



SRM
INSTITUTE OF SCIENCE & TECHNOLOGY
(Deemed to be University u/s 3 of UGC Act, 1956)

SPECTRUM

The Newspaper of SRMIST

For private circulation only

Volume 14 Number 3

Covaxin - Third Phase



Dr.P.Sathyanarayanan, Pro - Chancellor (Academics) at the Media event.

(Story P.3)



SRMIST's Deputy Registrar & Director of SRM IHM Dr. Antony Ashok Kumar, AuthorCafé's Consultant Sales and Strategy Punit Dhandhanian & Senior Vice President (HR) Shubha Kasiviswesaran, SRMIST's Registrar Dr. N. Sethuraman, Pro Vice Chancellor (E&T) Dr. C. Muthamizhchelvan and Joint Director (Research) Dr. SRS. Prabakaran at the MoU signing.

SRM signs MoU with AuthorCafé for enhanced research writing, management and communication

STAFF WRITER

SRM Institute of Science and Technology (SRMIST), Kattankulathur has signed an MoU with AuthorCafé India Pvt. Ltd, a knowledge management platform for research content that facilitates academia in the creation, collaboration, review, dissemination, and administration of research content such as reports, theses, dissertations, and grant proposals.

AuthorCafé was represented by its President Dr. Shanthi Krishnamoorthy, Senior Vice President (HR) Mrs. Shubha Kasiviswesaran, Consultant Sales and Strategy Mr. Punit Dhandhanian and Product Manager Mr. Neelanjan Sinha. SRMIST was represented by Registrar

Dr. N. Sethuraman, Pro Vice Chancellor (Engineering and Technology) Dr. C. Muthamizhchelvan, Deputy Registrar & Director of SRM Institute of Hotel Management Dr. Antony Ashok Kumar, Joint Director (Research) Dr. SRS. Prabakaran among others.

This MoU will benefit SRMIST with the enhanced productivity of research writing through automated & streamlined workflow; make Theses content searchable, discoverable, citable and showcase their institutional research output; and enable them to onboard/launch SRMIST's own journal. Dr. SRS. Prabakaran gave a brief introduction to AuthorCafé and how SRMIST would benefit from it. Speaking at the event, Dr. Shanthi Krishnamoorthy said,

"We are very excited to have been selected by SRMIST for implementation of our product to automate their academic content publishing program. SRM has been a pioneer in many fields and once again they have shown a path for making Indian research more impactful on the global stage." Punit Dhandhanian said, "This is a Cloud-based research writing platform, accessed from anywhere on the Internet. We need our system to adapt to the writer and not the other way around."

Dr. C. Muthamizhchelvan said, "SRMIST is a comprehensive university. Our approach is interdisciplinary research and such tools will help our university in the long run."

Haruki Murakami: Japan's Unconventional Literary Genius

EASHA NAIR

With works that range from coming-of-age stories about teenage protagonists to accounts of people who were victims to Tokyo's devastating gas attacks, Haruki Murakami has quite the unusual roster when compared to other Japanese authors. The 71-year-old novelist is widely regarded as one of the pioneers in modern contemporary fiction and is one of the best-selling authors hailing from the Land of The Rising Sun.

Murakami is famously known for constantly incorporating music into his works and many of his novels are named after songs. For example, the bestselling book

Norwegian Wood (1987) was named after a Beatles song. He was initially notorious amongst Japanese literary critics for defying the conventions of Japanese literature. While many authors from the country took a patriotic stand in their writing, Murakami unabashedly let his western influences shine in his works. He broke free from the shell of a 'Japanese author' by making his works truly globalised and accessible to readers across the ocean. Often, Murakami does not care to elaborate details in his stories and settles with a surreal and open-ended finale. Given how he dabbles in the genre of magical realism, many of the events in his stories make little



Haruki Murakami

to no sense, yet his stories flow beautifully and instil a longing for more. Such is the genius of Murakami, who is considered a strong candidate for a Nobel prize by many. While he cites the thought of winning the prize as something that would muddle his resolve as a writer, there is no doubt that he has set himself apart as a literary savant

7th International Conference on Business Research

STAFF WRITER

An international conference was held in the SRM institute of science and technology recently hosted by Department of Commerce with resource persons from all over the world. The inauguration was done by the renowned IRS official Mr. Nanda Kumar. The chief guest gave his insights about the current business system and research options and how the pandemic has affected the teachers and students. Apart from him various other officials with various designation joined the virtual conference and gave their views and ideas. The conference was scheduled for 4 sessions in 2 days which was completely held virtually. The organizers received 180 plus research papers of which 20 papers were from international delegates. The selected papers will be published in Scopus, UGC

Care indexed journals and SRM Business Horizon Journal. On the first day of conference, papers were presented by professionals, scholars and industrialists with 100 plus participants. "The department of commerce did not want the pandemic to affect our academic schedule or our annual events so we have taken this step of conducting our international conference in a virtual mode. With the support of all our faculties we were able to conduct the conference successfully" commented, the Organiser of the Conference.

The 2 day conference intended to give an idea about the area of business research by categorizing the research theme into different sub heads like finance, pandemic and commerce, marketing, human resource etc. and papers were strictly categorized in a manner they synced with the conference theme.

The Careless Use of Mental Health Terms

PRIYANKA R

Disturbed, depressed, retard, and psychotic. These are some words people incorporate into their daily life without realizing what they really mean. "When we are tossing about these words to describe other behaviours, it can make people who have these disorders feel very diminished, and can trivialise mental health," says Scott Bea, a clinical psychologist at the Center of Behavioural Health at Cleveland Clinic.

Mental illness is a real problem that changes the way an individual thinks, feels, and acts. It affects them physically, psychologically and emotionally, and threatens their social well-being. These terms aren't for casual descriptions of emotions or personality traits. For people who are already carrying the burden of coping with an illness, stigma is an unfair addition. It may prevent them from seeking help or even worse, trigger the condition. These words are not applicable in any situation or to any individual outside a discussion about mental health, and neurodivergence. They should never be included

Mental illness is a real problem that changes the way an individual thinks, feels, and acts. It affects them physically, psychologically and emotionally, and threatens their social well-being.



Words have power

casually in conversation without realizing the ramifications that they may have. It is essential to be considerate of the ones living with a mental illness by using appropriate terms. This will ensure that they do not feel their conditions are trivialised, and the words describing their behaviours are not used without thought. Words have the power to make or break, and that is a thought that must always be borne in mind.

Prof Ashutosh Sharma on Convergence of multiple disciplines to address future challenges

STAFF WRITER

SRM University-AP, Andhra Pradesh invited Prof Ashutosh Sharma, Secretary, Department of Science and Technology (DST), Government of India to deliver the University Distinguished Lecture. Prof K Hema Chandra Reddy, Chairman, Andhra Pradesh State Council Of Higher Education, Prof V S Rao, Vice-Chancellor, Prof D Narayana Rao, Pro Vice-Chancellor, faculty members, and more than 700 participants attended the lecture on "Art of Science in the Time of Virus and Beyond: The Brave New World". For the first time, SRM AP presented welcome bouquet and virtual memento to Prof. Ashutosh Sharma. The virtual avatars were created by SRM AP students who used applications developed by them such as character creator and bundle software. Further, Prof D Narayana Rao extended the warmest welcome to the guests and commenced the programme. He informed, "DST has taken up the daunting task of making India as one of the world leaders in science and technology with several projects aimed at motivating and harnessing talent to be better equipped to face future challenges".

Hema Chandra Reddy delivered a brief speech on research initiatives in science and technology introduced by the Government of Andhra Pradesh. He informed, "Government of AP is planning to establish AP state research board to promote multidisciplinary quality research and coordination among the universities." Further, Prof Ashutosh Sharma took the virtual podium to speak about science, technology, and innovation. Picturesquely, he explained, "Innovation pertains to visual imaginations and thinking. Knowledge becomes sustainable when invention and innovation are balanced. Invention uses resources to produce knowledge, whereas innovation deploys knowledge to generate economic resources".

Prof Sharma accentuated that Covid-19 taught us the lesson that "sustainable development,

which as a result of sustainable knowledge, can address major challenges." Urging everyone to do their individual job well, Prof Sharma informed that capacity of learning is the most prized possession. He said, "Capacity to adapt to change, learn new things, and lifelong learning is paramount to thrive. The convergence of multiple disciplines has an instrumental role in solving crucial problems. Our education system must have parallel structures for multidisciplinary knowledge creation and research. We should be crossing borders of knowledge and expanding the boundaries of disciplines."

Prof Sharma suggested the scientific community to become self-reliant. He said, "Quality, relevance, and appropriate direction of knowledge will lead the world. Coupled with it, cultural aspects such as self-confidence, and self-respect makes up the art of science." Emphasizing on the importance of collaboration, Prof Sharma concluded, "Covid 19 spontaneously spurred the spirit of collaboration with a clear and shared purpose. Researchers should have a scientific temper which entails rational analysis of situation, positivity, optimism, and cooperation. The scientific community should critically challenge views, be inquisitive, and be able to engage people in purposeful conversation."

Prof Ashutosh Sharma said "the scientists of the country need to be leaders and not the followers.

Some of the faculty members of SRM University-AP interacted with the DST Secretary and made a brief presentation about a few flagship projects of the University viz., "SRM – Amara Raja Centre for Energy Storage Devices", "Hydrogen-Powered Fuel Cell Based Train in association with the Ministry of Railways", "3-D printing of Gold Jewellery in association with Tanishq Jewellers". Prof Ashutosh Sharma commended the outstanding research initiatives of the University and said that DST will be happy to extend the support.



SRM hospital launches third phase of COVAXIN trial; Seeks volunteers

STAFF WRITER

"SRM Medical College Hospital and Research Centre (SRM MCHRC), Kattankulathur has successfully completed two phases of human testing of the COVAXIN trial and the third phase for the same will start today (7th December 2020), said SRM MCHRC's Pro Chancellor (Academics) Dr. P. Sathyanarayanan.

Speaking at a press meet held at the launch of the third phase of the COVAXIN trial in the hospital, he said that the number of patients who will be tested in this final phase will be over 1000.

"Until now we have received 500 volunteers for the test. We will be taking in more volunteers till the end of December 2020. We are trying our best to make this work, as it will be India's first indigenous vaccine," he added.

Also present with SRM MCHRC's Pro Chancellor (Academics) Dr. P. Sathyanarayanan were Pro Vice Chancellor (Medical and Health Sciences) Dr. Lt Col Dr. A. Ravi Kumar, Dean Dr. A. Sundaram, Medical Superintendent Dr. K. Thangaraj, Deputy Medical Superintendent Dr. R. Balamurugan, Director (Communication) Mr. R. Nandakummar and Principal

Investigator for COVAXIN Dr. Satyajit Mahopatra along with Dr. Melvin George.

"Any person above 18 years of age and had not suffered COVID19 illness in the past can participate as a volunteer in this trial. Pregnant women are excluded. The vaccine shot will be administered twice - 28 days apart," said Principal Investigator for COVAXIN, Dr. Satyajit Mahopatra.

The hospital will be able to conduct the trial for 50 people a day. Once the process is successful, the vaccine will be approved on a fast track basis. SRM MCHRC is currently treating 21 COVID 19 patients and on average 80 people are screened for COVID19.

The first phase of human trials at SRM MCHRC began in July 2020 with 30 volunteers. The second phase was done in August in which 45 volunteers participated. In both these phases, the safety of the vaccine was ascertained. In the trial conducted at SRM hospital, none of the volunteers suffered any serious reactions except for mild fever and body ache.

"SRM MCHRC is the only private Medical College Hospital in Tamil Nadu to undertake this trial. The third phase is to assess the efficacy of the Vaccine in inducing immunogenicity in

the human volunteer," said Dr. Lt Col Dr. A. Ravi Kumar, Pro Vice Chancellor (Medical and Health Sciences).

Indian Council for Medical Research (ICMR) is collaborating with Bharat Biotech, Hyderabad in the development of COVAXIN. SRM Medical College Hospital and Research Centre is the only private Medical College Hospital in Tamil Nadu to be selected to carry out all three phases of the COVAXIN trial. This vaccine has got the nod for human trials from the Drug Controller General of India.

"SRM MCHRC is well-equipped with various facilities to handle clinical trials such as COVID 19. It provides 24-hours emergency services and has well-qualified doctors and nurses," said Dr. A. Sundaram, Dean, SRM MCHRC

The hospital has so far treated 1400 COVID patients since April 2020. Both Allopathy and Siddha medicines in combination are used to treat COVID patients. SRM Medical College Hospital and Research Centre has been doing this under the able guidance of Chancellor Dr. T.R. Paarivendhar and Pro Chancellor (Academics) Dr. P. Sathyanarayanan. Those wishing to volunteer for this clinical trial can call 7598951868, 7358026002, 044-47432341 or email to srm.covaxin2020@gmail.com.

SRM Technologies launches its hiring campaign

STAFF WRITER

SRM Technologies Private Limited (Est 1998) in Ekkatuthangal, Chennai, has announced its first phase of the hiring campaign. The company is looking out for passionate, enthusiastic, and creative experts to bring modern abilities to what they do.



