

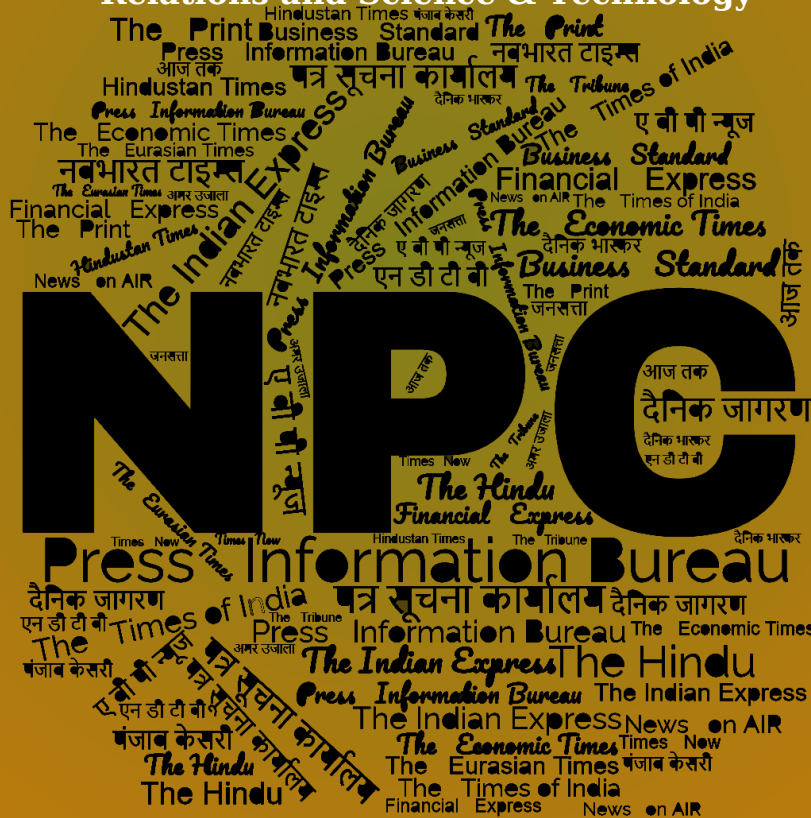
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# समाचार पत्रों से चयित अंश Newspapers Clippings

डीआरडीओ समुदाय को डीआरडीओ प्रौद्योगिकियों, रक्षा प्रौद्योगिकियों, रक्षा नीतियों, अंतर्राष्ट्रीय संबंधों और विज्ञान एवं प्रौद्योगिकी की नूतन जानकारी से अवगत कराने हेतु दैनिक सेवा

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## **THE TIMES OF INDIA**

*Wed, 14 Feb 2024*

### **Indian Army Tests Improved Anti-tank Missile Nag in Pokhran**

The Indian Army on Tuesday successfully tested an improved version of anti-tank guided missile Nag, with the missile hitting dummy targets at the Pokhran field firing range where the army is currently testing weapons as part of a war exercise.

According to Army sources, in this military exercise the army is conducting trials of firing capability of many guns, tanks and other weapons along with missiles and bombs. The improved version of the anti-tank guided missile Nag tested is a third-generation missile fired from surface to surface. There is also a Helina version of it that can be fired from air to surface and is fired from a helicopter. Helina has a range of 10 km.

<https://timesofindia.indiatimes.com/city/jaipur/indian-army-tests-improved-anti-tank-missile-nag-in-pokhran-jaisalmer/articleshow/107675839.cms>



*Wed, 14 Feb 2024*

### **DRDO, AIIMS to Tie up for Strengthening Military Physiology**

The Defence Research and Development Organisation (DRDO) is set to collaborate with all 18 AIIMS in the country to prepare a unique database of the Indian population in terms of their susceptibility to different environmental conditions. The database will be helpful in developing optimum deployment strategies and also designing climate-compatible defence equipment for the Armed forces. Initial discussion with AIIMS, Bhubaneswar, is already over. The institute will collaborate with DRDO for research on heat stress susceptibility factors, which play a significant role in the entire troop deployment cycle in adverse weather conditions.

DRDO sources said, heat stress and/or environmental extremes of heat and humidity, present a perennial challenge to military personnel. The consequences of inadequate heat adaptation sometimes turn fatal and increase susceptibility to military hazards, including combat.

