IIT Bombay Holds Alumni Day (Virtual Reality) Celebrations on December 27, 2020

* The Silver Jubilee batch of 1995 pledged Rs. 20.3 crores towards the Legacy project

*The Center for Policy Studies, IIT Bombay receives Rs.15 crores from IIT Bombay Alumnus Mr. Ashank Desai

The Silver Jubilee Batch (class of 1995) has pledged a sum of Rs 20.3 crores

Indian Institute of Technology Bombay celebrated its Alumni Day on Sunday, December 27, 2020, from 10.30 am onwards in a **virtual reality mode** in view of the ongoing pandemic. In a first-of-its-kind Alumni Day celebrations this year, the virtual reality programme had personalized avatars of the Distinguished Service Awardees and Chapter Service Awardees receiving awards from the personalized avatar of Director **Prof. Subhasis Chaudhuri.**

The Silver Jubilee Batch (class of 1995) has pledged a sum of Rs 20.3 crores towards the legacy project. A Legacy Project is a project adopted by the batch celebrating its Silver Jubilee anniversary, for the betterment of the Institute and of the people associated with it, as a way of giving back to the alma mater and to leave behind a lasting legacy and remembrance of their silver jubilee reunion. The event was also an occasion of E-Reunion for Ruby (class of '80) and Pearl (class of '90) Jubilee alumni.

IIT Bombay alumnus (Class of 1974) Mr. Ashank Desai made a substantive financial contribution of Rs.15 crores

The event witnessed exchange of MoU with **Mr. Ashank Desai**, an IIT Bombay alumnus (class of 1974) and Founder, Vice-Chairman and MD of Mastek/ Majesco for a substantive financial contribution of **Rs.15 crores** towards the Center for Policy Studies in IIT Bombay. Speaking on the occasion he said, *"I feel fulfilled to contribute towards IIT Bombay's journey of making Centre for Policy Studies a premier policy institution. This Centre will contribute towards India's need for talent, research and advisory to achieve holistic approach to policy making, particularly with emphasis on technology."*

The online event started with a warm welcome by **Prof. Suhas Joshi,** Dean (Alumni & Corporate Relations), IIT Bombay while **Prof. Subhasis Chaudhuri,** Director, IIT Bombay gave the visiting alumni an overview of the Institute and its growth over the years.

In his address, Prof. Chaudhuri informed how the Institute is growing from strength to strength. *"The value of an academic institution depends on the collective quality, achievements and leadership roles that its alumni play. Alumni assembled today for the reunion testify the contributions of IIT Bombay in nation building,"* he said.

As a part of the function, **Distinguished Service Awards** were bestowed on two alumni members this year, who besides being achievers in their own chosen domains, have contributed in a notable and sustained manner to the progress of the Institute. This year, the award was conferred on **Mr. Krishnamurthy Raghunandan (M.Tech., ME, 1972)** and **Mr. Sachin Galgalikar (B.Tech., ME, 1986)** by the Director.

The **Chapter Service Awards**, instituted during the Diamond Jubilee year celebrations were conferred on **Mr. Bhalchandra Gopal Deokule (M.Tech., AE, 1977), Dr. Shankar Moni (B.Tech., EE, 1984), Mr. K. Sharat Chandra (B.Tech., CE, 2001), Dr. Chandan Mozumder (Dual Degree (B.Tech.+M.Tech.), AE, 2005), Mr. Gaurav Porwal (Dual Degree (B.Tech.+M.Tech.), CE, 2005),** and **Mr. Mudit Jain (B.Tech., EE, 2011)**. The award is conferred on select alumni who have contributed in a very notable and sustained manner to the progress of the Chapter and also to the progress of the Institute.

A large number of alumni members and their family members participated virtually in one-of-its-kind Alumni Day celebrations this year.
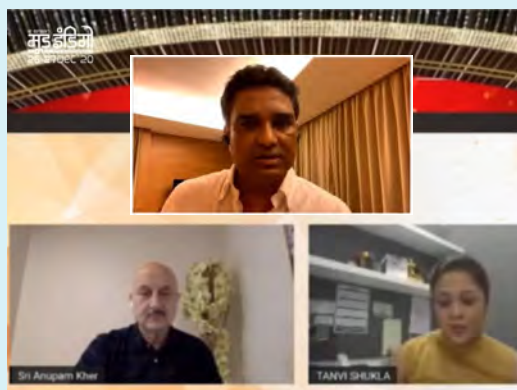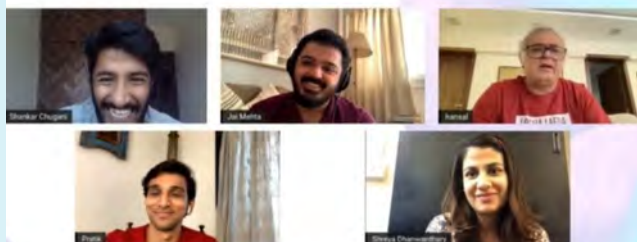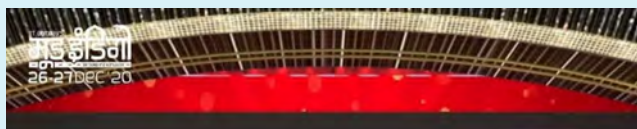
The entire event was broadcast live on the Youtube link :
https://www.youtube.com/channel/UCHW6skxNHhI6wppSLIvLQjg

Celebrating 50 Years Of Mood Indigo

*Glimpses of
Mood Indigo 2020*

IIT Bombay signs MoU with Lehigh University

The Indian Institute of Technology Bombay and Lehigh University (LU), Bethlehem, Pennsylvania, USA signed a Memorandum of Understanding (MoU) and Student and Scholars Exchange Program Agreement on December 17, 2020. The MOU was signed by **Prof. Subhasis Chaudhuri**, Director, IIT Bombay and **Prof. Nathan Urban**, Senior Vice President for Academic Affairs and Provost, LU.

Besides mutual sharing expertise in engineering and technology, the MOU facilitates academic and student exchange whereby the participating students and faculty from both institutions will come together for joint studies, research and training activities, and other educational programs of mutual interest.

The MOU sets the stage for future academic engagements between the Institute and the university when the global pandemic eases up. Until then, IIT Bombay and LU will continue to maintain professional links through virtual and online modes to implement many of the activities that will lead to a vibrant academic relationship between the two institutions.

IIT Bombay Wins Clarivate South and South East Asia Innovation Award 2020

The Indian Institute of Technology Bombay was selected as a winner of the Clarivate South and South East Asia Innovation Award 2020 in the Academic Institutions category. This award places IIT Bombay among the top academic innovators in India.

Every year, Clarivate, a global leader in providing trusted insights and analytics to accelerate the pace of innovation, recognizes the most innovative organizations in India according to patent-related metrics that get to the essence of what it means to be truly innovative. This analysis is done using proprietary Clarivate Analytics data and tools. The evaluation is driven by metrics for both patent volume (patents published) as well as patent quality (grant success rate, the extent of globalization, and citations).

The awards are given in three broad categories of Government Research Organizations, Academic Institutions, and Corporations for each country in the region. The awards were announced at the Clarivate South & South East Asia Innovation Forum 2020 held on November 18-19, 2020, in the presence of **Mr. Amitabh Kant,** CEO NITI Aayog, and **Prof. K Vijay Raghavan**, Principal Scientific Advisor to Govt. of India.

IIT Bombay Celebrates National Unity Day

IIT Bombay's staff members pledge to promote a culture of unity

Security office organize a march past in the campus

IIT Campus School student showcasing his talent in poster competition

Kendriya Vidyalaya student performing poetry recitation

The Indian Institute of Technology Bombay observed **Rashtriya Ekta Diwas (National Unity Day)** on October 29, 2020. The National Unity Day is celebrated to commemorate the birth anniversary of 'Iron Man of India' **Sardar Vallabhbhai Patel**. Looking at the current pandemic situation, the employees took pledge to promote a culture of unity and integrity by maintaining social distance following COVID-19 guidelines.

A march past was organized in the Institute's campus by the Security office to showcase the unity, integrity and security strength of the police officers, other uniform officers and national security agencies as part of the celebration.

The IIT Campus School and Junior College arranged various competitions for the students on this occasion. A drawing competition was organized for the primary section students by **Lata G. Popale**, a primary teacher, on the topic 'National Unity Day'. In another event, **Archana R. Lahane**, a secondary teacher, had conducted slogan writing and poster making competitions for the secondary section students.

Further, an essay writing competition on National Unity Day was organized by **Trupti Nair**, Jr. college professor. The students of all age groups showcased their creative side very enthusiastically by participating in various competitions.

