

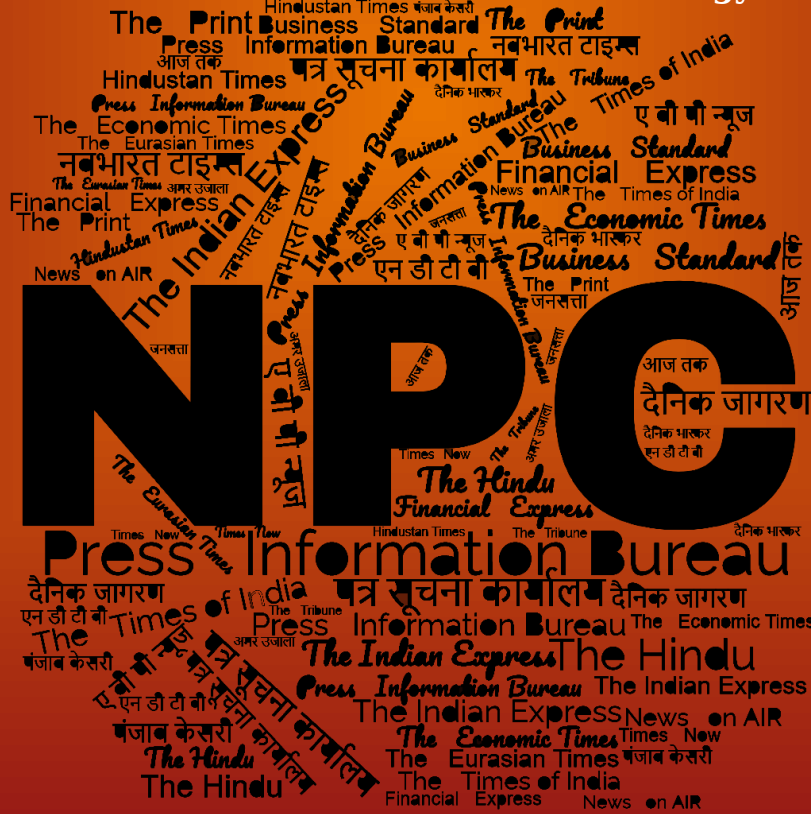
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समाचार पत्रों से चयित अंश Newspapers Clippings

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The Tribune

Fri, 19 Jan 2024

TBRL's Raising Day: Work on Newer Tech, DRDO Tells Scientists

Terminal Ballistics Research Laboratory (TBRL) celebrated its 64th Raising Day at its ranges in Ramgarh near Chandigarh today. In his address through video conferencing, Dr Samir V Kamat, Secretary, Department of Research and Development, and Chairman, Defence Research and Development Organisation, advised the scientists to work on newer technologies to meet emerging requirements.

Stressing the need to work in close interaction with the industry and academia, Dr Kamat said the TBRL could provide one-stop solutions for static and dynamic trials of all munitions and warheads in addition to its core capability of design and development of warheads, munitions and sub-systems.

Director General, Missile and Strategic Systems, U Raja Babu, who was the guest of honour, stressed that there should not be any compromise in quality of research. Prof Prateek Kishore, Director TBRL, highlighted the achievements of the laboratory and presented a plan for augmenting its capacity and capabilities in different areas.

<https://www.tribuneindia.com/news/chandigarh/tbrls-raising-day-work-on-newer-tech-drdo-tells-scientists-582555>

Firstpost.

Thu, 18 Jan 2024

India Working with Friendly Nations on Leveraging AI to Enhance Defence Capabilities: DRDO Chief

India is collaborating with “friendly” countries on leveraging Artificial intelligence for enhancing defence capabilities, the head of the Defence Research Development Organisation (DRDO) said on Thursday.

Speaking to ANI, Samir V Kamat explained that India is working with other countries on developing tools as well as fundamental research in improving the algorithm which goes into AI.

Talking about the applications of AI in the defence sector, the DRDO chief said that Artificial Intelligence helps in preventive maintenance, surveillance and cyber security.