“DRDO and all AIIMS will be working together for a project called Viswakarma. We will research human-machine interface related aspects to create a database on the population. With the data, we will use artificial intelligence (AI) and machine learning (ML) technology to develop the

Viswakarma platform,” a senior scientist of Defence Institute of Physiology and Allied Sciences (DIPAS) under DRDO told The New Indian Express.

Under Atmanirbhar Bharat initiative, the scientist said, most of the military technologies are being developed indigenously. The database of Indian population, especially the anthropometric and body composition data, which is not available, is required for designing defence equipment. The collaboration will help generate the data to prepare the state-of-the-art platform, he said.

DRDO is also working on extreme cold conditions, hypoxia and high altitude-related health factors. Presently, the response to heat stress is symptomatic. With the help of AIIMS, the DRDO is looking forward to identifying the susceptibility factors, which will help decision making easy on deployment of military troops.

### **DRDO, AIIMS to tie up for military physiology**

“Those who are susceptible to heat waves need not be exposed to the absolute environment. They can be in the back line and those who have more resilience to heat can be deployed in the extreme heat conditions. Once we know the factors, some sort of protective strategies can be developed for those who are susceptible so that they do not get the heat stress,” said the scientist.

With cognitive warfare and cognitive domain operations emerging as one of the significant new dimensions and will play a decisive role in future warfare, the DRDO believes, the project Viswakarma will be a game-changer.

DIPAS director Rajeev Varshney said the collaboration with AIIMS for research on different aspects such as underwater, heat, high-altitude and hypoxic stress will strengthen military physiology.

<https://www.newindianexpress.com/states/odisha/2024/Feb/14/drdo-aiims-to-tie-up-for-strengthening-military-physiology>

## **Defence News**

## **Defence Strategic: National/International**



**Press Information Bureau**  
**Government of India**

**Ministry of Defence**

*Tue, 13 Feb 2024*

## **Defence Secretary Shri Giridhar Aramane Visits BEL, Chennai and AVNL Avadi**

**BEL's contribution towards Indigenisation of weapon systems and platforms is crucial for the success of Make in India: Defence Secretary**

Defence Secretary Shri Giridhar Aramane visited Bharat Electronics Limited, Chennai on 13.02.2024. He reviewed the performance of the Unit in the presence of Shri Bhanu Prakash

Srivastava, CMD, BEL. He commended the R&D and manufacturing facility at the Unit and urged all stakeholders for boosting productivity and efficiency. He mentioned that the contribution of BEL towards indigenisation of weapon systems and platforms is crucial for the success of Make in India programme. He further emphasised on capacity development of MSMEs.

The Defence Secretary also visited the Armoured Vehicles Nigam Limited (AVNL) Corporate office, Heavy Vehicles Factory (HVF) and Engine Factory Avadi (EFA) for a review of production activities and ongoing R&D projects. Addressing the officials of AVNL in the presence of Shri Sanjay Dwivedi, CMD, AVNL, Shri Aramane laid emphasis on global manufacturing practices and highest levels of quality. He urged them to focus on R&D, new product development, indigenization initiatives and increasing overall efficiency and competitiveness.

Shri Aramane paid a visit to the MBT Arjun Shop at the Heavy Vehicles Factory. He also made a visit to various other production shops at Heavy Vehicles Factory like General Assembly Shop, Hull Shop and Transmission Shop. He also participated in a tree plantation ceremony.

Afterwards, Shri Aramane visited manufacturing facilities at Engine Factory Avadi (EFA), where he was briefed about Tank Engine manufacturing and overhauling. EFA demonstrated all the Engines of Armoured Fighting Vehicles (AFVs) of T-72, T-90, BMP-II and its other variants, which have been fully indigenised in the spirit of AtmaNirbhar Bharat. He then participated in a tree plantation ceremony at EFA.

<https://pib.gov.in/PressReleasePage.aspx?PRID=2005650>



**Press Information Bureau**  
**Government of India**

**Ministry of Defence**

*Tue, 13 Feb 2024*

## **MoD Inks Contract worth Rs.2269.54 Cr with BEL to Procure 11 Shakti Electronic Warfare Systems for Indian Navy**

The Ministry of Defence has signed a contract with Bharat Electronics Limited (BEL), Hyderabad on 13 February 2024 in New Delhi, for procurement of 11 Shakti Electronic Warfare Systems along with associated equipment / accessories for Indian Navy under Buy (Indian- IDDM) category at a total cost of Rs.2269.54 Cr.

