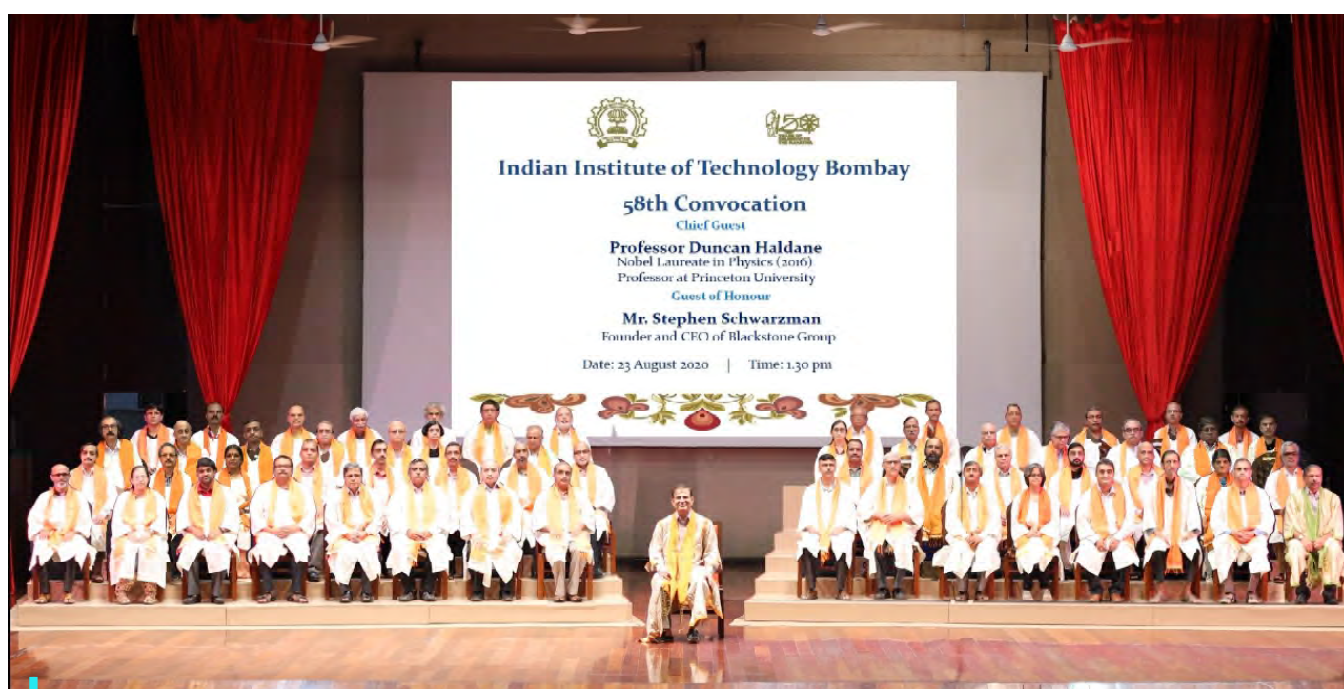


July - August - September 2020

<http://www.iitb.ac.in/en/activities/campus-diary>

INDIAN INSTITUTE OF TECHNOLOGY BOMBAY

## IIT Bombay Earns Accolades For Conducting First-Of-Its-Kind Convocation In Virtual Reality Mode



Senate members on the dais during the 58<sup>th</sup> Convocation held in VR mode

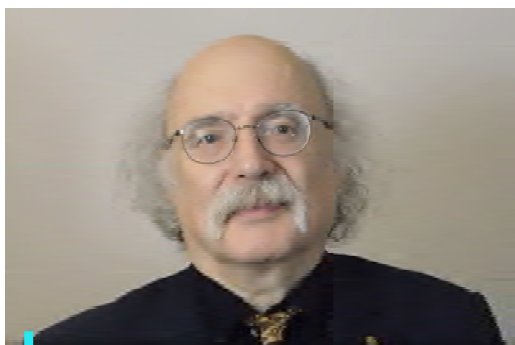


Professor Subhasis Chaudhuri, Director, IIT Bombay addressing the graduating students

The Indian Institute of Technology Bombay held its 58th Convocation on August 23, 2020 in Virtual Reality (VR) mode, keeping in view the safety measures during the ongoing pandemic crisis. The Institute thought that it is best to arrange such a VR-convocation for the graduating students as we did not wish to put their health at risk but at the same time, we did not wish to deprive them of the sense of achievement and pride of passing out of India's premier engineering Institute. The personalized avatar of each graduate received the graduating degree certificate from the personalized avatar of **Prof. Subhasis Chaudhuri**, Director of IIT Bombay. All medal winners received their medals from the personalized avatar of the Chief Guest.

The event was telecast on DD India and DD Sahyadri channels as well as on YouTube and Facebook Live.

This year, the Institute provided a unique experience for students to socialize on their convocation day as they could roam around the campus, visit their hostels and departments, and meet their friends and faculty, all virtually.



Chief Guest Prof. Duncan Haldane, co-recipient of the 2016 Nobel Prize in Physics, and a Professor of Physics at Princeton University, addressing the audience

**Prof. Duncan Haldane**, co-recipient of the 2016 Nobel Prize in Physics, and a Professor of Physics at Princeton University, was the Chief Guest during the ceremony and delivered the convocation address.

In his speech, the Chief Guest **Professor Frederick Duncan Michael Haldane**, FRS, said, *"There is a lesson for everyone involved in research. Even if you are involved in a very goal-driven project, try to find some small share of your time to investigate unexpected curiosities that sometimes show up along the way. The analogy is that you may be walking along a path kicking a few rocks with your boots, but if you don't look at your feet, you may miss a huge rough diamond that your kick exposed, and just walk on by. Of course, eventually someone else may walk that path and see the gem that you inadvertently unearthed but failed to notice."*

This year, the graduating students include 381\* PhDs, 18\* Dual Degree (MTech/ MPhil+PhD) and 27\* Dual Degrees (MSc+PhD). Out of these, 39 research scholars were selected for the award of 'Excellence in PhD Research' for the year 2018-20. In addition, 33 joint PhD degrees, in association with Monash University, were also conferred by the Vice-Chancellor and President of Monash University Prof. Margaret Gardner, on the occasion. (\*including PhD degrees awarded during interim convocation).

