2020

समाचार पत्रों से चयित अंश

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ONTENT

S. No.	TITLE	Page No.
	COVID-19: DRDO's Contribution	**1-5**
1.	DRDO offers tech from LCA Tejas oxygen system to hospitals fighting Covid-19	1
2.	DRDO offers oxygen plants to hospitals in far-flung areas	2
3.	Defence Minister inaugurates first of its kind mobile Lab for COVID-19 sample collection	3
4.	We are ready.. You? (Telugu News)	4
5.	Defence Minister launched DRDO mobile testing lab	5
	DRDO Technology	**6-7**
6.	Can AMRAAM be Integrated into LCA-Tejas Mk1A?	6
	COVID-19: Defence Forces Contribution	**8-8**
7.	No intention of deploying Army abroad to fight Covid-19: India	8
	Defence Strategic: National/International	**9-13**
8.	Def exports: Let's 'buy Indian' ourselves first	9
9.	Armed forces told to take optimisation measures amid Covid-19 crisis	10
10.	Rajnath asks top military commanders to assist in the revival of the economy, post lockdown	11
11.	Defence Minister Singh reviews overall preparedness of armed forces	12
12.	Ban on new arms deals in India, know why	13
	Science & Technology	**14-18**
13.	Inventors formulate material for more powerful lasers	14
14.	लॉकडाउन में भी बंद कमरे में ट्रेनिंग ले रहे हैं 'गगनयान के 4 भारतीय योद्धा'	15
15.	ISRO में मानव अंतरिक्ष कार्यक्रम के लिए मांगे गए प्रस्ताव	16
16.	ISRO invites ideas for bolstering human space flight programme	17
17.	Gaganyaan: ISRO to develop technologies for India's first manned mission to space	18
	COVID-19 Research	**19-20**
18.	Kerala university launches Covid-19 search engine for India, will let experts find latest research material	**19**
19.	कुष्ठ प्रभावित देशों में कम सामने आए कोरोना वायरस के मामले, रिसर्च में हुआ दावा	20

COVID-19: DRDO's Contribution

THE WEEK

Sat, 25 April 2020

DRDO offers tech from LCA Tejas oxygen system to hospitals fighting Covid-19

The system generates oxygen directly from the air and can be useful in remote areas

By Anantha Krishnan M

A spin-off from a critical technology that would aid future pilots of the Indian Air Force (IAF) flying the Light Combat Aircraft (LCA) Tejas with a non-stop supply of oxygen while undertaking long-endurance missions is now being offered to hospitals combating the coronavirus.

This product to fly out from the hangars of the Defence Research and Development Organisation (DRDO) is in the form of a Medical Oxygen Plant (MOP), is an offshoot technology from the Onboard Oxygen (OBOX) generation system being developed for the Tejas.

The naval Tejas fighter taking off from the ski-jump with Derbys (mounted on the inner-wing hardpoints) and R-73s (painted white, on outer-wing hardpoints) | Twitter handle of DRDO

The MOP technology is developed by Defence Bioengineering and Electromedical Laboratory (DEBEL), a life sciences wing of DRDO situation in Bengaluru's C.V. Raman Nagar.

MOP utilizes pressure swing adsorption (PSA) technique and molecular sieve technology to generate oxygen directly from atmospheric air.

The OBOX technology for Tejas being developed by DEBEL has been approved by the Centre for Military Airworthiness and Certification (CEMILAC), an agency mandated to certify the products being transferred to a Coimbatore-based firm.

"This plant will be useful to provide oxygen supply during corona pandemic in hospitals in urban and rural areas. The installation of MOP helps in avoiding hospital's dependency of scarce oxygen cylinders," says a DRDO official monitoring the work.

Ever since the coronavirus outbreak, the scientists at DEBEL have been working on developing various products for the healthcare sector.

Masks and sanitizers developed by the lab have already been distributed in bulk, while work on affordable ventilators has reached advanced stages of completion.

Several benefits

Scientists say that the MOP can be used extensively at hospitals situated at high altitude and inaccessible remote areas.

"There are several benefits including reduced logistics of transporting cylinders to these areas, low cost, continuous and reliable oxygen supply available round the clock. The facility can also be used for filling the cylinders in addition to direct installations at the hospitals," says a scientist.

DRDO has already used this technology to install oxygen plants at some of the military hospitals and establishments in the northeast and in the Leh-Ladakh region.

The first such plant set up in Tawang is operational since 2017 and it complies with international standards like ISO 1008, European, US and Indian pharmacopoeia.

Unique features

The MOP has high reliability, full in dependency with automation and reduces logistics. This safe technology needs only minimum maintenance and can be operated at low cost. It is free of oil and produces oxygen instantaneously from ambient air and works round-the-clock.

The electric oxygen compressor can charge the cylinders up to 200 bar. It has stored oxygen supply for transient power failures and boasts of low energy consumption. It can also be operated via remote control.

The MOP contains an air compressor, air dryer, oxygen generator and a compressor. Each plant can fill up to 60 47-litre (water capacity) cylinders a day and operate round-the-clock.

"The oxygen capacity depends on the pressure of filling, which is about 150-200 bar. The industry holding the transfer of technology can ramp up its production and can install up to 20 plants in five weeks," says a scientist.

The system can cater to 60 patients at a flow rate of 5 LPM (litres per minute) and can charge up to 60 cylinders per day. The capacity can be varied as per the hospital requirement. The plant is designed for a capacity of 18 NM3 per hour (NM3 or normal meter cubed per hour is the unit to measure the gas flow rate).

For the Tejas OBOX, the scientists have used a zeolite-based technology and the system will undergo trials soon.

"We have completed all ground-based trials of OBOX on the test rigs and the pilots are satisfied with the results. It will now be integrated on one of the test variants of Tejas for flight trials. IT has been already cleared by the Regional Centre for Military Airworthiness," says an official.

The Ministry of Civil Aviation and Indian Railways are among the several prospective users who have shown interest in DEBEL's MOP.

(The writer is an independent aerospace and defence journalist, who blogs at Tarmak007 and tweets @writetake. This article was originally published in OnManorama)

https://www.theweek.in/news/india/2020/04/24/drdo-offers-tech-from-lca-tejas-oxygen-system-to-hospitals-fighting-covid-19.html

hindustantimes

Sat, 25 April 2020

DRDO offers oxygen plants to hospitals in far-flung areas

The technology is in service with the army which has installed oxygen plants at some of its facilities in Ladakh and the North-east

By Rahul Singh

New Delhi: In its latest offering to combat the coronavirus disease (Covid-19), the Defence Research and Development Organisation (DRDO) has stepped forward to provide medical oxygen plants to hospitals in far-flung areas to generate their own oxygen supply, two government officials said on Friday.

The oxygen generating system is an offshoot of a critical system on board the homegrown Tejas light combat aircraft and it utilises "the pressure swing adsorption technique and molecular sieve technology" to generate oxygen directly from atmospheric air, said the first official cited above.