Positions open include Databricks, Magneto, DevOps, Embedded, Hardware, Automotive (Autosar, ADAS), Java, Full Stack, Dot Net full stack among others. To know more about the positions open and how to apply log on to careers.srmtech.com. You can also email reachrorthestars@srmtech.com. The core belief at SRM Technologies is best reflected by ideas@work which is the intersection of Innovation and execution. SRM Technologies is spearheaded by Dr. P. Sathyanarayanan, President SRM Group, and Anand Kashyap, CEO of SRM Tech.

Webinar on Human Rights Day

On 10th December, 2020, the Faculty of Law organized a webinar to celebrate Human Rights Day. Eminent legal experts like Hon'ble Mr. Justice Ravindra Maithani, Sitting Judge, Uttarakhand High Court, Hon'ble Mr. Justice Rajive Bhalla, Former Judge, Punjab and Haryana, Professor (Dr.) Nishtha Jaswal, Vice Chancellor, Himachal Pradesh, National Law University, Shimla, Prof (Dr.) Anand Pawar, Vice Chancellor, Rajiv Gandhi National University of Law, Punjab and Prof (Dr.) Paramjit S. Jaswal, Vice Chancellor, SRM University, Delhi-NCR were the speakers for the occasion.

Virtual Moot Court

Department of Law, SRM University, Delhi-NCR organized a virtual programme to celebrate Constitution Day 26th November 2020.

Virtual Intra Department Moot Court Competition

SRM University, Delhi-NCR organized Virtual Intra Department Moot Court Competition on October 28-29, 2020.



Body positivity simply means every body is beautiful

Spreading Body Positivity

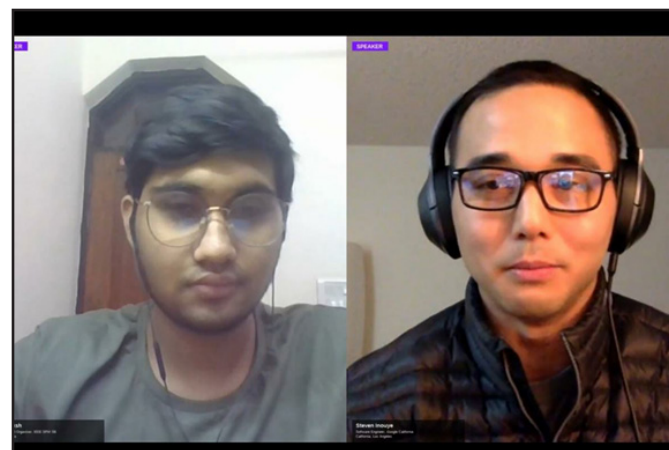
SHRUTI RAMESH

For years, society has held men and women up to unrealistic body standards. In case of men, a muscular body was the preferred norm, with 'chocolate abs'. For women, the classic 'hourglass' physique was considered ideal; anything less and they were too skinny, anything more and they were too fat. The 'Size Zero' trend was when women worldwide said enough was enough, and thus began the modern-day Body Positivity Movement.

Body positivity refers to the notion that everyone, regardless of gender and race, deserves to have a positive body image, despite how society views ideal shape, size, and appearance. The idea is that all shapes and sizes are beautiful, and one should celebrate their body. Although the movement has its roots in a fat acceptance movement that stirred in the 60's, it is now inclusive of all body-types. Research shows that since the inception of the current wave of the body positivity movement,

there has been a tremendous drop in eating disorders and depression amongst teenagers. Over the last decade, more and more plus-size models have made their mark in the fashion and entertainment industries. Although the body positivity movement is well-intentioned, it has its ramifications. For instance, some people refuse to take care of their bodies and continue to maintain an unhealthy weight in the name of 'self-love' or 'body positivity'.

The bottom line, however, is that this ground-breaking movement has done more good than bad. It has been hugely impactful in allowing people to have a better relationship with their bodies instead of starving themselves or taking other grave measures simply to meet society's ideal beauty standards. Above all, it teaches self-love and self-acceptance. The body positivity movement may have a long way to go before it serves its true purpose, but for now it has managed a decent start. And that is all that matters.



Speaker interacting with the curious young minds

CONCEPTO 2020

PRIYANK KAPOOR ASMITA SOOD

Concepto, the flagship event of IEEE SRMIST SB, was organized recently. An event aiming at sharing knowledge, it helped meet the curiosity of young minds with the expertise of eleven brilliant speakers. A crash course on UI/UX (User Experience design and User Interface design) was hosted by Mr. Paramjit Jolly, Director Engineer at Guavus-a Thales based Company. Mr. Rohit Ghosh addressed a thought-provoking session on how AI can be merged beautifully with the Healthcare system and Mr. Pradeep Kumar spoke about his journey from being an IIT-BHU graduate to an IFS officer.

Mr. Deepesh Nanda, CEO of GE Gas Power, broadened the vision of the audience with the concept of Application of Digital Technology for thermal power plants. After completing 3 successful days, the 4th day saw an interactive session on the topic, "Secrets to Entrepreneurial Success" by a highly successful entrepreneur Ananya Chandra. She updated the audience with some latest tips and tricks on entrepreneurship and then sprinkled the session with her personal experience on it as well.

The session after was graced by a Sr. Business Intelligence Associate of LinkedIn, Ms. Rashmi Phanishyae. This session also saw a bonus guest speaker from Apple. A session was specially designed for all the aspiring designer with the speaker being Anudeep Ayyagiri. The event finally concluded with two more sessions on Post COVID Entrepreneurship and IT Careers in Investment Banking.

COVID-19 Vaccines: Deception or Misconception?

KRITIKA MALHOTRA

The pandemic has pushed everyone to a wall, where placing complete faith in the hands of the authorities is the only option left. At such a time, when a vaccine seems like a plausible solution, rumours are rife that the vaccines under development could 'alter' human genes. Most claims refer to the now-deleted video of Dr Kaufman, a 'naturopath' and practicing psychiatrist, in conversation with online personality and independent researcher Spiro Skouras. In the video, Kaufman claims that the upcoming vaccines provide a means to "inject genes" into humans. This claim lacks

attestation.

Vaccines come from many sources – of these, traditional vaccines have a high efficacy and established safety profile. However, they take years to develop, and time is a big constraint amidst this pandemic. Leading vaccine manufacturers have, thus, resorted to developing vaccines using a novel technology – mRNA vaccines. The WHO identified six vaccines (as of 13 August) which were furthest along clinical trials, of which two are mRNA vaccines.

Messenger RNA (mRNA) is a ribonucleic acid. It is single stranded and stores codes for the synthesis of proteins in our body.

The vaccine essentially converts our cells into miniature vaccine manufacturers. It introduces the codes required for the desired antibody production. Subsequently, the mRNA enters the cell, and helps to produce antibody proteins. An immune reaction is produced and the immune memory stores it. mRNA vaccines inject part of the virus' RNA into tissues to stimulate an immune response; they do not integrate it into the recipient's cell nucleus, unlike what genetic modification would do. This means that if the recipient's cells divide, they will include only the natural DNA.

mRNA vaccines are cheap and can also be produced quickly on



Coronavirus mRNA Vaccine

a massive scale. This technology gives a jumpstart in the race for a vaccine, and are a step in the right direction – free of any harm to our bodies and genes.

Follow Govt. safety norms to stay away from COVID: SRM hospital

STAFF WRITER

“Facemask is a life mask,” said Pro Vice Chancellor (Medical) Lt. Col. Dr. A. Ravi Kumar of SRM Medical College Hospital and Research Centre (SRM MCHRC), Kattankulathur. Speaking to press personnel at a meet organised at SRM MCHRC, he emphasized on the importance of staying and following safety measures in order to prevent the second wave of COVID 19.

SRM MCHRC is now in the process of conducting the third phase of the COVAXIN shot which will be administered to nearly 1500 volunteers. The first phase human trials at SRM MCHRC began in July with 30 volunteers. The second phase was done in August where 45 volunteers received the COVAXIN shot.

Present for the press meet were SRM MCHRC’s Pro VC (Medical) Lt. Col. Dr. A. Ravi Kumar, Dean (Medical) Dr. A. Sundaram, Medical Superintendent, Dr. K. Thangaraj, Dr. R. Balamurugan, Deputy Medical Superintendent and Director (Communication) Mr. R. Nandakummar. “The COVAXIN trail is the need of the hour and SRM MCHRC is the only hospital in Tamil Nadu to undertake this trail. The third phase will see how people are able to withstand the vaccine and its efficiency. The result will be known only by February,” added the Pro VC.

The Indian Council for Medical Research (ICMR) is collaborating with Bharat Biotech for the

“SRM MCHRC is well-equipped with various facilities to handle emergencies such as COVID 19. It provides 24-hours emergency services and has qualified doctors and nurses,”

development of the COVAXIN. SRM Medical College Hospital and Research Centre is the only centre in Tamil Nadu to be selected for this trial. The drug has got the nod for human trials from the Drugs controller of General of India.

“SRM MCHRC is well-equipped with various facilities to handle emergencies such as COVID 19. It provides 24-hours emergency services and has qualified doctors and nurses,” said SRM MCHRC, Dean (Medical) Dr. A. Sundaram. He added, “All that we need to do is wash hands frequently with soap and wear masks when going out or interacting with people. Self-discipline is the need of the hour.”

“The hospital has so far treated 1400 COVID patients since April. It uses Allopathy and Siddha combined battle against COVID,” said SRM MCHRC Medical Superintendent Dr. K. Thangaraj. On how SRM MCHRC is taking precaution against this virus, Dr. K. Thangaraj said,

“We have body temperature checking machines at all entry points, moreover the entry and exit have been separated, all patients admitted need to take COVID check and most importantly everyone is expected to wear a mask.”

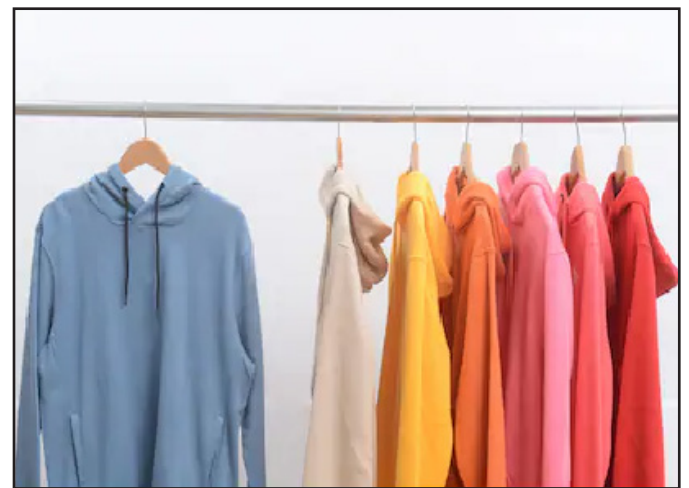
SRM Medical College Hospital and Research Centre has been doing this under the able guidance of our Chancellor Dr. T.R. Paarivendhar and Pro Chancellor (Academics) Dr. P. Sathyanarayanan. The COVAXIN clinical trial team is led by Principal Investigator Dr. Satyajit Mohapatra along with Dr. Melvin George who are assisted by a well-trained team of doctors, nursing staff and support staff.

SRM MCHRC has a state-of-the-art clinical trial facility to handle this clinical trial. The trial unit that was partly sponsored by DST, Govt of India has carried out several clinical trials in the last eight years. Five major projects are currently ongoing with COVID, one being COVID vaccine trial, another a BCG vaccine trial for prevention against COVID, an ICMR led cohort study on hydroxychloroquine prophylaxis for health care workers, an international multi centric clinical trial for COVID patients with certain drugs and a Siddha based product kabasura kudeneer for COVID patients.



Photo- Webinar on Vaccines against COVID-19 on December 3rd, 2020.

Faculty of Management “Get ready to introduce and reflect your personality” Contest Faculty of Management organized an activity “Get ready to introduce and reflect your personality” on 23rd October, 2020 for the first year students to boost their moral and confidence level and develop positive outlook for life. The results were announced on 28th October. 26 students have participated in the activity.



A selection of hoodie sweaters considered as comfort by many

It's time for comfort!

NANDITA BHYRAVBHATLA

The global pandemic has changed the workings of the world and it is safe to say that these changes have influenced many aspects of our lives, with fashion being one of the aspects. The rise of Tiktok, Instagram, and YouTube has brought about comfortable dressing trends across the young adult demographic.

2020 stopped the momentum of the rising 2019 street fashion trends as many across the globe were forced to stay in their homes. Several leading brands in the fashion industry like Levi's began to see their revenues going down and brands like true religion filed for bankruptcy as put in the Washington Post. Young adults renounced constrictive waistbands and troublesome cuts to sweatpants, joggers,

t-shirts, and anything they could be comfortable in for their new virtual lives. A statement was also released in the Times of India on the same by Bollywood actor Salman Khan's stylist, Ashley Rebello. “I think designers need to get more into their head and make clothes which are more affordable, comfortable and more homebound”. This point of course was proven by the newfound trend of cropped tops and balloon joggers all across the social media and fashion worlds.

The tides of trends changed for the first time we as fresh aesthetics started being influenced by the dress choices people were instinctively making rather than the alternative. The winds of fashion are truly shifting as the demand for comfort is beginning to outweigh the need for glamour.