Kendriya Vidyalaya, Powai organized various events on October 31, 2020. The staff members and school students took an online pledge. Activities related to the life of Sardar Vallabh Bhai Patel such as speech competition, slogan writing, poetry recitation, essay competition and a quiz were held across different age groups.

## IIT Bombay Observes Vigilance Awareness Week

Staff of IIT Bombay taking pledge

On the occasion of Vigilance Awareness Week observed from October 27, 2020 to November 2, 2020, the staff of IIT Bombay took a pledge to promote corruption-free society on October 27, 2020, in the Main Building of the campus maintaining social distance and keeping in mind the COVID-19 guidelines. Staff members, who were unable to attend the pledge physically, were shared an online integrity pledge on email.

The Vigilance Cell of IIT Bombay had also organised an essay competition on '**Satark Bharat, Samriddh Bharat (Vigilant India, Prosperous India): My Roadmap'** for the campus community.

IIT Bombay Observes Constitution Day
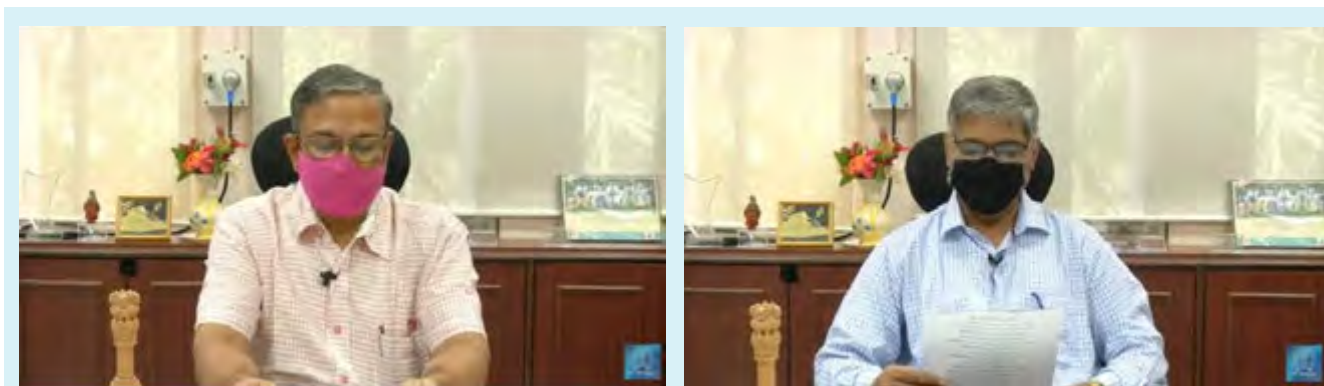
*Reading of the Preamble by the Institute dignitaries*

To mark the Constitution Day, also known as **Samvidhan Divas**, IIT Bombay staff read the Preamble to the Constitution of India on November 26, 2020 (online) observing COVID-19 guidelines.

Dr. R. Premkumar, Registrar of IIT Bombay read the Preamble in English followed by reading of the Preamble in Hindi by **Mr. Ganesh K. Bhorkade**, Joint Registrar of IIT Bombay.

The IIT Bombay's staff members took part in a virtual pledge reading to promote harmony and the spirit of universal brotherhood amongst all countrymen. Various Institute dignitaries and staff members marked their presence on the occasion.

On 26th November 1949, the Constituent Assembly of India adopted the Constitution of India, which came into effect from 26th January 1950.

IIT Bombay Launches 'Bandhu' For Students' Emotional Needs
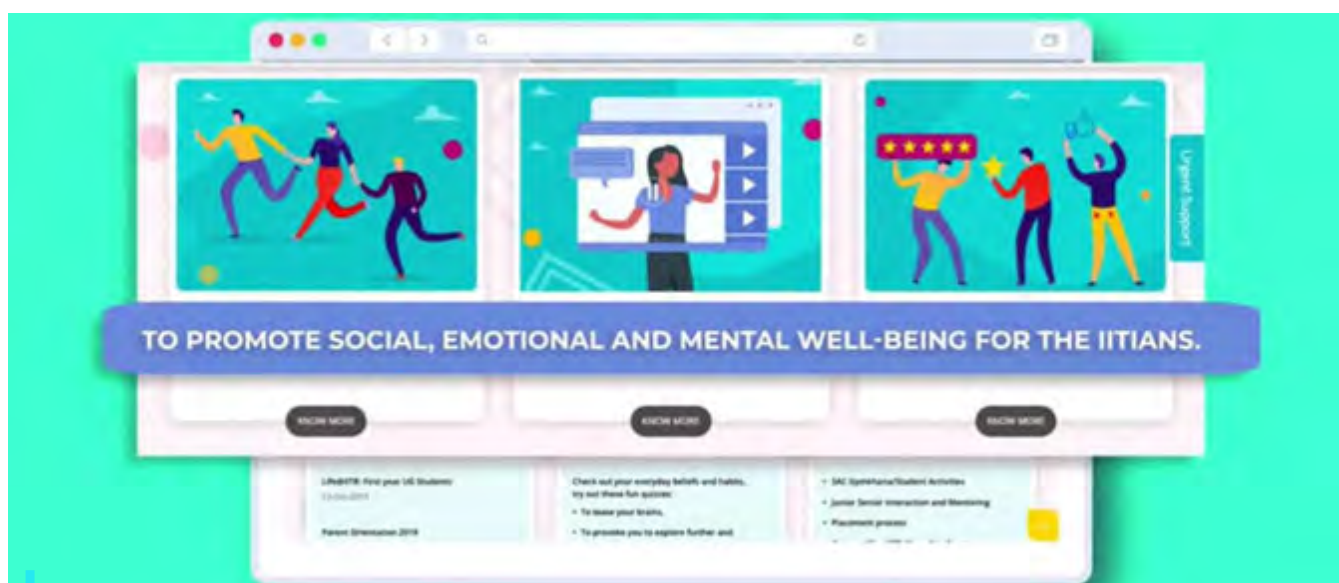
Screengrab of BANDHU website

Hon'ble Minister of State for Education, Government of India Shri. Sanjay S. Dhotre at launch of the website

Director and writer Mr. Nitesh Tiwari addressing the audience during the Q&A session

The Indian Institute of Technology Bombay launched **Bandhu**, a self-help web portal for its students' emotional well-being. The website, initiated by Class of 1992, is dedicated to inspire IIT Bombay students to deal with various challenges in positive way.

The website was launched online on November 1, 2020 by Hon'ble Minister of State for Education, Government of India, **Shri. Sanjay S. Dhotre**. Director and writer **Mr. Nitesh Tiwari**, an IIT Bombay alumni from Class of 1996, was the Guest of Honor during the event.

The website aims to empower the students, help them to deal with their various mental health problems and bring positive well-being in their way of life. It addresses challenges ranging from adjustment to college life, academic stress and mental health. The website has curated reads, motivational alumni journeys, expert podcasts and tools for self-exploration.

The Class of 1992 initiated the website as a part of their silver jubilee reunion in 2017. The self-help website is one of the first steps in this direction. They have been closely involved with execution of the project.

"*We live in a time where we are prone to stress. The students of IIT Bombay need to stay strong, both physically and emotionally to construct and pursue their dreams*," said Director of IIT Bombay **Prof. Subhasis Chaudhuri**. "*The pandemic has also increased stress in the lives of the students. We are happy to announce the timely launch of Bandhu at IIT Bombay*," he added.

Appreciating the efforts of alumni of IIT Bombay, the Hon'ble Minister of State for Education **Shri. Sanjay Dhotre** said, "*A good education institution is one in which every student feels welcomed and cared for, where a safe and stimulating learning environment exists, where a wide range of learning experiences are offered, and good physical infrastructure and appropriate resources conducive to learning are available to all students. The*

students are prime stakeholders in the education system. Vibrant campus life is essential for high-quality teaching-learning processes. Towards this end, students should be given plenty of opportunities for participation in sports, culture/arts clubs, eco-clubs, activity clubs, community service projects etc. Our National Education Policy 2020 says that in every education institution, there shall be counselling systems for handling stress and emotional adjustments. Furthermore, a systematized arrangement shall be created to provide the requisite support to students from rural backgrounds, including increasing hostel facilities as needed. All higher education institutions will ensure quality medical facilities for all students in their institutions."

