SUNDAY EXPRESS TAME NADU



newindianexpress • com

New med for drug resistant TB introduced

SINDUJA JANE @ Chennai



CHENNAI

TB Burden in India and Tamil Nadu

According to WHO Global TB Report-2015, of the estimated 9.6 million global annual incidence of TB, over onefifth or 2.2 million cases are from India In 2013, 6,59,389 presumptive cases were screened and 80,407 patients

were found positive for TB in Tamil Nadu

TAKING a step forward in the tough battle against extensively drug-resistant tuberculosis (XDR-TB), the State government began using a new drug for this from Saturday, administering it to two selected patients at the Government Hospital for Thoracic Medicine, Tambaram.

This drug, which is on the World Health Organisation's list of essential medicines, is the first new tuberculosis drug to be approved by the USFDA in over four decades, the patients for which are chosen only after careful screening.

"The drug will be a boon for multi-drug resistant tuberculosis (MDR-TB) patients. The effectiveness of the drug has been proven during the clinical trials in other countries," Health Minister Dr C Vijaya Baskar, a doctor himself, told *Express*.

The treatment using Bedaquiline, the new drug, was launched a week before its scheduled launch in the State.

of mortality, and thus comes with a 'black-box warning' of the risks involved such as changes in heart rhythm and increased mortality. Hence this is recommended only for use when

sunday]9.06.20]6

other treatment regimens are ineffective. It will be available only in government facilities and not sold in the market. "As the drug is not advisable

The drug carries higher risk

to all due to the risk of causing cardiac problems, we have to select patients to whom this could be administered," Dr A Lakshmi Murali, State TB Control Officer told *Express*.

The patients chosen for this should not have any cardiac problems. The female patients should not be pregnant and they should agree to stay compulsory in hospital for two months so as to be eligible to receive the drug.

"Because of the potential risks involved, district TB control officers were given training in 'Bedaquiline Condition Access Programme' that is exclu-

sively framed for this drug. They will monitor the progress of the patients meticulously," she added.

The first batch had officers from Tirunelveli, Thanjavur, Villupuram and Coimbatore who came to Chennai to take the special training before launching this drug.

Once a leading killer, TB does not have the same sting any more after advances made in treatment regimen. Globally nine million new cases are reported annually and about 25 per cent of the people in India are infected with the bacteria. experts say.

But the drug resistant ones are a different story altogether. The bacteria that causes this is resistant to treatment with at least two of the most powerful first-line anti-TB drugs - isoniazid (INH) and rifampicin (RMP)

About five per cent of TB cases in India and two per cent in Tamil Nadu are the drug-resistant variety, Dr Lakshmi added.



IIT-M develops warning system for gas turbines

Technology will prevent thermoacoustic instability, which triggers automatic shutdown in power plants

S V KRISHNA CHAITANYA @ Chennai

group of engineers at the Indian Institute of Technology Madras (IIT-M) has cracked the elusive secret code of thermoacoustic in-Istability, a problem that gas turbine and aerospace industry has been grappling with for decades, incurring losses to the tune of \$1 billion annually. The team has developed a host of precursors, dubbed as the world's first early warning system for gas turbine power plants and jet engines. The technology has found interest among some of the major players in the sector, including the National Aeronautics and Space Administration

INDIAN OVERSEAS BANK

Vivekananda House Branch

(NASA) and our own Indian Space Research Organisation (ISRO).

"We are exploring the process of working together with the ISRO. However, before we test the technology in aerospace sector, it will be tried first with ground-based engines like gas turbine power plants. We are now in talks with major gas turbine companies such as Ansaldo Energia, General Electric and Siemens to test the technology with real data. It needs lots of testing to root out any lacuna such as triggering of false alarms," Prof R I Sujith of the Department of Aerospace Engineering in IIT-M told Express. A key person behind the project, he recently visited NASA in this regard. Prof Sujith said no technology is

No.5, Kamarajar Salai,

Chennai-600005, Ph: 28442517

Prof R I Sujith and his student Vishnu working on a turbulent combustor at the IIT Madras laboratory | **EXPRESS**

available at present to help predict an impending instability in turbines.