"The oxygen plants will help provide medical-grade oxygen supply during the corona pandemic in hospitals in urban, rural and far-flung areas. The installation of these plants will reduce the

dependence of hospitals on oxygen cylinders. They will be of great help in high altitude and inaccessible remote areas," the official said.

The technology has been approved by Centre for Military Airworthiness and Certification, a regulatory body under DRDO.

The oxygen generator system has been developed by Bengaluru-based Defence Bioengineering and Electro-medical Laboratory (DEBEL, a DRDO unit) and the technology has been transferred to a Coimbatore-based private firm.

The technology has been approved by Centre for Military Airworthiness and Certification, a regulatory body under DRDO. (Sanchit Khanna/HT PHOTO)

The firm has the capability to install four plants in two weeks, 20 in five weeks and production can be ramped up if required, said the second officer.

"The benefits include reduced logistics of transporting cylinders to remote areas. The plants will ensure low cost, continuous and reliable oxygen supply round the clock," he said.

The technology is in service with the army which has installed oxygen plants at some of its facilities in Ladakh and the North-east. The plants can also be used for the filling up oxygen cylinders. Each plant can fill 47 litre (water capacity) cylinders at the rate of 60 per day, he said.

The DRDO is among the several government agencies that have been at the forefront of the fight against the coronavirus disease, having developed several products to combat the pandemic including ventilators, personal protective equipment (PPE) kits, large area sanitisation solutions and Covid-19 sample collection kiosks.

Defence minister Rajnath Singh on Thursday unveiled, via video conference, a mobile virology research and diagnostics laboratory (MVRDL) that will speed up coronavirus disease screening and other Covid-19 research and development activities. The MVRDL has been developed by the DRDO, Hyderabad-based Employees' State Insurance Corporation hospital and the private industry.

The DRDO last week shifted a key testing facility for carrying out quality checks on PPE kits from Gwalior to New Delhi to cut down delays and ensure faster delivery of the safety gear to healthcare workers battling Covid-19.

https://www.hindustantimes.com/india-news/drdo-offers-oxygen-plants-to-hospitals-in-far-flung-areas/story-wZpmIVcTIgJnYKVfMyggxM.html

newKerala.com
NEWS INFORMATION ENTERTAINMENT

Sat, 25 April 2020

Defence Minister inaugurates first of its kind mobile Lab for COVID-19 sample collection

The Union Defence Minister Rajnath Singh on Thursday inaugurated the first of its kind mobile lab for COVID-19 sample collection. The minister dedicated the lab to the country via video conference.

The lab has been developed by Defence Research and Development Organization (DRDO) in collaboration with ESIC Medical College and Hospital, Hyderabad with the permission of Indian Council of Medical Research (ICMR) and Telangana government, read an official statement.

Speaking on the occasion, the Defence Minister appreciated the efforts of DRDO and ESIC in setting up of this Bio-Safety Level 2 and Level 3 lab in a record time of 15 days which usually takes about six months time.

He further said this testing facility can process more than 1,000 samples in a day and will enhance the country's capabilities in fighting the coronavirus.

It will be the first of its kind facility in the country for COVID-19 and other related testing and research purposes.

The design of Mobile 'BSL-3 VRDL' Lab has been developed by DRDO scientists whereas specification of the lab has been given by ESIC Medical College and Hospital, Sanathnagar, Hyderabad. The project has been executed and constructed by three industry partners of DRDO, read the statement.

https://www.newkerala.com/news/2020/72293.htm

ఆంధ్రజ్యోతి

Sat, 25 April 2020

We are ready.. You?

DRDO's offer to industrialist

మేం రెడీ.. మీరు?

పారిశ్రామికవేత్తలకు డీఆర్‌డీవో ఆఫర్

ఆంధ్రజ్యోతి ఇంటర్వ్యూ

2

సాంకేతికత అందించడానికి మేం సిద్ధం

తీసుకోవడానికి పరిశ్రమలు సిద్ధమేనా?

వీలైనంత త్వరగా ఉత్పత్తి ప్రారంభించాలి

శానిటైజర్ల నుంచి వెంటిలేటర్ల వరకూ

మొత్తం 23 టెక్నాలజీలు అభివృద్ధి చేశాం

'ఆంధ్రజ్యోతి'తో డీఆర్‌డీవో చైర్మన్ సతీశ్‌రెడ్డి

రక్షణ పరిశోధన, అభివృద్ధి సంస్థ (డీఆర్‌డీవో) అనగానే చాలా మందికి క్షిపణులు, ఆధునిక యుద్ధ వ్యవస్థలు గుర్తుకొస్తాయి. కానీ, దేశంలో కరోనా వ్యాప్తి మొదలైన తర్వాత.. ఈ వైరస్‌పై కూడా డీఆర్‌డీవో యుద్ధం ప్రకటించింది. కరోనాను దీటుగా ఎదుర్కోవటానికి 29 టెక్నాలజీలను అతి తక్కువ సమయంలో అభివృద్ధి చేసింది. అంతేకాదు.. ఉత్పత్తి కోసం వాటిని ప్రైవేట్ సంస్థలకు అందించింది. "మన పరిశ్రమలకు ఇది ఒక మంచి అవకాశం. మా వద్ద ఉన్న టెక్నాలజీలను ఇవ్వటానికి మేము సిద్ధంగా ఉన్నాం. ఉత్పత్తి చేయటానికి పరిశ్రమలు సిద్ధమేనా?" అని ప్రశ్నిస్తున్న డీఆర్‌డీవో చైర్మన్ డాక్టర్ సతీశ్‌రెడ్డితో 'ఆంధ్రజ్యోతి' ప్రత్యేక ఇంటర్వ్యూ..

https://epaper.andhrajyothy.com/c/51275012

Fri, 24 April 2020

Defence Minister launched DRDO mobile testing lab

Mobile virology research and diagnostics laboratory (MVRDL) can be positioned anywhere in the country and will be able to process over 1000 samples in a day that can speed the diagnosis of the COVID-19 virus

By Shailja Tripathi

The inaugurated lab which can be positioned anywhere in the country will be able to process over 1000 samples in a day which can speed the diagnosis of the COVID-19 virus.

Defence Minister unveiled MVRDL through a video conference. The laboratory has been developed by DRDO in associated with ESIC Hospital, Hyderabad, and private industry.

Objective:

Mobile Virology Research and Diagnostics lab (MVRDL) developed by DRDO will be able to speed up COVID-19 screening and to carry out immune profiling of the patients of the virus for the vaccine development. The lab will be able to screen 1000-2000 samples in a day.

The lab will help in carrying out COVID-19 diagnosis, convalescent plasma-derived therapy, virus culturing for drug screening, and early clinical trials which will be specific for the Indian population.

