THE PULSE OF HBTU

Fortnightly Newsletter

YEAR II | MONDAY, FEB 1st, 2021 | CONVOCATION EDITION





2nd Convocation of Harcourt Butler Technical University

The Harcourt Butler Technical University witnessed its second convocation on 29th of January, 2021. The Ceremony was held in the presence of Honorable Chancellor and State Governor Mrs. Anandi Ben Patel and Honorable Vice-Chancellor Dr. N.B.Singh. Dr. A.D. Sahasrabudhe, Chairman, AICTE and Mr. Sandeep Singh, State Minister of Technical Education, U.P. were invited as the Chief Guest and Guest of Honor respectively. The auspicious ceremony to provide degrees to over 500 students from Bachelors, Masters and Ph.D. was hosted by Dr. R.N. Tripathi, Dean, Student Welfare and Dr. Niraj Kumar, Registrar.

The ceremony was inaugurated by Lightening of Lamp and The Kulgeet of the University. It was followed by the Vice-Chancellor's Address, wherein he emphasized how the Centenary Year of the University will unfold. He talked about NEP 2020 and various steps taken by the college in contributing to the New Startup Policy. Further, he highlighted the contributions of University during the Pandemic-Ridden times- Janta Rasoi, Relief Fund Allocation, Conduction of Online Classes, Awareness Campaign by students in Rural Areas and several quarantine measures undergone by the University. At last he talked about the astounding Academic Contributions by the University Professors and the Students.

The Gold, Silver and Bronze medalist were awarded their respective medals and degrees. (The official list can be found on Convocation Special Page)

Mr. Singh, described his elation regarding the centenary year of the college. He emphasized on how the government is promoting "Atmanirbhar Bharat" and the Importance of Education. He inspired students by his words of motivation. Dr. Sahasrabudhe started his speech by congratulating everyone on Completion of 100 years by the University. He talked about passion of youth and how education should never stop, no matter what the circumstances are. He remarked how students can make use of online portals like Swayam and SIH.

The Address of Chancellor proved to be thought-provoking. She pointed out how technical college can help to invent technologies to aid the primary education. She further described how National Education Policy is all set to revolutionize the field of formal education. She encouraged everyone to do some social work, however small it may be and the urgency of Women Education right from the grass-root level. After this the grand ceremony came to a conclusion by presentation of books as gifts to the guests.

NATIONAL INTERNATIONAL

U.K. invites PM Modi for G7 summit

The United Kingdom has invited Prime Minister Narendra Modi to attend the G7 summit that is scheduled to be held in June. Apart from India, Australia and South Korea are also invited to participate in the proceedings of the summit as "guest countries". "U.K. Prime Minister Boris Johnson will use the first in-person G7 summit in almost two years to ask leaders, including Indian Prime Minister Narendra Modi, to seize the opportunity to build back better from coronavirus, uniting to make the future fairer, greener and more prosperous," a statement issued by the British High Commission announced on Sunday. The G7 summit will be held in Cornwall from June 11 to 13. Cooperation between the U.K. and India is significant this year as India is a non-permanent member at the UN Security Council, where the United Kingdom will take over the presidency in February.

First phase work of tech park to be over by 2023: Delhi CM Arvind Kejriwal

Taking into cognizance the delay of 10 months in construction work for the first phase of the city's first-of-its-kind technology park in Rani Khera, Chief Minister Arvind Kejriwal on Friday held a meeting with the Delhi State Industrial and Infrastructure Development Corporation Limited (DSIIDC) officials. Earlier, it was estimated that the first phase of the Rani Khera Technology Park work will be completed by August 31, 2022 but now the revised deadline is May 2023. The new Rani Khera Technology Park, a new IT business project which will be constructed by the DSIIDC in seven phases and is being personally monitored by the CM. Officials of the department gave a presentation to the CM on the construction work, which will commence from May 2021 onwards, Kejriwal also reviewed the status of the on-going maintenance works in other industrial areas of which come under DSIIDC. Delhi Minister of Industries Satyendar Jain was also present in the meeting. All the necessary approvals of the concerned government departments for the construction of the business park have been "duly completed", it added. Setup across sprawling 150-acres of land, this technology park will be just 15 minutes away from the Delhi International Airport. Kejriwal also directed the officials to complete the pending as well as ongoing re-development and maintenance works.