“It is playing an increasing role in the offensive action. It is a technology which is going to make a big difference not only in improving the performance of the military but also in its efficiency,” he said.

When asked whether India is working with other countries on leveraging AI to enhance defence capabilities, Kamat said: “We are working in collaboration with countries which are friendly to us. With such disruptive technologies, it is good to work with other countries in collaboration.”Kamat refused to divulge further details about collaboration with other countries.

However, he added:” I will not state the name of the countries with whom we are working but we are working with friendly countries on developing tools as well as fundamental research in improving the algorithm which goes into making the AI tools.

“While mentioning about the threat posed by AI, Kamat informed that the country is working with several academic institutions to develop AI-based techniques to detect cyber intrusion” So the major threat from AI is in cyber. The large number of attacks which happen in AI are happening through bots which work on AI.

The same AI can also be used in cyber defence,” he mentioned.”We are working in a collaborative fashion with several academic institutions to ensure that the AI based on techniques to detect cyber intrusion...To prevent all our critical infrastructure is being attacked. How to use AI tools that we can prevent such attacks,” he added.

<https://www.firstpost.com/india/india-working-with-friendly-nations-on-leveraging-ai-to-enhance-defence-capabilities-drdo-chief-13630992.html>

Defence News

Defence Strategic: National/International



Press Information Bureau
Government of India

Ministry of Defence

Thu, 18 Jan 2024

Indian Navy's Mission Deployed Platform Responds to a Maritime Incident in the Gulf of Aden

INS Visakhapatnam, mission deployed in Gulf of Aden for anti-piracy operations, swiftly responded to a distress call by Marshall Island flagged MV Genco Picardy following a drone attack at 2311 hrs on 17 Jan 24. INS Visakhapatnam, undertaking anti piracy patrol in Gulf of Aden, acknowledged the distress call and intercepted the vessels at 0030 hrs on 18 Jan 24 in order to provide assistance. MV Genco Picardy with 22 crew (09 Indian) reported nil casualties and fire under control.

Indian Naval EOD specialists from INS Visakhapatnam boarded the vessel in early hours of 18 Jan 24 to inspect the damaged area. EOD specialists, after a thorough inspection have rendered the area safe for further transit. The vessel is proceeding to the next port of call.

<https://pib.gov.in/PressReleasePage.aspx?PRID=1997275>



Thu, 18 Jan 2024

Indian Navy's Destroyer Responds to Distress Call from Drone-hit Merchant Vessel in Gulf of Eden

Even as the U.S.-led coalition continued strikes on Houthi military targets in Yemen, meant to “degrade” their capabilities, the drone attacks on commercial shipping in the Red Sea and the Gulf of Aden continued. In the latest incident, the Indian Navy’s destroyer INS Visakhapatnam responded to a distress call by Marshall Island-flagged merchant vessel m.v.Genco Picardy following a drone attack at 11.11 p.m. on January 17. No casualties have been reported and the vessel is heading to the next port of call.

“INS Visakhapatnam, undertaking anti-piracy patrol in the Gulf of Aden, acknowledged the distress call and intercepted the vessel at 0030 hrs on January 18, 2024 in order to provide assistance. m.v.Genco Picardy with 22 crew members, nine Indians, reported nil casualties and fire under control,” the Navy said in a statement on Thursday.

As per marine traffic portal vesselfinder.com, m.v.Genco Picardy, a bulk carrier, departed Port of Safaga in Egypt on January 11 and was scheduled to arrive at Thoothukudi in Tamil Nadu in India on January 24.

The Navy said Explosive Ordnance Disposal (EOD) specialists from the warship boarded the vessel early on Thursday to inspect the damaged area and after a thorough inspection, they have “rendered the area safe for further transit.

The Indian Navy currently has around 12 warships deployed in the Arabian Sea area for anti-piracy and maritime security duties. Speaking on the sidelines of an event, Navy Chief Admiral R. Hari Kumar said they are deployed in the region to ensure that our national interests in the maritime domain are “preserved, protected, promoted and pursued.” “So we have our own deployments. We have two ongoing operations. One anti-piracy operation and one anti-drone support for merchant shipping. Both these operations are under way,” he stated.