Key Highlights:

- Defence Minister while inaugurating the lab stated that several timely decisions by the government have been taken under the leadership of PM Narendra Modi. Because of this, the impact of the virus in India is far less than the other countries.
- The biosafety level 2 and level 3 lab has been set up in a record time of 15 days which usually takes 6 months.
- The lab which can be positioned anywhere in the country will enhance India's capabilities in fighting COVID-19.
- The first such type of Mobile Viral Research lab for R&D activities and COVID-19 screening was developed by the Hyderabad based laboratory of DRDO, Research Centre Imarat (RCI), in consultation with ESIC Hospital, Hyderabad.
- The lab has been built as per the bio-safety standards to meet international guidelines of WHO and ICMR. The lab has LAN, inbuilt electrical controls, CCTV, and telephone cabling.

https://www.jagranjosh.com/current-affairs/defence-minister-launched-drdo-mobile-testing-lab-1587705054-1

INDIAN DEFENCE RESEARCH WING

Sat, 25 April 2020

Can AMRAAM be Integrated into LCA-Tejas Mk1A?

By Anita Desai

India has been cleared to acquire Integrated Air Defense Weapon System (IADWS) which is the advanced form of National Advanced Surface to Air Missile System (NASAMS-II) along with it will it India has been cleared to get two main and important weapons system in the package that are 118 AIM-120C-7 and AIM-120C-8 missiles which are latest Beyond Visual range Air-to-Air missile with no external changes then what is used on fighter jets.

LCA-Tejas Mk1A will be getting India's Astra Mk1 BVRAAM which according to developers of the missile system is comparable to the AIM-120C-5 which is used by Pakistani Air Force F-16 fleet in terms of range and technical specifications.

India has decided not to integrate Russian BVRAAMs like R-77 and R-37 due to performance issues but has tested an older version of the Derby BVRAAM which was originally procured for the Sea Harrier upgrade program which now has been retired from Tejas Mk1 aircraft. Israel has offered India its upgraded I-Derby BVRAAMs which has double the range and according to weapons maker offers 80% of the operational performance of the Meteor air-to-air missiles which are super exclusive to the 36 Dassault Rafale at least till now since MBDA the makers of the weapons system do not want to clear it for integration with India's Su-30MKI and Tejas Mk1A fleet anytime soon.

So India is left practically with only one option that is I-Derby BVRAAM. DRDO has promised to double the range of future variants of Astra BVRAAMs and according to certain media reports a Dual-Pulse motor with additional booster might be offered as Astra Mk2 with a range of around 140-150km against fighter-sized aircraft and Solid Fuel Ducted Ramjet (SFDR) which DRDO is developing with Russia and is equipped with solid fuelled air-breathing ramjet engine might become Astra Mk3 in near future with a range from 140-300km for fighter and AWACS sized targets.

Technical flexibility

Tejas Mk1A will come equipped with Israeli ELA ELTA-2052 AESA Fire Control Radar which already has been integrated with the ARMAAM variant due to Israeli manufacture which also needs to cater to both Israeli origin BVRAAMs and AMRAAM which are used by the Israeli Air force.

South Korean FA-50 which is Light attack/fighter version equipped with EL/M-2032 multimode planar array fire-control radar which is used in current Tejas MK1 use AIM-120 AMRAAM as its main BVRAAM on its FA-50 Block 20 variant which is still in work and interestingly also offered Israeli ELA ELTA-2052 AESA Fire Control Radar if any prospective customer desired to have an AESA Radar instead of older EL/M-2032 fire-control radar, which at least confirms that technically at least it's viable.

Americans Clearance

AMRAAM Family has been integrated into Non-American fighter jets like Saab's Gripen and Gripen-E, Euro-Fighter Typhoon, and light class fighter jet aircraft like FA-50. so It is unlikely Americans will object in the integration of AMRAAMs on the LCA-Tejas Mk1A and Mk2 soon since we are already getting them in another form.

Why AMRAAM?

Astra Mk1 BVRAAM which is comparable to AIM-120C-5 is a commendable achievement for the DRDO and India but the amount of time take to reach also suggests the development of smaller missile systems particularly air to air weapons are not so easy and the future variant of Astra will take no time to come.

Astra Mk1 BVRAAM production is yet to be scaled up and it still has entered only limited scale production and as per media reports initially will be cleared only with the Su-30MKI fleet and later will move to LCA-Tejas Mk1A and Mk2.

Production constraints will ensure that Tejas Mk1A will feature either Israeli I-Derby BVRAAM or the older Derby BVRAAM till the scale of Astra production is scaled up and IAF places orders in larger numbers. Astra Mk2 and Astra Mk3 won't be available at least for the next 7-10 years which means Tejas Mk1A and Mk2 will have to rely on at least one foreign-made BVRAAM along with Astra MK1.

AIM-120C-7 and AIM-120C-8 are way superior then Astra MK1 in terms of range and technical specifications and is the system which we are already getting in the country.

Conclusion

Until Astra Mk1 are mass-produced and until Mk2 and Mk3 arrive in the picture, Tejas Mk1A will require a foreign BVRAAM it can be I-Derby BVRAAM or AMRAAMs, even when Astra Mk1 is available in large numbers just to maintain a rigid combo of BVRAAMs it will continue to have secondary missile as a back up until off course Astra Mk2 and Mk3 arrives.

https://idrw.org/can-amraam-be-integrated-into-lca-tejas-mk1a/#more-225859

COVID-19: Defence Forces Contribution

THE ECONOMIC TIMES
WWW.ECONOMICTIMES.COM

Sat, 25 April 2020

No intention of deploying Army abroad to fight Covid-19: India

"We have seen some media reports regarding the deployment of Indian Army to countries to deal with the Covid 19 pandemic. These are factually inaccurate and misleading," MEA Spokesperson Anurag Srivatsava told ET

By Dipanjan Roy Chaudhury

New Delhi: India on Friday stated that it has no intention of deploying Indian Army to any country to deal with the Covid-19 pandemic describing some media reports suggesting deployment as misleading.

"We have seen some media reports regarding the deployment of Indian Army to countries to deal with the Covid 19 pandemic. These are factually inaccurate and misleading. We have responded promptly to requests from Maldives and Kuwait for deployment of Rapid Response Teams comprising doctors, nurses and paramedics to deal with the Covid 19 pandemic. These Rapid Response Teams are ready for deployment to other friendly countries at short notice if requested by them," MEA Spokesperson Anurag Srivatsava told ET.

Indian army soldiers patrol near the Line of Control (Representative image)

Earlier Sri Lanka stated that it has no plans to have foreign troops deployed in the country to combat the coronavirus as the island nation's military and police have shown their capabilities in tackling the pandemic, according to Defence Secretary Kamal Gunaratne.

Addressing a press conference earlier this week, Gunaratne said the Sri Lankan forces were well prepared to tackle all the challenges posed by the COVID-19.

"Our military has already shown their expertise and professionalism in handling the emergency situation created under the coronavirus threat," Gunaratne said.

The Lankan Defence Secretary was referring to a recent news report which claimed that the Indian Army would be deployed in Sri Lanka to support the country's efforts to control the spread of the coronavirus.