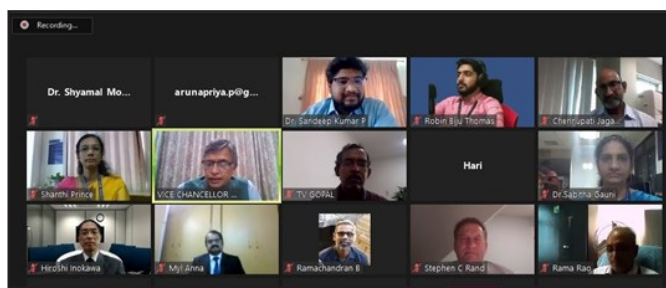


Smart Technologies and Emerging space Program

STAFF WRITER

The International Conference on Electronics, Photonics and Smart Technologies (ICePhaST-2020) was organized by the Department of Electronics and Communication Engineering through virtual e-platform.

The event was inaugurated by honourable chief guest Padmashri Dr. Mylswamy Annadurai Former director, Indian Space Research Organisation Satellite Centre, (ISAC), Vice President-Tamil Nadu State Council for Science and Technology, Chairman-National Design and Research Forum, India, who delivered a technical talk on “SMART Technologies in emerging space program”. The talk completely motivated young and budding researchers in the field of photonics and optical based satellites. Faculty members, Researchers and Students of SRM IST were very proud, content and excited to have the chief guest on the virtual conference. The three foreign delegates, Prof. Hiroshi Inokawa, Shizuoka University, Japan, Prof. Chennupati Jagadish Australian National University, Australia and Prof. Stephen C. Rand University of Michigan, USA provided the guests of honour address during the inauguration. Prof. Hiroshi Inokawa expressed the contentment that the long term technical relationship with



SRM IST and elaborated on the importance of organizing conferences under the photonics banner. Prof. Chennupati Jagadish and Prof. Stephen C. Rand showed the interest of long term research collaborations with the department of Electronics and communication engineering, SRMIST. The Presidential address was delivered by Dr. Sandeep Sancheti, Vice Chancellor, SRMIST who conveyed that several programs of this dimensions are conducted by the department of ECE, SRMIST, Kattankulathur. The ICePhaST-2020 Conference Proceedings was released by Dr. C. Muthamizhchelvan, ProVC, Engineering and Technology,

SRMIST and congratulated the team for meticulous planning and execution. The gathering was felicitated by Dr. T.V. Gopal, Dean, College of Engineering & Technology, SRMIST.

Dr. Shanthi Prince, Professor and Head, Department of ECE, SRMIST, Kattankulathur welcomed the e-gathering and Dr. P. Aruna Priya, the convener of the conference highlighted the importance the topics covered during the three days sessions and introduced the speakers of the conference. Several researchers across the globe have submitted their papers for presentation and around 160 papers were accepted for the conference.



All the answers you need are within you

Art therapy to heal the soul

NANDINI NIGAM

It is said, “The aim of art is not to represent the outward appearance but portray the inward significance.” Humans often come across situations where words are not enough to express what is felt and this is when art extends its hand to help. Art is not just a form of expression but also a way to heal souls. Art therapy is one way in which art helps to improve one’s mental health.

Art therapy integrates psychotherapeutic techniques with the creative processes to improve mental health and well-being. The goal of this technique is to utilize the creative processes to help people explore self-expression and find new ways to gain personal insight and coping skills. Art therapy is an amalgamation of drawing, painting, sculpting, etc. What makes this special is the fact that it is applicable for all age groups and does not specifically require any artistic abilities.

Art therapy did not become a formal programme until the 1940s.

Art therapy integrates psychotherapeutic techniques with the creative processes to improve mental health and well-being.

Doctors noted that individuals suffering from mental illnesses often expressed themselves through art works which further led to the exploration of art as a healing technique. The technique can be used to treat a wide range of disorders like depression, stress, anxiety, PTSD, etc. The Swedish Cancer Institute uses art therapy to provide mental peace to its patients. Ann Lawton, a famous art therapist, talked about her experience with the inmates of a county jail explaining how art had helped the aching individuals to voice their darkest emotions and heal from their traumas.

Art is like a candle which helps one escape the darkness and see the light once again, and it comes as no surprise that art therapy is as powerful as it is, allowing people to find answers to all their questions within themselves.

Artificial Intelligence

SHANE PRANOY

Artificial intelligence is widely being used in a lot of fields. From smartphones to advanced military analytics, artificial intelligence is making human life a lot easier and better. But, it also has some negative impacts on human beings.

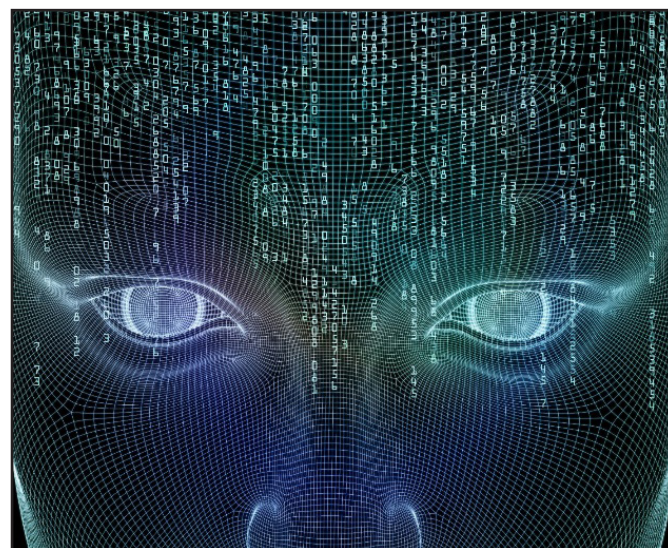
AI is about building devices that can think like humans. It might’ve started off with performing tasks such as facial recognition but it is bound to beat us in every possible field. There are a lot of threats AI poses to humans. Social manipulation is one such threat. The usage of internet has gone up dramatically

since its inception in the 1960’s. People believe everything that is written on the internet. This could be very harmful especially during times like governmental elections. “Investigations are still going on to determine how a private firm used the data of 50 million Facebook users to sway the outcome of the 2016 U.S presidential elections”, says a report by Forbes. Artificial intelligence has the power to understand how a user thinks and spread propaganda convincing them of lies.

For decades countries have been working on nuclear warfare. But, people believe that the future is all about automated

weapons; weapons that have a brain. Imagine designing a machine that has the potential to think all by itself but it is used for destruction.

If this falls into the wrong hands, it is difficult to imagine what could happen to the world. Countries like China have been using artificial intelligence for surveillance and ranking their citizens by what they call “social credit” through which they will be able to reward or punish a person. The government will be monitoring you and will credit you based on your lifestyle. China also happens to be the world’s first AI superpower.



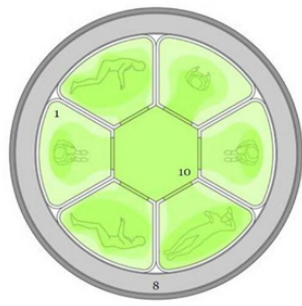
Artificial intelligence is used to achieve a certain goal that would make human life better. And AI is capable of accomplishing that task. There are a lot of tech geniuses who argue against the

concept of AI. AI is definitely beneficial to humans and could be a huge boon in the future but they also could be harmful. Thus, AI can be as harmful as it can be beneficial.

How brief can hibernation be?

TARUN NEGI

Scientists preparing humans for extended space travel escalates the interest in human hibernation related inventions. Aestivation, hibernation, and winter torpor are excellent tools for space travel as they customize human metabolism and enhance life support systems during long space travels.



A cross-section through ESA's hibernation module

Black bears in summer, hibernate for 4 to 7 months which reduces their metabolism by 75%. Similarly, if we reduce an astronaut's metabolism it would make space travel more feasible and cheap. It could help in the exploration of extraterrestrial sites, which otherwise, due to their huge distance away from earth and due to insufficient velocity of space vehicles would be out of human reach.

European Space Agency (ESA), with the help of the ESA Topical Team and the CDF teams, are assessing the current state of human hibernation and its impact on machines. "We worked on adjusting the architecture of the spacecraft, its logistics, protection against radiation, power consumption, and overall mission design"

says Robin Biesbroek of the CDF. A hypothetical drug would induce the same state of torpor that mammals enter naturally to sleep through winter and, like the animals, astronauts would be expected to acquire extra body fat in advance of torpor. ESA design involves adjusting the spacecraft, its logistics, radiation protection, and power consumption. The hibernating cruise phase would end with a 21 day recuperation period.

Sci-fi films like Christopher's *Interstellar* and Morten's *Passenger* show the protagonist hibernating. ESA's Rosetta waking up from deep space hibernation pave the way for human hibernation for an extended period of time. These new and exciting inventions will help propel several cosmic discoveries.



The best and worst of society

Time Travel through Dystopia

PRIYANKA SRINIVAS

In premise and plot, dystopia is the depiction of a dark and gory alternative future. Hence, for dystopian literature released in the 19th and 20th century, the future is now. So, was classic dystopia right about society? To make a singular conclusion is difficult, as society has branched in many ways.

In the book 'The World Set Free', H. G. Wells created a war-ridden world where uranium bombs dropped from planes were used for warfare. Not soon after, to humanity's horror, the bombings of Hiroshima and Nagasaki took place in World War II, in the same way that Wells described. Similarly, in the book 'Blindness', Jose

Saramago wrote about a blindness epidemic that takes over an entire nation. In the book, the inflicted are put into quarantine asylums and law and order, social services, government, schools, etc., cease to function. The order that society is built on breaks down swiftly. In 2020, 25 years after the release of 'Blindness', coronavirus has struck the world with an effect just as terrible, if not worse.

On the other hand, in the book 'Lord of the Flies', William Golding envisioned a scenario where young boys marooned on an island resort to violence and destruction for survival. A few years after the release of the book, a similar incident took place on an island in the Pacific Ocean. To skeptics' astonishment,

"In 2020, 25 years after the release of 'Blindness', coronavirus has struck the world with an effect just as terrible, if not worse."

however, the boys marooned on this particular island steered away from Golding's dystopia and created a lawful and ordered society on their island till the time of rescue. In its entirety, society has come a long way. While dystopia likes to spit on its worse, humanity tries its best to bound towards order, just like the little marooned boys did when they found themselves in an abnormal situation.

"Recently, South Africa's legendary cricketers, Hershelle Gibbs and Jonty Rhodes signed up as coaches for Kuwait and Sweden respectively. Australia Women's Captain Meg Lanning's enlightening words to China Women's team saw them as an emerging force in the East Asian Region behind Thailand Women."

How does Associate Cricket hold the ace in Globalisation of the sport?

ADITHYA R

Associate Cricket represents the 93 member nations of the International Cricket Council that do not play Test Cricket. Associate teams lack competitiveness against established teams mainly due to their limited exposure to professional cricket. Over the years, Associate Teams have tasted victory over Full Member nations in various formats of the game due to their ability to play fearless cricket. However, the large share of funding is directed towards the established teams to improve their grade and the weaker teams rely largely on self-belief to beat their higher-ranked opponents.

Secondly, most associate teams do not have a sponsor for their

cricket equipment and travel expenses. Since the Cricket associations run at a very low profit, most of the expenses are from the pockets of the players. ICC and Full Member nations should support such Cricket associations. Moreover, Associate matches need to be broadcasted for attracting the interest of the people who have limited or no knowledge of the sport.

Recently, South Africa's legendary cricketers, Hershelle Gibbs and Jonty Rhodes signed up as coaches for Kuwait and Sweden respectively. Australia Women's Captain Meg Lanning's enlightening words to China Women's team saw them as an emerging force in the East Asian Region behind Thailand Women.



Scotland's historic ODI victory over England was orchestrated by Calum Macleod's unbeaten 140 runs

Varun Chakravarthy, alumnus of SRMIST Kattankulathur was also a rising star in the 2020 edition of the IPL as a strike bowler. Talent arises where opportunities are plenty. Mainstream cricket

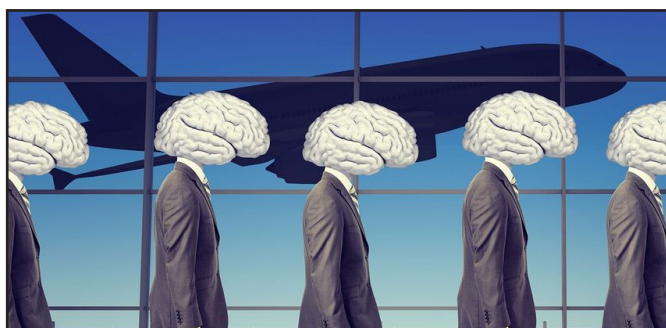
needs to expand its boundaries to witness the quantum leap of the sport and Associate Cricket proves to be the game-changer as they are more competitive than ever before.

Is brain drain a result of our Indian market structure?

ANANT DEV KAPOOR

The most important indicator of competitiveness in any economy is the market structure of the country. As per the data from the United Nations Department of Economic Affairs, an estimated 17 million people of Indian origin were living abroad, making India the largest source country for international migrants, globally up from 7 million in 1990 and a 143% increase till 2017 although India became wealthier and was one of the fastest-growing economies in the world, in the pre-COVID era. The Indian market structure is deemed to have a lot of pitfalls which directly or indirectly results in brain drain. The brain drain problem in India has been there since independence in spite of the fact that the Indian economy has undergone a change from the mixed economy post-independence to the phased liberalization in 1991. An

integral part of the Indian culture it is considered that settling abroad is a criteria of success irrespective of the job you're in. As per the reports from The New York Times, the average salary of a software engineer in the States is \$131,000 (approx. 96,00,000 rupees) per annum whereas in India it falls sharply with the highest bracket just being between 30,00,000 to 36,00,000 rupees. This being the major reason for the brain drain and the answer to why tech titans like Sundar Pichai and Satya Nadella preferred to work abroad. One more important factor which has resulted in the brain drain is the ease of doing business. Small countries like Malaysia are ranked 12th whereas India is ranked 63rd as of 2020 in the world index of ease of doing business. This can be the main reason why, companies like Flipkart, with Indian origin founders, are based out of Singapore due to the complex law structure of the Indian Market.

