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समाचार पत्रों से चयनित अंश
Newspapers Clippings

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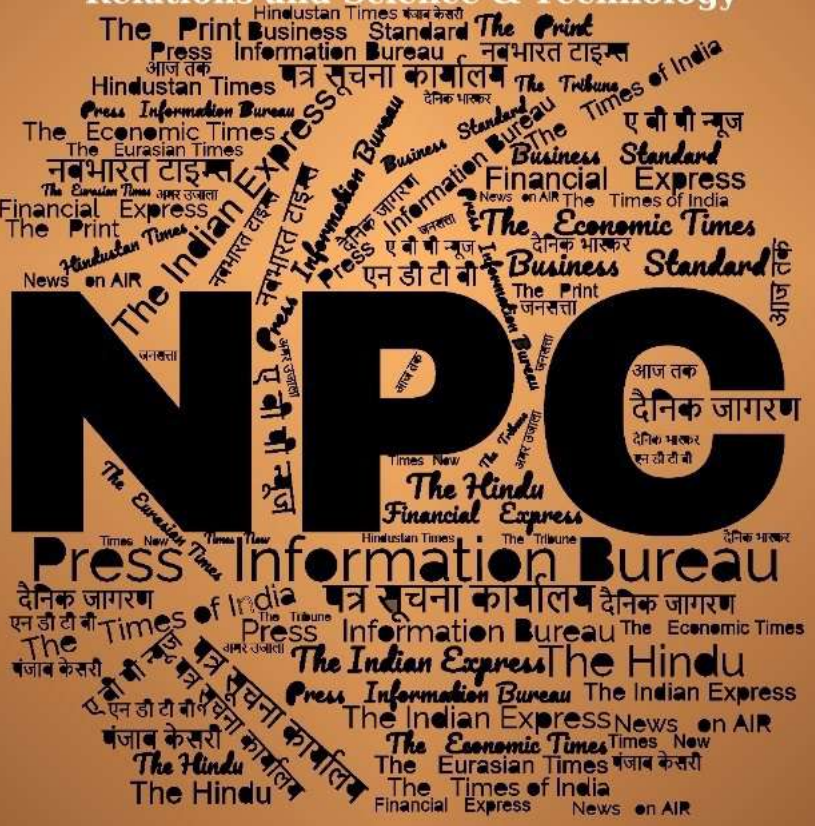

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Defence News

Raksha Mantri to inaugurate DDP's National Defence Industries Conclave 2026 on 'Advanced Manufacturing Technologies' in New Delhi

Source: Press Informtion Bureau, Dt. 17 Mar 2026

The National Defence Industries Conclave (NDIC) 2026, organised by the Department of Defence Production (DDP) on the theme *'Advanced Manufacturing Technologies'*, will be held at Manekshaw Centre, New Delhi on March 19-20, 2026. The two-day event will be inaugurated by Raksha Mantri Shri Rajnath Singh. The conclave aims to strengthen the integration of Micro, Small & Medium Enterprises (MSMEs) to India's defence manufacturing ecosystem while promoting the adoption of advanced technologies such as automation, artificial intelligence, robotics, additive manufacturing, digital twins and smart materials. The initiative aligns with the Government's vision of Aatmanirbharta in defence, and seeks to enhance India's technological capability and global competitiveness in defence production.

The conclave will bring together MSMEs, start-ups, DPSUs, private defence companies, innovators, policymakers, academia and technology providers to facilitate policy dialogue, promote innovation, and expand participation in the defence supply chain. The event is also expected to encourage industries from non-defence sectors to explore opportunities in defence manufacturing while fostering industry-academia partnerships and collaborative research and development.

As part of the event, Raksha Mantri will inaugurate an exhibition showcasing advanced manufacturing technologies and defence innovations. He will also launch a new set of challenges for the start-ups/MSMEs given by the Defence Forces and the Defence Public Sector Undertakings (DPSUs). Several important publications related to defence manufacturing and policy reforms will also be released.