Sri Lanka has so far reported 330 positive cases with 7 deaths, according to the World Health Organisation.

https://economictimes.indiatimes.com/news/defence/no-intention-of-deploying-army-abroad-to-fight-covid-19-india/articleshow/75352409.cms

Sat, 25 April 2020

Def exports: Let's 'buy Indian' ourselves first

Buoyed by a recent spurt in defence-related exports, the Modi government has set ambitious targets for overseas sales by the Indian military-industrial sector over the next few years. Specifically, it has been proposed that 25% of the annual turnover of each Defence Public Sector Undertaking (DPSU) and the Ordnance Factory Board (OFB) should come from exports by 2022-23, even as the private sector is being encouraged to boost defence exports.

The overarching theme is for India to become a 'net exporter' of defence items by the mid-2020s. While such a goal is commendable, given India's need to sustain influence with its partners and to generate better economies of scale, it cannot be sustainably achieved without India's own military placing timely orders for indigenous equipment that have export potential. Moreover, weapons that do not find favour with the domestic military usually don't find buyers in the international market either.

The draft 'Defence Production Policy 2018' explicitly seeks to achieve an annual export turnover of Rs 35,000 crore by 2025. In aid of this objective, the Ministry of Defence (MoD) has gone about streamlining its export control licensing regime, removed licensing requirements for several items altogether, created an end-to-end offset processing portal, while also setting up a defence investor cell to process queries and redress grievances. These measures have sufficed to increase the value of defence export authorizations in the past few years, which have risen from Rs 1,650 crore in 2016-17 to Rs 10,500 crore in 2018-19.

However, most of this growth has come from enhanced exports of components and sub-assemblies, a major portion of which is on account of 'offset discharge' by foreign original equipment makers (OEMs) selling wares to India. In fact, some of this will find its way back to India as part of major platforms built abroad. Naturally, encouraged by export growth in these categories, New Delhi is looking to tap further opportunities to tie-up with foreign OEM supply chains via the licenced production of major platforms as part of the 'strategic partnership' model.

But this not going to be enough for India to build its position as an arms supplier in the international market. For that, India must start exporting frontline weapon systems and platforms of indigenous design, alongside heightened exports of munitions and sensors of various types. In the case of munitions and sensors, India has already begun to secure respectable orders from allies such as the UAE and Myanmar. However, India is yet to succeed in exporting contemporary artillery systems or even air defence systems, forget about armoured fighting vehicles or fighter aircraft.

That is not surprising given that domestic orders for indigenous systems in these categories have been mostly piecemeal and that too with interminable delays between tranches. A case in point is the Pinaka multi-barrel rocket launcher (MBRL), which is already a part of the Indian Army's arsenal and for which the private sector is the lead supplier. Orders for new Pinaka regiments have been 'in the works' forever, even as the system finds pride of place in the MoD's shiny new export booklet. Obviously, the supply chain for the Pinaka is at a risk of withering away, a fact that potential international customers are bound to take note of.

Foreign militaries typically import systems in which the supplier country's own military has reposed faith. Not only does it serve as a quality certificate, it is also indicative of the maintenance

and spares support that a potential importer can expect. The after-sales support for systems built only in small uneconomic lots is likely to be uneven at best. Moreover, large production runs of indigenously developed equipment are the key to increasing the indigenous content of the same. This is especially important in an era where the threat of sanctions looms larger than ever, and customers would want security of supply.

In that context, Indian systems with the highest potential for export are those that are currently seeing noteworthy production runs and have high indigenous content. Here, too, there is a mindset of 'let us meet our own requirements first' that has been getting in the way of a serious export push. It almost seems as if some quarters are wary of giving up their 'sole buyer' privileges rather than embracing the strategic advantages of exporting major defence equipment. Beyond burnishing India's geopolitical influence, arms exports will help increase the competitiveness and flexibility of domestic industry, and that will obviously get reflected in their overall design and build practices. The productivity gains from having to satisfy the specific requirements of foreign customers should not be underestimated.

Be that as it may, given the fact that for the medium term it is domestic capacity that will drive exports and not the other way around, it is imperative that large orders are placed for indigenous systems that have already passed muster, with repeat orders for improved tranches following soon thereafter. Otherwise, foreign militaries may choose to remain content with just looking at the pictures they see on the MoD's brochure.

https://idrw.org/def-exports-lets-buy-indian-ourselves-first/#more-225855

Business Standard

Sat, 25 April 2020

Armed forces told to take optimisation measures amid Covid-19 crisis

Officers, however, fear this will sharply impair the military's equipment and functioning

By Ajai Shukla

New Delhi: Underlining the severe financial constraints imposed on the army, navy and air force as a result of the Covid-19 pandemic, the Department of Military Affairs (DMA), headed by the Chief of Defence Staff (CDS) General Bipin Rawat, has sent out a letter ordering "optimization measures". Officers, however, fear this will sharply impair the military's equipment and functioning.

In the letter, which Business Standard has reviewed, Rawat, in his capacity as DMA Secretary and CDS, has slashed expenditure on the building of unit medical facilities, training simulators, soldiers' cookhouses and officers' messes.

The letter orders that no concrete garages are to be built hereafter for armoured vehicles like the T-90 tank, even though they are damaged by excessive heat. Instead, these crucial combat platforms, costing Rs 25-27 crore each, are to be housed in "tin sheds and not concrete (garages)."

Army trucks and jeeps, similarly, will be housed in "temporary sheds – hard standing with tin sheds." Vehicles that bring personnel to office will stand all day in the open, since these are "parked for limited durations."

In the memo, Rawat "has desired that more such optimization is to be identified and an advisory issued" after his approval. The army, navy and air force headquarters have been asked to suggest additional cost cutting measures.

Military sources also say that Rawat has ordered the army, navy and air force to place a hold on the purchase of new equipment from the capital budget during the first quarter of this financial year.

On Friday, Defence Minister Rajnath Singh told a video conference of top commanders, including Rawat and the three service chiefs, "to initiate measures to spend the financial resources, avoiding wastage in view of the economic burden imposed by Covid-19," according to the defence ministry.

And on Thursday, the government announced a freeze on additional increments of Dearness Allowance and Dearness Relief for 18 months for all central government employees, including serving military personnel and veterans.

Officers from combat units say these measures would undermine their capability in combat. The army's fighting units have always been structurally self-contained, incorporating all the administrative elements needed to operate independently in wartime. Each company, squadron or battery – subunits comprising about 100 soldiers – has its own cookhouse and administrative components, enabling it to fight and move independently.

Long experience has shown that a single field cookhouse cannot feed more than about 125 soldiers. Now, with the number of cookhouses halved to two per battalion, they will struggle to feed many more soldiers, affecting both quality and efficiency.

Similarly, a battalion or regiment, -- the basic combat unit, consisting of three-to-four companies, squadrons or batteries – has always had its own officers' mess and junior commissioned officers' (JCO's) club. Besides housing and feeding the battalion/regiment's officers, including during wartime, the mess is usually a repository of unit history, often displaying memorabilia and souvenirs captured from the enemy in war.

Now, Rawat has ordered officers' messes to be constructed for military stations, not for units.