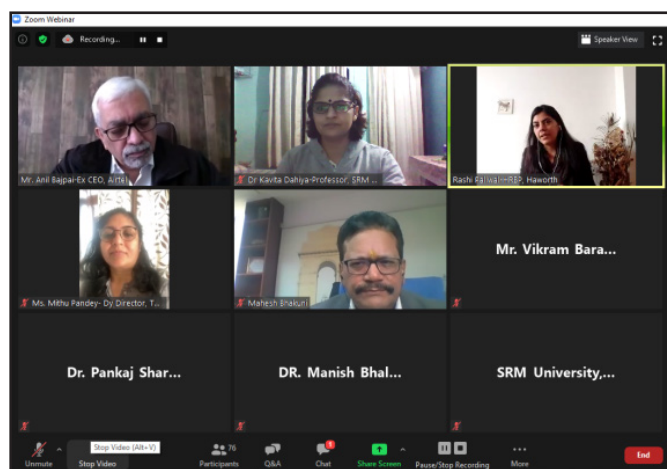


Brain drain is rampant in India

Panel Discussion organized by the Faculty of Management

“How Mentoring can make a difference”

Faculty of Management, SRMUH organized an exclusive webinar cum panel discussion on the theme ‘How mentoring can make a difference’. The speakers for the webinar were Mr. Anil Bajpai, Ex CEO Airtel, Capt MCS Bhakuni, Director HR @ANI News and Ms. Rashi Paliwal, HRBP @Haworth.



Raji- an ancient epic. India's very own action, adventure platformer by Nodding Head Games

India's foray into Game Development – Strides in the Right Direction

RITIK SHRIVASTAVA

India is home to one of the largest youth populations, an ever-expanding gaming base, and a talented pool of players and streamers like Mortal and Dynamo. In a country with its youth so viscerally invested in gaming, one could easily believe that it is just as active in the development sector. But that is far from the truth. This statement would have held true for an India 4 or 5 years in the past but today speaks a different language altogether. This tree may not

look like much on the surface but its roots reach far and deep and seem to have expanded recently. Quite a lot seems to have transpired that even the enthusiasts of the community might not be aware of. For example, in the development of the blockbuster title, Red Dead Redemption 2, Rockstar India played a pivotal role. Ubisoft India, which consists of studios in Pune and Mumbai, helped develop the remake of the legendary 'Prince of Persia and the Sands of Time' creating a place for itself in history. And it only gets better with the

critically acclaimed game Raji that was showcased at India's very own, annual Nasscom Game Developer Conference, back in 2017, being recently released on all platforms. This game received a rating of 4.9 out of 5 on Steam. India has finally made a place for itself in the game development market providing an outlet for passionate creators and innovators. With the establishment of a Gaming tech specialization, SRM and other universities offering these courses are already a step ahead in pioneering new visionaries.

Is VR the future of our socially distant life?

NATALIA RISHMA

Gaining popularity for the gallimaufry VR has to offer, will the social animal's paramour for inner peace and his vivid behaviors accept the change. Imagine this: You're walking down the street, excited to meet your friends on a bright Sunday afternoon, or going on a picnic with your family to a nearby park. This seems impossible to achieve but with the ongoing pandemic but with technology booming, optimism would be our friend.

Human beings exist in an amalgamation of heterogeneous realities- the physical, virtual, augmented, and mixed reality. The fables that intrigue our minds will also have to evolve in order to effectively propel ideas to the digital natives of the contemporary world and awaken the abeyant mind. As

a result, it would create a wow factor by merely activating our senses. A traveler being shackled by four walls now has the liberty to satisfy his burning urge to travel and meet new people, given the success of VR; which promotes sustainability by reducing the carbon footprint involved in physical travelling.

Virtual Reality enables us to see the world in a three-dimensional sphere, allowing us to relish our lives during these turbulent times. Forget parties, distance learning, and meetings over video conferencing apps, where everyone is two-dimensional and talking over each other- virtual reality may be the new Zoom.



Virtual Reality has opened new possibilities to engage and feel real-time external stimuli.

Feminism in Mankind

SUMISHA MOHAN

Only 6 countries give women equal legal work rights as men; at this rate, it will take 108 years to close the gender gap. Every day, 33,000 girls become child brides. Statistics like these illustrate the very real obstacles faced by women in achieving basic rights. It is to battle this bias that we have Feminism. Feminism is defined as the advocacy of women's rights on the basis of equality of the sexes, but is gradually evolving to include political, economic and social equality of every person regardless of gender.

In recent times, however, we have seen a huge outcry against Feminism where feminists have been labelled man-haters or more popularly, feminazis. If the goal of Feminism is simply to challenge the systemic inequalities women face on a daily basis, why exactly do so many hate the term Feminism and the feminist movement? Strangely enough, there is a popular belief that feminists want to control the world and

put men down. Many people fear that Feminism will mean that men will eventually lose out on power, influence, authority and economic opportunities.

Some women are hesitant to be labelled as "feminist" because it is sometimes associated with lesbianism or lack of femininity. There exists a misguided notion that women being on an equal footing with men will bring about negative shifts in relationships, marriage, power and authority dynamics, and in business, job and economic opportunities. Feminism is viewed as a threat because it challenges orthodox traditions and religious beliefs by rejecting established gender roles.

The beauty of Feminism is that it includes all sexes, races and sexualities. If the term 'mankind' encompasses every person, the term 'feminism' can very well stand for empowering humanity. Growing and evolving as a society, we realise that there are many prevalent beliefs and traditions that don't serve us any longer, and it is our responsibility to reject them.



Every voice matters



The official invitation of the event.

International Thirukkural Conference 2020

M.KAVIN RAMNATH
AARYAN PREM

The International Thirukkural conference on the topic "Thirukkural and multiculturalism" was jointly organised by the Department of Tamil Perayam, SRM Institute of Science and Technology and The International Thirukkural Foundation. It was a 5-day online event.

The colloquium was hosted by Dr. Chandrika Subramanian, conference director and founder of Tamil Valarchi Mandram. The 5-day event explored the various nuances of one of the world's oldest books of knowledge, Thirukkural. The speakers instilled the fact that

Thirukkural is not only applicable for the Tamil society, but also to the entire world as a whole and how the concept of universality has allowed Thirukkural to transcend national boundaries, races, religions and languages, and remain applicable even in today's modern and very multicultural world. The event described how well Thirukkural was received by scholars and influential personalities over its history and the percipience of its Author.

Dr. R. Balasubramanian, Pro VC (S&H) spoke of the rich heritage of Thirukkural and its meaning and relevance to mankind in the entire world. In a classical language like Tamil, Thirukkural's contribution cannot be ignored, he said. The

contribution of Thirukkural to global peace and harmony is reflected in its relevance for today and generations to come, he added.

On the final day of the event Dr. T. R. Paarivendhar, MP, Founder and Chancellor of SRM group welcomed the chief guest Dr. Hugh McDermott, MP New South Wales, a visionary who shared a very interactive session and his thoughts regarding the event. The conference revealed many aspects of Thirukkural, focusing on the aspiring moral and ethical virtues. The event was appreciated a lot by the audience and everyone dispersed with a sincere hope that such intriguing cultural events be organized more frequently.

Lyrics and Literature

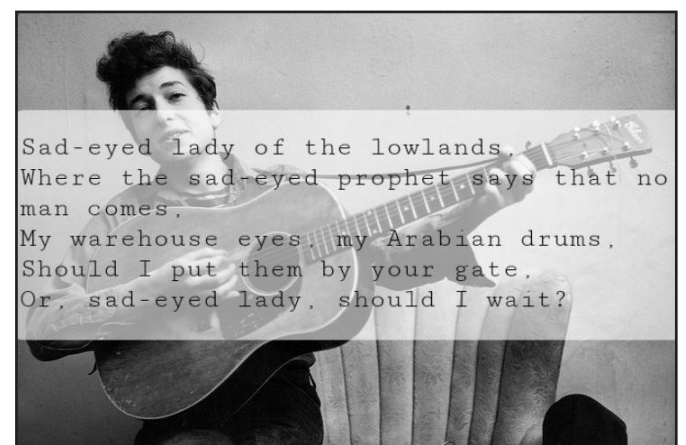
ANAHITA GUPTA

What is it about a song that captivates people? It may be the lyrics, or the music, or maybe the essence of both. A song without lyrics is music. But what is a song without music? A bunch of words? A form of literature? It is necessary to state that even though poetry can be found in the lyrics, there is a need to delineate boundaries between lyrics with poetry and the ones with facile words as an accompaniment to the music. Like poetry, lyrics also follow a rhythm and most likely have a rhyme scheme.

Whereas a songwriter must share their story, their thoughts and feelings in limited space and time, though it is not necessarily a compulsion.

Poetry is mainly written to be read and understood. It is easier for a poet to use complex language in poems which readers can read at their own pace. Whereas a songwriter must share their story, their thoughts and feelings in limited space and time, though it is not necessarily a compulsion. Bob Dylan, an American singer-songwriter, was awarded the

Nobel Prize in Literature 2016 "for having created new poetic expressions within the great American song tradition." His song "Sad Eyed Lady of the Lowlands", being more than eleven minutes long, paints a poetic picture of a woman, later revealed to be penned for his wife. The verses embrace metaphors and mystical words. A person reading the lyrics would



Both the imagery and meter of "Sad Eyed Lady" has been compared to a poem by Swinburne, "Dolores"

not be able to differentiate it from actual poetry.

Virginia Woolf's novel, "To the Lighthouse" conveys lyricism in an enchanting manner. Her lyrical narrative is based on a

design in which various contents of consciousness are juxtaposed. Nevertheless, there exists a blurred line between lyrics and literature. The power of words, be it in any form, never fails to entrance the world.

Activities at SRM University Delhi - NCR, SONEPAT

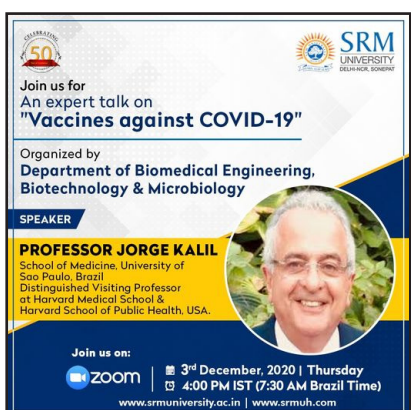
Kitchen Star Cooking Contest

An online cooking contest organized by KN Events. Our 2nd year students of B.Sc. HHA Ms Vanshika & Ms. Isha participated in the event and secured 1st & 2nd position respectively. The competition was chaired by renowned judges from the industry: Chef Varinder Singh Rana, Chef Nellu kaura, Chef Ajay Sood, Chef Saurabh Sharma, and Chef Nandita Karan.



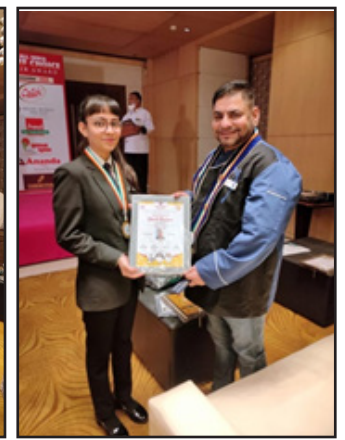
A talk on Vaccines against COVID-19

The Department of Biomedical Engineering, Biotechnology, & Microbiology organized a talk on Vaccines against COVID-19 on December 3rd, 2020. The Guest Speaker for the session was Professor Jorge Kalil, Professor and Head of the Clinical Immunology and Allergy Department at the School of Medicine, University of São Paulo and a Visiting Professor at Harvard Medical School and Harvard School of Public Health, USA. Prof. Jorge Kalil is using an approach for developing a COVID-19 vaccine that entails using molecular biology techniques to develop empty, non-infectious multi-protein structures known as virus-like particles (VLPs) that are easily recognizable by immune system cells. "The vaccine we're proposing resembles the protein coat of a virus. It has the external part of a virus, but it doesn't have nucleic acid inside, which is what allows it to multiply," Kalil said.



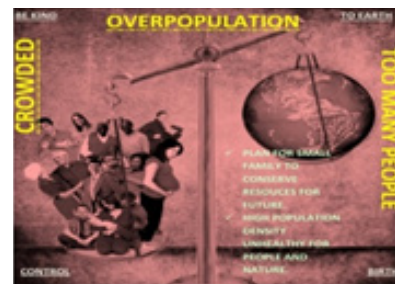
Bakery Workshop

The Department of Hotel Management organized a 2-day Bakery workshop in Delhi Technical Campus on 26th & 27th Nov, 2020, coordinated by Chef Sanket Kaplash (Assistant Professor) from DTC, Greater Noida. Chef Amit Kumar as an External Expert, SRM-IHM, Sonepat, demonstrated various recipes at the workshop to the students.