One PhD degree under joint supervision with Washington University in St. Louis, USA, and two Cotutelle PhD degrees, one each [in MTech+PhD and MSc+PhD programme] in agreement with University of Wollongong, Australia and with Université du Québec à Trois-Rivières in Canada were also awarded.

Besides these, 11 MS (by research), 6 Dual Degree (MSc+MTech), 621 MTech, 64 MDes, 20 MPhil, 110 MMgt, 225 two-year MSc, 2 five-year integrated MSc, 342 Dual Degree (BTech + MTech), 684 BTech Degrees, 10 Interdisciplinary Dual Degrees (BTech/ BS+MTech/ MSc), 20 Dual Degrees (BDes+MDes), 6 Dual Degrees (BS+MSc), 16 BS, 15 BDes, and 16 PGDIIT, were awarded.

Presenting the Institute's Report for the year 2019-2020, **Prof. Subhasis Chaudhuri**, Director of IIT Bombay informed that IIT Bombay continues to be a much sought-after destination for UG and PG studies. **Prof. Subhasis Chaudhuri** said, *"Producing top quality graduates who would be future leaders in industry, research and academia is the primary goal of IIT Bombay. The skill they developed, the work culture they picked up and the peers they made during their studies at IIT Bombay will help them achieve success in their lives. The entire nation will be looking forward to their contributions in taking our country ahead."*

He further said, *"Providing a virtual reality experience to all our graduates needed not only highly innovative steps but also a tremendous effort by our professors and staff. They did it for the students. Hopefully this will enthuse our graduates as well as other engineers in the country to think big and think innovatively."*

**Mr. Stephen Schwarzman**, Chairman, CEO and Co-Founder of Blackstone, world-renowned investor, and philanthropist was the Guest of Honour. In his speech, Mr. Schwarzman said, *"India occupies a unique position in the world today, especially when it comes to technology, where it has established global leadership through its talent. Of the 72 Indian-origin engineers who have founded unicorns across the world, 50 percent are IIT alumni. IIT engineers are defining the global technology landscape and the newest alumni will be the next generation of future global leaders who will advance that mission. You, IIT Bombay graduates, must seize the opportunity to be leaders of impact who are a force for change - and for good - in this world."*



Guest of Honour Mr. Stephen Schwarzman, Chairman, CEO and Co-Founder of Blackstone, world-renowned investor and philanthropist, addressing the audience



Personalized avatar of Prof. Subhasis Chaudhuri, Director, IIT Bombay distributing the certificates to the personalized avatars of graduating students using VR mode

This year, three students were presented the Gold medals for their exemplary performance. The '**President of India Medal**' was bestowed on **Sahil Hiral Shah**, a (B.Tech) student from the Department of Computer Science and Engineering. The '**Institute Gold Medal (2018-19)**' was awarded to **Shashwat Shukla**, a student from the Department of Electrical Engineering. '**Dr. Shankar Dayal Sharma Gold Medal**' was conferred on **Prakash Singh Badal**, a Ph.D. student from the Department of Civil Engineering. Additionally, departmental toppers were presented with silver medals by the Chief Guest.

**Prof. Margaret Gardner**, President and Vice-Chancellor, Monash University, Australia, members of Board of Governors, and several other distinguished guests from India and abroad attended the convocation function online, besides the graduating students and their proud parents.

## MEDALS AND PRIZES

### PRESIDENT OF INDIA MEDAL (for the year 2019-20)

Shah Sahil Hiral  
Computer Science and Engineering (B.Tech.)

### INSTITUTE GOLD MEDAL (for the year 2018-19)

Shashwat Shukla  
Electrical Engineering (Dual Degree)

### INSTITUTE SILVER MEDAL (for the year 2019-20)

#### BACHELOR OF TECHNOLOGY (B.Tech)

##### Aerospace Engineering

Biswas Pujan Aloke

##### Chemical Engineering

Arjav Shah

##### Civil Engineering

Apoorv Srivastava

##### Computer Science & Engineering

Shah Preety Hiten

##### Electrical Engineering

Bhishma Praful Dedhia

##### Mechanical Engineering

T Akshay

##### Metallurgical Engineering and Materials Science

Aayush Anurag

Ashutosh Kumar

##### Engineering Physics

Kartik Patekar

#### BACHELOR OF DESIGN (B. Des.)

Nebin Biju

#### MASTER OF SCIENCE (M.Sc.)

##### Applied Geology

Rohan Nandy

##### Applied Geophysics

Megha Chakraborty

##### Applied Statistics & Informatics

Arjun V

##### Chemistry

Subhabrata Dutta

##### Mathematics

Vikas Kumar

##### Physics

Shirke Swarnim Sunil

##### Biotechnology

Priya Kumar

#### DUAL DEGREES (B.Tech. + M.Tech.)

##### Aerospace Engineering

Sathe Atharva Sunil

##### Chemical Engineering

Kshitiz Parihar

##### Electrical Engineering

Anmol Kagreecha

##### Mechanical Engineering

Saksham Jindal

##### Metallurgical Engineering and Materials Science

Som Phene

##### Engineering Physics

Mandar Milind Sohoni

#### Dual Degrees (B.Des.+M.Des.)

Shanbhag Maulashree Bhooshan



**MASTER OF TECHNOLOGY (M.Tech.)**
**Aerospace Engineering**

Naveen Kumar S

**Chemical Engineering**

Shoubhanik Nath

**Civil Engineering**

Ankan Karmakar

**Computer Science & Engineering**

Shreya Mahabala Alva

Raktim Chaki

**Electrical Engineering**

Narendra Gangwar

**Mechanical Engineering**

Sohail Ahmad Asghar Husain

**Metallurgical Engineering and Materials Science**

Naman Somani

**Biomedical Engineering**

Survanshu Saxena

**Environmental Science & Engineering**

Prakhar Deroliya

**Geoinformatics and Natural Resources**

Nidhi Kapoor

**Earth Sciences**

Vaibhav Jayaswal

**Energy Systems and Engineering**

Mohit Padhee

**Systems & Control Engineering**

Anurag

**Technology & Development**

Aman Srivastava

**Industrial Engineering and Operations Research**

Shobhit Bhatnagar

**MASTER OF DESIGN (M.Des.)**
**Industrial Design**

Rishi Rama Rao Vanukuru

**MASTER OF PHILOSOPHY (M.Phil.)**
**Planning & Development**

Madhuri Pal

**MASTER OF MANAGEMENT (M.Mgt.)**

Chonkar Amogh Sanjay Shweta

**OTHER MEDALS**
**Miss Jayati Deshmukh Memorial Gold Medal**

Shah Sahil Hiral

Computer Sc. & Engg. (B.Tech)