The Shakti EW System is indigenously designed, developed and manufactured. The Shakti EW System is capable of accurately intercepting electronic emissions and implement counter measures in dense electromagnetic environment.

The Shakti EW System will be installed on-board capital warships of Indian Navy. The project will generate employment of two and half lakh man-days over a period of four years with participation of more than 155 industry partners including MSMEs, thus furthering the vision of 'Atmanirbhar Bharat'.

<https://pib.gov.in/PressReleasePage.aspx?PRID=2005641>

## India to Develop Engine for New Arjun Tanks

Turning a challenge into an opportunity, India is going ahead with an indigenous engine for its new set of Arjun Main Battle Tanks, after a German firm selected for the project expressed its inability to deliver the power plants in time, defence officials have told ET.

The Army has placed an order for 118 Arjun Mk1A tanks worth ₹7523 cr and deliveries are impacted as the engines have not been made available in the required quantities. The tank was to be powered by engines manufactured by a German firm but the company has conveyed that a long timeline of almost four years will be needed for delivery, officials said.

The Defence Research and Development Organisation (DRDO) has now started work on an indigenous option which is likely to be ready for production within three years. The DATRAN 1500 engine - being developed for the Futuristic Main Battle Tank program - is being modified to be fitted onto the new Arjun Tanks. The new engine is being rated to deliver 1500 hp and was first tested for the future tank program last year.

The Arjun Mk1A is a new variant of Arjun Tank with enhanced fire power, mobility and survivability. It has 72 additional features over the original Arjun tanks and has multi-layered protection provided and the capacity to fight in all weather conditions.

<https://economictimes.indiatimes.com/news/defence/india-likely-to-use-indigenous-engines-in-arjun-tanks-as-german-engines-getting-delayed-by-four-years/articleshow/107667794.cms>

# THE TIMES OF INDIA

## Kurta-Pyjama to Enter Navy Messes as Services Shed 'Vestiges of Colonial Era'

The humble kurta-pyjama has now made a formal entry into the spit and polish environs of naval messes, in the latest such move based on the government's directive to shed "vestiges of the colonial era" and "Indianise" military traditions and customs.

The Navy has issued orders to all its commands and establishments to allow officers and sailors to wear the "ethnic" attire of kurta-pyjamas, with sleeveless jackets and closed formal shoes or sandals, in officers' messes and sailors' institutes.

There are, however, strict guidelines about the colour, cut and shape of the kurta-pyjama, which can be worn when "the prescribed rig is informal (open collar) or casuals" in the messes, as per one order seen by TOI.

It must be a "solid tone" kurta, with the length just up to the knee, and cuffs at sleeves with buttons or cuff-links. Design of the "matching or contrast tone" narrow pyjama, in turn, must be "in line with trousers, with elastic waistband and side pockets".

A “matching pocket square” can be used in the sleeveless and straight-cut waistcoat or jacket. There are similar instructions for women officers who want to wear “kurta-churidaar” or “kurta-palazzo”. “This new dress code is not applicable for warships or submarines,” an officer said.

TOI in September had reported that the naval commanders’ conference, chaired by Admiral R Hari Kumar, had discussed the option of allowing kurta-pyjamas as “national civil dress” for officers and sailors.

Kurta-pyjamas for male personnel as well as guests have been so far strictly banned in Army, IAF and Navy messes. The Navy, however, has been in the forefront of proactively identifying and abolishing colonial era practices and symbols in line with PM Modi’s directive for “Gulami ki Mansikta Se Mukti (freedom from slavery mentality)” since 2022.

The Navy’s repeated reference to this phrase, however, has not gone down well with many veterans. “It is unnecessary and in poor taste to harp on so-called `ghulami ki virasat (heritage of slavery) because it casts aspersions on the post-Independence generations of patriotic Indian Navy personnel who have served the Navy and nation, fought wars and shed blood,” former chief Admiral Arun Prakash (retd) had posted on `X’.