Certification by World Chef Choice Magazine

On Nov 1, 2020, the World Chef Choice Magazine organized the world certification event in different categories. Our 2nd year student, Ms. Vanshika secured second position in culinary quest for Quick recipes and was awarded with a medal & certificate. Among the faculty members- Mr Sunil Panwar (Principal Incharge) was awarded the Best Restaurant Consultant, Ms. Sanskriti Singh (Assistant Professor) received the Best Hospitality Educator-Front Office award, and Mr Prakash Chandra Pandey (Assistant Professor) received the certificate for the Best Hospitality Educator-Food & Beverage Service.



Faculty of Management organized an 'e-poster' competition on 29th October, 2020 for the first-year students. Glimpses of short-listed e-posters



Webinar on 'HACCP Quality System for ensuring Food Safety-Microbiological Perspective'

On October 19, 2020, Dr. Surender Singh delivered a special lecture for the 2nd year students of Hotel Management outlining the importance of HACCP in ensuring Quality system for Food safety.



Bravo International Book of World Records

Mr Sunil Panwar, Principal Incharge (SRM-IHM, Sonepat) was nominated for the Bravo International Book of World Record's Asian Sub Continental Edition 2020 for "Most Energetic & Dynamic Hospitality Professional."

Let's Cook Together Event

An amazing event was organized by the Department of Hotel Management. Ms. Isha Sharawat, a student of B.Sc. 2nd year demonstrated Sautéed Stuffed Cheese with Beetroot dip to students of different colleges.



What Would the Human Race Look Like on Mars?

TYRA MINNAL VINAY

Think bright rust coloured sands, cool weather, the tallest mountain in the solar system and the deepest and longest valley. Does that sound ideal? Well, then Mars is the place to be. Except, you cannot actually physically be there for at least the next couple of years so you are more than welcome to take part in the various Mars habitation programmes out there to get a feel of how life on Mars would be. That being said, life on Mars wouldn't be easy. To put things into perspective, the atmosphere is very thin and also extremely

carbon-dioxide-rich, so there would be loads of dangerous solar and cosmic radiation and, of course, the problem of being unable to breathe.

The temperatures are extreme compared to our home planet and can vary from minus 125°C near the poles during the winter to as much as 20°C at midday near the equator. So, you'll probably need more than a sweater and a couple of monkey-caps. On the bright side, we have found out that we can use synthetic biology and create bacteria that can convert exhaled CO_2 to O_2 . We have also found that bacteria and lichen are

resistant to radiation. Hence, it is believed by scientists that by making these bacteria extremely radiation resistant, we could create a self-healing radiation barrier of sorts.

So, imagine this, a dome like structure within which we would live, biofuel cells, bioplastic cars and electronic devices, self-replicating robots and solar panels everywhere, humans in a body suit 24/7 and new laws compared to the current ones that are being followed universally (At least that's what Elon Musk has in mind right now). Doesn't it all sound very fascinating?

Medication now a days

MAYANK JHA

'Medication has changed a lot, both figuratively and literally.'

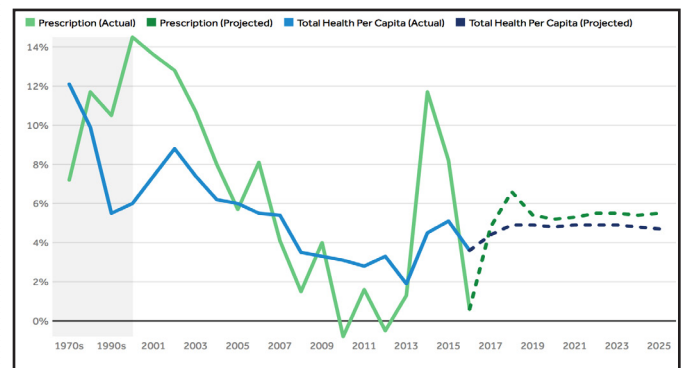
Medication as we know has come a lot far, from being just a healing source to serving a purpose to save lives. In the past, plants were used for medicinal purposes (herbalism)- their use was restricted to serving as a healing agent. However, the advent of modern medication and advancement in the field has been surreal.

In the past, there was only one type of medication- ayurvedic but now allopathic medicines have completely taken over ayurvedic medicines. Ayurvedic medicines are now considered to be an orthodox means of medication.

Medication has not only changed in the sense of

development but also in the manner of acceptance of society. Take the example of the antidepressant pill, in past the person who took them was considered to be a "madman" or "a psycho" but in today's time, due to the stressful lifestyle that we all are living these pills have become one of the most important things on day to day basis.

Major depressive disorder (MDD) is a chronic, recurring, and debilitating mental illness that is the most common mood disorder in the United States. It has been almost 50 years since the monoamine hypothesis of depression was articulated, and just over 50 years since the first pharmacological treatment for MDD was discovered. This is just one of the many important discoveries made in the medication field.



A graph showing the past and future of the medication market.

This distance between us

SHRAVYA SHARAN

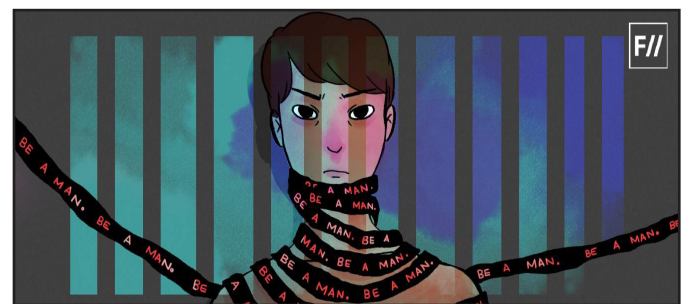
"For good ideas and true innovation, you need human interaction, conflict, argument, debate" -Margaret Heffernan. Social distancing, a side-effect of the pandemic, may end up making humanity 'socially distant'. The ability to communicate effectively is slowly declining as the days go by and this lifestyle is slowly dehumanising an essential part of community life, the interaction between mankind. Real-life interactions with people are like mental exercise. It is not just an exchange of thoughts but also involves understanding the other person, reading their body language as well as the situation while simultaneously attuning ourselves to the scenario to be able to convey our thoughts. Regularly interacting with others teaches us to feel valued and helps us to accurately interpret the intentions of others, which facilitates positive social experiences. This skill

is honed from birth and the nuances become part of our personality. It's worth cannot be measured in numbers with social media as evidence. Despite having the power to interact with people across the globe, we are susceptible to feeling alone. Our inability to voice our thoughts in a public setting leads to a feeling of loneliness. It makes us vulnerable to confirmation bias; wherein we might interpret others' words and actions in a way that supports the pessimistic outlook of our social ability. This 'loneliness loop' creates a toxic combination of low self-esteem, hostility, stress, pessimism and social anxiety – culminating in the isolated person distancing themselves even further. But this distance is not insurmountable. The existence of humanity is a reflection of the interactions between one another. So, every time an interaction occurs, society comes together to understand and be one's true self.

Men-tality of Patriarchy

SHREYA KHERA

Patriarchy is defined as a social structure wherein men hold power over people from other gender orientations, who have little power. While this is commonly known, less explored is the effect of patriarchy on men. Men themselves, among others, are restricted by the patriarchy. Throughout their lives, they're taught that asserting dominance is "masculine". Everywhere, they are told that straying away from this idea is wrong; this imposition of masculinity becomes toxic, affecting their mental health. Eventually, it is projected onto their worldview. Any expression of emotion is contained, because men "shouldn't be soft". Growing up, they see a gendered division of labor that becomes imprinted in their minds. It is interpreted that if they don't continue to do the same, they are not going to be accepted in society. They are tied



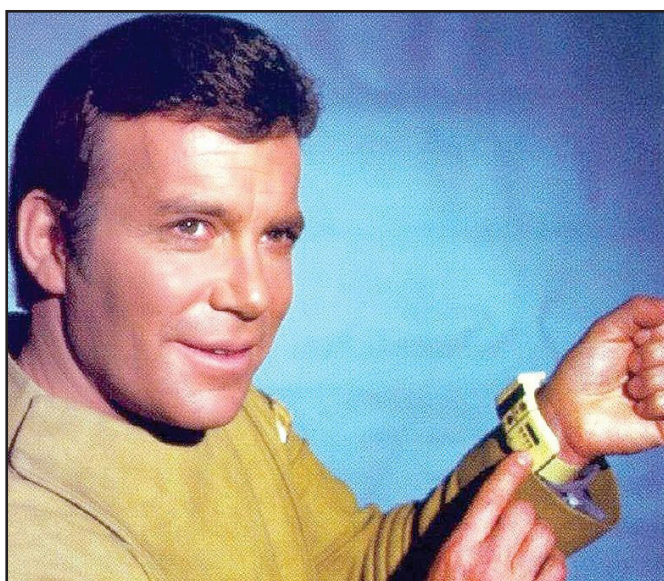
The constraints on men need to be dispelled for them to enjoy good mental health.

in emotional cages and struggle to open up about issues regarding mental health & abuse. The notion of "men feel no pain" instructs men to be secretive about any troubles they may face, leading to lower life expectancy, higher exposure to violence and increased tendencies of addiction. It reflects very strongly in the statistics surrounding abuse against men. Some studies showed that about 54.4% boys (of the participants) were victims of sexual assault. This included exposure to explicit content, forced touches, and

obscene photography. In most cases, the predator was a friend or relative. Being a man has become associated with being tough and non-vulnerable, when it is vulnerability that makes one human. To reject this vulnerability is to reject humanity. Its high time, thus, that we start talking about this on our family tables, however uncomfortable it may be. We must make it a priority to teach the men in our lives that it's okay to be vulnerable; that we stand up and challenge these stigmas.



"So this is the little lady who made this big war."



"The wrist communication devices in Star Trek became the inspiration for the modern-day smart watch"

The Mighty Pen

DIKSHA AVIRAL

When President Abraham Lincoln met Harriet Beecher Stowe, his first words to her were, "So this is the little lady who made this big war." So how did a little woman become one of the biggest reasons leading to the American civil war? The answer is that she wrote a book; a book that inspired millions to stand up against slavery.

"Uncle Tom's Cabin" certainly wasn't the only book that had led a nation to war and revolution. The works of Voltaire and Jean Jacques Rousseau roused France in 1789 to rebel against her king. "Das Kapital" by Karl Marx, sowed the seeds of communism so well in the Russian psyche that it led to the Bolshevik revolution just 50 years after its publication.

On a happier note, wars aren't the only events that stories inspire. Fiction, or science-fiction to be precise, has inspired a host of scientists over the ages. The ideas for the open-water submarine, the helicopter and the liquid fuel rocket were all lifted verbatim from the novels of Jules Verne. The TASER was inspired by the electric rifle, in "Tom Swift and His Electric Rifle" by Victor Appleton. We owe the credit card to Edward Bellamy's "Looking Backward". Not to forget that the term "Robot" was coined by Czech writer, Karel Čapek in his play "R.U.R", or the "Rossum's Universal Robots".

The list goes on. Yet, people often underestimate the power fiction holds over a population and how stories can transform the world. For centuries, humans have passed down not only our heritage and culture but also our history through stories. And thus, forever we stay, as we have stood for all time, humbled before the undeniable hold the unreal has upon reality.

Sankarabharanam – An Award-Winning Classic

NAVEEN AND JELSIA

Alejandro Gonzalez Inarritu once quoted "To make a film is easy, to make a good film is a war, to make a very good film is a miracle". But the iconic filmmaker, actor, screenwriter, and Dadasaheb Phalke award winner of the Telugu Film



Sri. K Viswanath – The paramount of Telugu Film Industry

Industry, Sri. K Viswanath has proven it wrong with his impeccable record of making extraordinary films. His ability to blend important social issues and flawless screenplay has been unmatched.

SRM CPFA and DSA in association with SPICMACAY hosted a special screening of the classic Telugu film 'Sankarabharanam' recently. The event was graced with the presence of director Sri. K Viswanath. The event began with an energizing introduction of vice-chancellor Dr. Sandeep Sancheti and leading Carnatic vocalist Dr. Shobana Vignesh. The scintillating welcome address by the dignitaries was followed by the screening of the film. The Telugu classic

kept the viewers' eyes glued to the screen following which the hosts turned the tables around with a pop quiz based on the film. This definitely elevated the interest among the participants.

The event then advanced into its most awaited section. The floor opened for questions and the participants engaged with the maestro film director in interesting and witty conversations. The participants and dignitaries utilized the online platform to express their gratitude and love for the film and the renowned director. Although virtual, the screening and the interactive session garnered the same level of enthusiasm and love from the participants as that of its offline celebrity interaction event counterparts.

Billion Dollar Investment for Space Research: Beneficial or Not?

RAMAY RAJ SINGH

Since the dawn of humans, curiosity is that emotion which had inclined mankind towards the path of exploration. The enigma of the flickering white lights beyond the blue sky always topped the explorations list and considering the technological advancement in the field of Aeronautics in the past few decades, it has now become possible to explore space, thus, paving a way for the betterment of society.