"Instead of cutting flab, the government is cutting close to the bone. The Covid-19 crisis is real, but we cannot afford a return to the 1990s, when funding cuts severely damaged the military's capability," says a combat unit commander, on condition of anonymity.

https://www.business-standard.com/article/current-affairs/armed-forces-told-to-take-optimisation-measures-amid-covid-19-crisis-120042500052_1.html

THE ECONOMIC TIMES
WWW.ECONOMICTIMES.COM

Sat, 25 April 2020

Rajnath asks top military commanders to assist in the revival of the economy, post lockdown

Defence Ministery Rajnath Singh also asked the commanders to ensure operational preparedness while they are battling the COVID-19 outbreak, so that an adversary does not exploit the current situation. Stressing on the requirement of jointness of the armed forces, the minister also asked them to identify and prioritise tasks that could be accomplished quickly

By Shaurya Karanbir Gurung

New Delhi: Defence Minister Rajnath Singh on Friday asked the top commanders of the army, air force and navy to assist in the revival of the economy after the lockdown is lifted by making purchases from micro, small and medium enterprises, even as he underlined the need to avoid wastage of financial resources due to the economic burden imposed by the coronavirus outbreak.

Singh also asked the commanders to ensure operational preparedness while they are battling the COVID-19 outbreak, so that an adversary does not exploit the current situation. Stressing on the requirement of jointness of the armed forces, the minister also asked them to identify and prioritise tasks that could be accomplished quickly.

These matters were discussed during a review of the operational preparedness and measures to fight COVID-19 with all the commanders through a video conference. Officers from the army's Northern Command, Eastern Command, Southern Command, South-Western Command, Central Command; the navy's Southern Naval Command, Western Naval Command, Eastern Naval Command; and the air force's Western Air Command, Central Air Command, South-Western Air Command, Southern Air Command; and the triservices Andaman & Nicobar Command were part of the conference. The Chief of Defence Staff General Bipin Rawat, chiefs of the three defence services and Defence Secretary Dr Ajay Kumar also participated in the conference.

"Defence Minister Rajnath Singh reviewed the operational preparedness as well as measures to fight COVID-19 with all the Commanders-in-Chief through a video conference," the defence ministry said.

"Stressing on the requirement of jointness of the armed forces, the Defence Minister asked the Commanders-in-Chief to identify and prioritise tasks that could be accomplished quickly and assist in revival of the economy after the lockdown is lifted," the ministry added.

Officials said measures to assist in reviving the economy would be making purchases from MSMEs as far as possible. Several MSMEs face closure within the next few months due to the impact of COVID-19, unless the government takes some urgent steps. The lockdown has badly affected the private industry. All defence PSUs have agreed to expedite payments to MSMEs.

The commanders also appreciated the recent devolution of emergency financial powers by the defence ministry, which has ensured the timely procurement of necessary medical supplies, aimed at bolstering the health infrastructure of the hospitals.

Meanwhile, Singh also "expected the forces to ensure their operational preparedness, while they are battling COVID 19 and the adversary should not be allowed to exploit the current situation", the ministry said.

The commanders have also expressed readiness to pitch in to maintain essential services locally if requested by the civilian administration. They informed Singh of the measures put in place by them to prevent virus infection among the forces and assistance extended to the local civilian administration. These include issuing standard operating procedures on COVID-19, modifications in protocols according to the advisories issued by the Health Ministry and taking care of the ex-servicemen and their families. The armed forces have also provided basic training to additional manpower to deal with the epidemic.

https://economictimes.indiatimes.com/news/defence/rajnath-asks-top-military-commanders-to-assist-in-the-revival-of-the-economy-post-lockdown/articleshow/75358346.cms

THE ECONOMIC TIMES
WWW.ECONOMICTIMES.COM

Sat, 25 April 2020

Defence Minister Singh reviews overall preparedness of armed forces

Officials the top army brass apprised Singh about the situation along the Line of Control in Jammu and Kashmir as well in areas close to the border with China. Singh also directed the armed forces to ensure judicial utilisation of financial resources in view of adverse impact of the pandemic on the country's economy

New Delhi: Defence Minister Rajnath Singh on Friday directed the top commanders of the armed forces to ensure that India's adversaries do not get any opportunity to exploit the current situation arising out of the coronavirus pandemic, officials said. At a high-level meeting, Singh reviewed the operational preparedness of armed forces and asked the top military brass to be "fully vigilant" to deal with any possible external security challenge facing the nation, they said.

Officials the top army brass apprised Singh about the situation along the Line of Control in Jammu and Kashmir as well in areas close to the border with China.

Singh also directed the armed forces to ensure judicial utilisation of financial resources in view of adverse impact of the pandemic on the country's economy.

Officials said Singh asked top military commanders to identify tasks and projects which could assist revival of economy.

Singh asked top military commanders to identify tasks and projects which could assist revival of economy.

The meeting was attended by Chief of Defence Staff Gen Bipin Rawat, Army Chief Gen MM Naravane, Chief of Navy Staff Admiral Karambir Singh, Chief of Air Staff Air Chief Marshal RKS Bhadauria, Defence Secretary Ajay Kumar and Secretary Defence (Finance) Gargi Kaul.

Top military officials from key commands of the Army, the Navy and the Indian Air Force also attended the meeting through video conference.

https://economictimes.indiatimes.com/news/defence/defence-minister-singh-reviews-overall-preparedness-of-armed-forces/articleshow/75348950.cms

DEFENCE AVIATION POST

Your Connect To The World Of Defence And Aviation

Sat, 25 April 2020

Ban on new arms deals in India, know why

PM Modi has implemented Lockdown 2 amidst the nationwide corona crisis. In view of the situation arising out of the novel coronavirus, the three services of the defense have been ordered to stop the new arms deal. There are chances of budget cuts for defense.

In a letter written by the Department of Military Affairs, the three forces have been asked to stop all the deals related to the purchase and sale of weapons till the end of the Covid-19 crisis. The Indian Air Force was yet to pay France for 36 Rafale aircraft and Russia for the S-400 air defense weapon system.

The Indian Army is also purchasing tanks, guns and rifles from various countries including the US and Russia. Navy has recently signed a deal with the US to buy 24 Chopper. The economic pressure on the government has increased amidst the ongoing war of Covid-19.

In the critical situation caused by the virus, the Ministry of Defense is monitoring the preparedness of the armed forces towards dealing with the epidemic. The three armed forces have already implemented the policy of 'no movement'.