India starts world's largest Covid-19 vaccination drive

India started inoculating health workers Saturday in what is likely the world's largest Covid-19 vaccination campaign, joining the ranks of wealthier nations where the effort is already well underway. The country is home to the world's largest vaccine makers and has one of the biggest immunization programs. But there is no playbook for the enormity of the challenge.

Indian authorities hope to give shots to 300 million people, roughly the population of the U.S and several times more than its existing program that targets 26 million infants. The recipients include 30 million doctors, nurses and other front-line workers to be followed by 270 million others, who are either aged over 50 or have illnesses that make them vulnerable to COVID-19.

The first dose of a vaccine was administered to a health worker at All Indian Institute of Medical Sciences in the capital New Delhi, after Prime Minister Narendra Modi started the campaign with a nationally televised speech. "We are launching the world's biggest vaccination drive and it shows the world our capability," Modi said. He implored citizens to keep their guard up and not to believe any "rumours about the safety of the vaccines." Health officials haven't specified what percentage of the nearly 1.4 billion people will be targeted by the campaign. But experts say it will almost certainly be the largest such drive globally. The sheer scale has its obstacles. For instance, India plans to rely heavily on a digital platform to track the shipment and delivery of vaccines. But public health experts point out that the internet remains patchy in large parts of the country, and some remote villages are entirely unconnected. India gave nod for emergency use of two vaccines, one developed by Oxford University and U.K.-based drug maker AstraZeneca, and another by Indian company Bharat Biotech, on Jan. 4. Cargo planes flew 16.5 million shots to different Indian cities last week. Health experts worry that the regulatory shortcut taken to approve the Bharat Biotech vaccine without waiting for concrete data that would show its efficacy in preventing illness from the coronavirus could amplify vaccine hesitancy. At least one state health minister has opposed its use. In wealthy countries including the United States, Britain, Israel, Canada and Germany, millions of citizens have already been given some measure of protection with at least one dose of vaccine developed with revolutionary speed and quickly authorized for use.

UGC releases draft regulations on academic credit bank

The University Grants Commission (UGC) has released draft regulations for the 'Academic Bank of Credits' (ABC), an initiative meant to facilitate credit transfer of students, allowing them to move across streams and higher education institutions. The academic bank of credits was a key proposal in the National Educational Policy (NEP) 2020. The UGC has given till February 5 to send in comments.

The draft regulation states that it is aimed at promoting flexibility of the curriculum framework and interdisciplinary and multidisciplinary academic mobility of students across institutions in the country with an appropriate "credit transfer"mechanism.

As per the draft regulation titled "UGC (Establishment and Operationalization of Academic Bank of Credits (ABC) Scheme In Higher Education) Regulation, 2021", students will be able to choose their own learning path to attain a degree or diploma and choose the multiple entry-multiple exit option.

PM Modi cherishes India's dual victory over Covid-19 and Australia; praise young India

Prime Minister Narendra Modi on Friday said that India's resolute battle to emerge victorious out of the pandemic and in the cricket field in Australia, have yielded momentous victories that will be cherished for long. Addressing the 18th convocation of Tezpur University virtually, Modi drew inspiration for a renewed, self-resilient India from the two notable events where he said the country excelled, even amid most adverse situations. "When the battle against Covid-19 just started, concern was raised that such a vast country like India will get devastated due to the dearth of resources. But India have shown that if you have resolved to do something and resilience, it takes little time for readying the resources," Modi said.

"India did not compromise with the Covid situation and took proactive decisions to curb the fast spreading virus. With made in India solution, we resisted the virus spread significantly and utilized the opportunity to improve our health infrastructure. Our vaccine research and production capacity has given a protection shield not only to India but to many other countries in the world," he added.