But the question as to how development and space is intertwined can be answered by taking into account facts such as how the very smartphone people so heavily rely on to

stay connected with each other, various significant advancements in medicines, and the treatment of fatal diseases like cancer, are all a result of communications research done in space. Though it may seem strange, technologies like water purification systems, LED lighting, home insulation, wireless headsets, freeze-dried food, modern smoke detector and computer mouse which are now an indispensable part of human life are some of the creations apart from the commonly known services like GPS and weather forecasting, were actually the result of the research and development conducted in space aboard mostly the International Space Station (ISS) and as for why

these experiments are only done in space and not here on Earth is because space provides sound environment such as vacuum and sterilised platforms to conduct experiments which is not practical to achieve here on Earth. Further, space exploration is quite affordable. NASA's budget which is approximately 21 billion dollars depicts the level of financial support space agencies get and surprisingly, ISRO's budget is 0.06% of India's GDP which turns out to be a bill of mere Rs. 130 per capita. Thus, space research is helping humanity grow by aiding in developments of technology and medicine, and every penny invested in it can definitely be said to be useful.



Research being conducted by ESA Astronaut aboard the ISS

Pandemic and the rise of video calling services

AISHIKI HALDER

2020 has been a tumultuous year so far. With most countries going into lockdown abruptly back in March, things were in utter disarray. With businesses, work and educational systems shut down, people were trying to hold onto any remaining semblance of their past lives.

As social distancing became the new norm, Video calling services became the perfect tool, both for work and to maintain some remnant of social life. This was supported by the fact that the video conferencing apps experienced record growth between March 14th and 21st with a whopping 62 million downloads from the app store.

While we all knew about apps like Skype and Facetime, what's notable is the rise of much lesser-known apps like Google Hangouts Meet, Houseparty, Brunch, Discord with Zoom topping the charts. These services were everywhere, from business



Distance is no longer an issue in today's age!

meetings to virtual classrooms, church sessions to even the UK cabinet meetings. When it comes to killing some time and shooting the breeze with friends, Houseparty and Brunch are the perfect partners. And if you want to add a little music to the mix, Discord is your place to go. With a plethora of options, users are no doubt spoilt for choice.

However, with a multitude of pros also come cons. With an increase in the popularity of such apps, internet and data

privacy are at a compromise. While such cases aren't an everyday issue, there still runs a risk of hacking and calls being interrupted.

The various companies were definitely unprepared for such a sudden spike in demand and unaware of the myriad of ways consumers are using them. It is a responsibility for them to make sure that there is no such breach of privacy besides also evolving with the times and maintaining the interest of their users.

Putting technical skills to test

NEERAJA MISHRA

GAYATRI RAMYA KOTHURI

SEMICOLON is a city level technical competition conducted by the IT Association which puts to test the technical skills and knowledge of the participants. This year, the sixth edition was conducted virtually due to the ongoing pandemic situation.

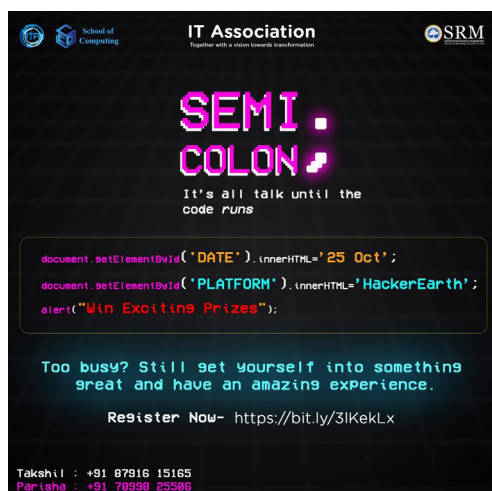
The event was held recently, consisting of a round each day. All the participants were sent a mail regarding the test link and login credentials an hour prior to the commencement of the test. The first round had various basic coding

"
The top 5 participants for the event were announced on the 1st of November 2020 in the closing ceremony of SRM Ideathon.

questions such as MCQ's, error correction, and finding output of the code which lasted for about an hour. Once done with their first rounds, the participants were apprised and those who qualified were updated of their second-round timings.

The second-round of the event was held the next day when all the qualifiers were reverified through call or mail. This round too took place for an hour and consisted of more complex coding programs based on mathematical and logical reasoning.

There were 37 registrations for the event and 25 participants. The top 5 participants for the event were announced on the 1st of November 2020 in the closing ceremony of SRM Ideathon. The participants felt that the event was quite a challenging one and the continuous support from the organizing committee and the technical events domain ensured a smooth functioning of the event which led to its ending on a good note.



SEMICOLON registration poster

Virtual tour of the national gallery of modern art

PRIYANSHA SINGH

ISHIKA GHOSH

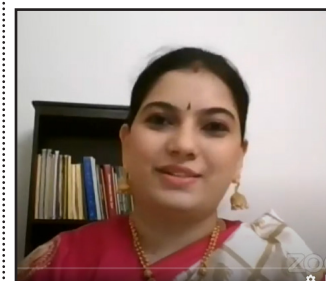
The SRM Directorate of Student Affairs and the SRM Centre for Performing and Fine Arts collaborated to arrange the event on a Zoom Video Call, hosted by the SRM CPFA head, Dr Shobhana Vignesh and a student convener, Ms Aparna Srivastava. They briefed the working of the SRM Cultural groups while acknowledging the honourable guest, Mr Argha Kamal Ganguly, Assistant Curator of the National Gallery of Modern Art, New Delhi. He diligently exhibited the National Gallery and explained how art is a set of Collection, Documentation, Restoration, Display and Education.

Mr Ganguly started the virtual tour by presenting four major artists- Raja Ravi Varma, Nicolas Roerich, Ramkinkar Baij, and Jamini Roy. The audience was fully engrossed into the description, and stories behind their compositions.

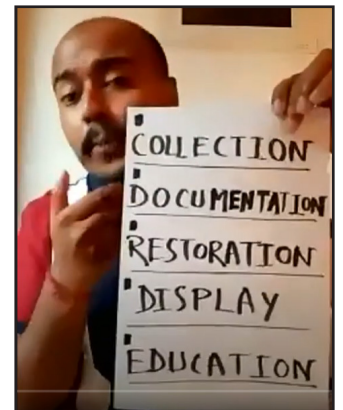
This was followed by taking the audience through paintings of various yogic poses portrayed for the International Yoga day and 'MAATRITVA'; unseen expressions of motherhood showcased on the International Mother's Day.

Through the end of the tour, a detailed 360° view of the entire gallery and the enormous four floors of preserved paintings and sculptures were shown.

While showing paintings and works from his collection- a Kavad and a Patachitra art, he answered several questions. The honourable vice-chancellor, Prof. Dr Sandeep Sancheti paid a visit thanking Mr Ganguly for his unique presentation. Mr Rohith Ravi, convener of the SRM SPICMACAY Heritage club thanked Mr Ganguly on behalf of the organisation for keeping the audience fascinated throughout the session.



Dr Shobhana Vignesh



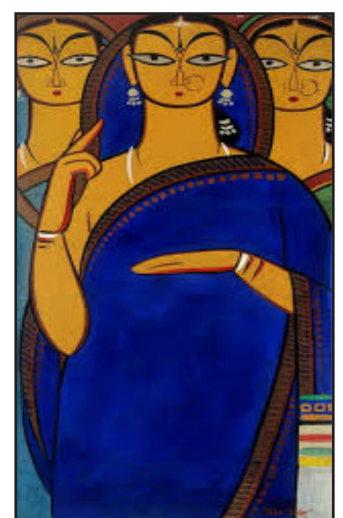
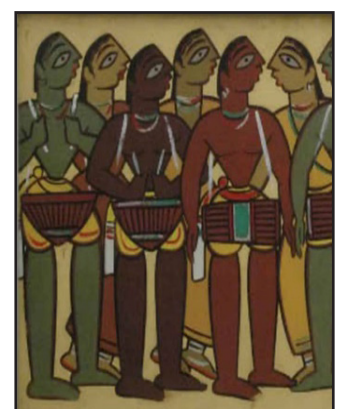
Mr Argha Kamal Ganguly



Ms Aparna Srivastava



Art by Raja Ravi Varma



Art by Jamini Roy

The Countdown Begins!

B.KAVYA SHRUTHI

It has dawned upon humans that time is now more valuable than ever as we've set to achieve net-zero carbon emissions globally by 2050 under the United Nations' Race to Zero campaign. Two exemplary organisations, TED and Future Stewards, have collaborated to establish Countdown, an initiative to embrace and enact solutions to climate crisis. It is motivated by the single-minded goal of cutting down greenhouse gas emissions to half by 2030 ensuring a safe, clean and fair future for everyone. An elaborate Global Countdown Launch was released on 10th October, 2020, on YouTube to

commemorate its beginning. More than 50 distinguished individuals came together with one shared emotion – care for life on Earth. His Holiness Pope Francis, United Nations Secretary General António Guterres, Former United States Vice President Al Gore, European Commission President Ursula von der Leyen and Prince William were among the few notable speakers. Others included eminent scientists, business leaders, politicians, activists, and artists from around the world representing diverse cultures.

All of them delivered remarkably revolutionary ideas on the topics of urgency, leadership, transformation, breakthrough

and action pertaining to climate change. The event introduced radical concepts like climate justice, clean capitalism, earth resilience, integral ecology, carbon budgeting, 15-minute cities, data-driven environmental apps, carbon negative concrete, climate leader bootcamps, raise of forest generations, stubborn optimism, and many more holistic approaches to fight climatic adversities. Varun Sivaram, the Chief Technology Officer of ReNew Power, India's largest renewable energy company, emphasised on specific goals to harness India's substantial potential for solar and wind energy, as opposed to India's vulnerable usage of fossil fuels for 75% of its current energy



Ice cap melts leave polar bears destitute in Churchill, Manitoba

supplies. The 6-hour event ended with a note of hope for intensive climate action in the next 10

years reminding all that in the battle against climate change, it is this decade or never!



A startup required infinite patience, persistence and perseverance

Student Startups and Challenges

PRIYANK KAPOOR

As they say, innovation is the key and this key is the most essential part of any startup. It takes both courage and an innovative mind to come with a startup of your own in this very aggressive market. But, what happens when students or better quoted as 'adults' take this extreme and risky step to go for a startup. Well, this is now more common than before with more and more students coming up with their own firms while also pursuing their degree.

SRM, itself has 3 to 4 startups running in the campus right now where students are actually pushing themselves beyond their boundaries to manage the work while not ignoring their academics. Startups themselves face a lot of hurdles in the market but the intensity of obstacles multifold itself in case of student startups.

Student entrepreneurs need to

develop the right team for their startup since at the end of the day one cannot fly solo in the limitless sky of the market, so his team can act as his wings. Another challenge is to perfect the product, the idea might be very innovative or out of the box but it needs to be properly executed as well. And with limited time and resources available to students, the quality might suffer. They also need to find the right partners and investors for their firm. Sometimes this competition and pressure can be overbearing to the young minds and they might just end up losing their focus on core goals.

These were the common challenges that every student entrepreneur has to go through for their startups. The solution to them is to be self-confident and patient. To the students out there, If you believe in yourself and be patient you will overcome any challenge that comes your way.

The thinking caps are on!

PRANAV. V

AARYAN SHARMA

The IT Association of SRM conducted the Ideathon '20 recently without giving in to the boundaries of the current pandemic. Partnered by Coding Blocks and Coding Ninja, the SRM Ideathon provides a great platform for students of all streams and interests to come together and put forth their ideas.

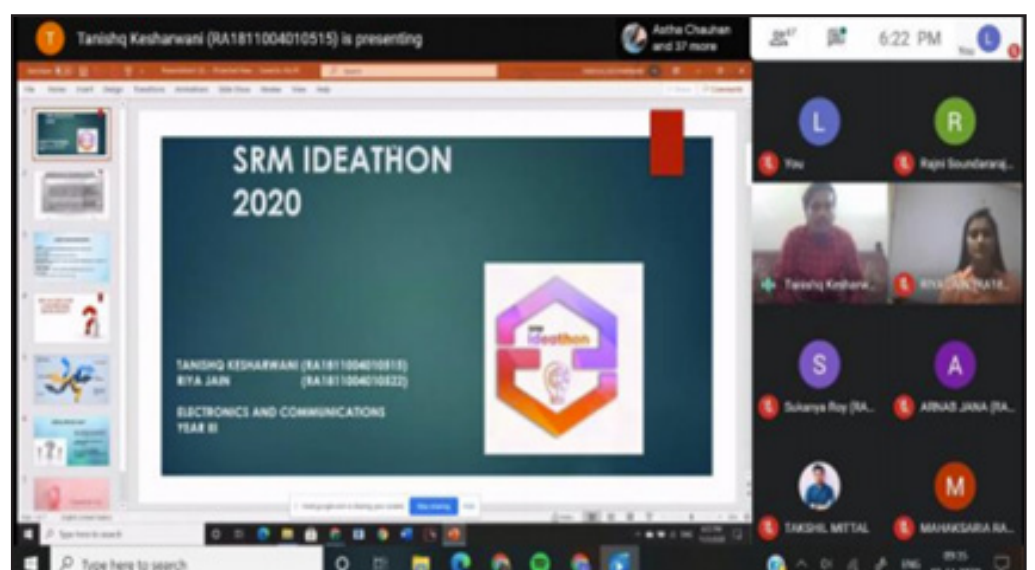
The program commenced with the inauguration ceremony at 5 PM, with 17 ideas and 24 participants. The Technical Event Organisers gave a brief overview, followed by the speeches of the esteemed faculty members Dr.G.Vadivu, Head of the IT department, and Ms.M.Safa,

"the SRM Ideathon provides a great platform for students of all streams and interests to come together and put forth their ideas."

the President of ITA, along with Mr.M.Vivekanandhan, senior consultant in Cognizant, and Mr.Balaji Srinivasan, an engineer at Ushur. The shortlisted teams went through 2 sessions. The first session started at 11:30, with 10 teams entering the second session at 2:30 PM. Each team was given a time limit of 6 minutes to present their idea and 4 minutes for the questionnaire by the judges. The closing ceremony started at 6:00 PM and was attended

by Dr.Metilda Florence and Ms. Nithya. The top 5 teams were declared and were given a chance to pitch their ideas to everyone. Riddles on Kahoot, a nontechnical event was conducted to fill up the time for the judges to decide upon the winners.

