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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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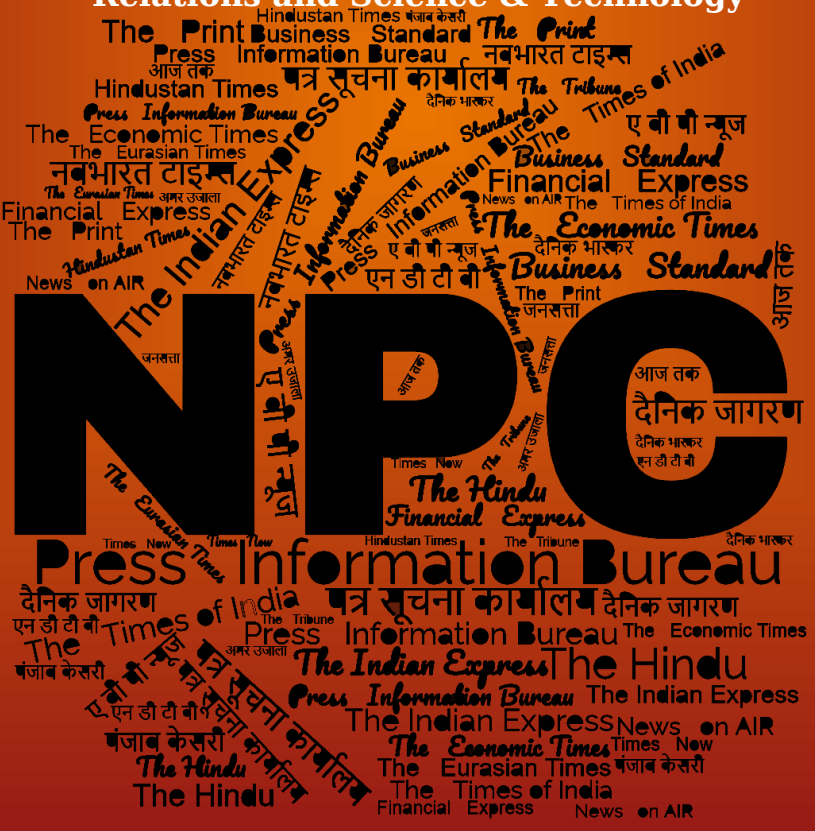

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THE TIMES OF INDIA

Mon, 22 Jan 2024

DMSRDE Prepares Indigenous Fuel for BrahMos, Testing Begins

In a major achievement towards becoming self-reliant, the Defence Materials and Stores Research and Development Establishment (DMSRDE), Kanpur succeeded in preparing indigenous fuel for supersonic cruise missile BrahMos.

The fuel will be used in the missile's liquid Ramjet engine and its testing has been started, said director and scientist of DMSRDE Dr Mayank Dwivedi during a press conference at the institute on Sunday. Currently, the fuel is exported from Russia.

Dr Dwivedi said that this fuel will not freeze even at -50 to -55 degrees temperatures. "It took over eight to nine months to prepare this indigenous fuel. It has been sent to Defence Research and Development Laboratory (DRDL) Hyderabad for testing," he added.

About other achievements of the institute, he said that anti-spike and anti-nail shoes made by the DMSRDE protect the soldiers from sharp nails hidden under the soil by naxalites. "Testing of these shoes has been also started. The shoe weighs a little more than one kg and its sole is coated with shear thickening gel and other fibres," he said. Similarly, anti-mine shoes can protect against explosion of up to 125 kg of mine have also been made and are being tested by the CRPF," he said, adding these shoes weigh three kg. "Nylon 66 fiber, which used to come from the United States till now, has also been made here. This fibre makes the uniforms of Army personnel, their tents or cloth materials more safe by protection against needles or metals," he said. Advanced riot protection suit created by the institute protects police or paramilitary personnel up to 360 degree angle, he said.

On the occasion, a life-size statue of former President of India late Dr APJ Abdul Kalam was unveiled at the campus. Foundation stone of the new building of DMSRDE was also laid on the occasion.

Dr Samir V Kamat, Secretary, department of defence research & development (R&D) chairman, Defence Research and Development Organisation (DRDO) Ministry of Defence, Kamlesh Kumar, deputy director & media coordinator DMSRDE (DRDO), and entire DRDO fraternity paid homage to Dr Kalam. The life-size brass statue, of around 220 kg, is the biggest metallic statue of Dr Kalam in the world.

Dr Kamat said, "With DRDO's current progress and future strategies our commitment remains steadfast in excellence and innovation in security and research. As we congratulate the director of DMSRDE on unveiling the statue of Dr Kalam, we should be inspired by his dedication and service."

He said, “My appeal to all DMSRDE employees is to adopt hard work and self-reliance and contribute to the improvement of defense products. .” Director, DMSRDE Dr Mayank Dwivedi informed about the contributions of Dr Kalam in missile technology and defence.

https://timesofindia.indiatimes.com/city/kanpur/dmsrde-prepares-indigenous-fuel-for-brahmos/articleshow/107040275.cms

Defence News

Defence Strategic: National/International

Press Information Bureau
Government of India

Ministry of Defence

Fri, 19 Jan 2024

Raksha Mantri Inaugurates 29 Bridges & Six Roads Constructed by BRO across Seven States/Union Territories at a Cost of Rs 670 Crore

The projects to enhance connectivity & defence preparedness and boost socio-economic development in far-flung areas

Govt considers border areas as the face of India; They’re part of our mainstream, not buffer zones: Shri Rajnath Singh

“We’re committed to border area development, keeping in view the nation’s security needs”

“New confidence of ‘New India’: Infrastructure being developed on mountains & troops deployed on hills to ensure people’s safety & help military effectively deal with adversaries”

Raksha Mantri Shri Rajnath Singh dedicated to the nation 35 infrastructure projects of Border Roads Organisation (BRO), built at a cost of Rs 670 crore, during an event organised at Joshimath-Malari Road in Uttarakhand on January 19, 2024. In his address, the Raksha Mantri commended the BRO for strengthening the border infrastructure of the country and asserted that by constructing roads, bridges etc., the organisation is connecting the far-flung areas with the rest of the nation geographically, while also linking the hearts of the people residing in remote villages with the rest of the citizens.