CONVOCATION SPECIAL

Medalists of 2nd convocation of HBTU

CHANCELLOR MEDAL :-

SHUBHAM KUMAR SINGH (ME)

VICE CHANCELLOR MEDALS :-

GOLD MEDALISTS

NISHITA SINGH (CE)
PRAGATI AGRAWAL (CSE)
HARSHIT MAURYA (EE)
SHUBHAM KUMAR SINGH (ME)
SHIVANGI PANDEY (ET)
SIDDHARTH GUPTA (IT)
DHARMENDRA SINGH (CHE)
NIRMAL SINGH (BE)
POONAM KUMARI (FT)
SRISHTI SINHA (PT)
AMBAR RASTOGI (OT)
NAVEEN KUMAR KUSHWAH (PL)
SHIVAM CHAUHAN (MCA)

SILVER MEDALISTS

ABHINAV JAIN (CE)
RITIKA GUPTA (CSE)
ANKIT SINGH CHAUDHARY (EE)
PRASHANT LAVANIA (ET)
DEVYANI GOYAL (IT)
SANDHYA VERMA (ME)
PANKAJ (CHE)
SUHASHI MEHROTRA (BE)
SWETA CHAUDHARY (OT)
AMAN KUSHWAHA (PL)
CHARUL AGRAWAL (PT)
ANITA HEMRAJANI (MCA)

BRONZE MEDALIST

ANJALI PATEL (CE)
RAMAN SACHAN (ET)
RAJ SINGH (CHE)
AISHWARYA MISHRA (CSE)
NEHA YADAV (EE)
ANJALI PATEL (CE)
RAMAN SACHAN (ET)
RAJ SINGH (CHE)
AISHWARYA MISHRA (CSE)
NEHA YADAV (EE)

Interview

with

Prof. Alak Kumar Singh

HOD of Food technology Department, HBTU Kanpur

Dean, School of chemical Technology,HBTU Kanpur

Associate Dean of student welfare HBTU Kanpur

Question 1-What are your views about the second convocation of HBTU?

Prof. A K Singh: The life of a college student, especially a journey during engineering is an exceptional time where one develops to acquire all the knowledge of the world we live in. Graduating from a university is not the end of an academic journey, but it is just the beginning of one's career with special wings. Every student enrolled in a university eagerly waits for the day of the convocation to look back on their significant journey with their friends, faculty, and families. Similarly, the day of convocation though looks like an annual event for a university but is all about the course of a journey from the aspirations and achievements of the past to ultimate goals to be realized in the future. While the whole world is preparing for the setback, the University is prepared to organize its second Convocation Ceremony teeming with lush grandeur and celebration by following extreme precaution from the COVID-19 pandemic. Though it is different from all previous years due to the pandemic, it is our whole-hearted effort to conduct it in the best possible way maintaining the Covid-19 protocols. The 2nd Convocation of HBTU Kanpur on 29 January 2021 will be a historic day for the University which has grown exponentially in the last 99 years as a source of inspration in the field of science and technology by maintaining its conspicuous presence in the technical world and embarking a new journey as the university established in 2016.We are delighted to host the 2nd Convocation that will witness the reminiscing of the achievements and key milestones of the academic year 2019-20. I congratulate the outgoing batch of students and hope they will continue to make the university proud shortly.

Question 2-Due to this global pandemic, it was not easy to organize convocation in-person, but the university is still organizing it. How was it possible?

Prof. A K Singh: The convocation ceremony holds a very significant place in every student's life. It is the day in the academic life of the students that reflects all the hard work, dedication, commitment, and enthusiasm pay off. It is a proud day for any institutions when their effort and performance are acknowledged and ready to serve the welfare of society. Marking this substantial milestone for our graduates and their families is significant to us - it's the highlight of our academic year - however, the health and safety of our students, faculty, and staff remain paramount, and we continue to be guided by measures and government directives related to COVID-19 protocols. Several meetings were conducted in the university under the guidance of the Hon'ble Vice-Chancellor to measure the protocols and followed accordingly during convocation. We have all the support and coordination of our valued members to prepare ourselves for the successful accomplishment of the 2nd convocation of HBTU Kanpur.

Question 3-Due to COVID-19, what type of safety system was made by the university administration for convocation?

Prof. A K Singh: Since the inception of the decision in favor of organizing an offline convocation ceremony, the university administration took a step forward to schedule the program with utter safety and precautions. This year, only selected programs have been listed during convocation ceremonies with trained members. Due to the importance of physical distancing and precautions followed as per protocols, alternative opportunities have been explored to acknowledge the achievements of our 2020 graduates in a meaningful way. During the convocation ceremony, it has been assured to follow the strict guidelines by participating members, and no stones were left unturned to accomplish the activity with smooth safety and scheduled guidelines. On behalf of university administrations, I am sanguine that anyone can positively notice the smooth and efficient groundwork of the convocation ceremony.