This is the latest in a series of drone attacks or hijacking attempts of Indian-flagged or foreign-flagged vessels with Indian crew. Since the Israeli offensive in Gaza, there have been a series of attacks on merchant ships from Houthi rebels in Yemen in the Red Sea as well as the Arabian Sea, including few instances where Indian-crewed vessels headed to India were hit by drones, m.v. Chem Pluto and m.v. Sai Baba.

Latest U.S. strikes

The U.S. Central Command (CENTCOM) said on Thursday that on January 17 at approximately 11.59 p.m. (Sanaa time), it conducted strikes on 14 Iran-backed Houthi missiles that were loaded to be fired in Houthi-controlled areas in Yemen.

“These missiles on launch rails presented an imminent threat to merchant vessels and U.S. Navy ships in the region and could have been fired at any time, prompting U.S. forces to exercise their

inherent right and obligation to defend themselves,” USCENCOM said in a post on X. These strikes, along with other actions we have taken, will degrade the Houthis’ capabilities to continue their reckless attacks on international and commercial shipping in the Red Sea, the Bab-el-Mandeb Strait, and the Gulf of Aden, it stated.

In a related development, on Wednesday, U.S. National Security Adviser Jake Sullivan announced the designation of Ansarallah, also known as the Houthis, as a Specially Designated Global Terrorist.

Analysing debris

Speaking in Hyderabad last week, Admiral Kumar said there were 35 drone attacks in the last 40 to 42 days on ships and the target was Israel-owned ships or those linked to Israel, and mainly in the Red Sea, the North Arabian Sea, and the Central Arabian Sea. He said the Navy had collected samples of debris from three vessels (which were attacked) and was examining them forensically to identify the origin of the attack.

In the first week of January, Indian Navy MARCOs (Marine Commandos) boarded a Liberian-flagged bulk carrier m.v. Lila Norfolk in the North Arabian Sea and rescued the crew, including 15 Indians and six Philippines, locked themselves in the citadel, after it was boarded by pirates, successfully foiling a hijacking attempt.

In December, Malta-flagged tanker m.v. Ruen, with 18 crew onboard, was hijacked by Somali pirates approximately 700 miles from the Indian coast and the vessel is currently off the coast of Somalia.

In response to these incidents, the Indian Navy has substantially enhanced maritime surveillance efforts in Central and North Arabian Sea and augmented force levels. Task groups comprising destroyers and frigates have been deployed to undertake maritime security operations and render assistance to merchant vessels in case of any incident and aerial surveillance by long-range maritime patrol aircraft and unmanned aerial vehicles has been enhanced to have a complete maritime domain awareness.

<https://www.thehindu.com/news/national/indian-navy-responds-to-merchant-vessel-under-drone-attack-in-gulf-of-aden/article67751533.ece>



Thu, 18 Jan 2024

Indian Assets Deployed in Arabian Sea, won't Allow Instability: Navy Chief R Hari Kumar

The Indian Navy has its assets deployed along the western coast to protect India's maritime interests and will not allow any "instability", Chief of Naval Staff Admiral R Hari Kumar said on Thursday.

On the situation in the Arabian Sea and Red Sea area, the Navy chief said Indian assets are already deployed in the area for two anti-piracy operations. He was speaking to the media on the sidelines of the fourth edition of the Global Artificial Intelligence Summit here.

"We are deployed to ensure that our national interest in the maritime domain is protected. We have our own deployments. We have two ongoing anti-piracy operations there and anti-drone support for

merchant shipping,” the Navy chief said. The remarks came amid increasing global concerns over Houthi militants targeting various cargo vessels in the Red Sea against the backdrop of the Israel-Hamas conflict.

“The job of the Navy is to ensure that we preserve, protect and pursue our national interest in the maritime domain. That is what we are doing. Anti-piracy operations have been going on since 2008. We have deployed more than 106 ships since then on a continuous basis,” he said.

