Ernakulam firm unveils first set of RT-PCR test kits


TCM is among six companies chosen by IIT Delhi nationwide to manufacture the much-awaited Covid test kits.

Healthcare workers getting ready by donning PPE with face shields before testing swabs through RT-PCR method.

TCM Ltd, a Kochi-based chemicals manufacturer until recently and founded by Nobel-laureate physicist C V Raman back in 1943, has rolled out its branded Covid-19 test kits based on a technology developed by IIT Delhi, the company said on Wednesday.

TCM is among six companies chosen by IIT Delhi nationwide to manufacture the much-awaited Covid test kits.

The company’s managing director, Joseph Varghese said the kit -- named Covi-DetecT -- is the first and only Real-Time PCR-based Covid test kit manufactured in Kerala. He said the availability of quality test kits locally will take the strengthen the state’s fight against the dreaded disease.
“Our fully-equipped unit in the Kinfra Biotechnology and Industrial Zone in Kochi has already reached a capacity for 10,000 tests per day and in a week’s time will produce 500 kits per day, which will be good enough for 50,000 tests per day,” Varghese was quoted in a release issued here. He said Kerala is now fully dependent on supplies from other states for Covid tests, which normally take a minimum of 48 to 72 hours, sometimes even more, to reach the state through a dry-ice packed journey.

The Weizmann Institute of Science signs an MoU with Indian Institute of Technology, Delhi for research and academic collaborations


A memorandum of understanding (MoU) between the Weizmann Institute of Science, Israel and the Indian Institute of Technology, Delhi (IIT – D) was signed this October, virtually.

The MoU covers a range of opportunities for collaboration between the two institutions including research exchange, student and postdoctoral fellow exchange, short-term educational programmes on topics of mutual interest, organising of joint seminars, conferences and workshops.

The Weizmann Institute of Science in Rehovot, Israel, is one of the world’s top-ranking multidisciplinary research institutions offering masters’ and doctoral-level degrees across five faculties. It is recognised for its wide-ranging exploration of the natural and exact sciences. The institute’s scientists are advancing research on the human brain, artificial intelligence, computer science and encryption, astrophysics and particle physics, and they are tackling diseases such as cancer, and addressing climate change through environmental, ocean and plant sciences, and more.

Indian Institute of Technology Delhi is a public technical and research university. An Institution of Eminence (IoE), it is one of the 23 IIT’s created to be Centres of Excellence for training, research and development in science, engineering and technology in India.

Prof. Ziv Reich, Vice-President, Weizmann Institute of Science, states: “We are very happy to collaborate with a pioneer institute like IIT-Delhi. Through this MoU we hope to leverage the expertise of both the institutes to conduct interdisciplinary basic research and subsequently address global challenges. We highly appreciate the quality of research in India and hope that our work together furthers our collective scientific understanding.”

The MoU provides a strong platform for various collaborations that involve academic, research and human resource development. The aim of the collaboration is to help in the identification of problems and work jointly by exchanging research and academic expertise.

Prof. Naveen Garg, Dean Alumni Affairs and International Programs, IIT-Delhi said, “We are happy to have the opportunity to collaborate with the Weizmann Institute of Science, an institute recognised world-wide for its basic research. We look forward to some interesting collaborative research and finding solutions to world’s most pressing challenges.”
The Sustainable Environergy Research Lab (SERL) of Chemical Engineering Department, IIT Delhi has demonstrated working prototype of Vanadium Redox Flow Battery (VRFB). The vanadium redox flow battery can efficiently store and utilize renewable energy for a wide range of applications such as rural electrification, e-vehicle charging station, domestic and commercial power back-up etc. leading to zero carbon footprint.

Environment Pollution (Prevention & Control) Authority (EPCA) has banned the use of diesel generators (except emergency purposes) in Delhi-NCR region from 15th Oct 2020 under Graded Response Action Plan to control the rising air pollution. The flow battery can be an efficient replacement to the polluting diesel generators.