Exhibition

The exhibition will feature stalls from private and public sector large defence companies which will present their initiatives and programmes for engaging MSMEs as partners and suppliers in defence manufacturing. Twenty-four (24) Indian and foreign firms will also showcase advanced manufacturing technologies. The exhibition is expected to encourage meaningful partnerships among large private defence manufacturers, DPSUs, technology providers and MSMEs, contributing to the national goal of building a self-reliant and globally competitive defence manufacturing ecosystem.

Sessions

The event will feature multiple thematic and domain sessions covering key defence manufacturing sectors. These sessions will provide a platform for policymakers, industry leaders, start-ups and technology experts to exchange ideas and discuss emerging opportunities in the sector. The discussions will also cover key areas such as indigenisation, innovation and technology development in domains including aerospace, naval systems, defence electronics, advanced materials and defence platforms.

The conclave builds upon the momentum generated by 12 State-Level MSME Conclaves & various other interactions with MSMEs organised by DDP this year. It is expected to serve as an important platform for fostering innovation, strengthening industry participation and accelerating India's journey towards self-reliance in defence manufacturing.

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HQ IDS Organizes Second Niche Technology Nexus (NTN) Seminar on 'Cognitive Spectrum Operations and Quantum Technologies' in New Delhi

Source: Press Infromation Bureau, Dt. 17 Mar 2026

The Headquarters Integrated Defence Staff (HQ IDS) conducted the Second Niche Technology Nexus (NTN) Seminar on March 16, 2026, in New Delhi. Focused on the theme 'Cognitive Spectrum Operations and Quantum Technologies,' the seminar brought together experts from the Defence Forces, academia, industry, start-ups, and research organizations to deliberate on technological advancements and innovative solutions in the areas of Cognitive Spectrum Management and Quantum Technologies.

Addressing the participants, the Chief of Integrated Defence Staff to the Chairman Chiefs of Staff Committee (CISC), Air Marshal Ashutosh Dixit emphasised on increasing importance of efficient spectrum utilisation, adaptive communication networks, and emerging quantum capabilities in modern warfare. He highlighted that Cognitive Spectrum Operations, enabled by Artificial Intelligence and advanced analytics, can significantly enhance dynamic spectrum access, electromagnetic spectrum awareness, and electronic warfare capabilities for the Defence Forces.

Emphasizing on the transformative potential of Quantum Technologies, particularly in areas such as secure communications, quantum sensing, navigation, and timing systems, Air Marshal Ashutosh Dixit underscored the critical role it can play in strengthening national Defence capabilities in the coming years. He also stressed upon the need for strong collaboration across all stakeholders to accelerate innovations and develop indigenous solutions in these niche domains.

The Second Niche Technology Nexus Seminar facilitated insightful discussions on emerging trends, operational applications, and technological challenges associated with Cognitive Spectrum Operations and Quantum Technologies. The deliberations also highlighted the importance of developing secure, resilient, and intelligent communication ecosystems to support the operational requirements of future theatre-based Defence forces.

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Colby visit to revive India-US defence ties

Source: Hindustan Times, Dt. 18 Mar 2026

MARCH 18, 2026

Colby visit to revive India-US defence ties

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WASHINGTON: Top US defence official Elbridge Colby is expected to visit India at the head of a US delegation towards the end of March to inject momentum into India-US defence relations after months of diplomatic tensions.

New Delhi and Washington will discuss speeding up pending defence acquisitions and consider reviving forums such as INDUS-X, which boosted ties between American and Indian defence companies, people familiar with the matter said, asking not to be named.

Colby, who serves as Undersecretary of War for Policy, is widely seen as one of the key figures behind the making of US defence policy in Trump's second term. This will be his first visit to India and follows closely on the heels of visits by senior US military officials including Indo-Pacific Commander Admiral Samuel Paparo and US Space Command chief General Stephen Whiting. The visit is also significant as it is being planned at a time when the war in West Asia is raging, choking supply lines of key products such as crude oil, gas, and fertiliser for India and other Asian countries.