He added, *"I am sure that the academic leaders at IIT Bombay are looking into these aspects also, along with imparting top class education. I am sure the 'BANDHU' initiative will help our students to travel on their respective chosen paths in a stress-free manner, ensuring the emotional wellbeing."*

Speaking during the event, the Guest of Honor mentioned the importance of connecting with people and building relations. **Nitesh Tiwari** said, *"As a community, we need to normalize the mental health issue and start sharing it with each other. Awareness and understanding the symptoms is important and plays a major role. Rather than waiting for someone to come forward and share their issues, we should reach out to each other by looking at one's behaviour."*

Bandhu website has been designed in conjunction with the counsellors at IIT Bombay along with external experts with support from **Prof. T. Kundu**, Dean (Student Affairs) and **Prof. Suhas Joshi**, Dean (Alumni and Corporate Relations).

"Many issues, when tackled effectively at the initial stages, can help students overcome challenges in a timely manner before a domino effect starts coming into play. Moreover, it will also point out when it could be time to seek help from the support structure available at IIT Bombay," said **Rekha Koita**, alumni of IIT Bombay from the Class of 1992.

"The project is one-of-a-kind and extremely promising, especially in these challenging times. We look forward to working on other initiatives under Bandhu," said **Prof. T. Kundu**, Dean (Student Affairs).

Avenues 2020 Goes Virtual Way

The annual international business festival of Shailesh J. Mehta School of Management, IIT Bombay – **Avenues** was organized as a virtual festival this year from October 29, 2020 to November 4, 2020. This year, over 18,000 participants registered for the festival which was conducted online with a theme '**Order In Chaos**'. The festival attracts participation from business schools and corporates across the globe.

Alankar, the flagship event at Avenues, is a global leadership summit which aims to bring together renowned personalities from diverse fields, who have been inspirational to the people. The speakers shared their experience with the audience consisting of

Writer and poet Mr. Javed Akhtar interacting with the participants

students, industry, academia and intellectuals on changing socio-economic diaspora and our responsibilities towards it.

This year, through the flagship event, the audiences were able to connect with renowned personalities such as **Mr. Vineet Nayar**, Founder of Sampark Foundation and former CEO of HCL Technologies; **Prof. Arvind Panagariya**, first Vice-President of NITI Aayog and Professor at Columbia University; **Mr. N. Chandrababu Naidu**, former Chief Minister of Andhra Pradesh; **Ms. Gloria Benny**, social entrepreneur, co-founder of Make A Difference and Guardians of Dream; **Mr. Javed Akhtar**, writer and poet; **Ms. Chhavi Rajawat**, India's first woman MBA sarpanch; **Mr. Sam Pitroda**, Father of India's Computer and IT Revolution; **Dr. Anil Kakodkar**, former Director of BARC and former Chairman of Atomic Energy Commission; **Mr. Vikram Chandra**, author of Sacred Games; **Mr. Saugata Gupta**, MD & CEO of Marico Ltd; **Ms. Anu Vaidyanathan**, an entrepreneur, writer and triathlete.

Besides this, the cultural and informal events were also attended by many participants. The Comedy Night was performed by **Gaurav Kapoor** and was joined by **Ayush Shrivastava** (Arre, TVF) and **Nigah Sayad Mallya** (The Glitch, TVF) who spoke about the growing importance of OTT platforms.
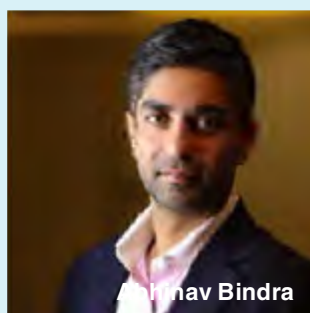
Techfest 2020-21 Attracts Youth From Across The Globe
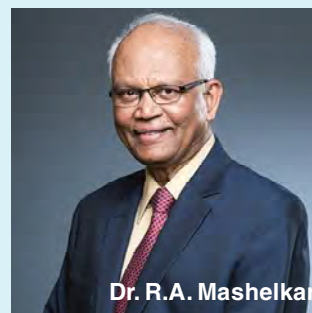

Mr. Malcolm Turnbull   Viswanathan Anand   Abhinav Bindra   Dr. R.A. Mashelkar

William D. Phillips   Dr. Jürgen Schmidhuber   Rana Daggubati

Guest speakers of Techfest 2020 Online Lecture Series

The 24th edition of IIT Bombay's Techfest hosted an online lecture series this year, for its participants to cultivate a culture of scientific discovery and technological innovation. Techfest, which has evolved into Asia's largest science & technology Festival, aims to provide a platform for the student community and youth across the world.

The virtual Techfest edition hosted highly-acclaimed leaders and famous personalities across the globe having profound knowledge and experiences to share their journey and inspire the participants.

This year, among the famous personalities for the online lecture series that the Techfest hosted, were Honourable **Mr. Malcolm Turnbull,** the **29th Prime Minister of Australia** from 2015 to 2018. He is one of the greatest and most insightful leaders across the globe. Mr Turnbull had international careers in law, business and the media before entering politics at 50. As Prime Minister, he reformed Australia's personal income tax, education, and childcare systems, supported same-sex marriage, worked towards a greener world and announced construction of the biggest pumped hydro scheme in the southern hemisphere. Mr Turnbull played a leading role in reviving the Trans-Pacific Partnership (TPP-11) after the United States withdrew. **Supriya Paul**– CEO and Co-Founder of Josh Talks, a social-tech start-up, hosted the session.

Another speaker included Chess Grandmaster **Viswanathan Anand** in conversation with **Tania Sachdev.** Anand, a five-time World Chess Champion, was the first Grandmaster from India to become the fourth player in history to pass the 2800 Elo mark on the FIDE rating list. Tania Sachdev holds the FIDE titles of Women's Grandmaster and International Master.

Abhinav Bindra, India's first individual Olympic gold medallist, was the speaker in the first week of the series. With more than 150 medals in his 22-year career, the Government of India awarded him with the Padma Bhushan, and he is one of the top influencers of sports policy in the country.

Other speakers included **Dr. R.A. Mashelkar**, former Director General, CSIR; **William D. Phillips**, 1997 Physics Nobel Prize Laureate and **Dr. Tasuko Honjo**, 2018 Physiology & Medicine Nobel Prize Laureate. Dr. Honjo spoke on his research and its implications on curing Cancer. **Dr. Jürgen Schmidhuber**, the Father of modern Artificial Intelligence, spoke about the future of the field. **Rana Daggubati**, Indian film actor known for his roles in several movies in Telugu, Tamil and Hindi languages. He is also an entrepreneur, a VFX coordinator and a producer.

International Exhibitions

For the first time, Techfest planned virtual exhibitions, a technological extravaganza which captured the audiences' imagination and inspired them to create something new.

The 24th edition of the Techfest highlighted **Nina Robot** from France. A 1.02-metre-tall humanoid robot, it is one of the most advanced social robots designed for human interaction. It talks through its mouth and has articulated lips, a jaw and ears. Nina will soon be capable of carrying out standard neuropsychological tests to provide an early-stage diagnosis of Alzheimer's disease. Nina has been training for the last

four years. Using speech, expressions and gestures, the robot is learning "how to behave in a socially-acceptable manner".

Another highlight was the **Virgin Hyperloop** from USA. Virgin Hyperloop is the only company in the world to have undertaken successful and safe passenger trials of the Hyperloop technology. Hyperloop is a radical new transportation technology, which will move passengers and/or cargo at airline speeds at a fraction of the cost of air travel. The vehicle glides silently for miles at speeds up to 1080 km/h with very low turbulence. The system is proposed to be entirely autonomous, quiet, direct-to-

destination, on-demand and will have lower environmental impact than other modes of mass transportation.

In the second week of the Techfest, the highlight of the international virtual exhibition was **Nadine Robot** from Singapore. This robot is the most realistic female humanoid socially intelligent robot, who has her own personality, mood and emotions. She is friendly, greets you back, makes eye contact, and offers you a handshake. She is able to answer questions in several languages and can recognize all the people she has previously met and engage in conversation based on their previous encounters. Nadine Robot has a total of 27 degrees of freedom (dof) for facial expressions and upper body movements and shows emotions both

in her gestures and in her face depending on the interaction with the user and her mood. Nadine's platform is implemented as a classic Perception-Decision-Action architecture.

Another highlight was **Alter 3** from Japan. It is a humanoid robot with a bare body exposing the machine inside. It was created by roboticist **Hiroshi Ishiguro** of Osaka University and Mixi Corporation. Alter 3 is embedded with an artificial neural network (ANN) developed by artificial life researchers of the University of Tokyo and uses ANN for singing, expressive ability, human sensing systems and vocalization. The robot has performed as an orchestral conductor, and every one of its musical renditions is unique because each movement it makes is a spontaneous interpretation of the score. This is made possible by a central pattern generator (CPG), which creates a basic rhythm that is cyclical, yet which gradually deviates from the original pattern.