**Dr. Shankar Dayal Sharma Gold Medal**

Prakash Singh Badal

Civil Engineering (Ph.D)

**Vidyasagar Nehra Gold Medal**

Rohan Agarwal

Civil Engg. (B.Tech)

**Prof. Madhav Kulkarni Lt. Col.(R) Gold Medal**

Rohan Agarwal

Civil Engg. (B.Tech)

**Rajit Bhagwati Memorial Gold Medal**

Prakhar Deroliya

Centre for Environmental Science and Engineering  
(M.Tech)

**Hindi Vidya Bhavan Gold Medal**

Chonkar Amogh Sanjay Shweta

M.Mgt

**Sharad Maloo Memorial Gold Medal**

Shubhankar Mihir Seth

Mechanical Engineering (B.Tech)

**PRIZES**
**Prof. K C Mukherji Award**

Bhishma Praful Dedhia

**Tulsiram Devidayal, P.M. Natu, Damle Trust Prize**

T Akshay

**Prof. R.P. Singh Memorial Prize (B.Tech / 2 Yr. M.Sc.)**

Kartik Patekar

Shirke Swarnim Sunil

**Chandrashekhar Prize**

Ashi Gupta

**Shri R Vembu Iyer Memorial Prize**

Aishani Singh

**Dilip R Limaye Academic Excellence Award**

Shah Sahil Hiral

**Prof. A.B. Biswas Memorial &**
**Shri Prakash Krishnan Award Prize(M.Sc)**

Subhabrata Dutta

**Dr. Gargi Vishnoi Memorial Prize**

Chitaranjan Mahapatra

**Prof. Hiralal Memorial Award**

Subhabrata Dutta

Iyer Sreehari Dinesh

**Shri Ashok Chaturvedi Memorial Prize (M.Tech)**

Sohail Ahmad Asghar Husain

**Prabhulal Bhatnagar Memorial Prize**

Vivek Tewary

**Mrs. Rama Mathur Memorial Prize**

Vikas Kumar

**Prof. M.N.Gopalan Prize (M.Sc.)**

Arjun V

**Ajit Shelat Award**

Shreya Mahabala Alva

Raktim Chaki



**Bhaves Gandhi Memorial Prize**

Shashwat Shukla  
Siddhi  
Ritesh Bachhar  
Dibyanandan Bhowmick

**Akshay Dhoke Memorial Award**

Shivam Nitin Kajale

**Prof. K.C. Khilar PhD Award**

Mohit Singh

**Prof. K.C. Khilar Prize (M.Tech)**

Tathagata Mukherjee

**R. G. Manudhane PhD Excellence Award**

Akshay Modi  
Vikky Anand

**R.G. Manudhane M.Tech Student Excellence Award Best M.Tech Thesis**

Shoubhanik Nath

**Indira Manudhane Student Excellence Award**

Rishika Gupta  
Arjav Shah

**Mr. Pranab Ranjan Sen Award**

Bal Pushan Prasanna

**Shubhada Mulekar Joshi Award**

Priya Kumar

**Prof. S N Sinha Memorial Award**

Aayush Anurag

**Dr. P.V. Sukhatme Memorial Award**

Vikas Kumar  
Arushi Vishwakarma  
Arjun V  
Priyanka Aggarwal

**S C Mehrotra Prize**

Rohan Agarwal

**K Seshia Research Excellence Award**

Mandar Milind Sohoni

**Ramesh Chandra Sinha Academic Excellence Award**

Ashi Gupta

**Manorama Sinha Academic Excellence Award**

Rituparna Samantaray

**Malini Vyavahare (Indore) Memorial Award**

Irina Merin Baby

**Digamber & Nilima Joshi Award**

Keshav Shankar Melnad

**Prabhakar & Pratibha Mulekar Award**

Stalin Joseph Correya

**Mrs. Charusheela Dange Award**

Edwin Saji Uthuppan

**Institute Academic Prizes for the year 2019-20  
II year B.Tech / Dual Degree / BS (2019 Batch)**

| Sr. No. | Roll No.  | Name                              | Prize      | Value of Prize | Department                |
|---------|-----------|-----------------------------------|------------|----------------|---------------------------|
| 1       | 190050003 | Abhinav Gupta                     | I          | Rs.3000/-      | Computer Sc. & Engg.      |
| 2       | 190050044 | Gupta Kartikey Chandresh          | I          | Rs.3000/-      | Computer Sc. & Engg.      |
| 3       | 190050048 | Harshit Gupta                     | I          | Rs.3000/-      | Computer Sc. & Engg.      |
| 4       | 190050053 | Jayesh Singla                     | I          | Rs.3000/-      | Computer Sc. & Engg.      |
| 5       | 190050072 | Nishant Abhangi                   | I          | Rs.3000/-      | Computer Sc. & Engg.      |
| 6       | 190050097 | Raj Aryan Agrawal                 | I          | Rs.3000/-      | Computer Sc. & Engg.      |
| 7       | 190100036 | Bhattad Krushnakant Dilip         | I          | Rs.3000/-      | Mechanical Engg.          |
| 8       | 190050020 | Ankit Kumar Misra                 | II         | Rs.3000/-      | Computer Sc. & Engg.      |
| 9       | 190050026 | Battepati Karthikeya              | II         | Rs.2000/-      | Computer Sc. & Engg.      |
| 10      | 190070054 | Sai Saketika Chekuri              | Additional | Rs.2000/-      | Electrical Engg.          |
| 11      | 190100044 | Devansh Jain                      | Additional | Rs.2000/-      | Mechanical Engg.          |
| 12      | 19D070024 | Gaurang Dev                       | Additional | Rs.2000/-      | Electrical Engg.          |
| 13      | 190070057 | Sanket J Hanamashetti             | Additional | Rs.2000/-      | Electrical Engg.          |
| 14      | 190050034 | Dhruv Arora                       | Additional | Rs.2000/-      | Computer Sc. & Engg.      |
| 15      | 19D070007 | Amit Kumar Mallik                 | Additional | Rs.2000/-      | Electrical Engg.          |
| 16      | 19B030003 | Anish Shivamani                   | Additional | Rs.2000/-      | Chemistry                 |
| 17      | 190050089 | Pradipta Parag Bora               | Additional | Rs.2000/-      | Chemical Engg.            |
| 18      | 190020079 | Parab Ridayesh Ramesh             | Additional | Rs.2000/-      | Chemical Engg.            |
| 19      | 190050041 | Gudipaty Aniket                   | Additional | Rs.2000/-      | Computer Sc. & Engg.      |
| 20      | 19D170022 | Renduchintala H S V N S Kowndinya | Additional | Rs.2000/-      | Energy Sc. & Engg.        |
| 21      | 19D180003 | Adarsh Kumar                      | Additional | Rs.2000/-      | Environmental Sc. & Engg. |
| 22      | 190070044 | Parvik Nileshkumar Dave           | Additional | Rs.2000/-      | Electrical Engg.          |
| 23      | 190070068 | Thomas Jacob                      | Additional | Rs.2000/-      | Electrical Engg.          |
| 24      | 190050058 | Kaustubh Dighe                    | Additional | Rs.2000/-      | Computer Sc. & Engg.      |
| 25      | 190050006 | Aditya Badola                     | Additional | Rs.2000/-      | Computer Sc. & Engg.      |