The visit comes as New Delhi and Washington continue efforts to restore bilateral ties after a prolonged period of tension caused by trade disagreements, the India-Pakistan conflict in May and India's purchases of Russian energy. The conclusion of a framework agreement on trade in February has opened up room for a broader improvement in ties, although the agreement itself now needs to be renegotiated and finalised after the US Supreme Court ruled that the Trump tariffs were illegal.

But defence will the main focus of the visit. According to the people cited above, both

Elbridge Colby

sides will be looking for a political direction to emerge from the meetings that will set the course for the bilateral defence partnership. While the US delegation is expected to push for greater military sales, India will bat for more co-production and local manufacturing of defence equipment. The India-US defence partnership has continued to progress despite broader tensions that built up in the relationship over the course of 2025. In October, Defence Minister Rajnath Singh and US Defence Secretary Pete Hegseth signed a 10-year defence framework in an effort to further deepen bilateral security ties in the Indo-Pacific region. In November 2025, the US State Department approved a possible Foreign Military Sale to India of the Javelin anti-tank missile system and related equipment for an estimated cost of $45.7 million. It also approved a possible sale of Excalibur projectiles for an estimated cost of $47.1 million.

According to news reports, India will also consider procuring six additional P-8I maritime reconnaissance aircraft manufactured by US defence giant Boeing. The two sides will likely push forward efforts by Hindustan Aeronautics Limited and America's General Electric for the co-production of GE F414 jet engines in India.

Exploring collaborations in mutually beneficial defence technologies [such as UAV and anti-UAV systems will also likely be on the agenda, the people said. Key defence forums [such as INDUS-X — established in 2023 to increase links between US and Indian defence firms — have been largely dormant since the Trump administration took office in January 2025.

The forum's annual summit did not take place in 2025 and HT learns that there were no firm plans yet for a summit in 2026. The Pentagon's Defence Innovation Unit (DIU) and the Indian MoD's Innovation for Defence Excellence (iDEX) have not publicly announced new joint challenges for defence startups in 2025. Reviving INDUS-X and platforms similar to it will also feature in bilateral talks. Colby's visit comes at a time of some uncertainty in the US-India defence partnership in the Indo-Pacific. "We must continue to improve commercial (and other) relations with India to encourage New Delhi to contribute to Indo-Pacific security," the document reads.

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Science & Technology News

DECODING EVOLUTION OF THE LADAKH MAGMATIC ARC IN NW HIMALAYA DOCUMENTING FORMATION OF THE RANGE

Source: Press Information Bureau, Dt. 17 Mar 2026

Scientists have decoded the evolution of the Ladakh Magmatic Arc in the NW Himalaya, that acts as a around 130-million-year, record of plate tectonics that document the subduction, maturation, and collision between the Indian and Eurasian plates.

Millions of years before the Himalaya became the tallest mountains on Earth, the region that is now called Ladakh lay above an ocean called the Neo-Tethys Ocean. Below that ancient sea, giant slabs of Earth's crust slowly plunged into the mantle in a process known as subduction leading to the formation of the Ladakh Magmatic Arc (LMA). LMA is a belt of igneous rocks in the Trans-Himalaya formed in the period Jurassic to Eocene- 201.3 million years ago to 33.9 Million Year (Ma).

Scientists from the Wadia Institute of Himalayan Geology, an autonomous institute of Department of Science and Technology (DST) have now traced this slow but powerful motion of subduction that formed the LMA by probing into the chemistry of rocks. They found that it was formed by the northward subduction of the Neo-Tethyan oceanic plate beneath the Eurasian margin.

They compared geochemical and isotopic results from the pre-collisional Dras-Nidar Island Arc Complex (DNIAC), pre-to syn-collisional Ladakh Batholith (LB) that formed the part of the well-known Kohistan-Ladakh Batholith, and post-collisional mafic dykes.