Question 4-As everyone knows that our college is entering its 100th year after completing its glorious 99 years, seeing how important this convocation is?

Prof. A K Singh: It is a memorable occasion and a landmark for all of us to be a witness while entering the college in its 100th glorious year. The inception and growth of our college are closely entwined with the saga of the rebuilding of Modern India, where the concept of "Atma Nirbhar Bharat" is the core priority to nurture the root of academia and research. Since 1921, Harcourt Butler Technical University (Formerly HBTI Kanpur) has always been an epitome and a source of encouragement in the field of science and technology. Nevertheless, it has sustained its remarkable presence in the technical world. HBTI has an amazing history of awareness, implementation of necessities, and expansion in the field of science and technology. It is steadfast for the source of rapid industrial development, crafting a healthy environment for functional researches, and above all to carve out men and women, having a truly cogent and scientific character. As 'Attitude' is the motto – taking care of which the personality of every harcourtian is molded, we are rightly committed to excel in all the fields of science, engineering, and technology. Its roots are as deep as its outlook. "Government Research Institute, Cawnpore" which was established in 1920, was renamed as "Government Technological Institute" in 1921. Finally, in 1926 it got the name by which we know it today "Harcourt Butler Technological Institute". Now as per Act No. 11 of 2016 by the Government of Uttar Pradesh it becomes a university, i.e., Harcourt Butler Technical University Kanpur.The convocation ceremony is not just about wearing regalia, convocation stoles, and holding these convocation degrees in hands to get snapped.

This day is known to be filled with symbolism and tradition; each student's participation will define their place in history with other academics and scholars that have equally gathered for epochs.Needless to say that under the dynamic leadership of Hon'ble Vice-Chancellor and State Authorities, HBTU Kanpur is continuing unparalleled growth and exemplary progress in every direction in technical education. This convocation is all about to represent the success saga and contribution to society's welfare with enthusiastic skilled graduates of engineering and technology.

Question 5-What message do you want to give all the students who are receiving medals in convocation?

Prof. A K Singh: HBTU Kanpur recognizes the academic achievements of its students in the form of several convocation awards, medals, and prizes that are given to the students at the time of graduation during the convocation ceremony. In every convocation, everyone looked forward eagerly to the meritorious students who consistently perform in their domain because of their hard work and firm belief to excel in every situation. It is the like triumph at the point of your life which denotes the advent of maturity and responsibility. Students dream of such moments in their college life where they harvest the fruits from the tree they have been watering for years. Such moments also inspire their juniors to perform with enough hard work and spirit.
I extend my wish to each one of the students all the very best in whatever endeavors you may embark on. May this day in your life be an exceptional one, a momentous one, and the start of an amazing ahead. Emphasis on your dreams, be ready to take calculated risks, and do not get discouraged by failures. There is no such beautiful thing as a failure. Endeavor to recognize your occupied potential. Behind every student's achievements is the result of the sheer hard work, inspiration, and encouragement they have received from their parents. It's time to thank your parents enough to stand by you through thick and thin. I suggest the graduating students reconnect with faculty members who have to lend a hand to shape their life and made them who they are. It's time for students to invite their family and friends to acknowledge their achievements.

Question 6-What has the university planned for industrial training for 2nd and 3rd-year students studying in the university?

Prof. A K Singh: Industrial training programs in the engineering curriculum are mutually beneficial relationships that help nurture student growth, enhance university-industry relationships, and challenge the faculty to include up-to-date information in the teaching curriculums. The engineering discipline in particular requires graduates to be well-prepared with real-world experience so they can anticipate the working challenges.

HBTU Kanpur firmly believes that internship programs are a brilliant source for career and professional preparation of engineering and technology students. Internships provide real work-related experience to the students and make it easy for the companies to select flexible, experienced, and highly qualified job applicants. So internship programs are rewarding to the students, educational institutes, and employers. During the time of the impact of the COVID-19 pandemic, HBTU has been continuously managing the learning and assessing of students. Moving with the protocols to maintain safety and precautions, HBTU is seriously looking for options to engage second and third-year students in industrial internships in the upcoming semester break and will continue the technological approach to train students with the help of training and placement cell.