International Media Summit

Techfest's International Media Summit aims to address issues related to the fields of Journalism and Media. The speakers shared their experiences and addressed topics such as Public Confidence in the News Media, Data-driven Journalism and Future Careers in Journalism.

This year, the speakers for the Media Submit included **Paul Pringle**, LA Times, Pulitzer Prize Winner (Investigative Journalism); **Ravish Kumar**, Senior Executive Editor at NDTV, Ramon Magsaysay Award Winner; **Rajdeep Sardesai**, Editor at India Today; **Farah Stockman**, Editorial Board Member, NYT, Pulitzer Prize Winner, Foreign Affairs Writer and **Michael Braga**, USA Today, Pulitzer Prize Winner, data-driven Journalist.
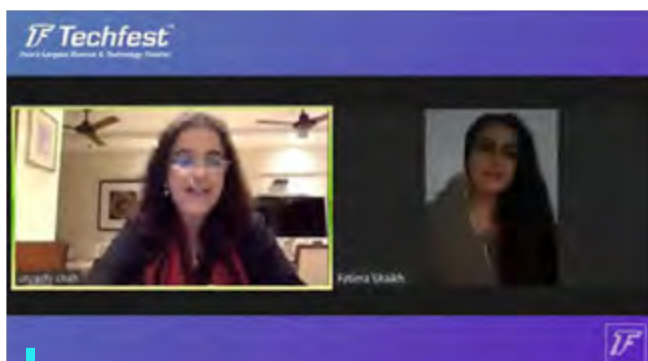
Social Awareness Initiatives

The IIT Bombay's Techfest has been aiming to give back to society with its impactful Social initiatives. This year, they started with a social initiative by creating awareness on Epilepsy, a chronic disorder. **HEAL (Help Epilepsy Awareness Last)** is a prime initiative on epilepsy awareness and aims to destigmatize epilepsy and sensitize the masses to the plight of patients and their families.

To raise awareness and eradicate social stigma, the Techfest organized a series of more than 40 workshops in over 70 schools and colleges which had a total attendance of 4,000 students. Neurologists from all

Launch of HEAL –A Epilepsy Awareness initiative by Techfest

over the country volunteered to be speakers of the session. It was India's first and biggest online initiative for Epilepsy Awareness, with record-breaking reach, for students and collaborations with international NGOs like Mar de Somnis from Spain. Indian actor **Fatima Sana Shaikh**, who championed

Dr. Urvashi Shah in conversation with multi-talented actress Fatima Sana Shaikh on Epilepsy

the cause and launched the initiative with a YouTube Live panel discussion, endorsed the campaign. Epilepsy is a chronic disorder of the brain characterized by recurrent 'seizures' or 'fits'. Over 12 million people suffer from epilepsy in India.

Another social initiative of Techfest is **WeCare** that aims to spread awareness about the archaic animal welfare laws in India and bring about impactful change. Through this initiative, the organizers want to make students aware of the plight of stray animals due to pandemic. Workshops were organized in more than 70 schools across India to sensitize students about animal rights. Techfest educated 5000+ students, in association with 10 major NGOs, about the current living conditions of animals and how to take care of stray animals. In order to bring about a positive change in the society, Techfest also launched a petition to introduce new legislation to safeguard animal rights.

WeCare, an online social petition by Techfest against animal cruelty

IIT Bombay Observes National Education Day
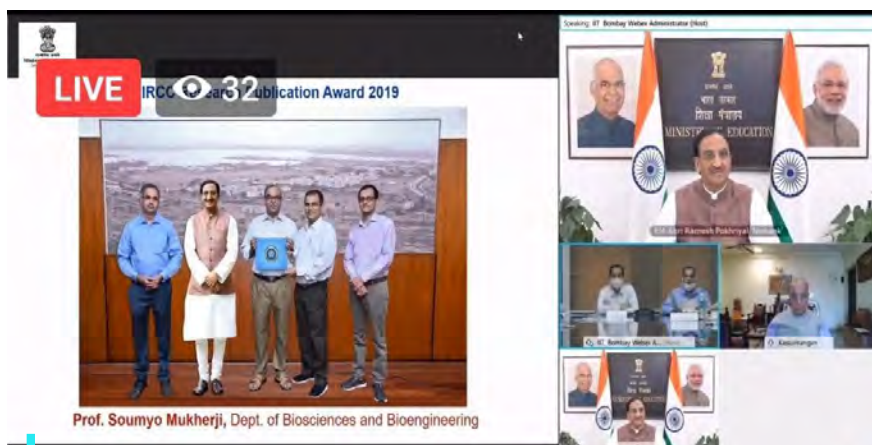
Awards conferred on the winners in virtual mode

The Indian Institute of Technology Bombay commemorated the birth anniversary of India's first education minister **Maulana Abul Kalam Azad** by observing National Education Day (Rashtriya Shiksha Diwas).

IIT Bombay had organised a programme on November 10, 2020 with **Shri. Ramesh Pokhriyal 'Nishank'**,Hon'ble Minister of Education, Government of Indiaas the Chief Guest. The Minister inaugurated the National Education Day programme via video conference. **Dr. K. Kasturirangan,** Former Chairman, ISRO and Chairman of the committee for drafting the New Education Policy was the Guest of Honor for the occasion.

Inaugurating the National Education Day programme, **Dr. Nishank** in his address said, "*Through 'Study in India, Stay in India and Internationalization of Education', we are committed to establishing India as a global hub of education. To ensure high quality of education, it is also necessary that we move forward with cooperation, coordination and agreement with the leading universities of the world. This has been incorporated in NEP 2020 by inviting Top 100 World Universities to set up campus in India.*"

The Director of IIT Bombay **Prof. Subhasis Chaudhuri** said, "*National Education Policy 2020 formulated by the Education Ministry is very comprehensive in its scope and through a proper assimilation we expect a big boost in the quality of education for all students in India. At IIT Bombay, we look forward to leveraging the key spirits embodied in this policy document in making our offerings more expansive, substantive and socially relevant. As we celebrate the National Education Day, we reaffirm our commitments to providing quality education and excellence in research.*"

The Chief Guest conferred **Professor Krithi Ramamritham Award for Creative Research 2019** to **Prof. Jayakrishnan Nair**, Department of Electrical Engineering, IIT Bombay for his significant research contributions in "Uncertainty management in the smart, renewable-rich power grid", and to **Prof. Varun Bhalerao**, Department of Physics, IIT Bombay, for his significant research contributions in "Electromagnetic counterparts to gravitational wave sources". The award carries a citation and a cash incentive of Rs. 1,00,000/- each and it is given from endowment grant given by **Prof. Jayant R. Harista,** IISc, Bengaluru.

Guest of Honour, **Dr. K Kasturirangan,** in his address said, *"National Education Policy 2020 represents an integrated yet flexible approach to education; duly taking cognizance of the interconnectedness of the various phases of education in mind, and how the same will enable continuity, coherence and processes to ultimately realize an end-to-end educational road-map for the country."*

Prof. Varun Bhalerao and Prof. Jayakrishnan Nair receive Prof. Krithi Ramamritham Creative Research Award 2019

The Director of IIT Bombay **Prof. Subhasis Chaudhuri** gave away the **IIT Bombay Research Excellence Awards 2019** in the esteemed presence of the Chief Guest and Guest of Honor. The IIT Bombay Research Excellence Awards were instituted since the last several years to recognize the R&D efforts of IIT Bombay faculty. The awards include:

Research Publication Awards are awarded to recognize original research results in *peer reviewed* publications and/or other forms such as exhibits (e.g., design, film).

Sr. No.	Awardee	Department/Centre	Theme Title
1.	Prof. Maheswaran Shanmugam	Chemistry	Influence of diamagnetic ion on slow relaxation of magnetization of lanthanide ion
2.	Prof. Nutan Limaye	Computer Science and Engineering	Exploring the Frontiers of Algebraic Computations
3.	Prof. Rajneesh Bhardwaj	Mechanical Engineering	Complex fluid droplets on engineered surfaces
4.	Prof. Soumyo Mukherji and Prof. Suparna Mukherji	Biosciences and Bioengineering & Environmental Science and Engineering	Synthesis and Immobilization of Silver Nanoparticles, and their Application in Water Disinfection
5.	Prof. Subhankar Karmakar	Environmental Science and Engineering	Precipitation extremes and urban flood management

Research Dissemination Awards are awarded to recognize outstanding efforts to disseminate research through monographs/ books/ review chapters/ review papers.