“Operation Sankalp is happening close to the Gulf of Aden and Gulf of Oman. We had witnessed that till last year, piracy had reduced almost to zero. But subsequently, we saw a resurgence... We have deployed an adequate number of assets. We are not going to allow any piracy to happen,” Kumar said.

He added that no attacks have happened on Indian merchant ships. “Whatever disturbance is happening, there has been no attack on any Indian-flagged merchant vessel. Last time they attempted piracy attack on a ship with a high number of Indian crew, our assets were deployed immediately, (and) we responded,” the admiral said. “Our message is that we are not going to permit any instability or insecurity happening,” he added.

Talking about artificial intelligence, Kumar said the Indian Navy is researching the use of AI for operational as well as other purposes. Several projects are going on. “AI requires a lot of new technologies and machines. All that will create new jobs, new specialisation and re-skilling of people will happen,” he said.

“We have a centre for excellence for data analytics... We have also set up an incubation centre called the Indian Navy Incubation Centre for AI which is in Bengaluru... We are working on more than 30 projects based on the use of Navy, largely for operational requirements, and then for logistics, administrative, maintenance as well,” he said.

“We also have the IDex and NIIO Navy Innovation and Indigenisation Organisation. Under IDEX, about 14 contracts have been signed with startups for AI projects,” Admiral Hari Kumar said. He was talking to reporters after inaugurating the Global Artificial Intelligence Summit at the Manekshaw Centre here.

“With remarkable strides in technology and innovation, AI stands as a tool that is poised to shape Bharat’s trajectory during the Kartavya Kaal... “Today, we are witnessing the vibrant spirit of AI. In this context, it is befitting to harness our capabilities and ascend as a prominent global leader in the realm of AI,” the Navy chief said.

<https://www.financialexpress.com/business/defence-indian-assets-deployed-in-arabian-sea-wont-allow-instability-navy-chief-r-hari-kumar-3368404/>



Thu, 18 Jan 2024

Germany to Develop Short-range Air Defence System to Replace Retired Gepard Tanks

Germany will order the development of a short-range air defence system for some 1.3 billion euros (\$1.4 billion) to plug a gap in its defences that became apparent after Moscow's invasion of Ukraine and replace its long-retired Gepard tanks among other equipment. The German budget committee on Thursday approved the deal with a consortium consisting of Rheinmetall

(RHMG.DE), opens new tab, Diehl and Hensoldt (HAGG.DE), opens new tab despite a five-fold price hike criticised by the federal court of auditors, several participants told Reuters.

Short-range air defence systems are meant to protect troops on the tactical level, for example during deployment operations or while they are on the move, against missile and drone attacks as well as low-flying aircraft.

The companies' main task will be to develop an air defence system for short ranges starting from three kilometres and very short ranges below that where the threat is posed mainly by small drones.

The very short-range system is likely to be based on Rheinmetall's Skyranger 30, a 30mm canon mounted on the Boxer APC, with the vehicles still to be procured. Targets beyond three kilometres are meant to be tackled by Diehl's IRIS-T SLS system.

In the past, Germany had mainly relied on the Gepard anti-aircraft tank for very short-range air defence of up to three kilometres, a weapon that since has become famous in the war in Ukraine. Berlin retired its Gepards in 2010 to save money.

The companies' second job will be to enable the linking-up of this system with Diehl's IRIS-T SLM medium-range air defences which Berlin has already ordered, to build a broader, multi-layered protective umbrella.

Hensoldt will supply the radars for the system which is expected to be ready from 2026 or 2027.

<https://www.reuters.com/business/aerospace-defense/germany-develop-short-range-air-defence-system-replace-retired-gepard-tanks-2024-01-18/>



Thu, 18 Jan 2024

Japan Inks Deal to Buy 400 Long-range Missiles from US

Japan signed a deal with its ally the United States on Thursday to buy 400 long-range Tomahawk missiles as it ramps up its military capacity to counter regional security threats.

Faced with growing Chinese military clout and a nuclear-armed North Korea, the Japanese government plans to double its defence spending to the NATO standard of 2% of GDP by 2027.

A sale of up to \$2.35 billion for two types of Tomahawks, which have a 1,600-kilometre range, was approved by Washington in November.