Question 7-Sir, you as Dean of School of Chemical Technology, what would you like to tell such things that 1-year students should keep in mind for their 4 years, and those things also help in their placement?

Prof. A K Singh: Opportunities to explore profound powers within ourselves come when life seems most challenging. History has trained us how disturbances are scary at the beginning but how they convert into something better at the end. We have also realized that many times, disruptors have become the shapers of history. It is consequently, our accountability to shape society learning from the positive and negative facets of disruption through new technologies.

As a Dean of School of Chemical Technology, I take the immense pleasure in welcoming all of the first-year students to Harcourt Butler Technical University, Kanpur – a pioneer institute in the field of science, engineering, and technology dedicated to the extraordinary growth and development of every student for a better career prospect. The first year is an imperative time for all the students. It signifies a unique phase in their learning, where they have been given control of the choice of what and where to study. The various courses offered to students in First Year, though common to all branches, essentially lays a robust foundation to develop as a potential engineer.

The first year of university is exciting and challenging, and there may be a period of adjustment, both academically and socially. Your success in engineering will be enriched by your interactions with your fellow students and friends; however, you continue to be responsible for your learning and growth. The pursuit of an engineering and technology degree is all about hard work, yet incredibly exciting. As with the time, you develop intellectually during your scholastic journey you will be challenged and sometimes feel unclear, you will experience highs and lows, you will work harder than you think you are currently capable, and you will achieve more than you think is possible. You will then notice that this process of growing intellectually is an art to be learned and an effort to be sustained, to become what you dream of becoming. One way you can be part of this process is by positively interacting with officials and faculties who are working hard to make HBTU Kanpur a better place to study and perform. We are here to listen to fresh ideas and perspectives!

Question 8-HBTU is particularly known for its chemical technology, so what plans has the college administration made to further the development and improvement of chemical technology?

Prof. A K Singh: HBTU Kanpur has a glorious history and has always been at the forefront of technological developments and growth of industries in the country since its inception. Since its inception as HBTI in 1920, the Institute has been providing all kinds of support to almost all chemical and allied industries effectively due to diverse course structures under the umbrella of the School of Chemical Technology. This is one of the reasons HBTU Kanpur is widely recognized nationally and internationally as the first choice for chemical technology graduates. The seven courses under the School of Chemical Technology – Biochemical Engineering, Chemical Engineering, Food Technology, Leather Technology, Oil Technology, Paint Technology, and Plastic Technology have been actively engaging to facilitate students in comprehensive research infrastructure with top-notch facilities for carrying cutting-edge teaching and research. As a Dean of the School of Chemical Technology, I am committed to maintaining the legacy of the School of Chemical Technology and exploring advanced measures with Heads of all seven departments to adopt and transform chemical technology graduates and scholars.

SCIENCE & TECH

Here's what colours of this barred spiral galaxy say about its star population

"NGC 4535 is located about 50 million light-years away in the constellation Virgo," reads a bit of the caption shared alongside the post.
NASA's Hubble Space Telescope shared this image on its official Instagram account. The caption shared alongside the post describes what it depicts. It reads, the bright colours in this #HubbleFriday image aren't just beautiful to look at; they can help tell us about the population of stars within this barred spiral galaxy, NGC 4535. The blue colours nestled in the spiral arms indicate the presence of younger and hotter stars. In contrast, the yellow tones of this galaxy's bulge suggest that this central area is home to stars which are older and cooler.

Telstra, Ericsson and Qualcomm achieve record 5G Download Speed

Telstra, in collaboration with Ericsson and Qualcomm set a new 5G download speed record of 5Gbps for a single user on a commercial network.
The 5G data call was performed at the 5G Innovation Centre on the Gold Coast using the commercial production network. This was done using a smartphone form factor mobile test device, powered by the Qualcomm Snapdragon X60 5G Modem-RF System with 3rd generation Qualcomm QTM535 mm Wave antenna modules.
The achievement builds on a previous maximum download speed of 4.2 Gbps achieved in September 2020.