The Navy is now also in the process of “Indianising” the names of the ranks for sailors, while senior officers are already donning epaulettes highlighting the “heritage and legacy” of Chhatrapati Shivaji Maharaj. The practice of officers carrying batons has also been stopped since it was considered a symbol of authority in the colonial era.

The Navy now also has a new President’s Standard and Colour as well as Crest after its new “swadeshi’ Ensign, which included the removal of the red-coloured St George’s Cross from the flag, was “unveiled” by the PM during the commissioning of indigenous aircraft carrier INS Vikrant in September 2022.

<https://timesofindia.indiatimes.com/india/kurta-pyjama-to-enter-navy-messes-as-services-shed-vestiges-of-colonial-era/articleshow/107670477.cms>



*Tue, 13 Feb 2024*

## **IAF Hawk Aircraft Accident Raises Safety Concerns: Court of Inquiry Initiated**

The Indian Air Force (IAF) encountered a setback on Tuesday, February 13, 2024, as one of its Hawk aircraft met with an accident during a training sortie in Kalaikunda, West Bengal.

Despite the mishap, the IAF confirmed that both pilots ejected safely, with no loss of life or damage to civilian property on the ground. However, concerns regarding the safety of IAF’s aircraft have been raised, prompting the initiation of a Court of Inquiry (CoI) to determine the cause of the accident.

### **Hawks & IAF**

The Indian Air Force (IAF) has relied on the British-origin Hawk aircraft, specifically the Hawk Mk 132, since 2008. Manufactured by BAE Systems, the Hawk serves as a vital component of the IAF’s training and operational capabilities. This advanced training aircraft boasts a single-engine,

jet-powered design, making it well-suited for a range of roles, including ground attacks, flying instruction, weapons training, and aerobatics.

The Hawk's origins trace back to its maiden flight in 1974 in Surrey, UK. Since then, it has earned a global presence, with operations spanning across 12 countries, including India, the UK, Australia, Canada, and Saudi Arabia. Its versatility lies in its capacity to function both as a training platform and a fully combat-capable aircraft capable of executing air-to-air and air-to-ground missions.

In India, the Hawk Mk 132 variant, featuring tandem seating for a trainee and a pilot, has been instrumental in bridging the training gap between basic piston-engine trainers and advanced fighter aircraft within the IAF ranks. Trainees undergo Stage-III training with the Hawk before progressing to supersonic jets like Jaguars, MiG-21s, and Mirage 2000s.

Powering the Hawk Mk 132 is the Rolls-Royce Adour Mk 871 twin-spool turbofan engine, offering a commendable range of 2,520 kilometers and a top speed of 1,065 kilometers per hour. Its fuel capacity of 2,805 liters ensures sustained operations during training exercises and combat missions alike.

The journey to integrate the Hawk into the IAF's fleet was not without its challenges. Although the IAF initially articulated its need for an advanced jet trainer (AJT) in 1982, it took until 2004 to finalize the contract for the Hawks. The first two aircraft arrived in 2007, with subsequent acquisitions procured from both BAE Systems and India's Hindustan Aeronautics Limited (HAL), which played a significant role in domestic assembly.

Today, India boasts the world's largest fleet of Hawk advanced jet trainers outside the UK, totalling 123 aircraft. These Hawks are stationed primarily at the Bidar Air Force Station, a cornerstone of the IAF's flying training infrastructure.

The Hawk's significance extends beyond training purposes. In 2015, it facilitated the revival of the Indian Air Force's Surya Kiran aerobatics team, which had been grounded for four years due to a shortage of trainer jets. However, tragedy struck in 2019 during a rehearsal for the Aero India show when two Hawks collided at the Yelahanka air force base near Bengaluru, resulting in the loss of one IAF wing commander's life and injuries to others.

Despite such incidents, the Hawk remains a cornerstone of the IAF's training and operational capabilities, reaffirming India's commitment to maintaining a robust defence infrastructure in the face of evolving security challenges.

<https://www.financialexpress.com/business/defence-iaf-hawk-aircraft-accident-raises-safety-concerns-court-of-inquiry-initiated-3393300/>

# The Tribune

Wed, 14 Feb 2024

## **Aerospace Giants Pratt & Whitney, Boeing Extend India Outreach**

Aerospace giants Boeing and Pratt & Whitney, in separate announcements, have extended their respective outreach in India.