"The conclusion of this signing starts the procurement of the Tomahawk missiles," a defence official told reporters on Thursday after the deal was signed in Tokyo.

"Through sound implementation of the (defence) budget, we will extensively strengthen our defence capacity," he added.

Japan has approved a record defence budget worth \$56 billion for the next fiscal year from April.

Japan has a pacifist post-war constitution, which limits its military to ostensibly defensive measures.

But when it updated key security and defence policies last year, Tokyo explicitly outlined the challenge posed by China.

At a press conference earlier in the day, US ambassador Rahm Emanuel lauded Japan's new defence push.

"As aggressors grow more and more belligerent, Japan is at the forefront of countries rallying to protect peace and prosperity by raising the costs of aggression," he said.

Last month Tokyo loosened arms export controls to enable it to sell Patriot missiles made in Japan under licence to the United States, which is seeking to replenish its stocks after sending the weapon systems to Ukraine.

<https://www.thehindu.com/news/international/japan-inks-deal-to-buy-400-long-range-missiles-from-us/article67752482.ece>



Thu, 18 Jan 2024

Marines Perform First Production Model MADIS Live Fire

Marines recently got their hands on a Marine Air-Defense Integrated System (MADIS) for the first live fire of an initial rate production model, US Marine Corps (USMC) officials announced on 11 January.

As one of the marine's central air-defence capabilities, MADIS is being developed to take on the threat of advanced unmanned aerial vehicles (UAVs) and other aircraft alongside paired up with the Medium-Range Intercept Capability (MRIC).

The system is on track for the first fielding to the 3rd Low Altitude Air Defense Battalion (LAAD) by November 2023, Marine Corps Systems Command spokesperson Morgan Blackstock told Janes on 17 January.

During the live-fire test on 13 December 2023 at Yuma Proving Ground, Arizona, marines fired Stinger surface-to-air missiles and projectiles from a 30 mm cannon off the back of two Joint Light Tactical Vehicles (JLTVs). The munitions targeted "multiple" Group 1 and 3 UAVs, and "test objectives were achieved", according to Blackstock. She declined to say how many were successfully hit during the test.

A M240 machine gun is also a part of the capability but was not used in the live fire. The systems use the RPS-42 produced by RADA Electronic Industries for its radar capability to track UAVs, while the Common Aviation Command and Control System directed the vehicles to the targets.

More live fires will take place throughout the fiscal year, which will include new equipment training, system verification testing, and initial operational test and evaluation, according to a 11 January USMC press release.

<https://www.janes.com/defence-news/news-detail/marines-perform-first-production-model-madis-live-fire>



Press Information Bureau
Government of India

Ministry of Science & Technology

Thu, 18 Jan 2024

"Vigyanika 2023: Celebrating Science and Literature at IISF 2023"

CSIR-NIScPR shows its commitment for Science Communication in Indian Languages

Vigyanika : Science Literature Festival is being held as a part of India International Science Festival 2023. The inaugural ceremony on 18th January 2024 began with the Welcome address by Prof. Ranjana Aggarwal, Director, CSIR-National Institute of Science Communication and Policy Research (CSIR-NIScPR), New Delhi. Prof. Aggarwal highlighted the importance of scientific temper and CSIR-NIScPR's commitment to foster scientific awareness. Emphasising the importance of science communication in Indian languages through diverse mediums like puppetry and poems, she underscored Vigyanika's role as a platform for networking among scientists and science enthusiasts. Dr. Dinakar M. Salunke, Former Director, ICGEB and DBT-RCB, Dr. Subhra Chakraborty, Director, National Institute for Plant Genome Research, New Delhi, and Shri. A Jayakumar, Vijnana Bharati, were the distinguished guests of the inaugural ceremony. Prof. Salunke emphasised the importance of increasing scientific temper and acknowledged that the gap between common masses and scientists should be bridged through various inclusive efforts such as Vigyanika. Dr. Subhra Chakraborty, underscored Vigyanika's role in fostering discussions on science, aligning with the goals of the New Education Policy 2020 to integrate varying fields such as science and literature in education. She also highlighted development of new innovative technologies that are capable of making India a technologically competent country and the need to take these technologies to the public through science communication channels.