Shri Rajnath Singh highlighted Prime Minister Shri Narendra Modi-led Government’s approach towards border area development which, he said, completely differs from the previous governments. “Other governments did not focus on development of border areas as they considered these zones as the last areas of the country. We, on the other hand, consider border areas as the face

of India, which is why we're ensuring that world-class infrastructure is created in these zones," he said.

The Raksha Mantri stressed that connectivity is being provided to every border area in the country through roads, bridges and tunnels, describing the work as not only of strategic importance, but also pivotal for the welfare of the people residing in these regions. "People living near the borders are no less than soldiers. If a soldier protects the country by wearing a uniform, the residents of border areas are serving the motherland in their own way," he said.

Shri Rajnath Singh pointed out that the Government has changed the approach adopted by previous governments that the border areas are buffer zones between the plains and the potential adversary. He emphasised that the present government considers border areas a part of the mainstream and not a buffer zone. "There was a time when border infrastructure development was not given much importance. Governments used to work with the mentality that the people living in the plains are the mainstream people. They were worried that the developments on the border might be used by the adversary. Due to this narrow mentality, development never reached the border areas. This thinking has changed today. Under the leadership of PM Modi, our government is committed to the development of border areas, keeping in view the Nation's security needs. We do not consider these areas as buffer zones. They are a part of our mainstream," he said.

The Raksha Mantri added that the Government's approach shows a new confidence of 'New India', which will not wait for potential adversaries to reach the plains to deal with them. "We are developing infrastructure on the mountains and deploying the troops on hill borders in such a way that it is ensuring the safety of the people there, and helping the military to effectively deal with our adversaries," he said.

Referring to the large migration from border areas in Uttarakhand, Shri Rajnath Singh termed it as a matter of concern. He said the Prime Minister and the Chief Minister are taking the schemes related to infrastructure development to the last person as the aim is to cover the development journey from the seas to the borders.

The Raksha Mantri also drew attention to the increasing number of natural disasters in some border States/UTs, including Uttarakhand, Ladakh, Himachal Pradesh and Sikkim in recent years, stating that many experts believe that climate change is the reason behind these incidents. He called climate change as not just a weather-related phenomenon, but a very serious issue related to national security. The Ministry of Defence is taking this very seriously and will seek cooperation from friendly countries in this regard, he added.

Shri Rajnath Singh made special mention of the BRO's contribution in the recent Silkyra Tunnel operation launched to rescue the trapped labourers in Uttarakhand. Commending the BRO personnel, especially women workers, for their tireless hard work during the operation, he congratulated the entire team of General Reserve Engineer Force (GREF) for carrying out its duties in the time of crisis. He termed the operation, which witnessed coordinated efforts of National Disaster Response Force, BRO, Indian Air Force and state agencies, as a great example of teamwork.

The Raksha Mantri described the personnel engaged with the BRO - Armed Forces personnel, Permanent Civilian employees and Casual Paid Labourers (CPLs) - as a unique workforce, which strives together to strengthen the border framework. He highlighted the change in the mindset brought out by the Government with respect to the CPLs. "Earlier, only permanent employees were considered part of the organisation; not those hired through outsourcing or those working on a contract/casual basis. Today, this mentality has changed. We believe that it is only through the combined efforts of all can the nation move forward on the path of development. This changed mindset has had a positive impact on CPLs engaged with the BRO. Today, these CPLs believe that

the BRO belongs to them as much as it belongs to the Armed Forces personnel and permanent employees," he said.

Listing out the steps taken by the Ministry of Defence to enhance the quality of life and ensure overall well-being of the BRO personnel, including CPLs, and their Next of Kin, the Raksha Mantri stated that Prime Minister Shri Narendra Modi-led Government recognises the hard work of the people engaged with the organisation. "We have ensured Risk and Hardship Allowance for permanent civilian personnel of BRO at par with the Armed Forces. Ex-gratia compensation of casual laborers has been increased to Rs five lakh from Rs two lakh. Recently, I approved the provision of insurance of Rs 10 lakh for our CPLs. These steps will help in boosting the morale of our Armed Forces personnel, civilian employees and CPLs in BRO," he said.

Out of the 35 projects inaugurated by Shri Rajnath Singh, 29 are bridges and six are roads. Eleven (11) of them are in Jammu & Kashmir; nine in Ladakh; eight in Arunachal Pradesh; three in Uttarakhand; two in Sikkim; and one each in Mizoram & Himachal Pradesh. These projects have been constructed under challenging weather conditions at the most inhospitable terrain. Uttarakhand Chief Minister Shri Pushkar Singh Dhami was also present during the event.

The event was organised on the Dhak Bridge, a state-of-the-art 93-meter long Class 70R bridge over Dhak Nallah, which was inaugurated by the Raksha Mantri on the site. The Dhak Bridge assumes strategic importance as it will provide increased connectivity to the borders and enhance operational preparedness of the Armed Forces. It will also boost the socio-economic development of the region as it is the only road connecting villages from Joshimath to Nitipass. This will not only promote tourism, but also generate more employment opportunities.