Boeing announced seven winners of Boeing University Innovation Leadership Development (BUILD) for Indian students and start-ups. Each of these seven teams has received Rs 10 lakh as a



financial grant, and its ideas covered solutions for community development and defence and space industries.

The programme is for the start-up platform, nurturing young entrepreneurial minds of the country with the right skills and support to scale up operations, develop cutting-edge technologies.

The winners will be further supported by Boeing and their respective incubator partners for over a few months to help develop their ideas into market-ready and viable business solutions.

The seven winning teams are Abyom SpaceTech and Defence Pvt Ltd and Green Aero Propulsion Pvt Ltd from Foundation for Innovation and Technology Transfer (FIIT), IIT-Delhi; Glovatrix Pvt Ltd from Society for Innovation and Entrepreneurship (SINE), IIT-Mumbai; dVerse Technologies Pvt Ltd from IIT Madras Incubation Cell; Backyard Creators Pvt Ltd, BONV Technology Pvt Ltd and Coratia Technologies Pvt Ltd from Technology Business Incubator (TBI), KIIT-Bhubaneswar.

Meanwhile, Pratt & Whitney announced the establishment of its new India digital capability centre (IDCC) in Bengaluru. The centre will accelerate innovation and drive digital and business transformation for Pratt & Whitney worldwide.

The facility will be co-located with Pratt & Whitney's engineering and supply chain operations centres.

The expansion aims to leverage India's aviation and technology talent and accelerate our digital transformation, a statement said.

Pratt & Whitney is expected grow to over 300 employees by 2027. The centre will be focused on delivering multiple digital technology capabilities across various priority areas of Pratt & Whitney's digital transformation.

Ashmita Sethi, president and country head, Pratt & Whitney, India, said: "With \$40 million already invested in engineering and supply chain operations centres in the past two years, Pratt & Whitney continues to grow its presence and contribution to India's aerospace ecosystem with this additional multi-million-dollar investment in the IDCC."

### **Focus on innovation, digital transformation**

Boeing has announced seven winners of Boeing University Innovation Leadership Development who will receive Rs 10L grant and help to scale up operations

Pratt & Whitney will establish new India digital capability centre in Bengaluru to accelerate innovation and drive its digital and business transformation worldwide

<https://www.tribuneindia.com/news/india/aerospace-giants-pratt-whitney-boeing-extend-india-outreach-590501>



*Wed, 14 Feb 2024*

## **US has Great Military-to-Military Relationship with India: Pentagon**

India and the US have a great military-to-military relationship and good communication with each other, the Pentagon's Deputy Press Secretary Sabrina Singh said in a press briefing on Tuesday (local time).

"We have a great military-to-military relationship with India, good communications. We're going to continue to monitor what's happening in the region, but I don't have more to share on any updates," she said.

Speaking about expecting a high level visit from India, Sabrina Singh said, "I don't have any visits to read out from officials from the Indian Government. At least here at the department. I can't speak for other officials across the interagency."

Asked whether the Pentagon is monitoring the situation in Pakistan after the elections held on February 8, Sabrina Singh said, "Yeah, we're certainly monitoring what's happening there, but I'd direct you to state for more specifics on that."

Sabrina Singh's remarks regarding the military relations between India and Pakistan come at a time when the Chief of Army Staff, General Manoj Pande embarked on a four-day official tour to the US, starting February 13, an official statement from the Ministry of Defence said on Monday.

In a press release, the Ministry of Defence said, "During his visit, the COAS will engage in high-level discussions and interactions with General Randy George, United States Chief of Staff of the Army (CSA) and other senior military leaders."

"Highlights of the tour include a prestigious US Army Honour Guard ceremony, a solemn laying of the wreath at the Tomb of the Unknown Soldier in Arlington National Cemetery, and a comprehensive tour of the Pentagon. These engagements symbolise the respect and mutual commitment towards global peace and security shared between the two countries," it added.

Ideas will be exchanged on crucial topics such as the "Transformation in the Indian Army," "Global Threat Perception," "Transformation to Army-2030/2040," "Human Resource Challenges," "Future Force Development and Modernisation," and "Co-Production and Co-Development Initiatives," according to the press release.

These discussions are aimed at sharing insights, ideas, and best practices between the armies of India and the US.