Under this, almost all the bases other than some important operational matters and strategic monitoring branches have been completely locked down.

https://www.defenceaviationpost.com/2020/04/ban-on-new-arms-deals-in-india-know-why/

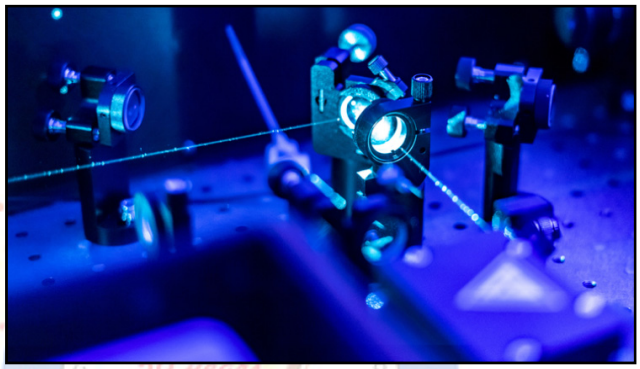
UANews

Sat, 25 April 2020

Inventors formulate material for more powerful lasers

Startup CMLaser Technologies Inc. has licensed the technology, which was developed in the James C. Wyant College of Optical Sciences

Researchers at the University of Arizona have developed a method for enhancing the performance of optical fiber lasers.



Optical fiber – which is made of silica glass or other multi-component glass – provides a conduit for transmitting light, including lasers. By adding different elements to that fiber, a process called "doping," inventors can change the properties of how such fiber transmits light.

A team of five inventors led by Nasser Peyghambarian, a professor in the James C. Wyant College of Optical Sciences, created a formulation for phosphate-doped fiber and tellurite-doped fiber, enhancing their performance and allowing for the building of more powerful fiber lasers and optical amplifiers.

With the help of Tech Launch Arizona, the commercialization arm of UArizona, the university has patented the technology and licensed it to startup CMLaser Technologies Inc.

Such lasers, which have direct applications in laser-based countermeasures for military and non-military aircraft, are enabling the development of aircraft-based technologies for detecting and defeating missile attacks. Heat-seeking missiles, invented in the 1970s, work by targeting the heat of jet engines. To foil these missiles, aircraft would deploy bright thermal flares to fool the missles and draw them away. As technologies have advanced, engineers have turned to laser-based innovations for such countermeasures.

"We have been doing this research for more than 10 years, working with students and research faculty to create a technology that is defensive in nature and will save lives," said Peyghambarian, also a professor of materials science and engineering.

Led by Peyghambarian in the early 2000s, the inventing team included then-adjunct professors Axel Schulzgen and Seppo Honkanen; Jacques Albert, now a professor of electrical engineering at Carleton University; and then-doctoral student Li Li.

UArizona President Robert C. Robbins praised Peygambarian's dedication to his students, his field and the idea of creating impact through research.

"Dr. Peyghambarian is a true superstar, and the Wyant College of Optical Sciences has an incredibly strong tradition of innovation in technologies that contribute to our national security and public safety," he said.

Peyghambarian has a long history of educating students and developing and commercializing cutting-edge technologies. He is an inventor on more than 40 patents, and this is the fifth startup in which he has been involved to bring inventions he has developed to the marketplace.

In 2016, the National Academy of Inventors named Peyghambarian a fellow, the organization's highest honor.

CMLaser Technologies has already secured investment from UAVenture Capital, led by UArizona alumnus and CEO Fletcher McCusker. McCusker said the funds will be used to advance the technology and better prepare it for application in practical settings.
https://uanews.arizona.edu/story/inventors-formulate-material-more-powerful-lasers

ZEENEWS

Sat, 25 April 2020

लॉकडाउन में भी बंद कमरे में ट्रेनिंग ले रहे हैं 'गगनयान के 4 भारतीय योद्धा'

भारत देश और भारतीयों के हौसलों का लोहा पूरी दुनिया मानती है.
यही वजह है कि हिन्दुस्तानी जांबाजों के जज्बे को हर कोई सलाम करता है...

खास बातें

1. ***लॉकडाउन में भी 'गगनयान के योद्धाओं' की ट्रेनिंग***
2. ***रूस में लॉकडाउन लेकिन थमा नहीं हिंदुस्तानियों का मिशन***
3. ***4 जांबाज फाइटर पायलट मॉस्को में ले रहे हैं ट्रेनिंग***

नई दिल्ली: हिन्दुस्तानियों के हौसलों की बुलंदी किसी को दिखाने की आवश्यकता नहीं होती, वक्त आने पर समय ही उसका सबसे बड़ा परिचायक बन जाता है. कोरोना काल के दौरान भारतीय अंतरिक्ष योद्धाओं के जज्बे को आज हर कोई सलाम कर रहा है.

लॉकडाउन में भी 'गगनयान के योद्धाओं' की ट्रेनिंग

भारतीय वायुसेना (**Indian Air Force**) के 4 जांबाज फाइटर पायलट 2022 में अंतरिक्ष में जाने वाले गगनयान मिशन के लिए मॉस्को में ट्रेनिंग ले रहे हैं. आपको बता दें, यूरी गागरिन सेंटर में ये ट्रेनिंग सालभर चलने वाली है, खास बात ये है कि इसका एक चौथाई हिस्सा करीब पूरा ही होने वाला था कि कोरोना वायरस के चलते रूस में 30 अप्रैल तक लॉकडाउन घोषित कर दिया गया. ऐसे में लॉकडाउन के सभी अंतरिक्ष यात्री प्लान के हिसाब से बावजूद बंद कमरे में ट्रेनिंग की जा रही है.

अहम बात तो ये भी है कि रूस में कर्मचारियों और ट्रेनिंग ले रहे पायलटों को खतरनाक वायरस कोरोना से सुरक्षित रखने के लिए लॉकडाउन से पहले ही रिस्पांस ग्रुप का निर्माण कर लिया गया था. साथ ही बीते 19 मार्च से रिमोट वर्क के लिए कर्मचारियों को भेज दिया गया था. फिलहाल, घरों से ही सभी काम कर रहे हैं.

रूस में लॉकडाउन लेकिन थमा नहीं हिंदुस्तानियों का मिशन

भारतीय वायुसेना के चारों जांबाज पायलट पूरी तरह सेहतमंद हैं, सभी पायलटों का फिटनेस टेस्ट रोजाना किया जाता है. पिछले हफ्ते ही उन्होंने मानव स्पेसक्राफ्ट के ऑनबोर्ड सिस्टम के बारे में जानकारियों की परीक्षा उत्तीर्ण कर ली. अब करीब एक सप्ताह के बाद उन्हें स्पेसक्राफ्ट की फ्लाइट थ्योरी का एग्जाम देना है.

ये एग्जाम इस पर निर्भर होगा कि सरकार महामारी के मद्देनजर लॉकडाउन क्या फैसला लेती है? वहीं, रेगुलग क्लासेज भी 30 अप्रैल से ही शुरू की जाएंगी. ट्रेनिंग के 1st फेज में गगनयान के यात्रियों को 2 रात और 3 दिन की सर्वाइवल मैराथन से गुजारा जाएगा.