German scientists make paralysed mice walk again

Two to three weeks after treatment, the previously paralyzed mice began to walk. The treatment involves injecting carriers of genetic information into the brain to produce a protein, called hyper-interleukin-6.
German researchers have enabled mice paralysed after spinal cord injuries to walk again, re-establishing a neural link hitherto considered irreparable in mammals by using a designer protein injected into the brain.
The researchers from Ruhr University Bochum managed to stimulate the paralysed mice's nerve cells to regenerate using a designer protein. The special thing about study is that the protein is not only used to stimulate those nerve cells that produce it themselves, but that it is also carried further (through the brain). In this way, with a relatively small intervention, we stimulate a very large number of nerves to regenerate and that is ultimately the reason why the mice can walk again.
Fischer told to investigate if method works on larger mammals then make sure that the therapy is safe for humans too. But that will certainly take many, many years.

Sequoia Holdings says employees can draw part of salary in cryptocurrencies

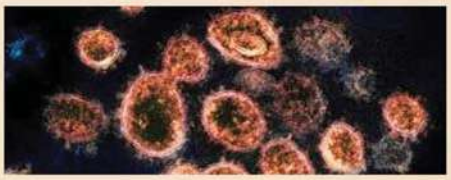
Software development services provider Sequoia Holdings LLC said on Thursday its employees can now receive a part of their salary in cryptocurrencies, should they choose to.
Under the new program, employees can elect to defer a portion of their salary into bitcoin, bitcoin cash, or the Ethereum platform's ether. Earlier this month, Bitcoin, the world's most popular cryptocurrency, hit a record high of $40,000, rallying more than 900% from a low in March and having only just breached $20,000 in mid-December.
The surge has been powered by increased demand from institutional, corporate and more recently retail investors, attracted by the prospect of quick gains.

Google shuts down a high-profile moon-shot company

Google's parent company Alphabet has decided to pull the plug from its internet balloon company, Loon, almost a decade after it was set up. The company said it failed to find a long-term sustainable business model for Loon. Astro Teller, CEO of X and Chairman of Loon's board said in blog post that despite ground breaking technical achievements, the road to commercial viability has proven much longer and riskier than hoped.
Loon successfully provided cell coverage in Peru and Puerto Rico after natural disasters, it failed to gain significant traction from other countries and international organisations. Loon's legacy would include finding ways to safely fly a lighter-than-air vehicle for hundreds of days in the stratosphere to anywhere in the world. It also made important technical contributions that would pave the way for more options in unlocking the full potential of the internet of things. As Loon's service comes to a halt, the firm pledged $10M to support non-profits and businesses focussed on connectivity, Internet, entrepreneurship and education in Kenya, where it recently started a pilot project. Loon will explore options to take its technology forward with governments, NGOs and technology companies to provide internet access to fill the blank spots in the global connectivity map.

Study shows COVID-19 triggers antibodies from previous coronavirus infections

The study, published in the journal Cell Reports Medicine, noted that humans have navigated at least six other types of coronaviruses before SARS-CoV-2 — the virus that causes COVID-19. The results suggest that the COVID-19 virus may awaken an antibody response that existed in humans prior to our current pandemic, meaning that we might already have some degree of pre-existing immunity to this virus. In the research the scientists used a novel tool called PepSeq to map the body's antibody responses to all human-infecting coronaviruses.
The data generated using PepSeq allowed for broad characterization of the antibody response in individuals recently infected with SARS-CoV-2 compared with those of individuals exposed only to previous coronaviruses that now are widespread in human populations.
The researchers examined the antibody responses from two other potentially deadly coronaviruses — MERS and the 2002-03 SARS pandemic virus. They also characterised the antibody responses of four older coronaviruses — alphacoronaviruses 229E and NL63 as well as beta coronaviruses OC43 and HKU1. According to the scientists, these are common viruses that are endemic throughout human populations, but usually are not deadly and cause mild upper respiratory infections similar to those of the common cold. By comparing how the antibodies react against these different coronaviruses, the researchers demonstrated that SARS-CoV-2 could trigger immune system antibodies originally generated in response to these past coronavirus infections.
The scientists believe the findings also explain the widely varying reactions COVID-19 patients have to the disease from mild to no symptoms, to severe infections requiring hospitalisation, and often leading to death. They said the differences in the pre-existing antibody response identified by this study may possibly explain some differences in how severely COVID-19 disease affects old versus young people.