Prof. Ranjana Aggrawal, Director of CSIR-NIScPR while addressing the gathering in Vigyanika event at IISF 2023

Shri A Jayakumar discussed the rich literary tradition of India, which covered a wide range of topics from science to diplomacy. He recognised the contribution that events such as Vigyanika make to the dissemination of science among the general public and bring together of the contemporary science and literature, which have long been interwoven in Indian knowledge systems. The inaugural session was concluded with the Vote of Thanks by Dr. Paramananda Barman, CSIR-NIScPR.

Scientific Session-I with the theme of Science and Technology Public Outreach in India began with an introduction by the Chair Prof. B. N. Jagatap, Senior Professor, IIT Bombay, who advocated the importance of citizen participation in science which can be achieved through science communication efforts that encourage evidence-based science and scientific way of thinking in everyday life. The Keynote Address by Prof. Dinakar M. Salunke highlighted the need to extend scientific research from labs to the general populace, emphasising the historical contributions of Indian scientists. Using India's recent achievements in space and vaccine technology as examples,

he also discussed the significance of funding innovative scientific endeavours while including indigenous efforts. Using the example of interacting with patients in a medical setting, Prof. Uma Kumar, AIIMS, New Delhi, discussed the significance of training in scientific communication which could affect how individuals perceive emerging technologies or developing drugs and vaccines. She emphasised that in order for science communication initiatives to be successful, local leaders and innovative technologies must be included and socio-cultural factors should be taken into account. Prof. Gobardhan Das, Jawaharlal Nehru University, stated the need to communicate science in languages other than English so that language is not a barrier. Prof. K. C. Bansal, Former Director, ICAR-NBPGR, gave a talk on genome editing and GM crops.

Panel discussion I on the theme Apni Bhasha Apna Vigyan: Strengthening Science–Communication in Indian Languages was the next session. This stimulating session was chaired by Padma Shri Chamu Krishna Shastry, Chairman, Bharatiya Bhasha Samiti and featured discussions from experts in various Indian languages including Tamil, Assamese, Punjabi, Manipuri, Malayalam, and Odiya. The panellists for the session were Prof. V. P. N. Nampoori, Dr Neelima Jerath, Dr. H. B. Singh, Dr. Uthra Dorairajan, Dr. Mantu Bhuyan and Prof Saroj Kant Barik. During the discussion, the experts stressed the importance of scientific communication in Indian languages in order to cross language barriers and strengthen communication. The panel discussion was followed by the release of an Assamese magazine, Bigyan Lahar, a collaborative initiative by CSIR-NIScPR and CSIR-NEIST, and then the release of a Tamil flip book “Treasures of Indian Tradition: A Journey through Scientifically Validated Indian Traditional Knowledge” as a part of CSIR-NIScPR’s SVASTIK initiative.

There was a parallel session cum Workshop on popular science writing by Shri Hasan Jawaid Khan, Former Chief Scientist, CSIR-NIScPR, and Dr. H. S. Sudhira, Director, Gubbi Labs.

Scientific Session II included presentations by various speakers from across the country focusing on the topic Science Communication in India: Current Trends, Opportunities and Challenges, which was chaired by Dr. Paresh K Joshi, Reader, TIFR-HBCSE.

Along with the scientific sessions, there was an exhibition by CSIR-NIScPR showcasing its publications and by SVASTIK, a CSIR initiative to disseminate scientifically validated Indian traditional knowledge. The event concluded for the day with a cultural programme on the confluence of arts and science.

<https://pib.gov.in/PressReleasePage.aspx?PRID=1997570>



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Ministry of Science & Technology

Thu, 18 Jan 2024

2nd Indo-French Joint Committee of Science and Technology (JCST), Paves Way for Renewed Scientific Co-operation

The second meeting of the Indo-French Joint Committee of Science and Technology (JCST) which took place today, discussed ways of catalyzing a stronger and rejuvenated Indo-French scientific partnership.