Sr. No.	Awardee	Department/Centre	Title / Details
1.	Prof. Hetu C. Sheth	Earth Sciences	Monograph: A Photographic Atlas of Flood Basalt Volcanism; Springer, New York (2018), 363
2.	Prof. Parinda Vasa	Physics	Strong light-matter interaction in quantum emitter/metal hybrid nanostructures; ACS Photonics 5(1) (2018), pp. 2-23
3.	Prof. Raghavan B. Sunoj	Chemistry	Mechanistic Insights on Cooperative Catalysis through Computational Quantum Chemical Methods; ACS Catalysis. 5, (2015) 480"503

Early Research Achiever Awards are awarded to young researchers who have already shown their potential for producing outstanding original work.

Sr. No.	Awardee	Department/Centre
1.	Prof. Pradip P. Kalbar	Centre for Urban Science and Engineering
2.	Prof. Shobhna Kapoor	Chemistry
3.	Prof. Varun Bhalerao	Physics

The inauguration was followed by a workshop on National Education Policy 2020. The workshop included talks by **Prof. B. N. Jagatap**, Department of Physics, IIT Bombay, **Dr. Jaitirth 'Jerry' Rao**, entrepreneur, Founder of VBHC and HFFC and **Prof. Dhruba J. Saikia**, Tata Institute of Fundamental Research (TIFR), ex-VC, Cotton College State University.

Institute Holds Award Lecture Series

The Institute's Research and Development (R&D) Office organized a two-day lecture series on October 28-29, 2020 where the recipients of the IIT Bombay Research Awards 2019, Prof. Krithi Ramamritham Creative Research Award 2019 and Shanti Swarup Bhatnagar Award 2020 were invited to present on their research works.

Following award recipients presented their talk during the lecture series.

Research Publication Award

No.	Speaker	Title
1	Prof. Maheswaran Shanmugam, Department of Chemistry	How to Exploit the Diamagnetic Ions to Improve the Magneti-zation Relaxation Dynamics of Dy(III) ions?
2	Prof. Nutan Limaye, Department of Computer Science and Engineering	Algebraic computations and lower bounds

Early Research Achiever Award & Prof. Krithi Ramamritham Award for Creative Research

No.	Speaker	Title
1	Prof. Varun Bhalerao, Department of Physics	Building astronomical instruments: an engineering foray into astrophysics

Research Publication Award

No.	Speaker	Title
1	Prof. Subhankar Karmakar, Department of Environmental Science and Engineering	Precipitation extremes and urban flood management

Research Dissemination Award

No.	Speaker	Title
1	Prof. Hetu C. Sheth, Department of Earth Sciences	Volcanoes of India, past and present
2	Prof. Parinda Vasa, Department. of Physics	Light-matter interactions in metal-semiconductor hybrid nanostructures
3	Prof. Raghavan B. Sunoj, Department of Chemistry	Stories on Cooperativity in (a) Catalysis and (b) between the Guide and Good Graduate Students

Early Research Achiever Award

No.	Speaker	Title
1	Prof. Pradip P. Kalbar, Centre for Urban Science and Engineering	Alternate Design and Operational Strategies for Improving Water Supply Systems in India
2	Prof. Shobhna Kapoor, Department of Chemistry	Mycobacterium Tuberculosis Glycolipids Disorganize Host Cell Membranes and Rewire Membrane-Associated Functions During Infection

Research Publication Award

No.	Speaker	Title
1	Prof. Rajneesh Bhardwaj, Department of Mechanical Engineering	Evaporation of a colloidal suspension droplet
2	Prof. Soumyo Mukherji, Department of Biosciences and Bioengineering Prof. Suparna Mukherji, Department of Environmental Science and Engineering	Silver versus Silver: Alexander's Waterpots to Nano-silver Water filters

Prof. Krithi Ramamritham Award for Creative Research

No.	Speaker	Title
1	Prof. Jayakrishnan Nair, Department of Electrical Engineering	Uncertainty management in the smart, renewable-rich power grid

Shanti Swarup Bhatnagar Prize for Science and Technology

No.	Speaker	Title
1	Prof. U. K. Anandavardhanan, Department of Mathematics	Distinguished Representations
2	Prof. Suryendu Dutta, Department of Earth Sciences	Evolution of Plant Terpenoids on a Rafting Continent

An Online Fest To Create Sustainable Housing Awareness

This year, Team Shunya hosted its first ever online event fest – '**Sustain**' as a part of team's social awareness program towards sustainable houses. The main aim and objective of the event was to spread the awareness about sustainability, technology and the idea behind it.

'Sustain' was held from October 31, 2020 to November 1, 2020 with six different subsystem specific webinars for the participants. Hundreds of students participated in the two-day online fest.

The first webinar session was on '**Sustainability in HVAC Systems'** by **Akshay Parmar**, a research scientist. He has completed his dual degree in Mechanical Engineering from IIT Bombay in 2017 and was head of mechanical subsystem of Team Shunya. His session initiated with discussion on basic elements of a heating air conditioning system for a beginner followed by current technologies that makes it possible. Later he also covered alternative technologies which can lead HVAC system towards sustainability.

The second webinar was on '**Introduction to optimisation energy performance of buildings using computational tools'** by **Supriya Gadre**, an architect by profession. She was research assistant in Department of Energy Science and Engineering, IIT Bombay and a part of Team Shunya in 2017. During her session, she discussed the increasing availability and usability of tools for daylight and energy simulation into parametric and generative design software that allows the integration of environmental factors into the design process from the very early stages. Such tools must be understood

and appreciated for improving the efficiency of design processes. The performance of building these tools give the designers new methodologies of work to create environmentally aware and high-performance architecture and spatial design.

The third webinar interaction was on '**Materials for Sustainable Development'** by **Prof. Satish Vitta**, Department of Metallurgical Engineering and Material Science, IIT Bombay. The session brought out various facts that shows the dependence on materials and their impact on environment with specific cases.

The fourth session was on '**Opportunities in Solar PV'** by **Kedar Deshmukh**, a senior research fellow in NCPRE, IIT Bombay. He is a certified energy auditor (CEA). He is currently also a member of electrical subsystem in Team Shunya. The session highlighted current state of Solar PV development across different categories in India and the upcoming opportunities in Solar PV deployment.

The fifth session was on '**Quo Vadis building Materials'** by **Issac Emmanuel**, Head of Construction in Covestro (India) Pvt Ltd. He has headed many divisions of firm in past 29 years. His session discussed the journey of construction innovation with more focus on mass housing which is the prime need of the hour in pour country.

The sixth session was in collaboration with the **Energy Club of IIT Bombay** which highlighted energy calculation and efficiency, to raise awareness about the same and also looked into the engineering aspects of household energy used.

Industry Leaders Share Their Learnings At SJMSOM's E-Conclave

The Indian Institute of Technology Bombay's SJMSOM E-Club had organized a two-day **E-Conclave**, the annual flagship entrepreneurship conference, from November 20-21, 2020. The E-Conclave saw the participation of more than 900 participants across the six fireside chat sessions.

The fireside chats and keynote sessions delivered by various eminent personalities such as **Mr. Vinod Khosla**, founder of Sun Microsystems and Khosla Ventures; **Mr. Sanjeev Bikhchandani**, Investor and Founder, Info Edge; **Mr. Dinesh Agarwal**, Founder and CEO, IndiaMART; **Mr. Suraj Saharan**, Co-founder, Delhivery; **Mr. Balaji Viswanathan**, Founder & CEO, Invento and **Mr. Mukesh Bansal**, Founder, Myntra, Curefit were truly inspiring and engaging.

E-Club organizes entrepreneurship conference to enlighten on increasing relevance of technology in entrepreneurship

Eminent VCs, media personalities, and leaders of IIT Bombay such as **Mr. Gaurav Chaturvedi**, Partner at KAE Capital; **Mrs. Harshada Sawant,** Senior Editor, CNBC TV18; **Mr. Rakesh Rajiv**, Incubation Manager, SINE, IIT Bombay; **Dr. Love Sarin**, Head, IDEAS, DSSE, IIT Bombay and **Mr. Anand Lunia,** General Partner, India Quotient, moderated the fireside chats.

The fireside chat discussion opened with **Mr. Vinod Khosla**, who spoke of the importance of an outsider perspective in bringing radical changes to a field by quoting examples of how no taxi company made Uber, and no hotel chain made Airbnb. Further, the effect of institutionalization of start-up on innovation was explored. The speaker enlightened the participants on the increased relevance of technology in entrepreneurship.

In the second fireside chat, **Mr. Sanjeev Bikhchandani** spoke about how he has been adapting to the changing times. He glazed over the importance of becoming flexible and agile and his velocity of work increasing during the lockdown. He also commented that investors love to invest in frugal entrepreneurs and companies creating IP, but the customer's money is better than investors' money.