The companies use pressure transducers to measure pressure fluctuations. After reaching the threshold point, the automatic controllers kickin and shut down the engines. Once the turbines are shut, it takes at least an hour to restart - a situation that is cumbersome and costly.

Contracts between the turbine manufacturers and power companies often require the manufacturers to bear the cost of such shutdowns and penalties incurred.

The situation is more critical when such instabilities arise in the engine of an aircraft or rocket, where the option to shut down the engine mid-air does not exist and severe vibrations or breakage of the engine can prove to be fatal. For such engines, extensive tests have to be run on-ground. However, a substantial number of these engines, especially for rockets, are destroyed while testing. "This is where our technology brings the radical change that industry has been craving for years. We can give several minutes of warning time, may be up to 20 minutes, for a power plant to take evasive action. For liquid rocket engines, it would probably be a few seconds, enough to

stabilise the engine," he said. However, Prof Sujith said it would take at least two to three years for the technology to develop into a full-fledged early warning system and for industrial consumption. The technology's robustness and protocols have to be established in the real scenario, which will take some time. "The companies will first provide historical data of thermoacoustic instabilities. Using the technology, we will try and predict the impending instabilities. This will give a tight understanding of the warning time and threshold limits," he said. "We can also customise the system, according to the industry specifications. But we have not reached that stage yet," he said.

INDIAN ORDNANCE FACTORIES MACHINE TOOL PROTOTYPE FACTORY AMBARNATH GOVERNMENT OF INDIA, MINISTRY OF DEFENCE CORRIGENDUM

The General Manager, Machine Tool Prototype Factory, Ambarnath (India) on behalf of the President of India invites Indian manufacturers / suppliers to submit their offer against the Open Tender (Two Bid System), for the following items :

TE No. & Date	Item Description	Quantity	Title	FOR	READ	
16TE210016 Dt : 13.04.2016	PLATE PRESSURE FRICTION CLUTCH (CASTING) CHILL CAST TO	42 Nos.	Time & last date for collection for tender documents	02.06.2016	23.06.2016	
	DRG.NO. IFL 8418.		Last date for submission	03.06.2016 before 2.00 PM	24.06.2016 before 2.00 PM	
			Opening Date	03.06.2016 at 2.30 PM	24.06.2016 at 2.30 PM	
16TE210018 Dt : 13.04.2016	HAND WHEEL (CASTING) (CHILL CASTING) DS.CAT.NO. 5340-016867.	84 Nos.	Time & last date for collection for tender documents	09.06.2016	11.07.2016	
16TE210019 Dt : 13.04.2016	GEAR WORM WHEEL (CASTING) DRG.NO. IFL 8414	34 Nos.	Last date for submission	10.06.2016 before 2.00 PM	12.07.2016 before 2.00 PM	
16TE210017 Dt : 13.04.2016	FORGING FOR CLUTCH DISC TO DRG.NO. ILG-1037-3	34 Nos.	Opening Date	10.06.2016 at 2.30 PM	12.07.2016 at 2.30 PM	
16TE210046 Dt : 20.04.2016	HAND WHEEL DRG.NO. TG-0765-55-117-111	341 Nos.	Time & last date for collection for tender documents	06.06.2016	20.06.2016	
16TE210033 Dt : 17.04.2016			Last date for submission	07.06.2016 before 2.00 PM	21.06.2016 before 2.00 PM	
16TE210034 Dt : 17.04.2016	SENDING UNIT D-20 TO DRG.NO. D 20-000 CD	31 Nos.	Opening Date	07.06.2016 at 2.30 PM	21.06.2016 at 2.30 PM	

Note : All relevant details & terms and conditions etcl are available on website : www.tender.gov.in

Sd/- (Ms. ROJALI P.) WORKS MANAGER, FOR GENERAL MANAGER

davp 10201/11/0477/1617



INDIAN ORDNANCE FACTORIES ORDNANCE FACTORY KANPUR

GOVERNMENT OF INDIA, MINISTRY OF DEFENCE

CORRIGENDUM

Against Advertisement No. davp 10201/11/1610/1516 published on dt. 04.12.2015, please read following against respective Tender Enquiries General Manager, Ordnance Factory, Kanpur on behalf of President of India invites e-tender through two bid system (Technical Bid and Price Bid) for the following machine:

GLOBAL TENDER ENQUIRY (ONLY THROUGH : E-PROCUREMENT)

DESIGN, MANUFACTURE, SUPPLY, SUPERVISION OF ERECTION & COMMISSIONING OF:-

								Reserve i nee.	(33,00,000/-,	LIND. (0,00,000/-	adhere to	stringent	C
S. No.	Tender Enquiry No.	Nomenclature	Qty	EMD (in INR)	Pre-bid Conference (PBC) Date	Bid Submission Closing Date & Time	Technical Bid Opening Date & Time	Date and time of e-auction: EMD Remittance	extension of five minutes e : EMD Deposit shall be paya	able through EFT/NEFT/ RTGS Transfer in	emission condition produce v called the	s, the eng iolent sou	gines und
1	T/15025/G/ OFC/EO	Horizontal Shrinkage press 650 Ton with Gantry	1	50,00,000	21.07.2016 1000 Hrs	01.09.2016 1800 Hrs	02.09.2016 1000 Hrs		EMD account, A/c No.01	I Branch" to the credit of IOB E-auction 10902000970853 Indian Overseas Bank,	instability operator 1	. It forces	s the
2	T/15026/G/ OFC/EO	CNC Double Column Grinding Machine, Grinding Length-2000 mm (min)	1	31,09,000	26.07.2016 1000 Hrs	05.09.2016 1800 Hrs	06.09.2016 1000 Hrs	Did Multiplier	Code:0109; IFSC Code: IC	Anna Salai, Chennai 600 002. Branch DBA0000109	engines a huge proc	bruptly ca	ausing
3	T/15027/G/ OFC/EO	CNC Precision Boring Machine with universal milling head	1	39,88,000	28.07.2016 1000 Hrs	07.09.2016 1800 Hrs	08.09.2016 1000 Hrs	Bid Multiplier Inspection of property	:₹ 50,000/- : 16.07.2016 From 11.00 a	m to 3.00 p.m			
4	T/15028/G/			47 76 000	02.08.2016	13.09.2016	14.09.2016	Submission of online applica					
	OFC/EO	CNC Deep Hole Drilling Machine		47,76,000	1000 Hrs	1800 Hrs	1000 Hrs			with EMD: 21.07.2016 till 4.00 p.m	Growin sector i		
5	T/15029/G/	CNC Milling Machine, Traverse: X-1600 mm	2	50,00,000	04.08.2016	15.09.2016	16.09.2016	т	Ferms and Conditions of E-A	uction Sale			
6 T/15030/G/ Automatic Straightening Machine, Straightening 1 50.00.000 09.08.2016 19.09.2016 20.09.2016 1. The above mentioned properties will be sold in lots by e-auction through the Bank's approved service are popular in Europ							pe and						
-	OFC/EO	force - 15000KN or higher	<u> </u>	50,00,000	1000 Hrs	1800 Hrs	1000 Hrs			rm, declaration, general terms and conditions	US where cheaper. I		•
'	T/15031/G/	CNC Medium Lathe, Swing over carriage - 1200 mm or higher, Centre Distance - 5000 mm or		25,40,000	11.08.2016	21.09.2016	22.09.2016	of online auction sale are available			industry is		
	OFC/EO	higher		2	1000 Hrs	1800 Hrs	1000 Hrs	9	0 0	and email address. For details with regard to 4,9380570551 of M/s. Matexnet P Ltd	Currently,		
Note	:							4. Bids in the prescribed formats of	given in the Tender Document	shall be submitted "online" through the portal	installed of turbine po		
		te https://ofbeproc.gov.in for the detailed informa		f the tender.				www.matexauctions.com. Bids s			India as o	n March i	S
		uote for above GTEs through e-procurement proces	SS.							/RTGS to the Bank account as specified above.	24,508.63	•	
		will be accepted. are interested to participate are advised to elect	ronical	ly oproll thoms	olvos for Ordnan	co Eactory Kann	ur on the website	 Bid form without EMD shall be re The property shall be sold to the 		ul bidder (purchaser) shall deposit 25% of the	Central-or generate		
		gov.in for which they are required to obtain class I					ui oli tile website	sale price (less the EMD) immedia	ately on the sale being confirme	d in his / her favour and the balance amount of	0000000	,	