बर्फ से ढके पहाड़ों, हिंसक जानवरों वाले जंगली इलाकों और दलदली क्षेत्रों में उनकी ट्रेनिंग कराई जाएगी, ताकि वे कठिन हालात का मुकाबला करने की मानसिक स्थिति हासिल कर सकें.

https://zeenews.india.com/hindi/zee-hindustan/odd-news/gaganyaan-astronauts-are-taking-training-in-closed-rooms-all-four-indian-pilots-also-pass-the-first-test/672210

दैनिक जागरण

Sat, 25 April 2020

ISRO में मानव अंतरिक्ष कार्यक्रम के लिए मांगे गए प्रस्ताव

भारत में इसरो द्वारा सुनिश्चित मानव अंतरिक्ष कार्यक्रम के तकनीकों के विकास के लिए प्रस्ताव मांगे गए हैं।

बेंगलुरु: भारतीय अंतरिक्ष अनुसंधान संस्थान (Indian Space Research Organisation) ने शुक्रवार को स्वदेशी तकनीकों के विकास के लिए प्रस्तावों को आमंत्रित किया है। यह आमंत्रण भारतीय मानव अंतरिक्ष कार्यक्रम व अन्य अंतरिक्ष शोधों के लिए है। इसरो के मानव अंतरिक्ष कार्यक्रम निदेशालय ने 18 संभावित प्रौद्योगिकी विकास क्षेत्रों के लिए प्रस्ताव आमंत्रित किए हैं।

भारत का पहला मानवयुक्त अंतरिक्ष मिशन 'गगनयान' 2022 में लांच किया जाएगा। इसके लिए मॉस्को में भारतीय वायुसेना के चार लड़ाकू पायलट की ट्रेनिंग चल रही है मिशन के लिए वे ही उम्मीदवार भी होंगे। 18 क्षेत्रों में प्रस्तावों को दाखिल करने के लिए 15 जुलाई अंतिम तिथि तय की गई है। इन क्षेत्रों में रेडिएशन खतरों की पहचान व इसके प्रभाव को कम करने की तकनीक, अंतरिक्ष भोजन व संबंधित प्रौद्योगिकियां, मानव रोबोटिक इंटरफेस, पर्यावरण नियंत्रण और जीवन समर्थन प्रणाली, लंबी अवधि के मिशनों के लिए मानवीय मनोविज्ञान और कृत्रिम गुरुत्वाकर्षण प्रौद्योगिकियां शामिल हैं।

निदेशालय ने अपनी अवसर की घोषणा (एओ) में कहा, 'स्पेस रिसर्च के लिए पृथ्वी की निचली कक्षाओं में और उससे आगे भी मानव के जीवित रहने में मददगार किफायती और स्वदेशी अत्याधुनिक तकनीकों के विकास के लिए राष्ट्रीय अनुसंधान/अकादमिक संस्थाओं से प्रस्ताव आमंत्रित हैं।'

एओ में कहा गया है कि प्रस्ताव का मुख्य रिसर्चर आवश्यक जानकारी दे और तकनीक के इस्तेमाल के बारे में बताए या मानव अंतरिक्ष कार्यक्रम के लिए ऐसे समाधान मुहैया कराए, जो सामर्थ्य और स्वदेशीकरण के संदर्भ में अंतर का पाट सके और अंतरिक्ष ले जाने योग्य पेलोड विकसित करने की क्षमता भी रखता हो। उसने कहा कि प्रस्तावों की छंटनी के लिए इसरो एक चयन समिति गठित करेगा। इनकी छंटनी वैज्ञानिक लाभ, प्रासंगिकता, तकनीकी विषय वस्तु और व्यवहार्यता के पहलुओं को ध्यान में रखकर की जाएगी।

वर्ष 2022 के लिए सुनियोजित गगनयान भारत का पहला मानव सहित मिशन है। इसके लिए मॉस्को में चार भारतीय वायु सेना के पायलट इसके लिए ट्रेनिंग ले रहे हैं। इन प्रस्तावों के सबमिशन की आखिरी तारीख 15 जुलाई सुनिश्चित की गई है।

https://www.jagran.com/news/national-isro-invites-proposals-for-development-of-technologies-for-human-space-programme-20218367.html

Inc42

Sat, 25 April 2020

ISRO invites ideas for bolstering human space flight programme

By Aman Rawat

- ***ISRO has invited proposals from research and academic institutions***
- ***ISRO expects that the outcome of the mission will be significant for mankind***
- ***ISRO will be sending astronauts to in low earth orbit and beyond***

While most of the people across the world are currently locked down inside homes, the Indian Space Research Organisation (ISRO) has invited proposals from research and academic institutions for developing an affordable indigenous technology that'll facilitate the Gaganyaan mission, ISRO's first human space flight programme.

ISRO expects that the outcome of the mission will be significant for all mankind. It said that the findings will help in adding value to the quality of life of a common man and also towards the national development.

However, the space organisation believes that there is still a need to build further capabilities to achieve the mission and drive scientific knowledge from the programme. This might be why it is now turning to help from research institutes. According to media reports, ISRO wants institutes to support it with technologies which can help in the areas of radiation hazard characterisation and mitigation, space food, inflatable habitats, and human-robotic interfaces. The opportunities provided by ISRO will enable institutions to harness their expertise and capabilities towards space exploration programmes.

Some of the other technology areas in which ISRO is seeking outside help are thermal protection systems, environmental control and life support systems, green propulsion, debris management and mitigation, energy harness and storage, and in-situ 3D manufacturing. ISRO would also require experts in technologies like simulated gravity, human psychology for long term missions, space medicine and diagnostics, among others for supporting life in the lower Earth orbit. ISRO is accepting proposals until July 15, 2020.

As part of the Gaganyaan mission, ISRO will be sending astronauts to low earth orbit and beyond. ISRO said that such human space flight missions require innovations and unique technologies for space exploration.

As this is ISRO's first human space flight research project, ISRO is looking to establish long term research before proceeding with the mission. ISRO has also developed a humanoid or human-robot named 'Vyommitra' which will be sent to space as part of the Gaganyaan mission. ISRO had previously said that the launch of the first test-flight of Gaganyaan that'll be carrying the humanoid to space will be conducted by the end of 2020.

Besides the Gaganyaan projects, ISRO is also working to launch over ten satellites, Aditya L1 (Sun) mission by mid-2020 and more. ISRO will be launching several communication satellites like Gisat1, Gisat 12R and earth observation satellites such as Risat-2BR2 and Microsat in 2020.

https://inc42.com/buzz/isro-invites-ideas-for-bolstering-human-space-flight-programme/

THE FINANCIAL EXPRESS

Sat, 25 April 2020

Gaganyaan: ISRO to develop technologies for India's first manned mission to space

The proposals have been sought by the Directorate of Human Space Programme of the Bangalore-headquartered ISRO for a total of 18 tentative technology development areas

By Devanjana Nag

Gaganyaan space mission: For the development of indigenous technologies for sustained Indian human space programme as well as for space exploration, the Indian Space Research Organisation (ISRO) has recently invited proposals. The proposals have been sought by the Directorate of Human Space Programme of the Bangalore-headquartered ISRO for a total of 18 tentative technology development areas. The first manned mission of India to space 'Gaganyaan' is likely to take place around the year 2022. At present, four Indian Air Force (IAF) fighter pilots are under training in Moscow, Russia, and they are likely to be potential candidates for the 'Gaganyaan' space mission, according to a PTI report.