The remaining 34 projects, which were e-inaugurated by Shri Rajnath Singh, include Ragini-Ustad-Pharkian Gali Road in J&K. It is a 38.25-km long CL-9 road, which will provide all weather connectivity between Tangdhar and Keren sector, bolstering the operational readiness of the military.

https://pib.gov.in/PressReleasePage.aspx?PRID=1997743

Press Information Bureau
Government of India

Ministry of Defence

Sat, 20 Jan 2024

Creativity, Interpersonal Skills, Emotional Intelligence & Sensitivity must to Stay Relevant in Today's Age of Machines & AI; NCC Readying Cadets with these Qualities: Raksha Mantri Shri Rajnath Singh at NCC Republic Day Camp

"Creativity, interpersonal skills, emotional intelligence and sensitivity are the qualities which will make a person relevant & employable in the present age of machines and artificial intelligence," said Raksha Mantri Shri Rajnath Singh while addressing the NCC cadets during his visit to the Republic Day Camp at Delhi Cantt. on January 20, 2024. He appreciated the NCC for equipping the cadets with these qualities and ensuring their all-round development to lead the next generation.

Sharing his insights on the rise of artificial intelligence in today's technology-driven era, Shri Rajnath Singh asserted that with time and further advancements, people will begin to focus more

on creating a career in sectors where machines cannot execute the desired tasks. He, however, stressed on the fact that even if machines could perform physical & intellectual tasks, they cannot be creative, generate consciousness and develop interpersonal skills like humans. This is where, he pointed out, the NCC is playing a crucial role.

The Raksha Mantri said: “The NCC, through its various initiatives & programmes, is ensuring holistic growth of cadets by making them physically, mentally & emotionally strong, developing their social skills and instilling the feeling of patriotism & national pride. Along with studies, it is extremely important for the cadets to imbibe these qualities. This will help them to give their 100% in the progress of the country".

On the occasion, Shri Rajnath Singh gave away the Raksha Mantri Padak and Commendation Cards to the NCC cadets for their exemplary performance and devotion to duty. This year, the Raksha Mantri Padaks were awarded to Senior Under Officer Makkatira Kalpana Kuttappa of Karnataka & Goa Directorate, and Junior Under Officer Dechen Chuskit of Jammu Kashmir & Ladakh Directorate. The Raksha Mantri Commendation Cards were given to Under Officer Amar Morang of North Eastern Region Directorate, and Senior Under Officer Jyotirmaya Singh Chauhan of Uttar Pradesh Directorate. The Raksha Mantri described the Investiture ceremony, which witnessed the participation of cadets from different regions of the country, as the perfect example of Ek Bharat Shreshtha Bharat.

The NCC cadets also presented a colourful cultural programme to the Raksha Mantri and other distinguished guests. Shri Rajnath Singh lauded the energy and enthusiasm of the cadets, terming their performance as excellent.

Earlier, the Raksha Mantri reviewed an impressive 'Guard of Honour' presented by the cadets representing the Army, Navy, and Air Force wings of the NCC. It was followed by a band performance by The Scindia School, Gwalior. He also visited the Flag Area of 17 NCC Directorates, depicting various social awareness themes. In addition, he paid a visit to the 'Hall of Fame', which houses a collection of alumni photographs, models and other achievements of NCC over the past 75 years. DG NCC Lt Gen Gurbirpal Singh and other senior officials of NCC & Ministry of Defence were present on the occasion.

https://pib.gov.in/PressReleasePage.aspx?PRID=1998080

THE TIMES OF INDIA

Mon, 22 Jan 2024

Army Gets Logistics Drones in Bid to Cut Manpower, Mules March into History

The sturdy and surefooted mules of the Army, who have been transporting crucial loads to forward border posts through treacherous routes under extreme weather and terrain conditions for over a century, are now slowly but steadily marching into history.

The Army is progressively inducting logistics drones, robotic mules, all-terrain vehicles and rough-terrain vehicles, in conjunction with the improvement in border infrastructure and better last-mile connectivity, to replace its existing animal transport fleet.

Under the overall “force restructuring and optimisation” plan under way in the 12-lakh strong Army to reduce manpower by around one lakh personnel by 2027, apart from other measures, animal transport companies and other “legacy units” are being gradually disbanded.The Army has

already reduced by 1,500 the number of its “mountain artillery mules”, who carry 120mm mortars and their ammunition to far-flung forward posts where proper roads or tracks do not exist. “The few remaining such mules will go by 2025,” an officer said.

Similarly, over 3,300 “general service mules”, who transport rations, fuel, water and ammunition, will be progressively retired by the end of this decade. “The number of animal transport companies will be cut down by about 70% by 2030,” he added.

Parallelly, in just the past one year, the Army has inked contracts worth over Rs 320 crore for 563 logistics drones of different types, including those designed to carry loads in high-altitude areas of over 12,000 feet.

“Such drones can carry out last-mile delivery to troops deployed along the borders. They will reduce the need for soldiers and porters as well as animal transport companies to carry supplies and ammunition,” the officer said.

A Rs 285-crore deal has also been signed for 100 four-legged robotic mules, capable of autonomous movement with obstruction avoidance features across different terrains at heights up to 10,000 feet. Another contract is for 300 rough-terrain vehicles, each of which can carry over 100kg of load, for almost Rs 70 crore.