	•	bbtained from agencies certified under IT Act 2000) of Go	ovt. of India. The	e list of such cert	ified agencies ar	e available on the			sale. Failure to remit the entire amount of sale of 25% of the tender price and forfeiture of all	GAST	JRBINE PO	WED
	ebsite https://of			· (• ·				claims over the property and it will		or 25% of the tender price and forfeiture of all		5 IN TAMIL	
		n the tender enquiry (amendment of Tender openi site as Corrigendum.	ng dat	e, specifications	s and General col	nditions etc.) will	l be available only	8. The sale certificate will be issue		er only, after payment of the entire sale price	· · · · · · · · · · · · · · · · · · ·	Install-	
 7. A Pre-Contract Integrity Pact would be signed between buyer and the bidder. Pact will be a preliminary qualification. 9. The purchaser shall bear the charges / fee payable for conveyance such as registration fee, stamp duty, etc., 								Plant	ation	Fuel			
 8. EMD shall be in favour of "General Manager, Ordnance Factory, Kanpur" 9. Hard copy of Integrity Pact, If applicable and EMD (in original) must be submitted on or before Bid submission closing date & time at Ordnance 10. The Authorized Officer has the absolute right to accept or reject the bid or postpone or cancel the sale, as 								capacity typ (MW)	type				
		frity Pact, if applicable and EMD (in original) must the formation of the				on closing date 8	time at Ordnance	 The Authorized Officer has the the case may be without assigning 		ect the bid or postpone or cancel the sale, as	Basin	(
10. The Bidders(s), if they deem it necessary, may furnish any information as relevant to their bid to the following Independent Monitor: Name : Mrs. Bulbul Sen (IRS-Retired), Address: C-II/125, Satya Marg, Chanakyapuri, New Delhi-110021. Ph.No. 011-26115657,							Bridge	120	Naphtha				
		801001 Sen (IRS-Retired), Address: C-11/125, Sat 862888. Email : bsensarkar@gmail.com	tya Ma	arg, Chanakyar	puri, New Deini-	·110021. Ph.NO	. 011-26115657,			ears of property tax, electricity dues, etc., by	(BBGTPS)		
11. D	etails of the firm	n's representative attending the PBC must reach to ain necessary security clearance.	this off	fice 03 days in a	advance for Indiar	n Nationals and 1	0 days for Foreign			sale certificate will be issued only in the name	Thiruma- kottai	107.88	Natural
		es the right to cancel / withdraw the NIT / Tender w	vithout	assigning any i	reason			of the tenderer.	will be returned through EET	/ NEFT / RTGS to the bank account details	Power	107.00	gas
12.1		es the light to cancer / withdraw the Wit / lender w	mnout	assigning any i		Asst. Ge	eneral Manager	provided by them in the bid form an		/ NEFT / KTGS to the bank account details	Station		
							neral Manager			sibility of the highest bidder to pay 1% of the	Kuttalam	101	Natural
		ORDNANCE FACTORY KANPUR, KA	LPI R	OAD, KANP	PUR - 208009	, INDIA				ot take any responsibility for the same.	Power Station		gas
		Fax: 91-0512-2216040, Ph.: 91-0512-22	29516	1-68 (4 lines)	Email: ofc.ofb	@nic.in				he intending bidders may contact the Branch h, No.5, Kamarajar Salai, Chennai-600 005	Valuthur		
No.:	ORDFYS/OFC/D	AVP/04/15-16/EO/03								ed service provider. M/s. Matexnet P Ltd.	Power	187.2	Natural
davp	10201/11/0479	9/1617						Place : Chennai		AUTHORISED OFFICER	Station		gas
								Date : 18.06.2016		Indian Overseas Bank			