### III year B.Tech. branchwise (2018 Batch)

| Sr. No. | Roll No.  | Name                   | Prize | Value of Prize | Department             |
|---------|-----------|------------------------|-------|----------------|------------------------|
| 1       | 180010047 | Randad Nakul Rajesh    | I     | Rs.3000/-      | Aerospace Engineering  |
| 2       | 180010038 | Patel Joy Pravin Kumar | II    | Rs.2000/-      | Aerospace Engineering  |
| 3       | 180010032 | Miloni Dipak Atal      | II    | Rs.2000/-      | Aerospace Engineering  |
| 4       | 180110014 | Arjun Varun Yennemadi  | I     | Rs.3000/-      | Chemical Engineering   |
| 5       | 180040011 | Anish Sukumar          | II    | Rs.2000/-      | Chemical Engineering   |
| 6       | 180040081 | Rishabh Sharaff        | I     | Rs.3000/-      | Civil Engineering      |
| 7       | 180040119 | Varun Reddy Bande      | II    | Rs.2000/-      | Civil Engineering      |
| 8       | 180050061 | Mohammad Ali Rehan     | I     | Rs.3000/-      | Comp.Sc. & Engineering |
| 9       | 180050078 | Pratyush Agarwal       | I     | Rs.3000/-      | Comp.Sc. & Engineering |
| 10      | 180050100 | Shreya Pathak          | I     | Rs.3000/-      | Comp.Sc. & Engineering |
| 11      | 180050121 | Yash Gupta             | I     | Rs.3000/-      | Comp.Sc. & Engineering |
| 12      | 180050075 | Pranav Goyal           | II    | Rs.2000/-      | Comp.Sc. & Engineering |
| 13      | 180070041 | Parth Nilesh Dodhia    | I     | Rs.3000/-      | Electrical Engineering |
| 14      | 18D070040 | Aseer Israr Ansari     | II    | Rs.2000/-      | Electrical Engineering |
| 15      | 180260038 | Siddharth Tiwary       | I     | Rs.3000/-      | Engineering Physics    |
| 16      | 180260027 | Pushkar Mohile         | II    | Rs.2000/-      | Engineering Physics    |
| 17      | 180100018 | Ashay Arun Veer        | I     | Rs.3000/-      | Mechanical Engineering |
| 18      | 18D100020 | Shubham Lohiya         | II    | Rs.2000/-      | Mechanical Engineering |
| 19      | 180110029 | Dhruv Dhaivat Anjaria  | I     | Rs.3000/-      | Met. Engg. & Mat. Sci. |
| 20      | 180110015 | Aryan Mishra           | II    | Rs.2000/-      | Met. Engg. & Mat. Sci. |

### III Year Dual Degree branchwise (2018 Batch)

| Sr. No. | Roll No.  | Name                    | Prize | Value Of Prize | Department                          |
|---------|-----------|-------------------------|-------|----------------|-------------------------------------|
| 1       | 18D070059 | Prashil Pramod Patil    | I     | Rs.3000/-      | Electrical Engineering              |
| 2       | 18D070035 | Abhilaksh Kumar         | II    | Rs.2000/-      | Electrical Engineering              |
| 3       | 18D100008 | Chaitanya Ashish Johari | I     | Rs.3000/-      | Mechanical Engineering              |
| 4       | 18D100007 | Bhavini Jeloka          | II    | Rs.2000/-      | Mechanical Engineering              |
| 5       | 18D170002 | Aishwarya Sidram Sherla | I     | Rs.3000/-      | Energy Sc. & Engineering            |
| 6       | 18D170024 | Pawan Kumar Jahajpuriya | II    | Rs.2000/-      | Energy Sc. & Engineering            |
| 7       | 18D180021 | Rishi Rath              | I     | Rs.3000/-      | Environmental Science & Engineering |
| 8       | 18D110008 | Saijal Rekhani          | I     | Rs.3000/-      | Met. Engg. & Mat. Sc.               |

### III Year BS branchwise (2018 Batch)

| Sr. No. | Roll No.  | Name               | Prize | Value Of Prize | Department  |
|---------|-----------|--------------------|-------|----------------|-------------|
| 1       | 18B030002 | Ajinkya Anil Dhepe | I     | Rs.3000/-      | Chemistry   |
| 2       | 18D070045 | Dibyajeet Bagchi   | II    | Rs.2000/-      | Chemistry   |
| 3       | 18B080023 | Siddharth Jain     | I     | Rs.3000/-      | H & SS      |
| 4       | 180110010 | Anirudh Maheshwari | II    | Rs.2000/-      | H & SS      |
| 5       | 18B080006 | Dhairya Jain       | II    | Rs.2000/-      | H & SS      |
| 6       | 18B090001 | Aryaman Maithani   | I     | Rs.3000/-      | Mathematics |