Google and French publishers sign agreement over copyright

In a first in Europe, Alphabets Google and a group of French publishers said on Thursday they had agreed a general framework over copyrights under which the U.S. tech giant will pay publishers for content online.
The principles agreed between the French publishers' lobby, Alliance de la presse d'information générale (APIG), and Google include criteria such as the daily volume of publications, monthly internet traffic and contribution to political and general information. Google and APIG did not say how much money could be distributed under the agreement to APIG members, which include national and local publishers. Details on how the remuneration would be calculated under the criteria were not disclosed.
The announcement follows months of bargaining between Google, French publishers and news agencies over how to apply revamped EU copyright rules, which allow publishers to demand a fee from online platforms showing extracts of their news.

Best from science journals: When mosquitoes were given malaria

Malaria menace
Published in Nature Communications
By giving malaria-infected blood meals to mosquitoes, researchers have now identified a few compounds that can kill the disease-causing parasite (Plasmodium falciparum). The team studied 400 chemical compounds and were able to pinpoint a few that were able to kill the parasites circulating in the human blood and also within the mosquitoes that ate the infected blood meal.
Plant defence
Published in Science
Many plants produce chemicals to protect themselves from being eaten. But how do they protect themselves from these chemicals? To understand this, researchers studied a chemical (diterpene glycosides) produced by wild tobacco plants. They found that these substances were stored in a non-toxic form inside the plant and when the insect feeds on it, the non-toxic molecule cleaves off and the chemical turns toxic.

History written in sands

Published in PNAS
The beach sand on a remote island in eastern Papua New Guinea has stunned geologists. Tectonic processes usually move grains of sand from the surface of the Earth to the deep (about 120 km into the Earth) and then back to the surface. The garnet sand showed that this cycle of subduction and exhumation took place in less than about 10 million years on the island, which is an extremely short period for geologic processes.
Circadian clock

Published in Nature Communications
Our biological or circadian clock (sleep-wake cycle) is controlled by many factors including CRY-1. A new study that analysed human cancer data, saw that CRY-1 increased in late-stage prostate cancers. Ayesha Shafi, the first author of the study explains in a release: "As we looked further into the role of CRY1, we unexpectedly found that the circadian factor was altering the way that cancer cells repair DNA."

A biodegradable expandable stent has been developed which can be used to treat pediatric laryngotracheal stenosis, a condition in children that leads to narrowing of airways. "Using commercial non-biodegradable metal or silicone-based tracheal stents has a risk of severe complications and doesn't achieve optimal clinical outcomes, even in adults," said corresponding author of the study Prashant N. Kumta in a release. "Using advanced biomaterials could offer a less invasive, and more successful, treatment option."

CREATIVE CLUSTER

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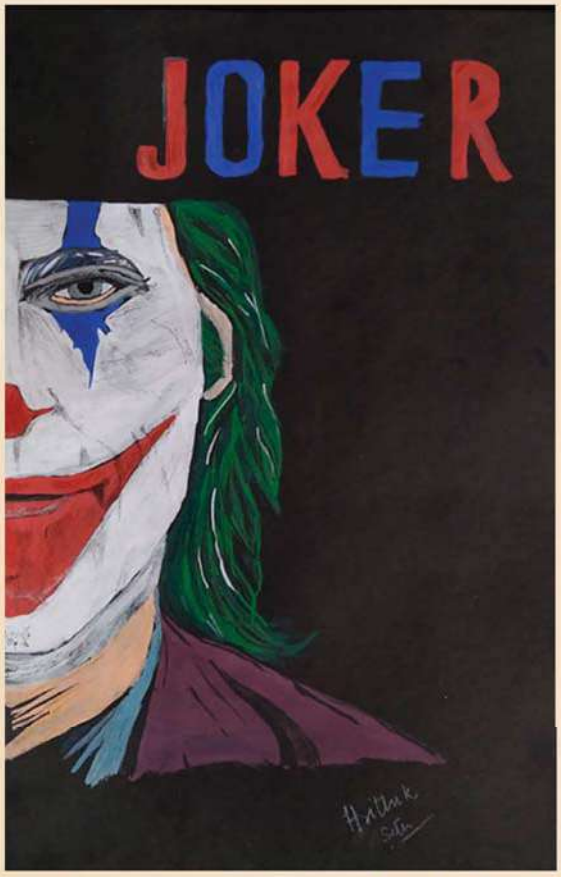
BHAWINI PRASAD
PHD MATHEMATICS