Prof. Anil Verma, SERL, Chemical Engg. Department, IIT Delhi said, “VRFB is non-polluting (no emissions), easily scalable, safe and environmentally friendly, and highly durable. One of the major differences between the flow battery and conventional battery is the independent scaling of power and energy capacity. The flow battery can store energy from kWh to MWh range and suitable for long discharge time with low cost in contrast to the conventional battery.”

The team is highly enthusiastic about the indigenously developed VRFB technology and actively participating in several national competitions and challenges in order to drive the technology from lab to society. To encourage the team, Prof. V. Ramgopal Rao, Director, IIT Delhi, along with the Deputy Directors (Operation, and Strategy & Planning) has inaugurated the working prototype of
VRFB.
The team members of SERL under the guidance of Prof. Anil Verma have recently filed five patents and also contributed to scientific international journals of repute.

**JEE Advanced 2020 Toppers flock to IIT Bombay, Delhi - none of Top 100 chose IIT Kharagpur**


JEE Advanced Toppers have chosen IIT Bombay and IIT Delhi this year. IIT Kharagpur and IIT Kanpur have not received a single student from the Top 100 JEE rankers.

Indian Institute of Technology Bombay, IIT-B, and Indian Institute of Technology Delhi, IIT-D are the top choices for JEE Advanced 2020 Toppers this year. IIT Madras is also on the list for JEE rankers, but surprisingly non of the Top 100 chose IIT Kharagpur this year.

Of the top 100 JEE rankers this year, 61 of them chose IIT Bombay, 30 students chose IIT Delhi, 7 registered themselves for IIT Madras, but non among the toppers chose IIT Kharagpur despite being one of the best IITs in the country.

The same is the case with IIT Kanpur as well. About 20 years back the top IITs included Kharagpur, IIT Kanpur, IIT Madras, IIT Bombay, and IIT Delhi. Over the years the popularity of IIT Delhi and IIT Bombay bloomed and now both these institutes are counted among the best engineering institutes of the nation.

But the sad part is the oldest of the IITs are slowing losing their status. This year neither IIT Kharagpur nor IIT Kanpur received a single student from the Top 100 JEE rankers. For the top 500 or 1000 students also Bombay, Delhi and Madras are amongst the top preferences while Kanpur and Kharagpur have sizeable representation in the group.

IIT Bombay Director, Subhasis Chaudhari while speaking to TOI said, “We know topper opt for IIT Bombay because of the quality of education they get here. This is a melting pot, attracting students from across the country, the academic ambiance, the rigour, and the research make academic life here competitive and we see that since the last 8 to 10 years similar number of toppers come to our campus.”

Students among the top 1000 have opted for other IITs including Roorkee, Guwahati, and Hyderabad. This year more than 16000 seats are available for admissions in 23 IITs across India. Among the top 1000, some students have opted for other options as well while 2 students among the top 500 have declined a seat in IIT.

Meanwhile, JoSAA Counselling 2020 first seat allotment result has been released on Saturday. Today is the last date for online reporting for students whose names have been listed for the seat allotment round. The seat allotment round 2 lists would release on October 21, 2020.
Founders of Zomato, PolicyBazaar Win IIT Delhi Alumni Awards 2020

Indian Institute of Technology Delhi (IIT Delhi) has announced this year's alumni award in various domains including Distinguished Alumni Award, Distinguished Alumni Service Award and Graduates of Last Decade (GOLD) Award.

The Indian Institute of Technology Delhi (IIT Delhi) has announced this year's alumni award in various domains including Distinguished Alumni Award, Distinguished Alumni Service Award and Graduates of Last Decade (GOLD) Award. The Distinguished Alumni Award under Entrepreneurship will be presented to co-founder and group CEO of Policy Bazaar Mr Yashish Dahiya and founder and CEO of Zomato Mr Deepinder Goyal.