During the third fireside chat session, **Mr. Dinesh Agarwal** shared the story about the beginning of *India MART*. Mr. Agarwal was an executive in the US in August 1995, when the internet became accessible in India. He resigned within a few months and returned to become an internet entrepreneur. Mr.

Agarwal talked about his IPO journey, having started thinking about it in the 90s.

Mr. Suraj Saharan, in his interaction, spoke about *Delhivery* being one of the few start-ups that have the original team intact and the reason for it being their like-mindedness. He highlighted his journey and the core problem they tried to solve. He spoke about the fact that ideas are overrated, and the implementation has a much greater worth because everyone has ideas but not the zeal of execution.

The chat discussion of **Mr. Mukesh Bansal** began with his journey from *Myntra* to *Cult*. He shared the vision to make health easy and made it into a successful model. He then spoke about the importance of patience and internal discipline while managing the start-ups and how it helped him through his journey at the Cult. He also spoke about the kind of new business models that are available today, and the wait for the pandemic to end is resulting in loss of available opportunities.

Mr. Balaji Viswanathan consolidated the learnings from his various ventures into six concise points. ***First,*** the timing of the market is one of the biggest hooks that even seasoned entrepreneurs can miss, and this should deter no budding entrepreneur. ***Second,*** being patient and persistent is what sets successful entrepreneurs aside. ***Third,*** experimentation is important and one can't be short-sighted or obstinate about the idea one possesses. ***Fourth,*** building the right team is synonymous with marriage, and they need to be persistent with your idea as well and fight the long battles which you would face. ***Fifth,*** setting up too close to your friend circles could lead you to do things out of peer pressure. And ***lastly,*** the most important thing is figuring out a niche category or a niche requirement of the market. This is one of the best ways for a successful venture.

Ground Breaking Ceremony Of Cafe '92

Prof. Subhasis Chaudhuri, Director, IIT Bombay, Prof. Suhas Joshi, Dean, Alumni and Corporate Relations (ACR); Ms. Falguni Banerjee Naha, Public Relations Officer and various other Institute functionaries during the ground-breaking ceremony of the Cafe '92

Director of IIT Bombay **Prof. Subhasis Chaudhuri** attended the ground breaking ceremony of Cafe '92, a Legacy Project of class of 1992. The cafe will be located adjacent to Nescafe stall, SJSOM Building. Even the design of the cafe has been done by class of '92. While performing the puja, Prof. Chaudhuri said, *"We are thankful to Class of '92 and hope they will continue to support us in our future endeavours as well."*

Artistic vision of Cafe '92

NASA Organises Blood Donation Camp To Meet Shortage

To overcome the shortage of blood supply in hospitals, the Non-Academic Staff Association (NASA) of IIT Bombay had organized a blood donation camp on December 15, 2020 keeping in mind the COVID-19 guidelines and restrictions.
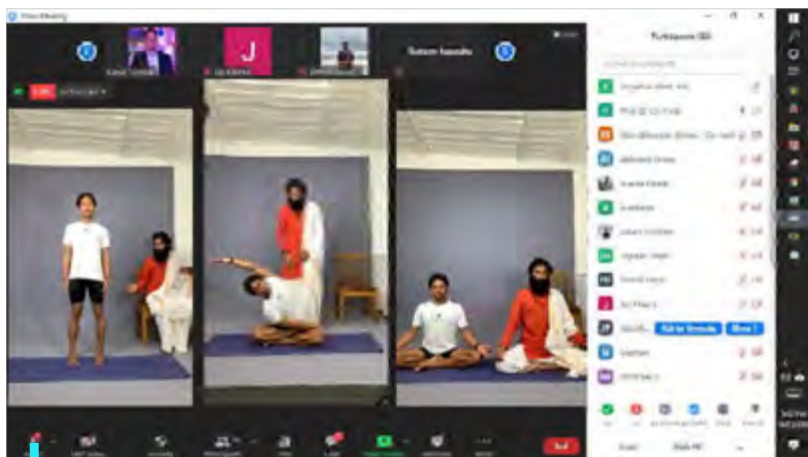
Around 80 donors participated in the blood donation camp. The Executive Committee members of NASA **Mr. Dilip Kalambate**, Vice President, **Mr. Vijay U. Jadhav**, General Secretary, **Mr. Sanjay Walunj**, Joint Secretary; and other members such as **Mr. Sanjay Kumar Tembhurne**, **Mr.PrasadMatkar** , **Dr. Varsha Kosta**, **Mr. Vishwas Katkole, and Mr. Ravindra Gaikwad** arranged for the blood donation camp with the help of the Institute authorities.

According to the NASA committee, the drive saw an overwhelming response from the faculty, staff members and students.

The committee will organize another blood donation camp in March/April 2021.

Yogastha Organizes Workshop For Good Health

Participants performing yoga asanas during the online workshop

Keeping in mind the importance of physical, mental and spiritual well-being, the Yogastha team of IIT Bombay had organized a two-fold event, **'Yogic Discipline in Student Life'** and **'Hatha Yoga',** on October 24 and October 25, 2020 respectively.

Both the sessions were addressed by **Acharya Advait Yog Bhushan**, a yoga practitioner and trainer with years of experience learning and teaching yoga.

The first event highlighted the conduct of one's body, mind, and senses to achieve control of one's actions and emotions. During the session, the attendees discussed their issues followed by a Q&A session over Zoom. Over 100 students, staff, faculties and residents joined the event.

The second event focused on the practical yoga asanas, those which we all can do from the comfort of our own homes. The session included a methodical approach to different exercises with the benefits, methods and contraindications of each discussed at length. The Q&A session was even more crucial, as there was a focus on ensuring that all practices would be performed correctly, as designed.

Prof. Neeraj Kumbhakarna, the faculty mentor for Yogastha, also addressed the crowd.

'Yoga for Success': An online workshop by Yogastha

'Yoga for Success', an online workshop by Isha Foundation

On November 7, 2020, Team Yogastha in collaboration with the PG Sports Council, IIT Bombay, conducted an online workshop, **'Yoga for Success'**. The workshop was organized by **Isha Foundation**. The workshop included simple yet powerful tools to manifest health and vitality in one's life.

Taking a holistic approach, there were detailed explanations of the variety of practices, including Sukshma Vyayam, Yogic Namaskar, and guided mindful meditation. Besides providing mental and physical relief, there was a unique focus on the visualization and achievement of one's goals.
Ms. Asha Suvarna, a practitioner and a member of the Isha Foundation, was the workshop instructor.

Over 100 people attended the workshop.

Winter Workshop for Yoga Enthusiasts

IIT Bombay's Yogastha organized a winter workshop to motivate fitness and well-being among yoga enthusiasts from the IIT Bombay community from December 19-24, 2020 by the instructors of **'Ambika Yog Kutir'**, Thane, on Hatha Yoga. **Shri Ramchandra Surve** was the principal yoga instructor and guide during the workshop.

The five-day workshop included warm-up yoga practices, an introduction to Hatha Yoga; practices related to asanas, variations of the Surya Namaskar and the importance of Omkara and Prananayam. A question-and-answer session too was organized to clear doubts of the participants at the end of the workshop.

Shri. Ambika Yog Kutir was established in 1965 in Mumbai and has been involved in spreading awareness about yoga and well-being in other parts of India and abroad.

Research in focus

Observing crystals that flow

Researchers show strange patterns in the flow of soft polycrystals

Polycrystals — made up of many tiny crystals ('grains') fused into a whole — can behave very differently from single crystals. For instance, some polycrystals made of micrometre-sized silica or polystyrene particles are known to be 'soft'; they begin to flow when a force such as pressure or gravity is applied. The particles of these polycrystals have a very weak force binding them together, allowing for movement when force is applied. But, single crystals, made entirely of one solid grain, cannot flow like polycrystals. No wonder then that these unique properties of polycrystals have piqued the interest of scientists in recent decades. A recent study by researchers at the Indian Institute of Technology Bombay (IIT Bombay) and the Institute of Mathematical Sciences (IMSc), Chennai, has revealed just how these soft polycrystals behave when forced to flow through channels of different widths. This work, published in *Physical Review Letters*, was funded by the Industrial Research and Consultancy Centre (IRCC) at IIT Bombay. The researchers ran computer simulations of soft polycrystals, using micrometre sized particles to make its grains, and forced it to flow through a channel constricted between two rough walls. *"There have been experiments using soft amorphous materials — whose atoms are totally unorganised — like gel and toothpaste in narrow channels, but none on polycrystals,"* says **Prof. Anirban Sain** from IIT Bombay, who led the study, in collaboration with **Prof. Pinaki Chaudhuri** from IMSc. The researchers found that the polycrystals in their simulations remained jammed in the channel initially, even when they were given a