The disbanding of so many animal transport companies will also lead to the closure of five mobile field veterinary hospitals that provide medical treatment to the mules. Similarly, the remount training school and depot, where mules are bred and trained, will also be closed.

“It’s quite difficult to maintain animal transport companies because the mules require proper shelters with environment control, medical treatment, transportation of voluminous hay bales and the like. The induction of technology will improve capacity and efficiency of operational logistics in forward areas,” another officer said.

The largely unsung mules, though a few of them have been awarded commendation cards over the years, certainly deserve a well-earned rest.

https://timesofindia.indiatimes.com/india/army-gets-logistics-drones-in-bid-to-cut-manpower-mules-march-into-history/articleshow/107035641.cms?from=mdr

The Tribune

Mon, 22 Jan 2024

Indian Air Force Digs into British Records to Digitise its History

The Indian Air Force (IAF) has started archiving and digitising the history of its operations, wars and warriors by digging into multiple old archival repositories in the United Kingdom, the National Archives of India in the Capital and records of its squadrons.

Project Marut, named after first indigenous jet fighter HF-24 Marut produced by Hindustan Aeronautics Limited in the 1960s, aims to collate, digitise and archive historical records of the Air Force, making them accessible for research and study. The plan is to digitise all de-classified material and make it available at the upcoming IAF Museum in New Delhi, said an official.

He said records of the period between 1947 to mid-1950s were sketchy, that’s why several retired soldiers had been approached for more details. The pre-1947 records have been obtained from the

United Kingdom. The records of 1947-48, 1965 and 1971 wars are any way declassified and available.

The project was initiated by Air Chief Marshal VR Chaudhari. In May last year, the IAF Heritage Centre was opened at Chandigarh by Defence Minister Rajnath Singh. It houses Indian Air Force's rich history and legacy, a collection of artefacts, murals and 3D dioramas, showcasing the evolution of the force since its inception. It displays the heroic deeds of the IAF and the country's technological progress in aircraft equipment.

https://www.tribuneindia.com/news/india/indian-air-force-digs-into-british-records-to-digitise-its-history-583518

Firstpost.

Mon, 22 Jan 2024

Indian Army Develops AI Chatbot to Stop their Officers from Getting Honey-trapped by Spies

The Indian Army has developed an AI-based chatbot to address the growing threat of online honey-trapping, a tactic often employed in international espionage. Inspired by instances where Indian military personnel fell victim to online deception by foreign intelligence operatives, the chatbot is designed to assess soldiers' susceptibility to such traps.

Honey-trapping has emerged as a significant concern in the digital realm, with instances of online targeting involving Pakistani intelligence operatives and Indian military personnel, as well as defense executives.

In 2020, an Indian Army soldier named Shantimay Rana was apprehended on suspicion of divulging military information to Pakistan. Allegedly, he fell victim to a honey-trap orchestrated by a Pakistani woman, leading to the leakage of details related to the movements and manoeuvres of his military unit.

Similarly, a 27-year-old BrahMos Aerospace Engineer named Nishant Agarwal was arrested in a joint operation by Uttar Pradesh and Maharashtra.

He was accused of providing technical information to a Pakistani operative and was in communication with suspected Pakistani intelligence operatives using aliases such as "Neha Sharma" and "Pooja Ranjan." Law enforcement revealed that despite the sensitive nature of his position, Agarwal had made himself vulnerable on the internet.

In 2023, Maharashtra's Anti-Terrorism Squad (ATS) detained scientist Pradeep Kurulkar, who served as the head of the Defense Research and Development Organisation's (DRDO) Research and Development Establishment Engineers Laboratory.

Kurulkar allegedly shared sensitive defense project information with an individual claiming to be Zara Dasgupta, an alleged Pakistani Intelligence Agent, as per the ATS. The DRDO scientist maintained contact with the supposed Pakistani agent through WhatsApp and video calls, even offering to disclose a "highly classified" report on the BrahMos missile project.

The newly developed AI chatbot, developed by the Territorial Army, operates on WhatsApp and engages in simulated conversations with soldiers, mimicking various scenarios. The objective is to identify individuals who may be vulnerable to deceptive tactics, enabling commanding officers to sensitize them to the risks of cyber threats.

The chatbot continuously learns from interactions, allowing for the addition of new scenarios to enhance training effectiveness. The deployment of this chatbot aligns with the Indian Army's broader efforts to strengthen cybersecurity and leverage technology for defense preparedness.

In addition to countering online threats, the Indian Army is introducing another AI chatbot called SAMBANDH, to connect veterans and Veer Naris or war widows associated with the Indian Army.

SAMBANDH, a bilingual messaging bot based on WhatsApp, aims to provide a simple platform for one-on-one communication, addressing queries, and grievances, and disseminating relevant information.

These initiatives highlight the military's commitment to enhancing awareness and resilience against evolving cyber threats while leveraging innovative solutions to foster communication and support among its community members. The adoption of AI chatbots underscores the ongoing efforts to stay ahead of technological challenges in the realm of defense and security.

https://www.firstpost.com/tech/indian-army-develops-ai-chatbot-to-stop-their-officers-from-getting-honey-trapped-by-spies-13642002.html

ThePrint

Fri, 19 Jan 2024

R-Day Preparations: Security Agencies Conduct Drill to Combat CBRNE Attacks

Counter-terrorist force NSG has conducted a multi-agency drill in Delhi to combat chemical, biological, radiological, nuclear and explosives (CBRNE) attacks through 'dirty bombs' as part of the Republic Day security preparedness, a senior officer said on Friday.