### IV Year B.Tech. branchwise (2017 Batch)

| Sr. No. | Roll No.  | Name                  | Prize | Value Of Prize | Department            |
|---------|-----------|-----------------------|-------|----------------|-----------------------|
| 1       | 170010022 | Ajit Dilip Patwardhan | I     | Rs.3000/-      | Aerospace Engineering |
| 2       | 170010047 | Rishi Agarwal         | II    | Rs.2000/-      | Aerospace Engineering |
| 3       | 170020008 | Geetika Jain          | I     | Rs.3000/-      | Chemical Engineering  |
| 4       | 170020021 | Devosmita Sen         | I     | Rs.3000/-      | Chemical Engineering  |
| 5       | 170020009 | Rajat Daga            | II    | Rs.2000/-      | Chemical Engineering  |
| 6       | 170040012 | Deo Pranav Sunil      | I     | Rs.3000/-      | Civil Engineering     |
| 7       | 170040105 | Shashanka Katta       | II    | Rs.2000/-      | Civil Engineering     |

|    |           |                            |    |           |                        |
|----|-----------|----------------------------|----|-----------|------------------------|
| 8  | 170050002 | Mashkaria Satvik Mehulbhai | I  | Rs.3000/- | Computer Sc. & Engg.   |
| 9  | 170050028 | Kritin Garg                | I  | Rs.3000/- | Computer Sc. & Engg.   |
| 10 | 170050027 | Aman Kansal                | II | Rs.2000/- | Computer Sc. & Engg.   |
| 11 | 170050035 | Ansh Khurana               | II | Rs.2000/- | Computer Sc. & Engg.   |
| 12 | 170050040 | Parikshit Bansal           | II | Rs.2000/- | Computer Sc. & Engg.   |
| 13 | 170050041 | Kushagra Juneja            | II | Rs.2000/- | Computer Sc. & Engg.   |
| 14 | 170050045 | Saksham Goel               | II | Rs.2000/- | Computer Sc. & Engg.   |
| 15 | 170070004 | Syomantak Chaudhuri        | I  | Rs.3000/- | Electrical Engineering |
| 16 | 17d070018 | Abhishek Sandeep Tanpure   | I  | Rs.3000/- | Electrical Engineering |
| 17 | 17d100013 | Sanjoli                    | II | Rs.2000/- | Electrical Engineering |
| 18 | 170100035 | Tezan Sahu                 | I  | Rs.3000/- | Mechanical Engineering |
| 19 | 170020084 | Vittesh Arora              | II | Rs.2000/- | Mechanical Engineering |
| 20 | 170040009 | Lakhani Raj Viren          | II | Rs.2000/- | Mechanical Engineering |
| 21 | 170100001 | Kshitiz Singhal            | II | Rs.2000/- | Mechanical Engineering |
| 22 | 170100020 | Kshitij Ravindra Ghormode  | II | Rs.2000/- | Mechanical Engineering |
| 23 | 170100024 | Siddhant Sundeep Shah      | II | Rs.2000/- | Mechanical Engineering |
| 24 | 170100041 | Anuroop Nag                | II | Rs.2000/- | Mechanical Engineering |
| 25 | 170100116 | Arvind Manimurugan         | II | Rs.2000/- | Mechanical Engineering |
| 26 | 170110082 | Sangabattula Lokesh        | I  | Rs.3000/- | Met.Engg.& Mat.Sci.    |
| 27 | 170110017 | Gautam Chetan Shah         | II | Rs.2000/- | Met.Engg.& Mat.Sci.    |
| 28 | 170260027 | Vijay V Nenmeli            | I  | Rs.3000/- | Engineering Physics    |
| 29 | 170260014 | Duse Chaitrali Manoj       | II | Rs.2000/- | Engineering Physics    |

#### IV Year Dual Degree branchwise (2017 Batch)

| Sr. No. | Roll No.  | Name                     | Prize | Value of Prize | Department             |
|---------|-----------|--------------------------|-------|----------------|------------------------|
| 1       | 170070051 | Koustav Jana             | I     | Rs.3000/-      | Electrical Engineering |
| 2       | 17D070009 | Madhur Sudarshan         | II    | Rs.2000/-      | Electrical Engineering |
| 3       | 17D100006 | Rohan Ajay Singh         | I     | Rs.3000/-      | Mechanical Engineering |
| 4       | 17D100007 | Swadesh Rath             | II    | Rs.2000/-      | Mechanical Engineering |
| 5       | 17D110004 | Pradhan Siddharth Sameer | I     | Rs.3000/-      | Met. Engg. & Mat.Sci.  |
| 6       | 17D170028 | Gaurav Lapashya          | I     | Rs.3000/-      | Energy Sc. & Engg.     |
| 7       | 170110039 | Mayuresh Ajay Bhattu     | II    | Rs.2000/-      | Energy Sc. & Engg.     |
| 8       | 170260023 | Nitish Ujjwal            | I     | Rs.3000/-      | Engg. Physics          |

#### IV Year Four Year BS branchwise (2017 Batch)

| Sr. No. | Roll No.  | Name             | Prize | Value Of Prize | Department |
|---------|-----------|------------------|-------|----------------|------------|
| 1       | 17B030018 | Rishi Tibrewal   | I     | Rs.3000/-      | Chemistry  |
| 2       | 17B030014 | Anushri Sachan   | II    | Rs.2000/-      | Chemistry  |
| 3       | 17B080011 | Rohan Kumar Garg | I     | Rs.3000/-      | H & SS     |
| 4       | 17B080009 | Shreya Agarwal   | II    | Rs.2000/-      | H & SS     |

#### V Year Dual Degree branchwise (2016 Batch)

| Sr. No. | Roll No.  | Name                       | Prize | Value Of Prize | Department               |
|---------|-----------|----------------------------|-------|----------------|--------------------------|
| 1       | 160020043 | Sanjay Khatri              | I     | Rs.3000/-      | Electrical Engineering   |
| 2       | 160040100 | R Sucheta                  | I     | Rs.3000/-      | Electrical Engineering   |
| 3       | 160070010 | Sahasrajit Sarmasarkar     | I     | Rs.3000/-      | Electrical Engineering   |
| 4       | 16D070032 | Anirudh Singhal            | I     | Rs.3000/-      | Electrical Engineering   |
| 5       | 16D110009 | Kotariya Vineet Ashok      | I     | Rs.3000/-      | Electrical Engineering   |
| 6       | 160110085 | Archiki Prasad             | II    | Rs.2000/-      | Electrical Engineering   |
| 7       | 16D070042 | Devanshu Singh Gaharwar    | II    | Rs.2000/-      | Electrical Engineering   |
| 8       | 16D170007 | Kumaresh Ramesh            | I     | Rs.3000/-      | Energy Sc. & Engineering |
| 9       | 16D170009 | Deshpande Varad Pramod     | II    | Rs.2000/-      | Energy Sc. & Engineering |
| 10      | 16D170024 | Sameesh Santosh Baheti     | I     | Rs.3000/-      | Mechanical Engineering   |
| 11      | 16D100004 | Konale Aditya Gurusidhappa | II    | Rs.2000/-      | Mechanical Engineering   |



|    |           |                                   |           |                        |
|----|-----------|-----------------------------------|-----------|------------------------|
| 12 | 160110020 | Sahasrabuddhe Hrushikesh Pravin I | Rs.3000/- | Met. Engg. & Mat. Sci. |
| 13 | 16D110010 | Itale Anup Hanamant II            | Rs.2000/- | Met. Engg. & Mat. Sci. |
| 14 | 16D260004 | Manu Srivastava I                 | Rs.3000/- | Engineering Physics    |