IIT Delhi will present the Distinguished Alumni Award to Professor HV Jagadish of Bernard A Galler Collegiate. Mr Jagadish is professor of Electrical Engineering and Computer Science at University of Michigan. The Distinguished Alumni Award will also be presented to 1982 batch's Mr Nemkumar Banthia of Canada Research Chair. Mr Banthia is a professor of Civil Engineering at the University of British Columbia. Professor Jagadesh and Professor Banthia have received the Distinguished Alumni Award for excelling in Teaching and Research.

IIT Delhi will award Professor Neville Pinto, President of University of Cincinnati. Professor Pinto was a BTech Chemical Engineering student of the institute of 1980 batch. The professor will receive the Distinguished Alumni Award under Academic Leadership.

The Distinguished Alumni Service Award will be presented to founder and managing partner of IvyCap Ventures Mr Vikram Gupta.

Congratulating the winners, IIT Delhi, in a social media handle posted: “IITDelh is pleased to announce the recipients of the Alumni Awards 2020. This year 5 alums receive the Distinguished Alumni Award, 1 alum receives the Distinguished Alumni Service Award and 2 alums receive the maiden Graduates of Last Decade (GOLD) Award. Congratulations!”

The Graduates of Last Decade (GOLD) Award will be presented to Assistant Professor at University of California, Berkeley, Professor Sanjam Garg under Teaching and Leadership and Mr Pankaj Chaddah, co-founder of Zomato and Mindhouse under Entrepreneurship.

CRPF inks MoU with IIT Delhi, DRDO to prepare tech experts from among force

The about 3.25 lakh-strong force has about 500 officers and sub-officers who hold professional degrees in engineering and technology.
The Central Reserve Police Force (CRPF) signed an MoU with IIT-Delhi and the DRDO on Saturday to create a pool of officials who will work to find technology solutions for its operational challenges.

The about 3.25 lakh-strong force has about 500 officers and sub-officers who hold professional degrees in engineering and technology.

The Memorandum of Understanding between the country’s largest paramilitary force, the Indian Institute of Technology-Delhi and the Defence Research and Development Organisation (DRDO) will enable these officers to undertake short-term specialised courses at these institutions and also pursue research work.

“A batch of 40 engineering graduate officers and sub-ordinate officers of the CRPF with right aptitude and potential will undergo a certificate course of about three to six months under IIT-Delhi’s continuing education programme,” a CRPF spokesperson said.

“This will equip them with unique skills, capabilities and knowledge to tackle complex challenges, meet operational and strategic needs and enhance competitive advantage,” he said.

A selected group of officers from this trained batch will undergo higher degree courses at the IIT-Delhi. These trained officers will act as tech advisors to the force, the spokesperson said.

The chosen officials will also be associated with joint research projects undertaken by the DRDO and IIT-Delhi in defence and security technology solutions, he said, adding the first batch is expected to undertake courses and research work in ballistics, building and infrastructure, information technology and communication.

CRPF Director General A P Maheshwari said, “The aim of inking the MoUs with the two premier institutions is to build capacity for optimal utilisation of police technologies and to integrate requirements of the force with their research labs for realistic indigenisation of technologies on the internal security grid.” The CRPF is designated as the lead internal security force of the country and is the mainstay for anti-Naxal operations in Left Wing Extremism-affected states and counter-terrorist combat in the Kashmir Valley.

**DAKSH Society and IIT Delhi sign agreement for Centre of Excellence for Law and Technology**

DAKSH Society, Bengaluru and the Indian Institute of Technology Delhi (IIT Delhi) have signed an agreement to establish the ‘DAKSH Centre of Excellence (CoE) for Law and Technology at the campus. The MoU was signed by professor V Rmgopal Rao, Director of IIT Delhi and Surya Prakash BS, Programme Director, DAKSH Society Bengaluru.

Research and Education

According to an official statement released under the new agreement, the two institutions will work in the fields of ‘Research and Education’ in Technology, Engineering, Management and Law. IIT Delhi has stated that the CoE will conduct interdisciplinary research on the different aspects of the justice system and build solutions drawing from the fields including Operations Research, Data analytics, Technology and law.