Apart from the National Security Guard (NSG), specialised teams of the National Disaster Response Force (NDRF), Delhi Police, Army, Defence Research and Development Organisation, Department of Atomic Energy, State Disaster Management Authority and other emergency services were involved in the drills that were planned by the National Disaster Management Authority (NDMA), he said.

The agencies used robotic equipment, decontamination tools and gadgets while personnel undertaking the drills wore HAZMAT (hazardous material) protection suits during the three-hour exercise held recently.

"This was part of preparing a proactive response in an integrated manner by the joint forces and agencies in response to a dirty bomb and radiological attack or outbreak. This is also known as a CBRNE attack," the officer said.

The NSG and the NDRF are two important stakeholders in this domain, another officer said.

The NSG also shared pictures of the drill on its official handle on X.

Huge security paraphernalia with armed personnel drawn from various forces are preparing to throw a tight security ring around the Kartavya Path in central Delhi for the Republic Day celebrations on January 26.

The Republic Day parade ambles down the citadel of power at Raisina Hills to the Red Fort via the India Gate showing India's military prowess and cultural richness.

https://theprint.in/india/r-day-preparations-security-agencies-conduct-drill-to-combat-cbrne-attacks/1931185/

Press Information Bureau
Government of India

Ministry of Science & Technology

Fri, 19 Jan 2024

Union Cabinet Minister Shri Kiren Rijiju Inaugurates the Young Scientist Conference at India International Science Festival 2023

Shri Kiren Rijiju, Union Cabinet Minister for the Ministry of Earth Science, inaugurated the prestigious Young Scientist Conference on January 17, 2024, at the Indian International Science Festival at Faridabad (Haryana).

Addressing a gathering of esteemed scientists, researchers, and young talents, Shri Rijiju said that India would be led by the dynamic force of young scientists. He emphasized the pivotal role of the Young Scientist Conference (YSC) in providing a platform for nurturing aspiring researchers in the realm of frontier sciences. Shri Rijiju remarked, "In the next 25 years, India will be propelled by the brilliance of young scientists." He underscored the significance of the YSC in fostering an ecosystem that connects science with the common people, asserting that the growth and quality of life in a nation depend on building a society that promotes scientific temper.

Highlighting the global challenges at hand, Shri Rijiju expressed confidence that the Indian young scientists would play a crucial role in addressing issues such as climate change and global warming. He envisioned them steering the nation towards a sustainable future through their innovative solutions.

The Young Scientist Conference serves as a vibrant platform, bringing together young postgraduates, research scholars, postdocs, academicians, scientists, entrepreneurs, and innovators under the age of 45. Participants are drawn from diverse backgrounds, including R&D laboratories, academic institutions, and industries. The conference aims to facilitate the exchange of experiences, ideas, and discussions that contribute to the country's scientific vision. The Science Media Communication Cell (SMCC) of CSIR-NIScPR coordinated the media publicity and visibility of the Young Scientist Conference for print, electronic and social media platforms.

https://pib.gov.in/PressReleasePage.aspx?PRID=1997970

Press Information Bureau
Government of India

Ministry of Science & Technology

Fri, 19 Jan 2024

India International Science Festival (IISF) Shines Bright on its 3rd Day

ISRO Chief Shri S. Somanath’s inspirational speech went viral on social media platforms

India International Science Festival on its 3rd day witnessed interesting events including many programs, panel discussions, workshops and water bottle rocket launching activity. The day three of the India International Science Festival (IISF) 2023, held at DBT THSTI - RCB Campus, Faridabad (Haryana) witnessed a continued enthusiasm and participation from students, young researchers, scientists, and the general public. The mega science festival, inaugurated on January 17th, 2023 has consistently garnered overwhelming response, fostering a platform for scientific exchange and learning. On 18th January 2024 Shri S. Somanath, Chairman ISRO addressed the school students in the Student Innovation Festival - Space Hackathon 2023. Shri Somanath motivated students to build satellites for scientific explorations and inspired them to become scientists when they grow up. His address has created a large impression across social media. His videos have crossed 40,000+ impressions and views on social media platforms. Brief detail of various activities organised on 19 january 2024 is given here.

Student Science Village (SSV)

On Day-3, the Student Science Village event caters to active engagement between students and esteemed scientists like Professor Narinder Mehra, Vice President of the Indian National Science Academy (INSA). Prof. Mehra shed light on organ transplantation, providing valuable insights into life-saving medical procedures. The day also featured activities like Foldscope making, hands-on experiments in Physics, Chemistry, and Biology, Inspire Manak Expo, and Mega Science Expo, creating a dynamic learning environment for students.

Face to Face with New Frontiers of Science

Around 2000 students from Palwal district of Haryana, attended the Face to Face with New Frontier of Science and Technology event. Dr. D K Singh from ISRO discussed "Stellar Odyssey: Human Presence in Space," while Prof. Nagata Kyosuke, President of Tsukuba University, shared advancements in pharma through virology and molecular biology.

Vigyanika : Science Literature Festival

Vigyanika event featured a panel discussion on Creative Science Communication through Films, Podcasts, & Social media, with prominent speakers discussing the intersection of creativity and scientific accuracy. A drawing and quiz competition, engaging 105 students and 12 teachers from 4 different schools, added a hands-on dimension to the learning experience

Startup Technologies and Innovation B To B Meet

Day 3 of the Startup, Technology, and Innovation B2B Meet organised talks by renowned entrepreneurs, workshops on startup success, and strategies for pitching and raising funds. The event emphasized the essential elements in achieving startup success.