The Committee was co-chaired by Prof Abhay Karandikar, Secretary for the Department of Science and Technology (DST), Ministry of Science and Technology, Government of India and Dr Claire Giry, Director General for Research and Innovation at the French Ministry of Higher Education and Research.

Professor Karandikar highlighted the success of the CEFIPRA model as a catalyst of Indo-French Collaboration and said that it could help step up research partnerships in new age technologies like ICPS, health, clean energy, AI, quantum technologies, and advanced materials. He also underscored the need for more collaboration between the innovators and entrepreneurs of the two countries.

“There is a need for stronger associations between researchers of the two countries focusing on sustainable technologies, applied mathematics, health and ocean research,” said Dr Claire Giry.

The meeting was held on the premises of the Translational Health Science and Technology Institute (THSTI) where the committee was convened on the margins of the India International & Science Festival (IISF), which is one of India’s main scientific outreach events.

The scientific collaboration seamlessly aligns with the broader framework of the Indian and French strategic partnership, commemorated by Prime Minister Modi's visit to France on Bastille Day in July 2023, marking 25 years of collaboration in the Indo-Pacific region. The Indo-French roadmap “Horizon 2047”, signed on Bastille Day in Paris, underscores the commitment to bilateral scientific cooperation. The JCST, guided by the objectives of bilateral scientific cooperation, aims to identify thematic priorities, allocate resources, and enhance tools for achieving mutual goals.

The JCST was co-organized with the French Ministry for Europe and Foreign Affairs, represented by the Deputy Director for Cultural Diplomacy, and the delegates also included high-level representatives from the two countries, amongst which the CEO or deputy CEOs of French research institutes, the president of the French National Research Agency (ANR), representatives of the Indian Department of Science and Technology (DST), Department of Biology and Technology (DBT), Ministry of Earth Sciences (MoES), Council of Scientific and Industrial Research (CSIR), and Indian Council of Medical Research (ICMR) besides Director, Indo-French Centre for Promotion of Advanced Research (IFCPAR/CEFIPRA) and Director, Translational Health Science and Technology Institute (THSTI).

The two co-chairs reiterated that the JCST will catalyze a stronger and rejuvenated Indo-French scientific partnership. Speakers highlighted the vibrancy of Indo-French scientific cooperation and acknowledged the multitude of stakeholders and actions contributing to this dynamic relationship. The committee stressed the diversity and quality of the Indo-French academic and scientific cooperation, which relies on the mobility of scientists and joint research efforts, from fundamental to applied science involving notably industrial partners and Start-ups. The Indo-French Center for the Promotion of Advanced Research (CEFIPRA), financed by the Ministry for Europe and Foreign Affairs and the Indian Department of Science and Technology, has emerged since 1987 as a key instrument in this regard, playing a crucial role in structuring and sustaining the scientific partnership and will be instrumental to implement the priorities of the JCST in complement to the ANR-DST program.

Both parties have agreed to prioritize scientific collaboration in the thematic fields of Health, Decarbonized Hydrogen, Marine Sciences, and Applied Mathematics, with dedicated calls for projects to be announced soon. Notably, an agreement has been reached between ANR and DST to set up calls for proposals funding priorities set by the JCST. CEFIPRA, which should also be reinforced, will complement the ANR-DST calls to further fund other priorities highlighted.

Both parties also pointed out the key role of mobility and networking in preparing future cutting-edge scientific cooperation. They agreed to create ambitious new programs supporting the joint research, mobility of scientists, especially focusing on new cooperation and young researchers,

while maintaining the existing programs devoted to women scientists, notably through CEFIPRA. The JCST members have stressed the significance of transdisciplinary approaches for overall better coordination, embedded in a long-term perspective on common initiative.

The outcomes of the committee are expected to be endorsed during the upcoming meeting between Prime Minister Modi and President Macron on Republic Day on the 26th of January.