IIT Delhi will provide scientific and technical expertise, extensive research facilities to the centre apart from the infrastructural facilities. It has further stated that the students and research scholars will also be attracted to set up startups and incubators on different law and technology-related research solutions.

IIT Delhi Major Departments to come together

Professor Rao in a statement has also mentioned that the initiative is a beginning of a long-standing relationship between IIT Delhi and DAKSH and the centre will address some of the important issues faced by the society and work to provide the solutions. He further pointed out that the major departments at IIT Delhi such as the Mechanical Engineering and Computer Science are coming together for the new initiative.

DAKSH Society, Bengaluru will also be reaching out to the judiciary, institutions of the state, universities, private organizations and researchers for collaborative research projects along with connecting with the groups at IIT Delhi for interdisciplinary research and development for the justice system. The initiative will also assist in securing financial resources for the centre.

IIT Delhi Director Mr Surya Prakash BS also stated that the initiative is an exciting partnership which will provide independent non-partial interdisciplinary research to address the most pressing issues in the justice system. He further stated that the CoE will become a hub for innovative research and implementation models for the justice system. He also added that a launch event is planned and will be conducted soon.

IIT Delhi, Hyderabad Open House on Oct 13, 14 for JEE Advanced 2020 admission related queries


Indian Institute of Technology, IIT Delhi and Hyderabad are going to conduct open house sessions for JEE Advanced 2020 Admission related queries - Check links here

Indian Institute of Technology, IIT Delhi and Hyderabad would be conducting an open house session for all students seeking admissions to India’s topmost engineering institutes. The open house by
Indian Institute of Technology, IIT Delhi would be conducted on October 14, 2020, while IIT-Hyderabad would conduct an open session for aspirants seeking admissions to IIT on October 13 and 14, 2020. The candidates would be able to resolve all issues and queries related to online JEE Advanced admissions this year.

IIT-Delhi is conducting the open house only for female candidates who have cleared JEE Advanced 2020, as per the institute’s tweet. “Please fill the form below by October 13, 5 PM to receive the link and details of the event,” the tweet reads. The online open session would be held on October 14 from 11 am to 5:30 pm. Take a look at the details here.

The link shared by IIT Hyderabad reads, “Doubts!!! will clarify IITHyderabad is conducting an Online Open House for the BTech aspirants 2020 on Tue (Oct 13th) & Wed (Oct 14th) from 2-5 PM.”

IIT Hyderabad’s open house is scheduled to be held from 2 to 5 pm on both days. The online session will be held in youtube, candidates can follow the direct link.

The admission process would be conducted online for 16,053 seats in 23 IITs. The online counselling process for JEE Advanced has begun, and the candidates can participate in it using the website-josaa.nic.in for online registration and choice filling process. The results for JEE Advanced was earlier released on October 5, and a total of 43,204 candidates have qualified the exam.

**Omega Seiki Mobility and IIT Delhi Come Together To Develop EV Technology**


Omega Seiki Mobility (OSM), a part of Anglian Omega Group of companies, has collaborated with the Foundation for Innovation and Technology Transfer (FIIT), Delhi – an organisation established by
the Indian Institute of Technology, Delhi (IIT-Delhi). This MoU will allow both the firms to work together on electric vehicle technologies and advanced research.

The collaboration is primarily aimed at innovating alternate energy-powered vehicles and other emerging technologies in the EV space, including efficiency and performance improvement of Omega Seiki Mobility’s existing vehicles.

Commenting on the collaboration, Uday Narang, chairman, Anglian Omega Group said “We are excited to collaborate with FITT for exploring the valuable resources in alternative energy-powered vehicles and other emerging technologies in the EV industry. Partnering with the best premier technical and research university will not only contribute to India but to the whole world, through excellence in scientific and technical education and research will ultimately serve as a treasured resource for industry and society as a whole.”
Dr Anil Wali, MD, FITT – IIT Delhi said, “E-mobility has arrived in India. This is a milestone occasion as it brings together two parties from different walks of life, who has the potential to work jointly towards this global disruption of electric mobility.”