The judges declared team Tech Betas as the winner and the team Code Hard as the runner up. All the winners shared their experience and thanked the jury and the team for the opportunity.



The thinkers in action at Ideathon '20

The concept of Ikigai and its significance

GAUTHAM

Everybody seeks happiness in life. We are all ordinary people trying to look for euphoria in little things. Not many find true happiness, some do, and some don't. One might say that the pursuit of true happiness is never-ending.

This is where the concept of ikigai comes in. It originated in the Japanese island of Okinawa. Unlike others, the people of Okinawa aren't worried about tiresome Mondays. They sleep and live peacefully, having a positive outlook about the future. Many claim that the notion of ikigai is behind this happy-go-lucky way of living. Ikigai is a work or a lifestyle that you live, which satisfies everything that you ever wanted without going beyond your capacity. It is the epicentre of questions pertaining to what one is good at, what one can get paid for, what the world needs, and what one loves doing. For attaining ikigai or knowing what one's ikigai is, one needs to answer these questions. The lifestyle that satisfies all the above questions is the person's ikigai. Like one's



A pictorial representation of the ikigai wheel

personality, it is always unique. The journey of this discovery could be hard or easy and it varies from person to person. It is advised that the first step in this expedition is to jot down everything that one wants in life. There will be one or more things that fall under all the categories mentioned above.

The significance of ikigai is immense in the current society. Knowing these questions is often half the battle. The stress amongst the current generation can be drastically brought down by introducing ikigai in our society as well. A transformation in a person's perspective on how he looks at life can be done by finding his/her ikigai.

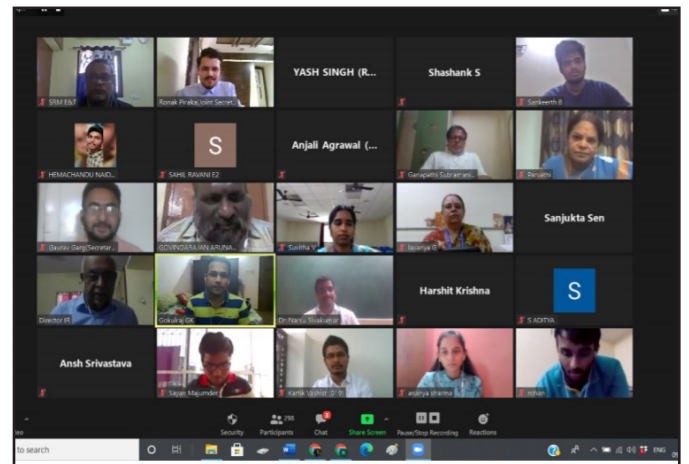
e-IMF 2020: Numbers and Beyond

AASTHA AGGARWAL

ADITYA KUMAR

Sri Ramanujan Mathematics Club, Department of Mathematics, SRM Institute of Science and Technology, organized a one-day mathematics festival via online mode, recently. It aimed at providing a platform for students to fully utilize their mental potential.

The President of the club, Dr. Govindarajan. A, inaugurated the festival, and the Vice President, Dr. Parvathi N, introduced the chief guest, Mr. G. K. Gokulraj, CEO-MD, My Copie, Chennai. During the address, he shared his success story for encouraging the participants. Office of International Relations Director, Mr. Kartar Singh, was on hand to open the meet. He praised the department for organizing the event and lauded the students' active participation. He spoke about the renowned mathematician, Srinivasa Ramanujan, and his contributions to the field of mathematics. The Director then officially declared the meet open.



A glimpse at e-IMF 2020

...applications of mathematics in Artificial Intelligence, Machine Learning and Internet of Things....

The competitions began with a Math Quiz, followed by Search Cross and Treasure Hunt. The total number of registrations for the day was 2511. Mr. Madhan Shanmuga sundaram, Director, Infosys Technologies, Chennai, was the chief guest for the valedictory function and was introduced by Dr. Vennila B, Associate Professor. He spoke on

applications of mathematics in Artificial Intelligence, Machine Learning and Internet of Things, and announced the winners of the respective contests. The event wrapped up with the vote of thanks by Gaurav Garg, Secretary of Sri Ramanujan Mathematics Club, which was then followed by the National Anthem.

World Space Week

LAWRENCE S

SRISHTI C

On 6th December 1999, the General Assembly decided to dedicate the 4th-10th of October solely to advancements and nouveau escapades in the Space. From then on, each year, we celebrate the week in commemorating and immortalizing the spirit of exploration of space.

2020 was no different when it came to it, despite its dilemmas. With this year's theme of "Satellites Improve Life", countries from Algeria to Zimbabwe celebrated with their set-ups, accounting for a total of 82 countries celebrating. Each country stood-out in portrayal, unanimous in spirit, showcasing a flavoursome answer to a single question- 'How will satellites improve life?' With the first man-made satellite being launched back in 1957, it was expected

that a week dedicated to it was well-deserved and well-received, considering that race to the moon is slowly shifting to the race to Mars or any planet for that matter.

World Space Week was aimed to provide unique leverage in space outreach, to educate people globally about the benefits. It also excites young minds about science, technology and astronomy. They are organised by space agencies, aerospace companies and educational institutes around the world.

Organising the World Space Week was more difficult than usual for most countries due to the Coronavirus pandemic and the consequent economic fallout of 2020 which saw a decrease of events from about 8000 last year. Yet, just like the world has adopted and adhered to changes, World Space Week continued its mission, some events being organised completely online.

ARYAN DWIVEDI

ANAMIKA TRIPATHI

Fighting COVID is all about caution and SRM Institute of Science and Technology, Kattankulathur, is doing its due part aptly. Under the Unnat Bharat Abhiyan, an initiative of the Ministry of Education, GOI, SRMIST donated a contactless thermometer cum hand sanitiser to Hayagriva Temple. The purpose of the event was to enhance the

awareness of sanitisation and hygiene in the many devotees who visit the temple from all across the nation throughout the year.

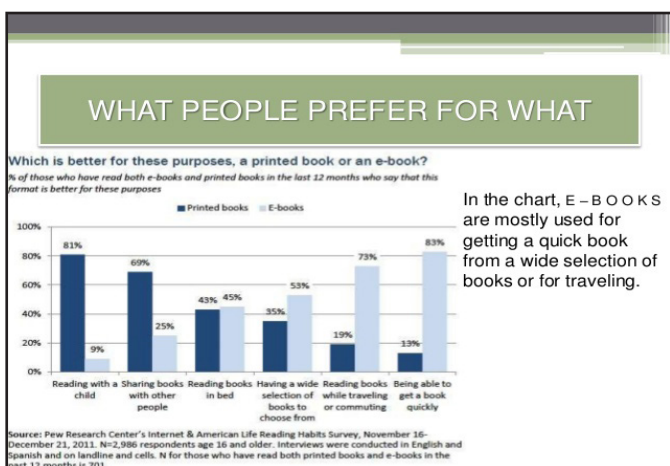
The chief guest of the event was Dr. P Satheesh Kumar, Dean of School of Architecture and Interior Design. Further, Dr.V. Thirumurugan, Associate Director (Campus Life) and Nodal Officer-UBA, and Dr. T. Rama Rao, HoD, Department of ECE, also graced the occasion.



Act of sanitisation making lives safer

Many faculties from the School of Architecture and Department of ECE along with several supporting staff, were also present. Women from nearby villages were invited to take part in the demo session along with Mr. Gunasekaran (ex-Panchayat President), Mr. Vasudevan (Panchayat Secretary), and Mr. Tamil Selvan (Temple Administrator), several villagers and temple dignitaries. The event started with a few words on sanitisation and measures to counter COVID-19 from the chief guest. The speech was followed by a tree plantation drive in Chettipunniyam Village. The event concluded with the distribution of the hand sanitiser to Hayagriva Temple.

Being amidst a world crisis it is everyone's responsibility to put forth the greatest possible effort to win the battle against the virus for humanity, and SRMIST took a step in that direction with this initiative.



Will books make it to the next century?

V REVATHI AISHWARYA

E-books have been on the rise ever since it was first made available to the Indian market. Due to the continual rise of e-books, the market for a traditional hardcopy seems bleak, but it may not be so.

From an author's standpoint, e-books are more profitable because the author is paid a mere 10-15% of print book net sales as opposed to e-books where an author can get as much as 70% of net sales. To add to this, the sheer convenience of an e-book and the ability to store multiple books on a single tablet is revolutionary.

But, in comparison to physical books, e-books are often sold for quite high prices, and consumers do not benefit from the cost reduction that comes from low printing and distribution expenses. Physical books are perceived to be an escape from being constantly connected to

gadgets. They represent a form of 'digital detox', bringing with it a sense of being 'unplugged'.

In the U.S., publishers of printed books made up to \$22.6 billion in revenue and e-books making \$2.04 billion, according to the Association of American Publishers' annual report 2019. Those figures include trade and educational books, as well as fiction.

As far as the numbers for the current Indian e-book market go, they seem to vary depending on who you ask since there is no government-regulated association tracking the sale.

Almost a decade after its introduction, the e-book remains a format that tries to mirror the physical book. While the e-book industry is constantly evolving, the printed book continues to allure the readers. In the end, the fate of the type of book remains in the hands of the reader.

Reporting for Spectrum

- Contributing reports should be confined to a maximum of 250 words and must be written by students only.
- Accompanying pictures must have captions. Pictures without caption will not be published
- Request for coverage in Spectrum by its editorial team must be made well in advance with an accompanying note and the invitation to sridhark@srmist.edu.in
- Coverage of a certain event or receipt of an article does not guarantee publication.

-Editor

International Workshop on Numerical and Analytical Techniques in Engineering Problems (WNATEP - 2020)

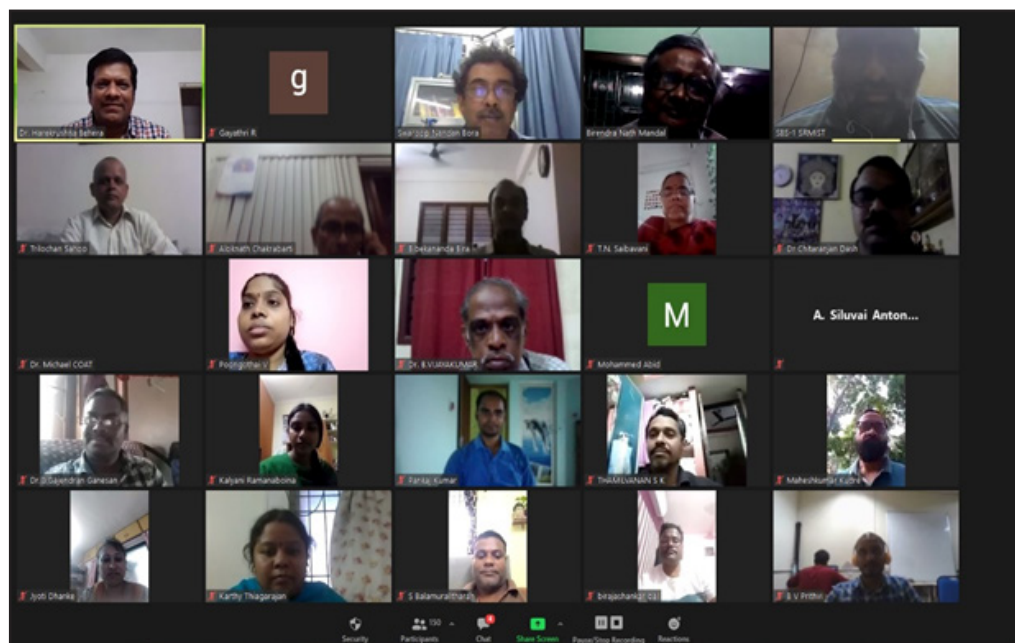
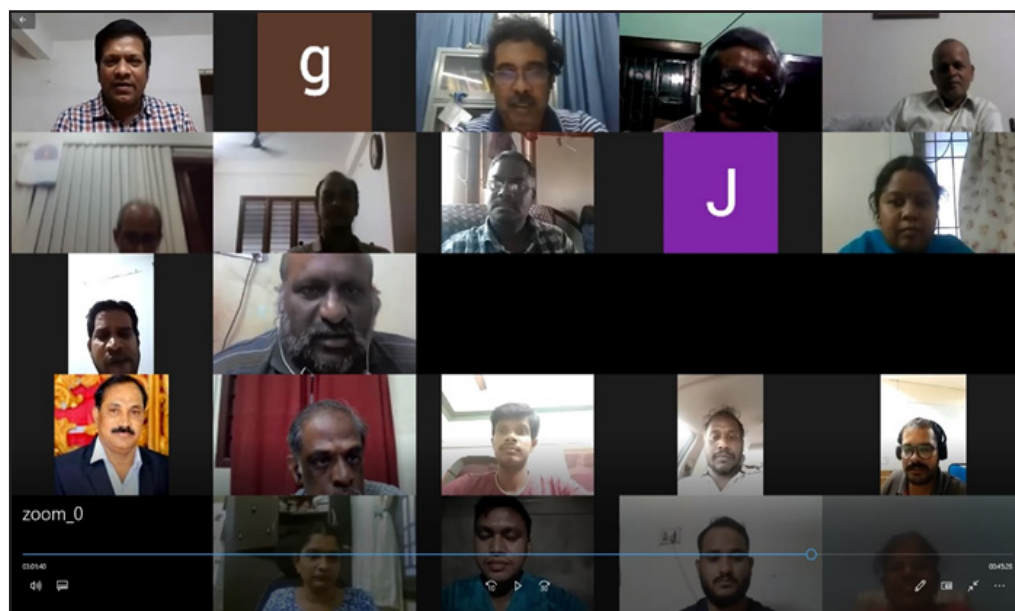
STAFF WRITER

On Nov 12-13 2020, an international workshop focussing on numerical and analytical techniques in engineering problems was conducted by the Department of Mathematics, College of Engineering and Technology, SRMIST. The workshop brought in 12 experts from premier Indian institutes including IITs, IISc, ISI, NITs, and 3 experts from international academia to share their knowledge pertaining to real-world applications in these fields, aimed to enrich the participants already working in this field as well as the beginners. The workshop was conducted online via Zoom platform. Each day comprised of two sessions separated by a lunch break. Each talk was followed by an interactive discussion with the participants. On average, more than 200 participants were always present for every talk.