HRITHIK SETH
2ND B TECH CHEMICAL ENGINEERING

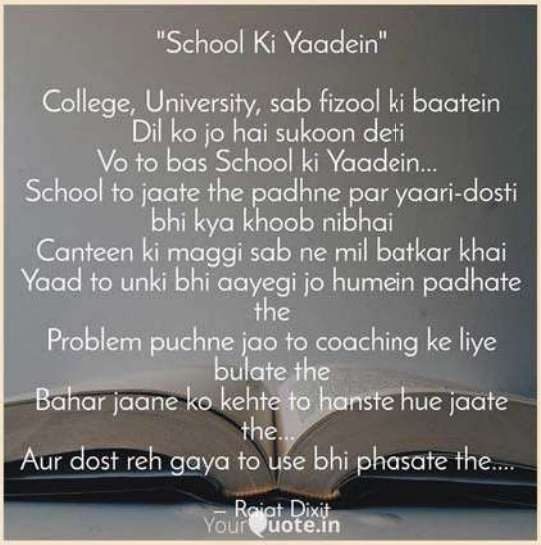
Topic -विद्रोह
जब उचित-अनुचित का एहसास नहीं रहता
प्रजा को शासक पर विश्वास नही रहता
तब बदलाव की शुरुआत होती है
विरोध की भाव जगती है, विद्रोह का आग जलता है

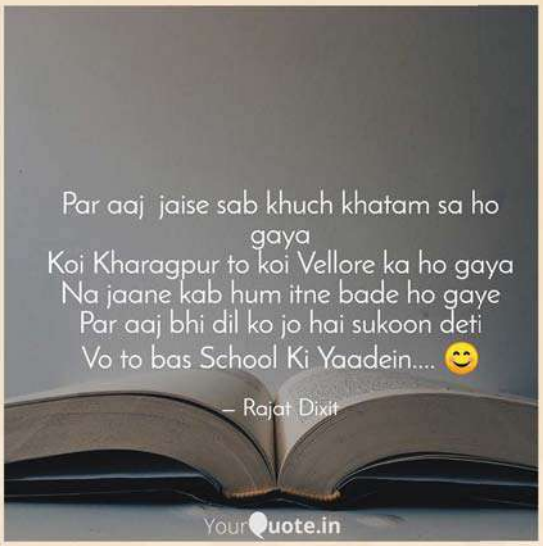
जब व्यक्तिगत मत जनादेश बन जाता है
व्यक्ती विशेष का इक्षा आदेश बन जाता है
तब जनआदोलन की शुरुआत होती है
विरोध की भाव जगती है, विद्रोह का आग जलता है

जब धर्म प्रतिभा का पहचान बन जाता है
मानवता का अभाव पर जाता है
तब एक उदेश्य की शुरुआत होती है
विरोधी की भाव जगती है, विद्रोह का आग जलता है|

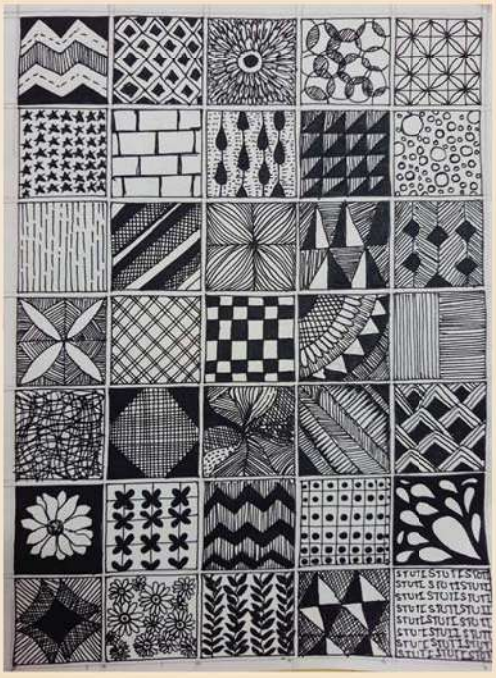
ANANT SINGH
1ST B TECH ELECTRICAL ENGINEERING

FRESHER'S CORNER





Rajat Dixit
1st PL



Stuti Agarwal
1st LT

Shreya Tripathi
1st ME