The strategic collaboration between OSM and FITT will leverage Omega Seiki Mobility in terms of design, simulation, product development, prototyping and production of automotive components and full vehicle development of two-, three- and four-wheeled electric vehicles. OSM will be making its vehicles, design and manufacturing facilities and lab available for any prototyping, testing or sample manufacturing as part of this collaboration which will eventually subsidise FITT.

The collaboration will be helpful for the development of battery and battery management systems, electric powertrains, electronics, charging system, telematics, and overall vehicle architecture as well as focus on improving performance from the battery and electric drivetrains. Omega Seiki is also expected to introduce its electric two-wheelers in India by the end of this year.

Omega Seiki Mobility launched Rage & Rage+ on Auto Expo 2020, which will primarily cater to the B2B segment. The introduction of the vehicles will usher a whole new concept in emission-free cargo transportation and people movement. Going forward, the cargo vehicle will provide a much-needed impetus to companies in the B2B and e-commerce segment. Also, Omega Seiki will be rolling out electric two-wheelers by Diwali this year and electric pickup trucks within the next three years. Mr Uday Narang discourses that the agreement over reducing dependency on China for components should be treated as a positive opportunity to make India a global component supply source.

**IIT-D flags toxic ultrafine particles in Delhi air, need to study impact on body**


Authored by experts from IIT Delhi’s Civil Engineering and Biological Sciences department, the study is titled ‘Insights on the biological role of ultrafine particles of size PM<0.25: a prospective study from New Delhi’.
According to doctors, respiratory illnesses like viral influenza increase with a spike in pollution levels as poor air quality leads to inflammation in the lungs making it more vulnerable for the virus to penetrate.

Ultrafine particles suspended in the air constitute more than 50% of the total particulate matter of 2.5 micrometres (PM2.5) size around the year in Delhi, and are associated with higher cytotoxicity in human lung cells, a new study from the Indian Institute of Technology (IIT) Delhi shows.

Data from the study sheds light on the necessity of routine monitoring of ultrafine particles that are below PM2.5 micrometres in size, and particularly PM size lower than 0.25, which is linked with more cytotoxicity — the quality of being toxic to the body’s cells.

The study, published in Elsevier’s peer-reviewed journal Environmental Pollution in September, also found that PM2.5 levels have no relation to PM<0.25 levels. “In other words, a decrease in total PM2.5 levels may not be associated with a decrease in PM<0.25 levels... These findings unequivocally suggest that total PM2.5 levels are not good indicators of PM<0.25 levels,” the paper states.

Authored by experts from IIT Delhi’s Civil Engineering and Biological Sciences department, the study is titled ‘Insights on the biological role of ultrafine particles of size PM<0.25: a prospective study from New Delhi’.

While the adverse impact on health from chronic exposure to PM2.5 is well established — including stroke, lung cancer, and other heart and lung related problems — different size fractions within PM2.5 have not been well studied, the study states.

It adds that the National Ambient Air Quality Standard has fixed a threshold for PM2.5 at 60 µg/m3 for 24 hours and 40 µg/m3 annually, but it does not have specific policies for ultrafine particles.

High levels of PM2.5 are recorded in Delhi every year during post-monsoon and winter months, which in the past have led authorities to declare a public health emergency on some days and close schools.
“Considering that PM2.5 levels in some developing countries, such as India, reach to over 15-fold higher than the recommended limit, the absolute concentration of different sizes of particles within PM2.5 may be very high and is worthy of further investigation,” the IIT study states.

Data for the study was collected six times every month between January and December 2017, through a cascade impactor measurement device installed at the main gate of IIT Delhi, at the height of human breathing zone — 1 to 1.5 metre.