#### II Year M.Sc. (2019 Batch)

| Sr. No. | Roll No.  | Name                        | Prize | Value Of Prize | Department                       |
|---------|-----------|-----------------------------|-------|----------------|----------------------------------|
| 1       | 195030005 | Aashi Kasera                | I     | Rs.3000/-      | Chemistry                        |
| 2       | 195030044 | Saikat Pandit               | II    | Rs.2000/-      | Chemistry                        |
| 3       | 195060011 | Prasenjit Gorai             | I     | Rs.3000/-      | Earth Sciences                   |
| 4       | 195060001 | Abhishek Natarajan          | II    | Rs.2000/-      | Earth Sciences                   |
| 5       | 195120028 | Paras Chopra                | I     | Rs.3000/-      | Physics                          |
| 6       | 195120026 | Eleena Gupta                | II    | Rs.2000/-      | Physics                          |
| 7       | 195300022 | Ambalika Chowdhury          | I     | Rs.3000/-      | Biosciences & Bioengineering     |
| 8       | 195300021 | Aishi Dasgupta              | II    | Rs.2000/-      | Biosciences & Bioengineering     |
|         | 95300025  | Pritha Dasgupta             | II    | Rs.2000/-      | Biosciences & Bioengineering     |
| 9       | 195280006 | Ankita Dargad               | I     | Rs.3000/-      | Applied Statistics & Informatics |
|         | 195280036 | Sayantani Sarkar            | I     | Rs.3000/-      | Applied Statistics & Informatics |
| 10      | 195280017 | Santosh Kumar Chaudhary     | II    | Rs.2000/-      | Applied Statistics & Informatics |
| 11      | 195090016 | Dhruv Arora                 | I     | Rs.3000/-      | Mathematics                      |
| 12      | 195090001 | Krishna Chaitanya Kalidindi | II    | Rs.2000/-      | Mathematics                      |
| 13      | 195320010 | Shivam Jaiswal              | I     | Rs.3000/-      | Applied Geophysics               |

#### 2017 Batch B.Des students for the year 2019-20

| Sr. No. | Roll No.  | Name           | Prize | Value Of Prize | Department               |
|---------|-----------|----------------|-------|----------------|--------------------------|
| 1       | 17U130002 | Harshit Satija | I     | Rs.3000/-      | Industrial Design Centre |
| 2       | 17U130008 | Sargam Prakash | II    | Rs.2000/-      | Industrial Design Centre |

#### 2018 Batch B.Des students for the year 2019-20

| Sr. No. | Roll No.  | Name           | Prize | Value Of Prize | Department               |
|---------|-----------|----------------|-------|----------------|--------------------------|
| 1       | 18U130028 | Saumya Oberoi  | I     | Rs.3000/-      | Industrial Design Centre |
| 2       | 18U130008 | Atish Waghware | II    | Rs.2000/-      | Industrial Design Centre |

#### 2019 Batch B.Des students for the year 2019-20

| Sr. No. | Roll No.  | Name           | Prize | Value Of Prize | Department               |
|---------|-----------|----------------|-------|----------------|--------------------------|
| 1       | 19U130005 | Saloni Shetye  | I     | Rs.3000/-      | Industrial Design Centre |
| 2       | 19U130030 | Lakshya Ranwan | II    | Rs.2000/-      | Industrial Design Centre |

#### 2016 Batch B.Des students for the year 2018-19

| Sr. No. | Roll No.  | Name       | Prize | Value Of Prize | Department               |
|---------|-----------|------------|-------|----------------|--------------------------|
| 1       | 16U130016 | Nebin Biju | I     | Rs.3000/-      | Industrial Design Centre |

#### 2017 Batch B.Des students for the year 2018-19

| Sr. No. | Roll No.  | Name           | Prize | Value Of Prize | Department               |
|---------|-----------|----------------|-------|----------------|--------------------------|
| 1       | 17U130002 | Harshit Satija | I     | Rs.3000/-      | Industrial Design Centre |
| 2       | 17U130008 | Sargam Prakash | II    | Rs.2000/-      | Industrial Design Centre |

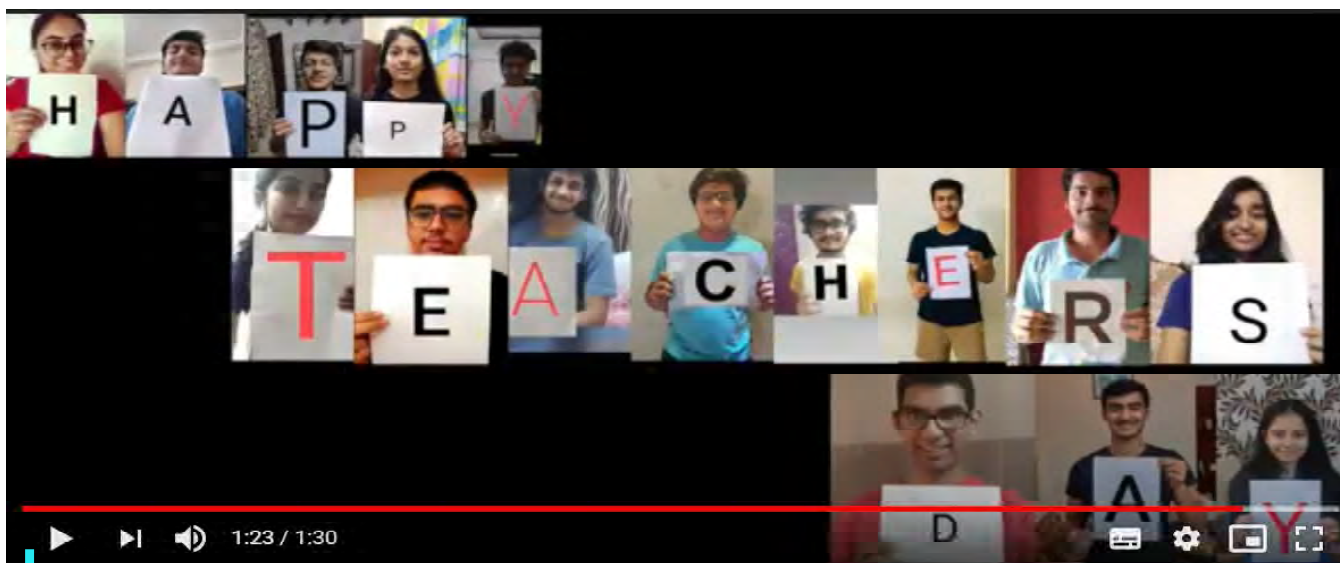
#### 2018 Batch B.Des students for the year 2018-19