push. It was only when this push was sufficiently high did they start to move. Interestingly, the polycrystals behaved differently depending on the width of the channel. In channels which were a few tens of micrometres wide, the researchers observed that the grains in the middle of the channel moved sluggishly at a constant speed, almost like solid blocks. But, the parts of the grains close to the wall hardly moved due to friction offered by the walls. *"The grains cannot let its particles move at different speeds, else they break,"* explains **Dr. Tanmoy Sarkar** from IIT Bombay, who worked on the simulations. Since the parts of the grain touching the walls could not move as fast as the rest of it, the grain broke into particles. These particles behaved similar to liquids and were seen to be almost stagnant near the walls. It is not surprising then that, for narrower channels, most of the grains in the polycrystal broke into particles and flowed through the middle along with the few intact grains. In general, there was a gradual increase in the speed of the particles as their distance from the walls increased. An interesting pattern emerges from the chaos of these moving particles. As the solid grains slowly move forward in the liquid soup, the grains gain some particles at their back and lose some from the front. Due to this constant restructuring, the grains appear to move backwards even though all the particles are actually moving forward due to the force. *"Such patterns have been seen before in amorphous materials moving in narrow channels. But we found that, for polycrystals, it occurs within the liquid-solid mixture, which is new,"* shares **Prof. Sain**. Insights from this type of research are important to engineer new materials. For instance, scientists have already exploited the structures of soft polycrystals to create photonic crystals that can filter out certain frequencies of light. Hence, it is possible that a deeper understanding of material properties like their flow could open up new applications in the future. *"Our work should motivate further experimental exploration of such flow behaviour in colloidal polycrystals,"* signs off **Prof. Sain**.

Author: Prof. Anirban Sain, IIT Bombay

Photo credit: Jaël Vallée on Unsplash

Link to published work:

Sarkar, Tanmoy, Pinaki Chaudhuri, and Anirban Sain. "Poiseuille Flow of Soft Polycrystals in 2D Rough Channels." Physical Review

IDEAS Program Hosts Demo Day For Startups

Glimpses from previous event of IDEAS

The first Demo Day by **Innovation, Development and Entrepreneurship with Alumni Support (IDEAS)** for early-stage startups was organized on October 17, 2020. The event was attended online by representatives from incubators, angel investors and early-stage investment firms. The IDEAS is the Legacy Project of Class of 1990.

In conjunction with other entrepreneurship courses and programs at the Desai Sethi School of Entrepreneurship, IDEAS program focuses on early-stage entrepreneurs to provide support during the pre-incubation phase of the startups.

IDEAS program conducts various activities related to startups such as ideation, team building, mentoring and startup boot-camp to enable students, researchers and faculty at IIT Bombay to navigate the early phase of discovering entrepreneurship and uncover their entrepreneurial potential.

On the Demo Day, eight teams who graduated from the first cohort of Level 2 program this year presented their projects. Three teams from this

cohort applied and got selected for YCombinator, a reputed global accelerator. One team has been incubated at IIT Kanpur. Two more teams are raising their finances and have got their first customers.

Further, three months long Level 1 program with structured coaching, alumni mentoring and a grant of Rs. 50,000, helps the teams to figure out the business potential and right steps of taking their idea further on the commercialization path. The advanced self-paced Level 2 program, with Rs. 2,00,000 grants and alumni mentoring for mature teams, guides them on the path for execution, validating the idea and to get them ready for incubation or early-stage investment. The winter batch has started with 15 teams in Level 1 and 7 teams in the Level 2 program currently.

11 startups have emerged from IDEAS program since its start in August 2018, and collectively they have raised more than Rs. 230 million in equity/grant/prizes till date.

2 Students Bag INAE Innovative Student Project Award 2020

Mr. Sarosh Alam Ghausi, a PG student from the Department of Civil Engineering, IIT Bombay has been selected for the conferment of Innovative Student Project Award 2020 jointly with **Mr. Suman Banerjee, IIT Madras** at Masters Level by INAE, Department of Science & Technology.

The Master's thesis project titled 'Sensitivity of Precipitation and Streamflow extremes to temperature over Central and South Asia' was guided by **Prof. Subimal Ghosh.** *"I feel proud that the civil engineering department of IIT Bombay nominated my thesis which ended up getting the award,"* said **Sarosh Alam Gahusi**. The award consists of Rs.15000 which will be jointly shared by the two Awardees.

The presentation of the project was made before the selection committee on September 29 and September 30, 2020 for selection of Innovative Student Projects Award 2020.

The Innovative Student Projects Award was presented to Sarosh Alam Ghausi in the Grand Award Function on December 21, 2020 during Academy Annual Convention.

Another student **Dr. Akshay Modi,** student from the Department of Chemical Engineering, has been selected for the conferment of Innovative Student Project Award 2020 at doctoral level by the Indian National Academy of Engineering (INAE). His Ph.D. thesis supervisor was **Prof. Jayesh Bellare**, Chemical Engineering Department. The title of his Ph.D. thesis was *"Tailored Polymer Nanocomposite Hollow Fiber Membranes for Biomedical, Gas Separation and Water Treatment Applications"*.

Website : inae.in/innovative-student-projects-award/

Institute Colloquium / Lectures

Prof. Debasis Chakraborty, Department of Aerospace Engineering, IIT Bombay, delivered an Institute lecture titled "*The recent flight demonstration of hypersonic air-breathing cruise vehicle by India*" on October 19, 2020

Prof. Gérard Berry, Professor and Algorithms, Programs and Machine Chair, Collège de France, delivered an Institute lecture titled "*Time, from Physics to Informatics and Music*" on November 4, 2020
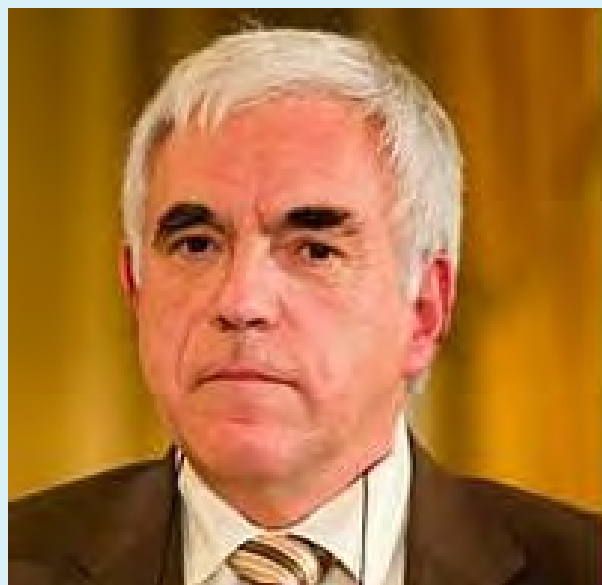
Cyclothon To Motivate Healthy Lifestyle

Glimpses of Cyclothon event at IIT Bombay

IIT Bombay Sports organized Cyclothon on Sunday, December 13, 2020, for all residents of IIT Bombay as part of the Fit India Movement under the Government of India to encourage physical exercise and activity in daily lifestyle.

With the pandemic fading away, Cyclothon was the first offline event that saw much enthusiasm from campus residents. Over 65 residents, including faculty, staff members and students, took part in the cycling event across a wide age group of 6- 65 years of age. The event was organized, keeping in mind all the guidelines and restrictions of the COVID-19 pandemic.

The winners were selected as the fastest to complete the track of 12 km for men and 6 km for women.

Awards / Distinctions/ Invited Lectures/ Paper Presentation

Prof. Devang V. Khakhar, Former Director, Department of Chemical Engineering, has been elected as Vice President of the Indian National Science Academy (INSA) Council.

Prof. Shobhna Kapoor, Department of Chemistry and **Prof. Prabhakar Naraga,** Department of Earth Sciences, have been selected to receive "INSA Medal for Young Scientists" for the year 2020.

Prof. Vivek Agarwal and **Prof. Souvik Mahapatra** from Department of Electrical Engineering, and **Prof. M. Ravikanth**, Department of Chemistry have been elected as Fellows of Indian National Science Academy, New Delhi.

Prof. Sridhar Iyer, Department of Computer Science and Engineering, & IDP- Educational Technology, has been selected to receive the ACM Indian Outstanding Contribution to Computing Education (OCCE) award for the year 2020.

Prof. Subimal Ghosh, Department of Civil Engineering, has been selected to receive American Geophysical Union (AGU) DL Memorial Medal 2020.

Prof. Ruchi Anand,Department of Chemistry, has been invited to join the International Advisory Board of Asian Journal of Organic Chemistry, published by Wiley-VCH.