Women Scientists and Entrepreneurs Conclave

The Women Scientists and Entrepreneurs Conclave featured insightful sessions on breaking barriers in STEM, modern lifestyles rooted in ancient wisdom, and career opportunities and networking. The event concluded with a valedictory session focused on the importance of constructive involvement of men in sharing burdens and caregiving.

Science Through Games & Toys

The Games and Toys event offered a diverse range of sessions, including innovative teaching methods, workshops on effective teaching using mathematics and science-based sports toys, and activities like "Fun with Flying Things" based on aerodynamics. The day concluded with a STEAM show and a workshop on making science subjects interesting through SCIToon.

Education for Aspiring India : National Science Teachers Workshop

The National Science Teachers Workshop continued with teachers experimenting with science and developing innovative teaching strategies. Topics covered included Prism Dispersion, Electrolysis, Enzyme activity demonstration, and the role of Carbon dioxide in Photosynthesis.

Science & Technology Media and Communicators Conclave

The second day of the S&T Media and Communicators Conclave began with a panel discussion on "Enhancing S&T Representation in Media," chaired by Prof. K.G Suresh. Dignitaries were honored by Prof. Ranjana Aggarwal, setting a ceremonial tone. The discussion, featuring insights from Archita Bhatta, Dr. Pallav Bagla, Shri Vijay Joshi, and Shri Raj Chengappa, highlighted the importance of simplicity in science communication. The event also included a panel on "Science through Cinema," exploring the intersection of science and film, emphasizing the creative role of AI in filmmaking. The event affirmed its role as a vital platform for cross-disciplinary dialogue. The event concluded with a valedictory session.

Student Innovation Festival - Space Hackathon 2023

On Day 3, the Space Hackathon featured talks on India's upcoming space launches, the government-funded space ecosystem, and the role of innovation in bringing positive changes to the community.

Young Scientist Conference

Prof. Ashutosh Sharma, President, Indian National Science Academy addressed young researchers, introducing the concept of "Vigyan Karmayogi" and various fellowships to support and recognize young scientists. The conference delved into the realm of scientific journals and publications, encouraging young researchers to publish in Indian scientific journals.

The 3rd day of the India International Science Festival showcased a rich tapestry of events, blending science, technology, innovation, and collaboration. The overwhelming response and active participation reaffirm the festival's role as a catalyst for scientific curiosity and exploration. As the festival progresses, it continues to inspire and ignite the spirit of inquiry and discovery, creating a lasting impact on the scientific landscape. The science festival is like a unique experiment of science and public engagement in festive spirit.

The Science Media Communication Cell (SMCC) of CSIR-NIScPR is coordinating the media publicity and visibility of the India International Science Festival 2023 for print, electronic and social media platforms.

https://pib.gov.in/PressReleasePage.aspx?PRID=1997971

Press Information Bureau
Government of India

Ministry of Science & Technology

Sat, 20 Jan 2024

India International Science Festival (IISF) 2023 Concludes with the Hope of Viksit Bharat in Amrit Kaal through the Contribution of Science and Technology

The Day 4 of the India International Science Festival (IISF) 2023 was marked with the gracious presence of Shri Manohar Lal Khattar, Chief Minister of Haryana. The mega science festival,

which is being organized from January 17 to 20, 2024, has brought together the brightest minds in science and innovation, fostering a spirit of exploration and collaboration. It continues to receive overwhelming response, providing a platform for scientific exchanges and learning.

In his special address, Shri Manohar Lal Khattar emphasized the boundless benefits that science offers to society without any discrimination. Recognizing the importance of science in shaping the future, he expressed his commitment to further integrate science with society through various initiatives of the state S&T council. Shri Khattar announces the plans of the state government for the development of a state-of-the-art Science City in Faridabad (Haryana) spanning across 50 acres. This ambitious project aims to create a dedicated space for scientific exploration, learning, and engagement, fostering a culture of curiosity and discovery among the public, especially children.

In his announcement, Shri Manohar Lal Khattar highlighted the importance of nurturing a scientific temperament among the youth and creating an ecosystem that encourages innovation and research. The Science City is envisioned as a dynamic center that will play a pivotal role in promoting scientific awareness, fostering a love for learning, and inspiring the next generation of scientists. He said that the country is marching ahead under the leadership of our Prime Minister Shri Narendra Modi in all walks of life including science and technology.

Shri Khattar highlighted the crucial role that the public engagement platforms like IISF play in fostering a scientific temperament among citizens. He emphasized that the festival serves as a bridge between the scientific community and the general public, demystifying complex concepts and showcasing the transformative power of science.

Dr Abhay Karandikar (Secretary, DST), Shri Shivkumar Sharma (National Organizing Secretary, Vijnana Bharati), Dr. Arvind C Ranade (Chief Coordinator, IISF 2023), Dr. PS Goel (Chairman, National Innovation Foundation) was also present in the closing ceremony of IISF 2023. Dr Abhay Karandikar remarked that IISF is meant to inspire, motivate young students and innovators so that by looking at the progress of S&T that country made during the last several years, these young innovators and students can contribute to our country's S&T progress to make it global leader during next 25 years in Amrit Kaal. Dr. Ranade proudly announced that around 5000 picosatellites that were made by school students at the IISF Challenge event have created history. Some of the eye-catching activities of day four are as follows.