About JCST : [The Indo-French Joint Committee of Science and Technology, known as JCST, is guided by the objectives of bilateral scientific cooperation. The committee aims to identify priorities, allocate resources, and enhance tools for achieving mutual goals. The 1st Indo-French Joint S&T committee was held in 2018]

<https://pib.gov.in/PressReleasePage.aspx?PRID=1997579>

THE ECONOMIC TIMES

Thu, 18 Jan 2024

Tests on Bharatiya Space Station Next Year: ISRO Chairman S Somanath

ISRO plans to carry out the first tests of the proposed Bharatiya Space Station next year and talks are on with the industry to manufacture, test and launch its first module by 2028, the space agency's chief S Somanath said on Thursday. Interacting with reporters on the sidelines of the India International Science Festival, he said India's first mission to Venus is also likely to be launched in 2028 and engineers are working on bringing down costs on certain high-value components.

Last year, Prime Minister Narendra Modi set ISRO a target to launch the Bharatiya Space Station by 2035 and land an Indian astronaut on the moon by 2040.

"It will happen next year. On Tuesday, I had a review of the Bharatiya Space Station architecture. Our people are working on so many options. Which one to choose, I am really having mixed feelings now," Somanath responded to a question on whether any tests of the space station would be carried out in the near future.

He said the prime minister's announcement has really created an enthusiasm internally and ISRO was already talking to the industry to manufacture, test and launch the space station in 2028.

"It is a space station, not a person. The person will come whenever they are there. It will still work if there is nobody there," Somanath said, indicating that initially the space station will be unmanned. He said the agency also planned to launch the mission to Venus in 2028 and engineers were working towards it. "Venus mission has already been proposed once, we are looking at how to bring down the costs. There are some high value items we want to bring down the cost," Somanath said.

He said it was not possible to give a timeline for the Venus mission as the primary goal for ISRO was the tasks set by the prime minister.

He said ISRO was also working on developing a new rocket to launch heavier payloads.

The Next Generation Launch Vehicle (NGLV) was being developed as the country was now pursuing missions to send humans to the moon and build a space station.

<https://economictimes.indiatimes.com/news/science/tests-on-bharatiya-space-station-next-year-isro-chairman-s-somanath/articleshow/106961706.cms>

Japan Moon Mission: All Eyes on JAXA with 'Pinpoint' Landing just a Day away

JAXA (Japan Aerospace Exploration Agency) is just a day away from its historic 'Moon Sniper' landing on the lunar surface. The Japanese space agency is using pinpoint technology for its landing and all eyes are on it after recent string of failures of other lunar missions. Japan is hoping for the success of its Smart Lander for Investigating Moon (SLIM) mission. If the mission succeeds, Japan will be the fifth nation to achieve a soft landing on the Moon, a very tricky affair to start with.

Before this, only the United States, Russia, China and India have been successful.

Soft landing on the Moon may be tricky but the Japanese space agency has taken efforts for success of its mission. The spacecraft is equipped with a rolling robot which lends unprecedented precision to the landing attempt.

When will JAXA land on the Moon?

The descent of the SLIM craft will begin its descent is slated to start on midnight on Saturday (8:30 pm IST on Friday). If all goes well, the touchdown will take place 20 minutes after that.

What's different about JAXA Moon landing?

Unlike other missions, which target a large area of the lunar surface, JAXA is targetting 100 metres. This is far less than the usual targets of several kilometres in previous missions.

Why is NASA pushing back Moon mission timelines?

JAXA is keen to taste success after two failed lunar missions and a recent rocket failures including explosions after lift-off.

SLIM is aiming to land in crater on the Moon where the Moon's Mantle is estimated to be accessible from its surface. Mantle is the deep inner layer beneath the crust of the lunar surface.

"The rocks exposed here are crucial in the search for the origins of the Moon and the Earth," Tomokatsu Morota, an associate professor at the University of Tokyo specialising in lunar and planetary exploration, told AFP.

Japan is not new to pinpoint landings. It has achieved the feat on an asteroid. But doing so on lunar surface presents greater challenges due to relatively strong gravity of the Moon.

<https://www.wionews.com/science/japan-moon-mission-all-eyes-on-jaxa-with-pinpoint-landing-just-a-day-away-681231>