Prof. Pradip Kalbar, Centre for Urban Science and Engineering (CUSE), has been invited to join as one of the Editors for the Journal of Water Reuse and Desalination, an International Water Association's (IWA) publication.

Prof. Kasturi Saha, Department of Electrical Engineering, has been invited to join the Editorial Board of Quantum Optics as Review Editor for Frontiers in Photonics.

Prof. C. M. R. Volla, Department of Chemistry, has been chosen by Editorial Boards of Synlett, Synthesis and Synfacts as one of the "Thieme Chemistry Journal Awardees" in 2021.

Prof. K. G. Suresh, Department of Physics, has been elevated to the grade of Senior Member of IEEE for the year 2020.

Prof. Chetan Singh Solanki, Department of Energy Science and Engineering, has been appointed as Brand Ambassador of Solar Energy for Madhya Pradesh till 2023.

Prof. Amit Sethi, Department of Electrical Engineering, has been invited to join the Editorial Board of Cancer Imaging and Image-directed Interventions as Review Editor for Frontiers in Oncology.

Prof. Vinish Kathuria, Shailesh J. Mehta School of Management, has been given an Outstanding Reviewer Award by Emerald Publisher for his "International Journal of Developing Issues" for the year 2020.

Prof. Sudarshan Kumar, Department of Aerospace Engineering, has been elected as a Fellow of the International Society for Energy, Environment and Sustainability. **Prof. Kumar**, has also been nominated as one of the members of the Editorial Board of "Defence Science Journal", a peer-reviewed primary research journal in the field of Engineering and Defence Technologies.

Prof. Dulal Panda, Department of Biosciences and Bioengineering, has been selected to receive "The Sun Pharma Research Award-Pharmaceutical Sciences" for the year 2020.

Prof. G V Sreekumar, IDC School of Design, presented a paper on "Significance of Optical Illusion, Optical Correction and Visual Balance in Calligraphy and Font Design" and conducted a workshop on "Story-telling and Visual Narrative through experimental typography" at the recently concluded international conference on Typography organised by AtypI - Association Typographique Internationale (the International Typography Association) in November 2020.

Students News

Dr. Neha Rathi, a Post-Doctoral Fellow in the Department of Humanities & Social Sciences, Indian Institute of Technology Bombay, has been appointed as a Topic Editor for International Journal for Environmental Research & Public Health.

Notification

Prof. Rajan Chakrabarty, Associate Professor of Energy, Environmental & Chemical Engineering, Washington University in St. Louis (WUStL), has been appointed as the McDonnell Academy Ambassador to IIT Bombay w.e.f. November 3, 2020.

Prof. Alok Porwal, has been appointed as the Head of Centre of Studies in Resource Engineering (C.S.R.E) w.e.f. November 2, 2020.

Mr. M.S. Unnikrishnan, has joined as the Chief Executive Officer (CEO) of the Indian Institute of Technology Bombay-Monash Research Academy w.e.f. September 14, 2020. He was former MD and CEO, Thermax Limited.

Mr. G. Ravishankar has joined Indian Institute of Technology Bombay Development and Relations Foundation (IITB DRF) as its new Chief Executive Officer (CEO) w.e.f. December 14, 2020. Mr. Ravishankar is an alumnus of our Institute having completed his B. Tech. in Electrical Engineering in 1990. After his initial stint with Mather & Platt, he completed his PGDM in Finance & Marketing from IIM, Lucknow in 1994 and since then had an illustrious career with CRISIL Ltd., India's premier credit rating agency. He is a recipient of the Distinguished Service award from our Institute. He will be closely working with Prof. Suhas Joshi, Dean, Alumni & Corporate Relations.

Dr. Pawan Goenka, Managing Director, Mahindra and Mahindra has been appointed as the new Chairman of Board of Governors, IIT Bombay w.e.f. October 27, 2020.

Appointments

Mr. Bibhudatta Mohapatra has been appointed as an Executive Engineer (Scale-I) in Estate Office w.e.f. September 22, 2020

Dr. Ayan Bhattacharya has been appointed as Assistant Professor (Grade II) in the Department of Mathematics for a period of 3 years w.e.f. October 1, 2020

Retirements on October 31, 2020

Prof. Bhanu Pratap Singh, Department of Physics, retired after 31 years of service

Mr. Arun Y. Manjarekar, Sr. Multi Skilled Assistant, Department of Chemical Engineering, retired after 40 years of service

Mr. Gulab B. Wadge, Sr. Multi Skilled Assistant, Department of Chemistry, retired after 35 years of service

Retirements on November 30, 2020

Mr. Irshad Ahmad Hisamuddin Bhaldar, Assistant Workshop Superintendent (SG), Department of Mechanical Engineering, retired after 31 years of service

Ms. Sharlet Joseph, Assistant Technical Officer, Department of Centre for Research in Nanotechnology and Science, retired after 34 years of service

Mr. Suhas K. Tendolkar, Superintendent, Internal Audit Section, retired after 36 years of service

Retirements on December 31, 2020

Ms. Jayashree A. Purandare, Superintendent, Material Management Division, retired after 38 years of service

Ms. Indrani A. De, Sr. Trained Graduate Teacher, IIT Campus School, retired after 28 years of service

Obituary

Prof. A.K. De, a former professor in the Department of Mechanical Engineering and the former Director of the Institute passed away on October 30, 2020. Prof. De was 95-year-old. He joined IIT Bombay as an assistant professor in 1958, was appointed as the Head of Department of Mechanical Engineering in 1965, was appointed the Director of CMERI in 1969, and took over as the Director of the Institute in July 1974. He continued to serve the Institute as the Director till August 1984.

He was a Fellow, Indian National Academy of Engineering (INAE) and Fellow, Institution of Engineers, IE (Ind). Prof. De was an outstanding professional engineer, a researcher, an educationist and an administrator of distinction all rolled into one. He had the autobiographical book 'Meandering Streams' published in the year 2008 to his credit.

The handing over and taking over ceremony organised for the charge of Director of IIT Bombay in April 2019 was blessed with his presence.

Prof. D. M. Dhamdhere, a former professor in the Department of Computer Science and Engineering (CSE), IIT Bombay passed away on November 28, 2020, in Nashik, Maharashtra.

Prof. Dhamdhere did his B.Tech, M.Tech, and PhD degrees all from the IIT Bombay Institute. He played an important role in developing the Department of Computer Science and Engineering from its inception until his superannuation in June 2017. His research contributions to compilers are immense and he was well-known for building the first Fortran compiler for the Russian EC 10 computer that was IIT Bombay's main computer back then. Prof. Dhamdhere, an excellent academic researcher, has written many textbooks on compiler construction, operating systems, and systems programming, widely popular across India and abroad.

He also started a forum for Academic Culture in IIT Bombay, addressing several issues related to students and learning.

Prof. S. Santhanam, a former professor in the Department of Mathematics, IIT Bombay passed away on December 7, 2020 in Bengaluru, Karnataka.
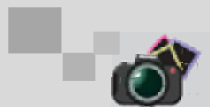
Prof. Santhanam joined the IIT Bombay Institute in the year 1963 and superannuated in the year 1998. Prof. Santhanam was one of the founding faculty members of the Department of Mathematics in the Institute. He is survived by his wife, son Srikanth and daughter Prof. Rekha Santhanam, a faculty member in the Department of Mathematics at IIT Bombay.

Mr. F.C. Kohli, the father of Indian IT industry and the founder of TCS, passed away on November 26, 2020. IIT Bombay is indebted to Mr. Kohli for his guidance and patronage. Under his leadership, IIT Bombay found a great partner in TCS in taking our Computer Science and Microelectronics programs to greater heights. Incidentally, his son is an alumnus of IIT Bombay.

CEP courses scheduled during January - March 2021

Duration	Days	Course Title	Course Coordinator	Department
January 2021				
Open Programmes:				
4-1-2021	5 days	Multiscale Crystal Plasticity Modelling	Prof. Alankar Alankar	Mechanical Engineering
15-1-2021	6 months	AMIL with Python	Porf. Biplab Banerjee	Centre for Studies in Resource Engineering
20-1-2021	3 days	Multiscale Materials Informatics, Discovery and Design	Prof. Alankar Alankar	Mechanical Engineering
In-House Programmes:				
25-1-2021	5 months	Naval Operations Research	Prof. Manjesh Hanawal	Industrial Engineering & Operation Research
March 2021				
Open Programmes:				
1-3-2021	5 days	Polyolefin Science and Technology	Prof. Guruswamy Kumaraswamy	Chemical Engineering Engineering

In the
Wilderness

Photo Credit :

by Mr. Chintamani Joglekar
Jt. Registrar HR-1 (HRM)

campus diary

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