Face To Face With New Frontiers Of Science & Technology

On the last day of IISF 2023, an interactive session with students was organised at Face To Face With New Frontiers Of Science & Technology. International experiences were shared by H.E. Madam Ruziah Binti Shafei, Deputy Secretary General, Ministry of Science, Technology and Innovation (MOSTI), Government of Malaysia on Malaysia’s S&T Development: Pioneering Advancements and Global Opportunities; and on One Health Approach: An Integrated Approach on Sustainable Ecosystems by Dr. Omosa Ochwang’i, University of Nairobi, Kenya.

Education For Aspiring India - National Science Teachers Workshop

Teachers Workshop entered its fourth day with an insightful panel discussion chaired by Prof. Nomesh Bolia from the Indian Institute of Technology (IIT), Delhi. The discussion, titled "Indian Knowledge System: Ancient to Aspiring India. Dr. Venkatnarayan Ramanathan emphasized the importance of sustainable science in the contemporary world and advocated for a reduction in consumerism. He highlighted the two fundamental components of science, namely observation and experience, citing examples like predicting groundwater levels through tree observation as a hands-on learning experience for children.

Additionally, a plenary talk on the "Role of Government Institutions: Strengthening Science Education through Schemes" was organized, chaired by Dr. Abhay Jere, Vice Chairman of the All India Council for Technical Education. Dr. Namita Gupta, Head of the INSPIRE Programme at DST, discussed the work undertaken to unravel the mysteries behind various results embedded in ancient teachings.

Young Scientists Conference

On the Day 4 of the Young scientists conference (YSC), in the Interactive Session on Science Technology and Innovation in North East, Jammu & Kashmir, Leh and Ladakh, various prospects for making Samridh Bharat in Amrit Kal were explored. Prof Surendra K Mehta, VC, University of Ladakh informed the audience that the university of Ladakh is the only university of ladakh and is a very unique place for research especially climate change, biodiversity, etc. He also talked about the upcoming government solar energy facility in Ladakh region. Prof Bolin K Konwar Nagaland, former VC of Nagaland Central University talked about how research is helping in developing the urban economy. Prof. Gowhar Basheer Waqil, Director, Institute of Technology, University of Kashmir and Dr. Shweta Yadav, University of Jammu were also present as panellists.

New Age Technology Show

On the Day 4 of New Age Technology Show, a panel discussion on quantum technologies was organised and moderated by Dr Akhilesh Gupta, Secretary, SERB and Senior Advisor, DST. Dr. Sudhir Ranjan Jain, Adjunct Professor, UM-DAE Centre for Excellence in Basic Sciences, Mumbai; Prof. Urbasi Sinha, Raman Research Institute, Bangalore; Mr. Manish Modani, Principal Solution Architect, NVIDIA, Bangalore and Dr. A Robert J Ravi, DDG, DoT, GoI (TBC) participated as panellists. In another session an interactive talk on Cyber Security was also organised. In the valedictory session of the event, Prof Abhay Karandikar, Secretary DST announced that the pre proposal has been invited from academia institutions/ R&D Labs to submit innovative pre-proposals in consortia mode aligned with objectives of National Quantum Mission (NQM) to setup T-Hubs in Quantum Computing, Quantum Communication, Quantum Sensing & Metrology and Quantum Materials & Devices.

Startup, Technology And Innovation B To B Meet

Startup, Technology And Innovation B To B Meet invited a distinguished Panel of Investors on to the stage for Start Up - Investors Meet on its last day. It was an excellent opportunity for the Start ups to pitch their novel ideas and Innovations to the Investors. Startups like Arc Robotics, MyWays.ai pitched their Start Up ideas. The Meet was succeeded by the arrival of the Distinguished Chief Guest ,Prof. Abhay Karandikar(Secretary, Department of Science and Technology) and his facilitation. Addressing the Startup B2B Meet, Mr.Karandikar remarked that he's hopeful for the future of young innovators that they'll be able to Create Jobs and contribute to the economy. He also announced that 10% of the funds to be allotted to the upcoming ANRF would be dedicated to innovation and startups.

Valedictory session

The India International Science Festival (IISF) 2023 concluded with a significant valedictory session on January 20, 2024. Dr. P S Goel, Chairman of NIF – India, expressed appreciation for all contributors, highlighting the integration of innovation. Prof. Sudhir Bhaduria, Secretary General of Vijnana Bharati (VIBHA) India, delineated the vision for this year's event. Noteworthy moments encompassed Dr. Arvind C Ranade, Chief Coordinator's presentation, revealing a record-breaking turnout with more than 13,000 delegates and 25,000 students. The ceremony also solidified international collaborations through the signing of MoUs.

During the valedictory session, winners of the Student Innovation Festival-Space Hackathon 2023 were announced, achieving remarkable feats in the world record category. Awards were conferred upon exceptional pavilions, acknowledging excellence in conceptualization, technology, interactivity, and special mentions.

Dr. Akhilesh Gupta, Senior Advisor, DST, and Dr. Rajesh S. Gokhale, Secretary, DBT also the gathering. Ms. A. Dhanalakshmi, Joint Secretary, DST proposed he vote of thanks. Ms. Dhanalakshmi appreciated the Science Media Communication Cell (SMCC) of CSIR-NIScPR to actively coordinate and ensure media publicity and visibility of the whole IISF2023.

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Press Information Bureau
Government of India

Ministry of Science & Technology

Sat, 20 Jan 2024

Science, Technology, and Innovation Exhibition of IISF 2023

With the closing ceremony of IISF at the grand A.P.J. Abdul Kalam Hall, where the Chief guest was Shri Manohar Lal Khattar, Chief Minister of Haryana. The Minister announced the development of a “Science City” in the city of Faridabad, Haryana. He also visited the mega science expo where countless commendable innovations were displayed. Dr. Jitendra Singh, Union Minister of State for the Ministry of Science & Technology visited the mega expo at the inaugural day, the first day of the India International Science Festival (IISF) 2023.