General Manoj Pande will also visit the 'Army Geospatial Centre' at Fort Belvoir, the 'National Defence University' at Fort McNair, and hold interactions with leadership at Headquarters 1 Corps.

He will also engage with units at the forefront of military innovation and strategy, including the Stryker Unit, 1st Multi-Domain Task Force, the 1st Special Forces Group at Seattle and the Defence Innovation Unit in San Francisco.

In a press release, the Ministry of Defence said, "A visit to the California National Guard is also planned, highlighting the comprehensive nature of the visit aimed at exploring avenues for more significant training, co-development and co-production engagements."

In a press release, the Ministry of Defence said, "This visit is another milestone in the Indo-US defence relationship, reflecting a mutual desire to enhance military collaboration, exchange strategic perspectives on global threat perceptions, and work together toward future force development and modernisation."

"The engagements between General Manoj Pande and senior leadership of the United States Army are poised to yield substantive outcomes, fostering an environment conducive to shared security interests and defence cooperation," it added.

Recently, US NSA General Randy George visited India for the Indo-Pacific Army Chiefs Conference (IPACC) that was jointly hosted by the Indian Army and the US Army. The conference was attended by 18 Chiefs of Armies and 12 countries represented by Heads of Delegations.

In a press release, the Ministry of Defence stated, "The Indian Army and the United States Army share a commitment to peace, democracy, and stability across regions. This tour epitomises the shared values and interests that underpin the partnership between India and the United States, aiming at a future of enhanced cooperation and mutual development in defence and security domains."

<https://www.aninews.in/news/world/us/us-has-great-military-to-military-relationship-with-india-pentagon20240214034935/>

# ThePrint

Wed, 14 Feb 2024

## UK to Urge Allies to Boost Defence Production for Ukraine

British Foreign Secretary David Cameron will urge allies to increase defence production to help Ukraine's war with Russia, his office said on Tuesday ahead of a diplomatic tour to Bulgaria, Poland and Germany.

### WHY IT IS IMPORTANT

Ahead of the two-year anniversary of Ukraine's conflict with Russia, Kyiv faces ammunition shortages and uncertainty over the future of U.S. military aid even as Russian forces begin to gain the upper hand on the battlefield.

### KEY QUOTES

"We have the resources, the economic might and the expertise. We need to show that we have the will to see this through," Cameron is expected to say during his travel, according to a statement from the Foreign Office.

"We must stand up for freedom and match our words with action. On sanctions. On support for Ukraine. On defence production."

### CONTEXT

Cameron will speak at the Munich Security Conference, attended by the world's defence and security elite. The conference takes place on Feb. 16-18.

On Monday, German Chancellor Olaf Scholz said Germany and Europe's defence industry must switch towards mass production of arms as the war in Ukraine exposed how European manufacturers struggled to meet demand for ammunition.

U.S. President Joe Biden has urged U.S. lawmakers to pass a multi-billion pound military aid package.

<https://theprint.in/world/uk-to-urge-allies-to-boost-defence-production-for-ukraine/1965471/>



**Press Information Bureau**  
**Government of India**

**Ministry of Science & Technology**

*Tue, 13 Feb 2024*

## **A New Method for Sodium Catalyzed Synthesis of Carbon Nanotubes could be Useful for Rechargeable Batteries & Flexible Electronics**

A novel method for directly synthesizing Carbon nanotubes (CNTs) on glass substrates at a temperature of 750 °C could help energy research, biomedical fields, and optoelectronics.

Carbon nanotubes (CNTs) are pivotal in advancing modern technology by showcasing extraordinary properties. They have found applications in diverse fields, including rechargeable batteries, flexible electronics, aerospace, transparent electrodes, touch screens, supercapacitors, and medicine. However, conventional CNT synthesis methods require high temperatures (~1000 °C) and metal catalysts (Fe, Co, and Ni). These catalysts pose biocompatibility concerns for potential biomedical applications. The challenge of removing these catalysts from CNTs adds a significant cost, highlighting the urgent need for cleaner, more sustainable CNT synthesis methods - an exciting frontier in the realm of nanotechnology.