How they got the breakthrough

While performing experiments in their lab at IIT Madras, Prof Sujith and his team were able to intuitively sense and predict when the system was about to become unstable. On analysing the data just before the instability, they realised that the bursts correspond to a type of behaviour known as 'intermittency' in dynamical system theory, which was a breakthrough

SALE OF IMMOVABLE PROPERTIES MORTGAGED TO THE BANK UNDER THE SECURITISATION AND RECONSTRUCTION OF FINANCIAL ASSETS AND ENFORCEMENT OF SECURITY INTEREST ACT, 2002 Whereas Mr.C. RAMESH BABU S/o.C.Chandran, has borrowed monies from Indian Overseas Bank,

E-AUCTION SALE NOTICE

Vivekananda House branch against the mortgage of immovable property more fully described in schedule hereunder and the Bank has issued a demand notice under Section 13 (2) of the SARFEASI Act, 2002 on 23.07.2015 calling upon the Borrower Mr.C. RAMESH BABU S/o.C.Chandran, 149, Pappankuzhi Village, Sriperumbudur Taluk-600 056. to pay the amount due to the Bank, being Rs.14,20,730/- together with further interest, costs and expenses within 60 days from the date of the said notice.

Whereas, the borrower having failed to pay the amount due to the Bank as called for in the said demand notice, the Bank has taken possession of the secured asset more fully described in the schedule hereunder on 20.10.2015 under section 13(4) of the said Act.

Whereas the borrower having failed to pay the dues in full, the secured creditor, Indian Overseas Bank has decided to sell the under mentioned secured asset in "As is Where is" and "As is what is" condition under section 13 (4) of the Act read with Rules, 8 & 9 of the security interest (Enforcement) Rules, 2002. The dues of the borrower in the loan account as on 17.06.2016 works out to Rs.15,71,025/- (Rupees Fifteen Lakhs Seventy One Thousand Twenty Five only) and further interest and costs thereon.

DESCRIPTION OF THE IMMOVABLE PROPERTY

All the piece and parcel of the land and building at S.No.302/1/ as per patta-302/1C, Venugopalapuram. Door No. 2/178, Plot No.16 (southern side), Venugopalapuram, 2nd Street, lyyapanthangal, Porur, Chennai-600 116. Total extent 1200 sq.ft. Thereabouts bounded on the; North by: L & B bearing Plot No.16 (Northern part) Door No. 2/177A, South by: 24 Feet Road (Venugopalapuram 2nd Street), East by: 20 Feet Road (Main Road), West by: L & B bearing Plot No.15 (Door No. 2/180).

Reserve Price:	₹ 55,00,000/-; EMD: ₹ 5,50,000/-							
Date and time of e-auction:	: 22.07.2016 between 12.00 noon and 2.00 p.m. with auto extension of five minutes each till sale is completed.							
EMD Remittance	: EMD Deposit shall be payable through EFT/NEFT/ RTGS Transfer in favour of "IOB, Cathedral Branch" to the credit of IOB E-auction EMD account, A/c No.010902000970853 Indian Overseas Bank, Cathedral Branch, 762, Anna Salai, Chennai 600 002. Branch Code:0109; IFSC Code: IOBA0000109							
Bid Multiplier	:₹ 50,000/-							
Inspection of property	: 16.07.2016 From 11.00 a.m to 3.00 p.m							
Submission of online applic	ation for bid with EMD: 20.06.2016 onwards							
Last date for submission of	online application for BID with EMD: 21.07.2016 till 4.00 p.m							
	Terms and Conditions of E-Auction Sale							
	erties will be sold in lots by e-auction through the Bank's approved service er the supervision of the Authorized officer of the Bank.							
	ntaining online e-auction bid form, declaration, general terms and conditions e in website http://www.matexauctions.com							
3. Intending bidders shall hold a	valid digital signature certificate and email address. For details with regard to							

Thermoacoustic Instability

Big engines that produce 500-600 MW electricity operate in lean condition. which means less fuel and more air. They do this to adhere to stringent