The first manned mission of India to space 'Gaganyaan' is likely to take place around the year 2022.

According to the report, the last date for submission of the proposals in 18 tentative technology development areas is July 15. These areas include space food and related technologies, radiation hazards characterization and mitigation techniques, human robotic interfaces, human psychology for long term missions, environmental control and life support systems, as well as simulated gravity technologies. The Directorate in its Announcement of Opportunity (AO) said that the proposals are solicited from national research or academic institutions for developing affordable as well as indigenous cutting edge technologies for the survival of humans in low earth orbits and beyond for space exploration.

The AO further stated that the principal investigator of the proposal should provide essential details as well as usage of technology or solution for the human space program. According to the AO, this can bridge the gap in terms of indigenization as well as affordability, and also the capability of developing a payload or solution that is space qualified. It also said that for scrutiny of the proposals, the Indian Space Research Organisation shall constitute a Selection Committee. The screening of these proposals will be based on scientific benefits, technical content, relevance as well as feasibility perspective, it added.

https://www.financialexpress.com/lifestyle/science/gaganyaan-isro-to-develop-technologies-for-indias-first-manned-mission-to-space/1938523/

INDIA TODAY

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Kerala university launches Covid-19 search engine for India, will let experts find latest research material

The search engine for Covid-19 is intended for Indian medical researchers looking for quick information about the work done on this disease and the novel coronavirus in the academic community

By Roshni Majumdar

Highlights

- A Kerala University has launched a new search engine called vilokana.in for medical researchers.
- Researchers type a keyword to access relevant information on the topic.
- The special search engine can be a boon for the medical researchers in this age of "infodemic".

Faculty and students of artificial intelligence from the Indian Institute of Information Technology and Management in Kerala have launched a new search engine for COVID-19 medical researchers. The engine is called vilokana.in which means "finding out" in Sanksrit.

Though there are dozens of apps in the country that provide information on the coronavirus, the search engine is a first dedicated toward the medical community in India. The idea is that through this search engine scientists, doctors and researchers who are racing to better understand Covid-19 and the novel coronavirus will be able to keep a track of the latest research about the disease and the pandemic it has caused.

Professor Alex James, who worked on the search engine, says that his team undertook an AI-first approach to list articles and journals that would be most relevant to someone looking up information by typing in a keyword on the search engine.

The search engine is different from Google because the researcher will also have access to a quick summary of the article at hand. The purpose, Professor Alex James says, is to accelerate the process of research by giving easy access to a wide range of information to those who're working in the field.

Professor James added they are adding a feature to detect fake information. Recently, Bill Gates, in his piece on the Economist, stressed that medical researchers are going to be among the most important people in the coming year.

But the idea of research engine or a sort of aggregator for Covid-19 related news is not new in itself.

Given that this pandemic comes at a time when information flows easily and cutting-edge technologies are available, since January when the world became aware of the coronavirus, scientists and researchers have raced to understand it. Every day there are tens of academic articles and research papers on Covid-19 that are coming online, and there are search engines, micro-sites and even communities on Reddit that are helping scientists keep track of this information. At the same time, organisations like WHO have created dedicated tech tools that let scientists and doctors track the latest research on Covid-19.

But most of these efforts have a global focus, and that is where the search engine launched by Indian Institute of Information Technology and Management may help because it is also likely to feature information on a lot of India-specific Covid-19 research.

https://www.indiatoday.in/technology/news/story/kerala-university-launches-covid-19-search-engine-for-india-will-let-experts-find-latest-research-material-1670730-2020-04-24

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कुष्ठ प्रभावित देशों में कम सामने आए कोरोना वायरस के मामले, रिसर्च में हुआ दावा

मदन जैड़ा

जिन देशों में कुष्ठ रोग का बैक्टीरिया ज्यादा सक्रिय है, वहां कोरोना संक्रमण के मामले कम आए हैं। वहीं, यूरोप और अमेरिका जहां कुष्ठ रोग के लिए जिम्मेदार बैक्टीरिया 'माइकोबैक्टेरियम लेपरे' मौजूद नहीं है, वहां संक्रमण घातक साबित हुआ है। 'एपिडेमोलॉजी इंटरनेशनल जर्नल' में छपे भारतीय शोध में यह दावा किया गया है।

ब्राजील छोड़ सभी प्रभावित देशों में मिले संकेत

शोधकर्ता डॉ. एनएस धर्मशक्तु के मुताबिक ऐसा प्रभाव भारत समेत कुष्ठ रोग से अधिक प्रभावित 39 में से 38 देशों में देखने को मिला है। सिर्फ एक देश ब्राजील अपवाद साबित हुआ है। वहां बड़ी संख्या में संक्रमित मरीज सामने आए हैं। डॉ. धर्मशक्तु हाल ही में केंद्रीय स्वास्थ्य मंत्रालय के प्रधान सलाहकार पद से सेवानिवृत्त हुए हैं। वह लंबे समय तक भारत के कुष्ठ रोग नियंत्रण कार्यक्रम का संचालन कर चुके हैं। उन्होंने दावा किया कि भारत समेत 39 देशों के 90% लोगों में कुष्ठ के बैक्टीरिया के खिलाफ प्रतिरोधक क्षमता पैदा हो चुकी है। यह कोविड संक्रमण के खिलाफ काम आ रही है।

टीबी के टीके ने भी इसीलिए जगाई उम्मीद

यह शोध इसलिए अहम है, क्योंकि दो और शोध भी इसी तरह के नतीजों की ओर इशारा कर चुके हैं। विदेश में हुए शोध में पाया गया है कि जिन देशों में बीसीजी टीकाकरण हुआ है, वहां कोरोना का कहर कम है। बीसीजी हालांकि, टीबी के खिलाफ प्रतिरोधक क्षमता विकसित करता है, पर चूंकि टीबी व कुष्ठ के बैक्टीरिया एक ही समूह के हैं, इसलिए माना जा रहा कि कुष्ठ के बैक्टीरिया के खिलाफ प्रतिरोधक क्षमता कोरोना से लड़ाई में मददगार है। यही वजह है कि भारत ने भी कोविड-19 के उपचार में बीसीजी के इस्तेमाल की संभावनाएं खोजने को क्लीनिकल ट्रायल की मंजूरी दी है।

एम्स, पीजीआई में संक्रमितों पर 'एमडब्ल्यू' आजमा रहे

भारत में हुए एक शोध में देखा गया है कुष्ठ रोग के इलाज में इस्तेमाल होने वाली दवा 'एमडब्ल्यू' कोरोना पर असरदार साबित हो सकती है। यही वजह है वैज्ञानिकों की ओर से खोजी इस दवा को अब एम्स दिल्ली और पीजीआई चंडीगढ़ में कोविड-19 से संक्रमित मरीजों पर आजमाया जा रहा है।

https://www.livehindustan.com/national/story-coronavirus-cases-less-in-leprosy-affected-countries-research-claims-3173780.html