The researchers observed that the long-term magmatic evolution was controlled by the Neo-Tethyan Ocean geodynamics. The pre-, syn-and post-collisional history of the Ladakh magmatic arc shows three main magmatic episodes (160– 110 Million Year (Ma), 103–45 Ma, and < 45 Ma) of distinct geochemical signatures that are closely linked to the subducting slab dynamics involving the slab, the sub-arc mantle wedge, and the crustal com-ponents.

The LMA is a long-extinct volcanic system that once produced enormous amounts of molten rock that evolved through three major phases of geological activity over tens of millions of years.

In the earliest phase, the region resembled a chain of volcanic islands rising from the Neo-Tethys Ocean. Rocks from the Dras–Nidar Island Arc Complex preserve evidence of this stage. Their chemical fingerprints suggest that the magma mainly emerged from the mantle with only a small contribution from sediments dragged down by the subducting oceanic plate.

The arc evolved as tectonic plates continued to converge. Large bodies of granite known as the Ladakh Batholith formed deep below the ground. These rocks show stronger chemical signals from continental materials, implying that sediments and crustal fragments were being recycled into the magma.

This is because the approaching collision between the Indian Plate and Eurasia began to reshape the entire system. The plate that subducted carried more sediments into the mantle, enriching the magma and changing its chemistry.

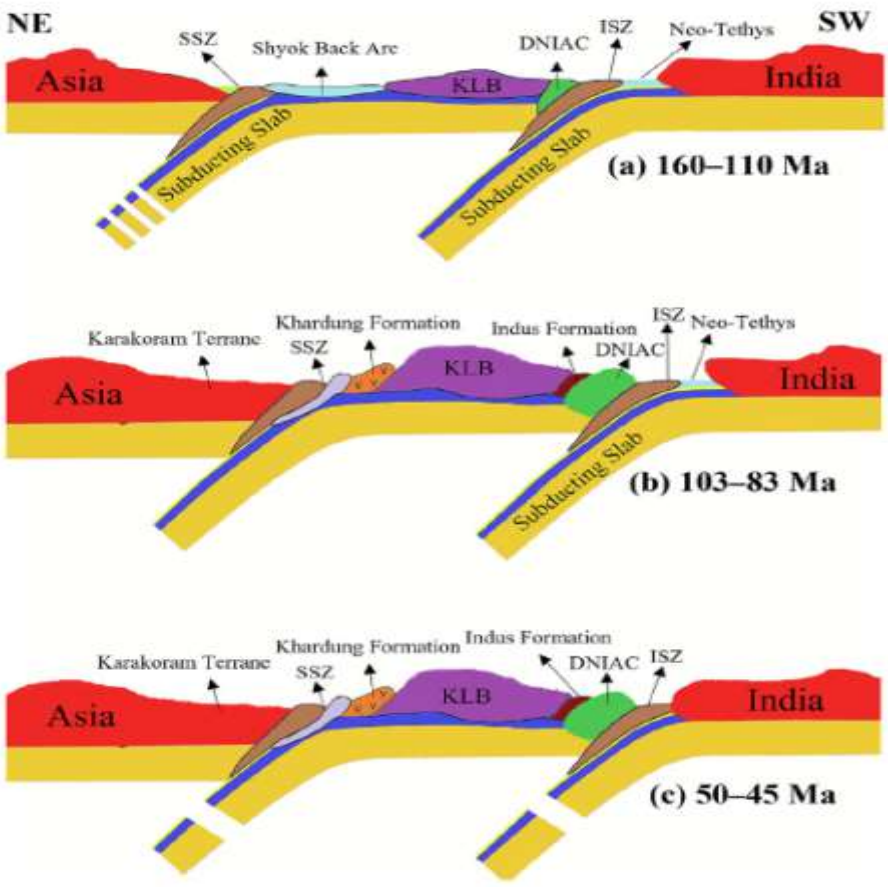

Fig: *A 2-D geodynamic model for the evolution of the DNIAC-KLB compiled and modified after Ahmad et al. (2008). Abbreviations: KLB, Kohistan Ladakh Batholith; DNIAC, Dras Nidar Island Arc Complex; SSZ, Shyok Suture Zone; ISZ, Indus Suture Zone.*