Airborne particles in five sizes — 2.5, 1, 0.5, 0.25 and below 0.25 micrometres — were collected through the filters. Human lung carcinoma epithelial cells were used for cytotoxicity assessment.

“For PM particles of size up to 2.5 µm, 1.0 µm, 0.5 µm and <0.25µm, the cumulative average mass concentration values were found to be highest for the post-monsoon season (October-December), followed by winter (January-February),” the study said.

“The observed high levels of PM in the post-monsoon and winter months may be partially explained by celebration of Diwali, agricultural residue burning in neighbouring states of Punjab and Haryana, and secondary formation of particles due to favourable meteorological conditions. The low temperature and high humidity during winter nights enhance the fog-smog-fog cycle and result in 2-3-fold increase in PM concentration compared to pre-monsoon and South-West monsoon season,” the study said.

Findings also show particulate matter of below 0.25 micrometres constituted the highest share in the composition of PM2.5 around the year as compared to particles of other sizes.

The PM<0.25 particles constituted over 40% of PM2.5 levels during post-monsoon season, and over 30% during winters and pre-monsoon period between March and May.

Their concentration was highest during the monsoon between June and September, constituting over 50% of PM2.5 levels. Further investigation is needed to find the reason behind the spike in particles of this size during these months, the study states.

Exposure to ultrafine particles of below 0.25 micrometres was also associated with over two-fold higher cytotoxicity, as compared to exposure to other sizes.

“The highest toxicity was seen for the months of January 2017 and February 2017,” the study said.

It concludes by stating that findings demonstrate a potentially important link between PM<0.25 levels and human health. “We believe this work provides novel insights for policy changes in monitoring PM, especially the need to routinely monitor PM<0.25 and the necessity to start working towards establishing exposure limits for PM<0.25 when the total PM2.5 levels are breached,” the study concludes.
JEE Advanced AAT 2020 Result declared at jeeadv.ac.in, here’s direct link to check scores


The Indian Institute of Technology - Delhi (IIT-D) on Sunday declared the Architecture Aptitude Test (AAT 2020) on the official website of JEE Advanced at jeeadv.ac.in.

The Indian Institute of Technology - Delhi (IIT-D) on Sunday declared the Architecture Aptitude Test (AAT 2020) on the official website of JEE Advanced at jeeadv.ac.in. The JEE Advanced AAT 2020 was conducted on October 8. Candidates who wish to take admission in B.Arch course offered by IIT BHU, Varanasi, IIT Roorkee and IIT Kharagpur had taken the AAT 2020 that was conducted in pen and paper mode. Seat allotment of the candidates who have qualified the exam will be done through JoSAA.

Direct Link to check AAT Result 2020

JEE Advanced AAT Results 2020: Steps to check
Visit the official website -- jeeadv.ac.in

On the official website, click on the link that reads, “AAT 2020 result is available on the Candidate Portal”

A login page will appear key in your login credentials and submit

Your AAT result 2020 will be displayed on the screen

Download and take its print out.

Candidates allowed to change branch after first year: IIT Delhi Director, V Ramgopal Rao

Indian Institute of Technology, Delhi Director, V Ramgopal Rao has informed through his twitter handle that at IIT Delhi, over 100 students are allowed to change their branches every year at the end of first year, based on their performance. The tweet was made in reference to the queries sent by many JEE Advanced qualified candidates regarding change in branches. He also mentioned that the authorities are trying to make this process more flexible.

Change in branch at IIT Delhi
Students at IIT Delhi are eligible to apply for a change of branch at the end of the first year only, provided they satisfy the criteria laid down by the authorities. Note that change of the branch will be permitted strictly on the basis of merit, in each category, as determined by CGPA at the end of the first year, subject to the limitation that the actual number of students in the third semester in the branch to which transfer is to be made should not exceed its sanctioned strength by more than 15% and the strength of the branch from which transfer is being sought does not fall below 85% of its sanctioned strength.