| Sr. No. | Roll No.  | Name          | Prize | Value Of Prize | Department               |
|---------|-----------|---------------|-------|----------------|--------------------------|
| 1       | 18U130026 | Rishabh Kumar | I     | Rs.3000/-      | Industrial Design Centre |
| 2       | 18U130028 | Saumya Oberoi | II    | Rs.2000/-      | Industrial Design Centre |

### Other Prizes

| Name of the Prize   | Roll No.  | Name of the Awardee      | Total Amount   |
|---|-----------|--------------------------|--|
| Shri Rakesh Mathur Excellence Award                       | 170050041 | Kushagra Juneja          | Rs. 1,00,000/-<br>IV Yr. UG Student.   |
| Shri T.K. Subramanian Prize For Academic Excellence       | 170100035 | Tezan Sahu               | Rs. 1000/-<br>IV Yr. B.Tech., Mech. Engg.  |
| Urvish Medh Memorial Prize<br>(For Electrical Engg.)      | 190070054 | Sai Saketika Chekuri     | Rs. 2000/-<br>II Yr. B.Tech., Electrical Engg.   |
|   | 180070041 | Parth Niles Dodhia       | Rs. 1000/-<br>III Yr. B.Tech., Electrical Engg.  |
|   | 18D070040 | Aseer Israr Ansari       | Rs. 1000/-<br>III Yr. B.Tech., Electrical Engg.  |
|   | 17D070019 | Siddharth Chandak        | Rs. 2000/-<br>IV Yr. B.Tech., Electrical Engg.   |
| Prof. M.N. Vartak Memorial Prize                          | 195280036 | Sayantani Sarkar         | Rs. 6000/-<br>II Yr. M.Sc., Applied<br>Statistics & Informatics                              |
| Mrs. Rama Mathur Memorial Prize                           | 195090016 | Dhruv Arora              | Rs. 2000/-<br>II Yr. M.Sc., Mathematics  |
| Aditya Choubey Memorial Prize                             | 190070054 | Sai Saketika Chekuri     | Rs. 4000/-<br>II Yr. B.Tech., Electrical Engg.   |
| S C Mehrotra Prize  | 180040119 | Varun Reddy Bande        | Rs. 10000/-<br>Topper of II Yr. B.Tech Civil Engg.   |
|   | 170040105 | Shashanka Katta          | Rs. 10000/-<br>Topper of III Yr. B.Tech Civil Engg.  |
| Prof. A.K. Mallik Award                                   | 17D110004 | Pradhan Siddharth Sameer | Rs. 5000/-<br>IV Yr. B.Tech/Dual Degree Met.<br>Engg. & Mat. Sc.                             |
| Shri Ram Kumar Gupta Merit Award                          | 170020008 | Geetika Jain             | Rs. 10000/-<br>IV Yr. B.Tech Chemical Engg.<br>(Topper)                                      |
| Shrimati Prakashvati Devi Gupta                           | 170020021 | Devosmita Sen            | Rs. 7500/- Merit Award<br>IV Yr. B. Tech Chemical Engg.<br>(2nd Highest)                     |
| Praj Industries Academic Excellence Award                 | 170110039 | Mayuresh Ajay Bhattu     | Rs. 30000/-<br>Topper in 3rd yr.<br>(VI semester) UG Programme<br>in Energy Sc. & Engg.      |
|   | 193170007 | Abhishek Kumar Pandey    | Rs. 30000/-<br>Topper in 1st yr. (II semester)<br>Masters programme in<br>Energy Sc. & Engg. |
| Late Prof. R. Subrahmonia Ayyar Academic Excellence Award | 170040024 | Komal Kundlik Gaware     | Rs. 15000/-<br>(Topper female student in<br>B.Tech 3rd year Civil Engg.)                     |
|   | 193040008 | Melna Jose               | Rs. 15000/-<br>(Topper female student in<br>M.Tech 1st year Civil Engg.)                     |

## Institute Celebrates Teachers' Day (Online)



*Students wishing their professors on Teachers' Day*

The 62nd Teachers' Day celebrations of the Indian Institute of Technology Bombay was held online on September 8, 2020 in view of the ongoing pandemic.

**Prof. Meric Gertler**, President, University of Toronto, Ontario, Canada was the Chief Guest for the occasion. IIT Bombay Director **Prof. Subhasis Chaudhuri** presented the '**Prof. S. P. Sukhatme**

**Award for Excellence in Teaching' & 'Departmental Award for Excellence in Teaching'** to selected faculty members.

The awards were accepted virtually by the recipients, wherein they expressed their gratitude and thanked the Institute via video message. The online function was attended by Deans, Heads of Departments, faculty members and students.



