan, on Saturday. The four-day event is one of Tokyo's biggest lantern festivals, held annually to comfort the souls of those who lost their lives in war. **AP**

Study suggests virus co-evolved with humans

Will help in studying human evolution

ASIAN NEWS INTERNATIONAL
WASHINGTON

In 2014, a virus called crAssphage that infects bacteria was discovered as part of the human body's intestinal environment. Now, a recent study indicates that it may have co-evolved with human lineage.

The study published in the journal *Nature Microbiology* showed that the virus was found in the sewage of more than one-third of the world's countries. Additionally, the make-up of the virus can vary depending on the country and city.

"The virus is both highly abundant in the human gut and represents an entirely new viral family. With this study, we were able to expand our understanding of the diversity and evolution-

ary history of the human microbiome globally. Our team at Notre Dame has been evaluating the potential uses of this newly identified virus and is developing it as an alternative to *E. coli* or other faecal indicator bacteria that are not specific to humans, as an indicator of faecal pollution," said Kyle Bibby, co-author of the study.

The research was conducted by over 115 scientists from 65 countries, allowing for the collection of a significant amount of sequencing data.

Genetic data were also collected from primates and three pre-Columbian Andean mummies and a Tyrolean glacier mummy, which had 5,300-year-old intestinal content.

Ecuador tribe wins legal battle

Court ruling prevents government from selling rainforest land to oil companies

REUTERS
BOGOTA

A court in Ecuador has upheld a ruling preventing the government from selling land in the Amazon rainforest to oil companies, a move that is being termed a historic win for the Waorani indigenous tribe living there.

The government had appealed an earlier court ruling in April that the 2,000-strong tribe had not been properly consulted over the land auction plan.

The decision upholding the ruling ends the years-long legal battle over the land, campaigners said. "This victory is for my ancestors. It's for our forest and future generations. And it's for the whole world," said Nemonte Nenquimo, president of the Waorani Pastaza Organization on Friday.



Pushing back: Waorani natives take part in a demonstration against the entry of oil companies. **AFP**

The Energy Ministry said in April that the government had carried out a proper consultation process with the Waorani according to the "law and international standards".

Ecuador is pushing to open up more rainforest land and develop its oil and gas reserves in the hope of

improving its sluggish economy and cutting its high fiscal deficit and foreign debt. The move has led to heightened tensions emerging between indigenous communities and oil companies in Ecuador.

The Constitution gives the government the right to develop energy projects and extract minerals on any land, regardless of who owns it, but requires that communities are first consulted and properly informed about any projects and their impact.

This week's ruling "permanently voids the consultation process with the Waorani undertaken by the Ecuadorian government in 2012, indefinitely suspending the auctioning of their lands," said campaign group Amazon Frontlines, which supported the Waorani.

The win "shows once again that the fate of the Amazon rainforest, and consequently our climate, hinges on whether or not indigenous people can continue to protect their rainforest territories and cultures," said Mitch Anderson, president of Amazon Frontlines.

Gay giraffes and penguins play a part in Munich Pride Parade

Zoo tours give insights into homosexuality among animals

AGENCE FRANCE-PRESSE
MUNICH

Organisers of this year's Gay Pride week in Munich have a group of rather wild partners – penguins, giraffes and lions at the city zoo – where tours are being run about same-sex love in the animal kingdom.

The Munich Zoo has joined Pride week with a look into the intimate lives of animals, seeking to boost tolerance among humans.

"It is important for us to talk about" homosexuality in the animal kingdom and show that same-sex love is natural, said Munich zoo spokesman Dennis Spaeth, adding that Germany is seeing an increasing number of attacks on LGBTIQ rights. At least 91 attacks on non-heterosexuals were recorded by the police last year.

The first stop on the Pride tour is the giraffes. "In some groups, 90 percent of the acts observed are in fact ho-



No bounds: Giraffes in their enclosure in Munich Zoo. **AFP**

mosexual in nature," explained biologist Guenter Strauss.

Lifetime partners

There is also a male couple of Humboldt penguins squatting together from other, mixed pairs. "Penguins conduct homosexual relationships that can last a whole lifetime, something very rare in the animal kingdom," said Mr. Strauss. Same-sex love among ani-

mals was a taboo for scientists for a long time, says Mr. Strauss.

"On one expedition to the South Pole at the start of the 20th century, a doctor saw males (penguins) copulating – but he left out the pages dealing with the behaviour when he published the results of his research," he said. The pages were only re-discovered "eight or nine years ago" in a library in Britain, the biologist added.