The workshop was hosted

by Dr. Harekrushna Behera and Dr. Bibekananda Bira, and the gathering was welcomed by Dr. A. Govindarajan, Professor and HoD Mathematics, who briefed on the importance of such events and appreciated the interest that the research scholars showed as the number of registered participants had touched 500, from India and abroad. Following this, Dr. A. Anuradha introduced the Dept. of Mathematics at SRM IST, highlighting the courses that the department offered, and

the goals and achievements of their students and alumni till date. This was followed by individual talks by the invited professors and experts aiming to stimulate and encourage researchers in these fields. Each speaker was introduced by a senior faculty member chairing that session. The sessions on the second day were followed by the valedictory function in which Dr. Harekrushna Behera gave a vote of appreciation to the experts, participants and organizers.



A Resilient Shuruaat - Shuru '20

KRITIKA MALHOTRA

RITIK SHRIVASTAVA

"Life is a journey that must be travelled no matter how bad the roads and accommodations."

-by Oliver Goldsmith

Shuru '20 was an avant-garde event, owing to the current scenario. The pandemic, instead of slowing down the organisers, gave them a push to bring out their creative best and utilise innovative resources to conduct this huge annual fresher's event online. The massive influx of participants came as a pleasant surprise to all. The prelims began on December 1, 2020, and the main event was held between December 5, 2020, and December 6, 2020. Under the guidance of the Directorate of Student Affairs, several events and celebrations were successfully organised by the various member clubs and societies.



The Banner for Shuru '20: #TheNewNormal

Events ranging from quizzes, open mics, poetry writing, gaming, puzzles, Rubik's cube championships, etc were held using both online and offline means. Several distinguished experts in the respective fields were invited to judge these competitions. The freshers participated with much fervor and exhibited a wide range of talents.

The passion and synergy brought forward a renewed

momentum to Shuru, setting a higher benchmark for the upcoming years. This event facilitated the interaction between the freshers and their seniors from multiple disciplines and campuses. Winners were awarded certificates and prizes. The event ended with high spirits and ecstatic participation. The organisers and the participants kept up with the essence of Shuru '20 and heralded the spirit of 'The New Normal'.

SRM Indian Energy Conference

LAWRENCE S.

Over the past 4 editions, the SRM Indian Energy Conference has hosted MUNs across different types of committees that have helped set a benchmark and go beyond the traditional boundaries of a MUN. The fifth edition hosted from 20th-22nd November 2020 proved to be no different. SRMIEC aims to provide a chance to represent countries, organizations, or individuals at a conference simulating international and national level discussions and, in turn, work on crucial predicaments and solutions for energy and its relevant sectors.

With 'Conquering energy' as their motto, the fifth edition of SRMIEC aimed to have committees discuss saving, renewing, and conquering energy. SRMIEC presented a wide variety of committees including Committee on Climate Change, Futuristic Energy Crisis Committee, Indian Council for Energy Economics, International

Marine Energy Council along with the International Press. With the motive to involve, evolve and aggregate the ideas of the youth, SRMIEC witnessed delegates from all over India from various colleges and institutes.

Throughout the three days, the event conducted highly researched debates along with energy-related conflicts among the represented nations and new, sophisticated agendas were proposed and put forward by the delegates. The second night consisted of a virtual social night which saw a plethora of energetic performances led by talented musicians and actors and bonds formed between people from different colleges. The conference concluded after every committee got to its goal with their agendas and the names of the winning delegates were announced. With

'Conquering energy' as the motto, the fifth edition of SRMIEC aimed to have committees discuss saving, renewing, and conquering energy.



Effect of Pop Culture on Globalisation

SHASHANK IYENGAR

Globalisation has enabled the world to be a more connected and interdependent place by prompting significant changes in not only trade and technology but also in our cultures. It has manifested acceptance and openness in people's mindsets which previously dwelled upon our thoughts and perspectives restricted to the scope of our exposure to societal values and cultures. This change has not only impacted the lives of people involved in the network but has also impacted the network itself. As a network of services, information and trade that caters

to the needs of the masses, has transformed largely in accordance with the varying needs of the people. Over the past few years, we have seen the majority being more accepting of newer alternative sources of technology, information and entertainment over the previously used conventional mediums. Local industries have also observed internal changes with the local audiences' growing interest and support for international pop culture. The movies, music, web-series, art, literature and fashion to name a few have been vastly accepted and preferred by consumers around the world. This has also simultaneously opened several opportunities for cross cultural exchange and collaborative work. The onset of globalisation and pop culture as a by-product has channelled the transforming societies. The extent of its influence on the societies and even on trade laws across nations is both objective and subjective in nature. The consensus on what would be considered ideal is in finding autonomy and balance in retaining the pre-existing cultural ethics and embracing pop culture and urbanization in its true essence.

Frames That Change Lives

SHASHANK KUMAR

"Lights. Camera. Action!", is the phrase most people associate with filmmaking. What runs through a director's mind when they utter these 3 holy-words? Do they feel the pressure of creating something which would not only inspire a new generation of filmmakers but also educate the masses? Or are their thoughts just as casual as the mainstream audience? A steroid injected person enters, blows up a few cars and exits. Is that what cinema truly is?

During the World-War-2, thousands of people would flock to movie theaters to watch hours of grainy, black-and-white footage of the war. To feel the pain and despair their sons, fathers and brothers might have felt. Steven Spielberg was a part of one such flock. Years later, he wanted his audience to feel what he felt when his father was enlisted to fight Nazis. Consequently, he filmed his magnum opus, Schindler's list, in black-and-white. The lack of colours, in all but one scene, made sure that "the girl in the red coat" was always the focus of his audience's attention and that we always strive to make



A still frame from the 'Schindler's List' highlighting a girl in red coat, representing death, destruction and loss of innocence as by-products of War.

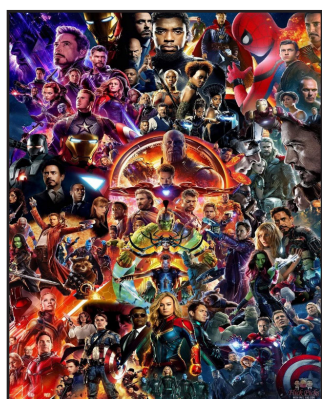
....Cinema is not only a tool to show us the horrors of past but also to educate the future generations. Multiple studies have given conclusive evidence that children learn new concepts at a faster pace from movies than from books....

this world a better place so that no other red coat ever gets lost in the stream of blood.

Cinema is not only a tool to show us the horrors of past but also to educate the future generations. Multiple studies have given conclusive evidence that children learn new concepts at a faster pace from movies than from books, 'Zootopia',

through an inventive narrative illustrates how multiple species of the animal kingdom can co-exist harmoniously.

Movies, unarguably, are one of the best forms of escapism. But one should not limit them to just that. An entertaining thriller stays with you for an hour, a well-crafted movie for a life-time and then some.



Marvel: An influential entertainment enterprise, and the finest example of pop culture

ICePhaST-2020

RAMAY RAJ SINGH

The modern lifestyle is highly dependent on electricity and electrical equipment for its functioning, and innovation in this area helps push the world forward. ICePhaST (International Conference on Electronics, Photonics and Smart Technologies) is one such conference that fosters innovation, and is organised by the Department of Electronics and Communication Engineering (ECE) of SRM Institute of Science and Technology every year.

ICePhaST-2020 was held online between 16th and 18th November 2020 on Zoom. There has been rapid research and development in technology related to these areas during the past few years, and it has resulted in dramatic changes in techniques adopted in various applications. But development never stops; and this conference was aimed to lay out the opportunity to discuss state-of-the-art research contributions, and to explore arenas for future work. It aimed to bring researchers, practicing engineers, faculty members and students to a common platform to share their research work. Many eminent researchers from different countries submitted their papers for presentation and also interacted with young students of various institutions.

The discussion encompassed a lot of topics such as Analog and Digital Circuits, Nano electronics and Micro-electronics, Very Large-Scale Integration (VLSI), THz Sources and Detectors, Quantum Electronics, Laser 3D Manufacturing, Vehicular Communication Systems, Cyber-Physical Systems and Society, and more.

The chief guest of the conference was Padmashri Dr. Mylswamy Annadurai, with Prof. Hiroshi Inokawa, Prof. Chennupati Jagadish and Prof. Stephen C. Rand as Guests of Honour. Speeches were given by professors from different institutions from across the world like Professor Jun Kondoh (Shizuoka University, Japan), Dr. Balaji Srinivasan (Indian Institute of Technology - Madras, India), Dr. K. R. Murali Mohan (Mission Director, NM-ICPS Department of Science & Technology, New Delhi, India), Dr. Dhruva Jyoti Biswas (Bhabha Atomic Research Centre, Mumbai, India), Prof. Hugh Barr (Gloucestershire Hospitals, NHS Foundation trust, United Kingdom) and many others.

ICePhaST-2020 truly explored the research contributions in recent technologies to aid future development, and helped budding researchers and engineers to think, innovate and create.



A group of happy gypsy Indian children.

Why is India so low on happiness index?

AASTHA AGGARWAL

The happiness of a country depends a lot on its people, and not only on its annual budget. Although India has significantly progressed since independence, even when compared to countries never been quashed by a foreign power. However, according to the World Happiness Report released by the United Nations on 20th March 2020, India ranked 144 out of a total of 153 countries. So, the question that here arises is why India so low on happiness index and how can one truly measure the happiness of a country? Well, the main reason for the former could

be the amalgamation of social, political, and economic stresses such as overpopulation, lack of awareness of mental health problems, and discrimination. Besides, does the real measure of Indian happiness come from a survey of business leaders in Forbes or from a 12-year-old ragpicker?

Elucidating on the above, overpopulation can be considered as the father of all the causes. It not only leads to the lack of basic amenities but also lesser jobs, hence increasing unemployment. With the market rates of everything as small as a toothbrush skyrocketing, people

are finding it difficult to afford a living. This further leads to mental health problems like hypertension and depression, thus increasing the suicide rates. India indeed has a lot of potential; however, satisfaction is something that prevents the citizens from realizing and discovering the positives of life. Only when it understands the true essence of the phrase “money cannot buy happiness”, it can actually feel and see the same. People from all over the world come to India to find inner peace and happiness. However, ironically what India gave the world as a remedy, failed to apply it to itself.

Diwali and Crackers: A Relationship to Reconsider

SHRUTI RAMESH

Diwali, the Festival of Lights, is arguably India's favourite festival. It celebrates the triumph of good over evil and people from all walks of life come together to light lamps, exchange gifts, and most importantly, burst crackers over the week-long festivities. However, with rising environmental concerns, maybe it's time to reconsider the way this festival is celebrated?

State governments such as Delhi and Karnataka issued a ban on the sale of firecrackers before Diwali this year. While a few people welcomed this decision with open arms, most

others criticized it. A recent study revealed that New Delhi alone burnt around 50 lakh kilograms of crackers in 2018, raising the AQI to 451, or “severe”. Crackers that were most commonly burst emitted gases such as oxides of cadmium, lead, and zinc, which can lead to lung diseases and low oxygen levels in the bloodstream. The study also found that during Diwali, there was a 40% increase in PM2.5, particles that are extremely harmful to health, and a significant increase in the number of cases of bronchitis and other respiratory diseases. Additional issues include pollution of all three kinds and the distress faced by street animals and pets. Another angle to consider is

that firecrackers weren't even associated with Diwali before the fifteenth century, in a claim made by historian P. K. Gode. Even then, most common folk did not burst crackers till they were further popularized in the 1940s. Diwali has always been about lights. In fact, “Deepavali” means ‘row of lamps’. The origin of the festival saw the people of Ayodhya lighting lamps to signify the victory of light over darkness. It has aesthetic appeal, sparks joy, and can bring the community together like no other celebration can. Most importantly, it is good for the environment. So, why not keep ancient traditions going and ditch the crackers?



The perfect opportunity to broaden minds