Also, in case two or more candidates applying for a change in the branch have the same CGPA then a tie will be resolved on the basis of JEE rank of the applicant.

Rules of change branch at IIT Delhi

- CGPA for General and OBC category students - >8.00
- CGPA for SC/ST and Person with Disability category students - >7.00
- Earned credits / non-graded units at the end of the second semester of first year - All credits of core and non-graded units of first year
- One first-year course has been identified by each programme, in which the grade of the applicant should be equal to or above B.
- The student should have no disciplinary action against him/her.

IIT Delhi startups launch Covid-19 protection lotion, antiviral T-shirts

The products, which are part of an antiviral kit, were unveiled by institute Director V Ramgopal Rao on Friday. The two startups are---E-TEX and Clensta.
Two startups incubated at the Indian Institute of Technology (IIT) here have together launched antiviral T-shirts and a COVID-19 protection lotion at affordable prices, according to officials.

The products, which are part of an antiviral kit, were unveiled by institute Director V Ramgopal Rao on Friday. The two startups are---E-TEX and Clensta.

The kit consists of a novel Clensta protection lotion, hand sanitiser, E-TEX Kawach Antiviral T-Shirt and Kawach Mask.

The products have been backed by experts from Chemical and Textile department of IIT, Delhi. According to officials, the antiviral fabric designed by startup---E-TEX, has been designed using advanced technology which reduces the likelihood and speed of contaminations and transmissions by destroying micro-organisms on contact. The antimicrobial property of the garment remains effective even after 30 washes at mild condition. The finishing is done on cellulosic fibres, which is safe for human contact and on the environment.

“The COVID-19 pandemic is pushing for an all-time-high demand of multi-functional anti-viral and microbial apparels. Developing cost-effective bio-clothing with antiviral and antimicrobial functionalities through local resources and resilient manufacturing can deactivate the viral threats, can efficiently stop or slow the spread of the virus. “Further, this will boost the local economy for textile and garment sectors,” said Bipin Kumar, Department of Textile and Fibre Engineering, IIT Delhi.

Kumar explained that the COVID-19 Protection Lotion launched by the start up named “Clensta” offers 99.9 per cent virus protection with antiviral and antiseptic properties for up to 24 hours.

“The product is a breakthrough advancement in the formulation of engineering chemistry with first of its kind PAP Technology (Prolonged Antiviral Technology) to prevent bacterial, viral, and fungal infections without harming the environment and human health and advanced hand sanitiser is formulated with increased alcohol retention time to be effective prevention against multiple viruses,” he said.

“The product can be used over any exposed part of the body including face and hands. The application of the product keeps users safe from viruses by disrupting it for almost 24 hours and reduces the extended use of alcohol-based sanitizers and washing hands multiple times a day,” he added.

India’s COVID-19 caseload inched closer to 64 lakh-mark with 81,484 infections reported in a day, while the number of people who recuperated from the disease crossed 53 lakh pushing the recovery rate to 83.70 per cent, the Union Health ministry said on Friday.

The total number of coronavirus cases in the country mounted to 63,94,068, while the death toll climbed to 99,773 with the infection claiming 1,095 lives in a span of 24 hours, according to the ministry data updated at 8 am on Friday.
Indian Institute of Technology (IIT) Delhi on Thursday announced the launch of a new undergraduate programme, B.Tech in Materials Engineering. Students qualifying JEE (Advanced) and choosing IIT-Delhi will be eligible for this programme. The new programme will be offered by the Institute’s Materials Science and Engineering Department and there will be 40 seats this year.

Josemon Jacob, head of Department of Materials Science and Engineering said: “The development, selection and processing of materials are central to any engineering advancement. The UG programme in Materials Engineering is designed to equip the students with the necessary knowledge and skills to cater to all industrial sectors that require knowledge in material design and engineering.”

He added that graduates of this programme will be poised to enter the aerospace, manufacturing, defence, oil & gas, automotive and petrochemicals industry.