Russia sends telescope into space

AGENCE FRANCE-PRESSE
MOSCOW

Russia launched a space telescope on Saturday from the cosmodrome in Baikonur, Kazakhstan, in a joint project with Germany.

A video posted on the website of the Roskosmos, the Russian space agency, showed a Proton-M rocket carrying the Spektr-RG taking off from the launch pad.

The launch was originally scheduled for June 21 but was postponed twice because of a battery problem.

The Spektr-RG, developed with Germany, is a space observatory intended to replace the Spektr-R, known as the "Russian Hubble", which Roskosmos said it lost control of in January. Spektr-R was launched in 2011 to observe black holes, neutron stars and magnetic fields. Its successor will take up similar duties.

Computer genius Corbató dies at 93

Worked on time-sharing systems

KATIE HAFNER

Fernando Corbató, whose work on computer time-sharing in the 1960s helped pave the way for the personal computer, as well as the computer password, died on Friday. He was 93.

His wife, Emily Corbató, said the cause was complications of diabetes. At his death he was a professor emeritus at the Massachusetts Institute of Technology.

Corbató, who spent his entire career at MIT, oversaw a project in the early 1960s called the Compatible Time-Sharing System, or CTSS, which allowed multiple users in different locations to access a single computer simultaneously through telephone lines.

At the time, computing was done in large batches, and users typically had to wait until the next day to get the results of a computation.

In a 1963 public television interview, Corbató described batch processing as "infuriating" for its inefficiency. The advent of time-sharing, however, reinforced the notion, still in its infancy, that computers could be used interactively. It was an idea that would animate the computing field for decades.

"Long before personal computers made it possible for each person to have



Fernando Corbató

a computer, time-sharing transformed the way people used computers," said Stephen Crocker, a computer scientist and internet pioneer who worked on time-sharing systems.

Corbató explained his time-sharing methods in the 1963 interview, with the reporter John Fitch, broadcast as part of the WGBH series *MIT Science Reporter*. In place of an actual bulky computer of the day, he used a modified electric typewriter mounted on a box of electronics.

Computers, he said on the programme, were so expensive to use that any idle time was a huge waste. But with time-sharing, computer time was carefully metered and wasted time all but eliminated. CTSS gave rise to a successor project called Multics, which Corbató also led. He told the Babbage Institute, "Multics started out as kind of a wish list of what we would like to see in a big computer system that might be made as a commercial model." **NY TIMES**

Chevron spills 30 lakh litres of oil and water in California



Oil flows at a Chevron oil field in Kern County, California. **AP**

ASSOCIATED PRESS
SACRAMENTO

U.S. officials began to clean up a massive oil spill on Friday that dumped nearly 30 lakh litres of oil and water into a California canyon, making it larger if less devastating than the State's last two major oil spills.

The newly revealed spill has been flowing off and on since May and has again stopped, Chevron spokeswoman Veronica Flores-Paniagua said. She and California officials said the spill is not near any waterway and has

not significantly affected wildlife.

Chevron reported that the oil and water have leaked out of the ground where it uses steam injection to extract oil in the large Cymric Oil Field. The steam softens the thick crude so it can flow more readily and is a different process from fracking, which breaks up underground layers of rock.

The State has issued Chevron a notice of violation ordering it to stop steam injections around the spill. The company also increased its

production of oil from wells in the area. Both actions are intended to relieve underground pressure that may be forcing the mix of oil and water to the surface.

Polluter pays

Chevron will pay for the clean-up, though the State will oversee the process, said Steve Gonzalez, a spokesman for the California Department of Fish and Wildlife's Office of Spill Prevention and Response. The clean-up and the investigation into what caused

the oil flow were somewhat delayed as officials ensured there are no dangerous fumes or sinkholes that could trap workers or heavy equipment, he said.

"At this point, they have it dammed off and they're sucking it out, sucking the oil out," Mr. Gonzalez said.

Environmental groups said the Chevron spill is another sign of weakened regulations under an embattled California agency. Governor Gavin Newsom this week fired the head of the State's oil and gas division

over a recent increase in hydraulic fracturing permits and amid a conflict-of-interest investigation of other division employees.

The Last Chance Alliance, which opposes California's oil and gas industry, said the State's Division of Oil, Gas and Geothermal Resources adopted weaker restrictions on steam injection earlier this year, "making these operations even more dangerous." Neither Chevron nor division spokesman Don Drysdale commented on the criticism.