More than 100 stalls were installed at the expo where 20 stalls were from the private organisations, while more than 80 stalls were from the government organisations. There were around 1 lakh visitors in the exposition. Among the major organisations who showcased their scientific inventions and innovations include Indian Institute of Technology (IIT), Defence Research and Development Organisation (DRDO), Indian Space Research Organisation (ISRO), Ministry of Earth Sciences (MoES), and Department of Science and Technology (DST) and its autonomous bodies.

The displays were clearly justifying the theme of the ninth edition of IISF, “Public Outreach in Amrit Kaal” reflecting the Nation’s contemporary position in the new era in the field of Science and Technology. It proved that our country is young and enthusiastic determined to achieve a lot.

Among the many displays, Ram Mandir model was the centre of attraction of the exhibition due to its inauguration ceremony on January 22, 2024. The unique design including the “Surya Tilak,” highlighting the scientific prowess in the monument was given by the CSIR lab, Central Building Research Institute (CBRI) located at Roorkee, Uttarakhand.

Another treat to the eyes was the "Pollution-Free Viksit Gaon, Viksit Bharat" at the expo. It envisions a sustainable and developed rural community contributing to the overall progress of India. It was a CSIR initiative.

National Institute of Plant Genome Research (NIPGR), the autonomous institute of Department of Biotechnology (DBT), Government of India. The institute focuses on high quality plant biology research and training the next generation of plant biologists. One of its recent major achievements showcased include “ADVIKA,” a novel superior drought tolerant, climate smart chickpea variety.

Participants watching live experimental set-up in International Centre for Genetic Engineering and Biotechnology (ICGEB), New Delhi stall at the expo.

Several awards under different categories were given to the participants at the mega science expo. For the Best Conceptual Pavilion, Raman Research Institute (RRI) was awarded the first prize. Department of Science & Technology, Govt. of Gujarat was awarded the second prize, and Technology Development Board (TDB) stood third.

In the category of the Best Technology Pavilion, Defence Research & Development Organisation (DRDO), Ministry of Defence stood first. BrahMos Aerospace got the second prize.

For the Best Interactive Pavilion, National Centre for Polar and Ocean Research (NCPOR), Ministry of Earth Sciences (MoES) received the first prize, and Indian Space Research Organisation (ISRO), Department of Space (DoS) got the second prize.

In the category of the Jury Special Mentioned Award, Indian Council of Medical Research got the first prize (ICMR), Amity University received the second prize.

For the Best Pavilion in the Expo, the Council of Scientific and Industrial Research (CSIR) stood first, and Department of Biotechnology stood in the second category, Department of Science and Technology received the third prize.

The Mega science exposition was covered by the Science Media Communication Cell (SMCC) at CSIR-National Institute of Science Communication & Policy Research (NIScPR). It coordinated and facilitated the media publicity of the India International Science Festival (IISF) 2023. The key objective of the SMCC is to disseminate and showcase R&D breakthroughs and scientific achievements of India on various platforms of media.

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Press Information Bureau
Government of India

Ministry of Science & Technology

Sun, 21 Jan 2024

Call for Pre-proposals for Setting T-Hubs Launched under National Quantum Mission

A milestone in the journey of the National Quantum Mission (NQM) was reached with the launch of the call for pre-proposals for setting up Thematic Hubs (T-Hubs) launched by Secretary, Department of Science and Technology (DST) Professor Abhay Karandikar on January 20, 2024, on the sidelines of the 9th edition of the India International Science Festival.

The preproposal invites academia institutions/ R&D Labsto submit innovative pre-proposals in consortia mode aligned with objectives of the National Quantum Mission (NQM) to setup T-Hubs in Quantum Computing, Quantum Communication, Quantum Sensing & Metrology and Quantum Materials & Devices.

“The launch of the pre-proposal is an important step in the National Quantum Mission approved by the Cabinet last year. With a brainstorming session with researchers to identify expertise, strengths and opportunities scheduled soon, the National Quantum Mission is expected to see substantial progress in the next few months. The NQM will also work in collaboration with industry and

startups to translate research to deployable technologies. The Department of Science and Technology (DST) will provide necessary resources for success of submission and to facilitate researchers so that India evolves to a competitive position at the international level," said Secretary DST Professor Abhay Karandikar, while launching the call.

He highlighted that the spirit of collaboration in the mission could help make a meaningful impact at the national and global level.

The pre-proposals should demonstrate the quantum technologies to advance the application of quantum science and technology. The highlights of the call as well as other detailswere elaborated upon by Senior Adviser DST and Secretary SERB Dr Akhilesh Gupta.

Recently at the 1st meeting of Mission Governing Board (MGB) of National Quantum Mission (NQM) the committee had approved the decision to invite Call for Pre-proposals for inviting proposals for setting up of four technology hubs under NQM in consortia format.The launch of the pre-proposals was undertaken as a follow up to the approval, given the centrality of the NQM.

The Union Cabinet approved the National Quantum Mission (NQM) on 19th April 2023 being implemented by DST with a total outlay of Rs.6003.65 Crore for a period of eight years. The Mission aims to seed, nurture and scale up scientific and industrial R&D and create a vibrant & innovative ecosystem in Quantum Technology (QT). This will accelerate QT led economic growth, nurture the ecosystem in the country and make India one of the leading nations in the development of Quantum Technologies & Applications (QTA).

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