The two plates eventually collided and the Neo-Tethys Ocean closed and the dramatic collision uplifted the Himalaya. Even after the main collision, molten rock still forced its way upward through cracks, forming mafic dykes—narrow sheets of dark volcanic rock cutting through older formations.

These later magmas came from a mantle source that was already enriched by earlier tectonic processes.

They reconstructed the techtomagmatic events by measuring rare elements and isotopes such as strontium and neodymium, that record whether magma formed from deep mantle material, recycled sediments, or continental crust and hence act as a geological time machine.

The researchers concluded that the contribution from the sediment subduction is more pronounced in the KLB Kohistan Ladakh Batholith compared to the DNIAC.

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TDB-DST supports Acrannolife Genomics Private Limited, Chennai for Indigenous Manufacturing of Advanced IVD Diagnostic Kits

Source: Press Information Bureau, Dt. 17 Mar 2026

The Technology Development Board (TDB), Department of Science & Technology (DST), Government of India, has extended financial assistance to Acrannolife Genomics Private Limited, Chennai for the project titled “Indigenizing IVD Innovation: Establishing a State-of-the-Art Manufacturing Facility to Drive Scalable and Sustainable Growth of Trunome GrafAssure IVD Kits and TBFYND IVD Kits.” The project focuses on establishing an advanced manufacturing facility to support the large-scale production and deployment of indigenous in-vitro diagnostic (IVD) solutions developed by the company.

Acrannolife Genomics Private Limited is engaged in developing innovative non-invasive diagnostic technologies based on cell-free DNA and LAMP technology platforms, addressing critical healthcare needs such as infectious diseases and transplant diagnostics. Through this project, the company will establish a state-of-the-art manufacturing facility at the TANSIDCO Industrial Estate to scale up production of two key diagnostic products—Trunome GrafAssure and TBFYND.

The company’s flagship product, Trunome GrafAssure, is a laboratory-developed blood test designed for the early detection of post-transplant organ rejection and infection in patients who have undergone solid-organ transplants. The test utilizes advanced cell-free DNA analysis to provide high diagnostic sensitivity and specificity, enabling clinicians to detect signs of rejection or infection weeks before clinical symptoms appear, thereby supporting timely medical intervention and improved patient outcomes.

The second product, TBFYND, is designed to address the urgent need for rapid and accurate detection of tuberculosis, one of the most significant public health challenges in India. Both diagnostic kits are fully developed in-house with secured intellectual property and will be processed through the company’s proprietary software platform, ensuring reliable and scalable diagnostic workflows.

With support from TDB, the project will enable the creation of a dedicated platform facility for manufacturing these IVD kits at scale, strengthening India's domestic capabilities in molecular diagnostics and reducing dependence on imported diagnostic technologies.

Speaking on the occasion, Shri Rajesh Kumar Pathak, Secretary, TDB, stated that the Board remains committed to supporting indigenous biotechnological innovations that translate cutting-edge research into affordable and accessible healthcare solutions. He noted that the establishment of advanced manufacturing capabilities for diagnostic technologies will play a vital role in strengthening India's healthcare ecosystem and promoting self-reliance in critical medical technologies.

Promoters of Acrannolife Genomics Private Limited expressed appreciation for the support extended by TDB and highlighted that the assistance will enable the company to scale up production, accelerate deployment of its diagnostic kits, and expand access to innovative genomic diagnostics for patients and healthcare providers.