Researchers at the Institute of Advanced Study in Science and Technology (IASST), an autonomous institute of the Department of Science and Technology (DST), Government of India, have pioneered a novel method for directly synthesizing CNTs on glass substrates at a temperature of 750 °C. The experiment is performed using the Plasma Enhanced Chemical Vapour Deposition Technique (PECVD), where plasma is generated using a specially designed spiral-shaped fused hollow cathode source. This innovative process circumvents the need for elevated temperatures and eliminates the necessity for a transition metal catalyst. Furthermore, this synthesis is executed under atmospheric pressure, adding commendable cost-effectiveness to its advantages compared to counterparts in the field.

Several factors, including the plasma characteristics, substrate composition, substrate temperature, and plasma pre-treatment of the substrate, significantly influence the CNT growth. Optimally, the pre-plasma treatment of the glass substrate at an elevated temperature enhances the surface area, exposing a more significant amount of its constituent elements directly to the surface. Among all the elements within the glass, sodium (Na) emerges as the primary catalyst for initiating CNT growth, and analysis evidences the same. It has also been observed that the Na present in the as-grown CNTs can be easily removed by washing the Na-containing CNTs with deionized water.

In essence, this study unveils a novel atmospheric pressure PECVD process for synthesizing CNTs, enabling the production of clean CNTs suitable for applications in energy research, biomedical fields, and optoelectronics. The finding marks a significant stride towards addressing challenges in CNT synthesis and advancing their application in diverse technological fields.

Patent filled: “A Process for Single-Step Synthesis of Carbon Nanotube on Glass Substrate”, Jyotisman Bora and Arup R. Pal, (Indian Patent Application No. 202331043095)

Publication Link: <https://doi.org/10.1016/j.apsusc.2023.158988>

<https://pib.gov.in/PressReleasePage.aspx?PRID=2005547>



## Press Information Bureau Government of India

Ministry of Science & Technology

*Tue, 13 Feb 2024*

### **National Geospatial Policy Meets Government Commitment to Inclusion & Progress through Access to Locational Data & Related Services**

Demonstrating commitment towards inclusive development, the Government is implementing the National Geospatial Policy 2022 (NGP) and has substantially expanded the access and usage of spatial data, improving citizens services rapidly and increasing its reach to the remotest corners of the country.

In order to implement the NGP which was launched in 2022, the Department of Science and Technology (DST) consolidated the governance framework to liberalise geospatial data access. DST is continuously strengthening Geospatial Data Infrastructure and enterprise development. Emphasizing Atmanirbhar Bharat, it is empowering local companies to generate and utilize their own Geospatial data to enhance their global competitiveness. It encourages open standards, open data and platforms.

“The Hon’ble PM has highlighted the role of geospatial technologies in driving inclusion and progress at the UN World Geospatial International Congress. The liberalisation of the Geospatial data access through NGP has been a major step in this direction. It has transformed the way spatial data is used for reaching its benefits to the people,” said DST Secretary Professor Abhay Karandikar.

After the policy for liberalisation of data access was announced, under the visionary leadership of Shri Narendra Modi, the governance framework has been consolidated. The requirement for prior approval, security clearance, license, other restrictions on Geospatial Data and Maps within India have been dispensed with. The pre-existing clearance system has been replaced by self-certification, making access simpler.

To strengthen data infrastructure and improve the availability of and access to better location data across organizations and sectors a pan-India Continuously Operating Reference Stations (CORS) Network has been launched by the Survey of India (SoI). Besides, SoI has surveyed and mapped more than 2.8 Lakhs villages by Drone Flying Under SVAMITVA Scheme covering the states of Andhra Pradesh, Haryana and Karnataka.

Individuals, Companies and Government Agencies can now process acquired Geospatial Data, build applications, and develop solutions on it as well as use such data products, applications and solutions. Through this as well as through promotion of open standards, open data, and platforms, the NGP has encouraged enterprise development. This will help foster a thriving geospatial industry in the country with active participation from private enterprises.

The citizen-centric Policy is also empowering local companies to generate and utilize their own Geospatial data, enabling innovations and promoting technology innovation and adoption by establishing incubation centers, industry accelerators as well as Geospatial Technology Parks. It is poised to make India a World Leader in global Geospatial space with the best in the class ecosystem for innovation.

Thus, NGP with its focus on freedom to innovate and increase in access of spatial data has become a crucial tool to support National development, economic prosperity and a thriving information economy towards the PM's dream of vikshit bharat.

<https://pib.gov.in/PressReleasePage.aspx?PRID=2005538>