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Why AI literacy is a Civic compentency

Source: Hindustan Times, Dt. 18 Mar 2026

Why AI literacy is a civic competency

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For the first time in human history, we have created technology that can take over cognitive tasks and make decisions on our behalf. This shift has real consequences for human agency and autonomy: our ability to make choices freely and to carry out those choices within legal boundaries. When we, as a society, begin outsourcing the core of these abilities to AI, understanding how these systems work - AI literacy at the very basic level - becomes an essential life skill. Like reading and writing. AI literacy could soon become the gateway that allows individuals to participate meaningfully in civic society.

This takes on special significance in India, especially given our ambition to be a global AI leader as evidenced at the AI India Impact Summit. Recommender systems that suggest a movie are one thing, but automated decision making in welfare, healthcare, education and financial access is something else entirely. India has some of the world's largest digital public infrastructures, including the Public Distribution System, UPI, Digi yatra, Digi locker and Aadhar. These systems serve hundreds of millions of people. When an automated decision misidentifies a traveller at an airport facial recognition gate or denies someone food rations under the National Food Security Act, the consequences are immediate and material, which highlights how high the stakes are in the delivery of public services.

In such an environment, citizens must be able to identify when an automated decision-making system has failed, understand what the failure means, and know how to question or challenge the decision. Without this, people cannot seek correction, demand remedy, or assert their rights. AI literacy thus becomes essential for civic participation because it protects individuals from silent errors that can shape their access to essential services and assets.

But AI literacy must not be limited to technical skills alone: it must be sociotechnical. Much of the national conversation treats AI competency as a technical skill. This is valuable, but tells only part of the story. Consider the idea of explainable AI. This means that why an AI system took a decision should be explainable and though not explicitly stated, the explanation should be understandable. Today most explainability efforts in India and globally are technical. We assume that model cards that document details about an AI system or algorithmic audits are sufficient as explanations. But these are documentation tools - they provide transparency, not explanations. Explanation and understanding are socially mediated acts in that they involve people, who deal with meaning-making in language, cultural context, interpersonal and machine-human communication skills, the use of metaphors, normative ideologies, and the ability to interpret. A model card cannot help a beneficiary understand why their digital identity failed. An audit cannot substitute for a clear sentence that explains an automated decision. If AI literacy is to serve civic life, it must recognise the human, cultural, and institutional side of explanation, not just a technical one.

The National Education Policy (20220) has recognised this need for multi and inter-disciplinarity in education. We need to extend the same lens to our narratives, policies and initiatives in the realm of AI. The educational institutions and regulators in the education sector are striving for this.

AI literacy, with discourse, dialogue and debate balanced across socio-technical perspectives, must grow into a civic competency for India.

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Avionics Co to Expand into Space & Drone Tech

Source: The Economic Times, Dt. 18 Mar 2026

Avionics Co to Expand into Space & Drone Tech

Samtel eyes order book of ₹1,000-cr

Manu Pubby

New Delhi: Indian defence avionics company Samtel is expanding into space technologies and drone manufacturing and has set aside a budget of over ₹200 crore to diversify its product line over the coming years.

The company, which already makes defence electronics and is involved in indigenous programmes like the Advanced Light Helicopter and the Light Combat Helicopter, has created new teams to develop drone and anti-drone systems, as well as low earth orbit satellites.

A new drone division has been created that will focus on indigenous platforms with proprietary intellectual property. It plans to build long-endurance drones and establish long-term maintenance, repair and overhaul capabilities for unmanned systems.

New drone division has been created; it will focus on indigenous platforms

In the space sector, it plans to develop low-earth orbit and miniature satellites and the first space project is expected to begin within the next few months. "We are looking to expand in space tech, particularly in LEO and space debris clearing mechanisms... I can say that there cannot be a better time for companies in this sector than today," said Puneet Kaura, CEO and MD of Samtel, which is targeting a ₹1,000-crore order book, on the back of domestic and global markets.

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