*Chief Guest Prof. Meric Gertler, President, University of Toronto, delivering his speech*

*IIT Bombay Director Prof. Subhasis Chaudhuri congratulating the awardees*





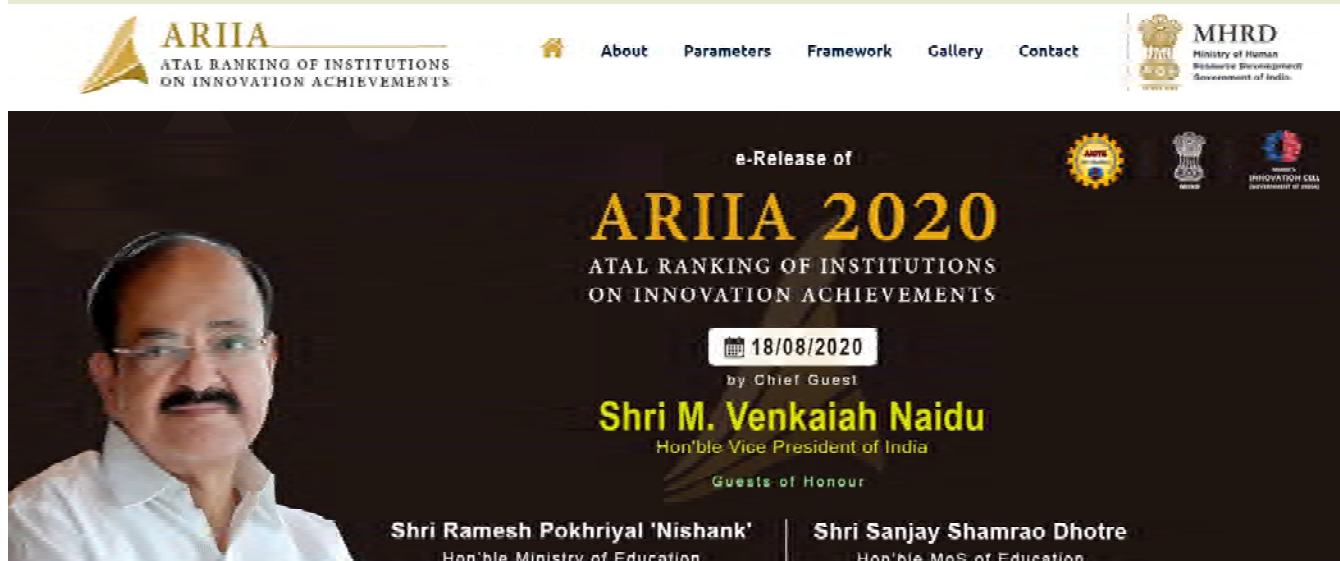
The recipients of the Awards for Prof. S. P. Sukhatme Excellence in Teaching (2020) are:

- **Prof. Gajendra Kumar Adil**, Shailesh J. Mehta School of Management
- **Prof. Sudesh Balan**, IDC School of Design
- **Prof. S. Baskar**, Department of Mathematics
- **Prof. Anurag Mahesh Kumar Garg**, Department of Environmental Science & Engineering
- **Prof. Suvarn Subhash Kulkarni**, Department of Chemistry
- **Prof. Malay Mukul**, Department of Earth Sciences
- **Prof. Sahana Murthy**, IDP in Educational Technology
- **Prof. Suresh C. Patel**, Department of Earth Sciences
- **Prof. Nithyanand Prabhu**, Department of Metallurgical Engineering and Materials Science
- **Prof. Vaijayanthi Mala Sarma**, Department of Humanities and Social Sciences
- **Prof. Dinesh Sharma**, Shailesh J. Mehta School of Management
- **Prof. Nishant Sharma**, IDC School of Design
- **Prof. Sanjeeva Srivastava**, Department of Biosciences and Bioengineering
- **Prof. Vikram Singh Sirola**, Department of Humanities and Social Sciences
- **Prof. Perumal Vedagiri**, Department of Civil Engineering

The recipients of the Departmental Awards for Excellence in Teaching (2020) are:

- **Prof. Aniruddha Sinha**, Department of Aerospace Engineering
- **Prof. Samir Kumar Maji**, Department of Biosciences & Bioengineering
- **Prof. Chandra Venkataraman**, Department of Chemical Engineering
- **Prof. Rajdip Bandyopadhyaya**, Department of Chemical Engineering
- **Prof. Rajarshi Chakrabarti**, Department of Chemistry
- **Prof. Irishi N. Narayanan Namboothiri**, Department of Chemistry
- **Prof. Subimal Ghosh**, Department of Civil Engineering
- **Prof. Mandar M. Inamdar**, Department of Civil Engineering
- **Prof. S. Sudarshan**, Department of Computer Science and Engineering
- **Prof. Uday Khedker**, Department of Computer Science and Engineering
- **Prof. H. C. Sheth**, Department of Earth Sciences
- **Prof. Girish Kumar**, Department of Electrical Engineering
- **Prof. Anupama Kowli**, Department of Electrical Engineering
- **Prof. Pradeep R. Nair**, Department of Electrical Engineering
- **Prof. Venkatasailanathan Ramadesigan**, Department of Energy Science and Engineering
- **Prof. Ramesh Bairy T. S.**, Department of Humanities and Social Sciences
- **Prof. Mrinmoyi Kulkarni**, Department of Humanities and Social Sciences
- **Prof. Preeti Raman**, Department of Mathematics
- **Prof. Siuli Mukhopadhyay**, Department of Mathematics
- **Prof. Ramesh Kumar Singh**, Department of Mechanical Engineering
- **Prof. Sridhar Balasubramanian**, Department of Mechanical Engineering
- **Prof. R. P. Vedula**, Department of Mechanical Engineering
- **Prof. Rajiv O. Dusane**, Department of Metallurgical Engineering & Materials Science
- **Prof. N. K. Khosla**, Department of Metallurgical Engineering & Materials Science
- **Prof. Mithun Kumar Mitra**, Department of Physics
- **Prof. K. G. Suresh**, Department of Physics
- **Prof. Venkatesh Rajamanickam**, IDC School of Design
- **Prof. Shishir Kumar Jha**, Shailesh J. Mehta School of Management
- **Prof. P. S. V. Nataraj**, Systems and Control Engineering
- **Prof. Amit Y. Arora**, Centre for Technology Alternatives for Rural Areas
- **Prof. Y. S. Rao**, Centre of Studies in Resources Engineering

## IIT Bombay Ranks Second In ARIIA 2020



IIT Bombay has secured second position in the Atal Rankings of Institutions on Innovation Achievements (ARIIA) 2020 under the category of government-funded institutions. The result of ARIIA was announced on August 18, 2020 by the Hon'ble Vice-President of India **Shri. M. Venkaiah Naidu** in presence of Hon'ble Education Minister **Shri. Ramesh Pokhriyal 'Nishank'** and Hon'ble Minister of State for Education **Shri. Sanjay Shamrao Dhotre**.

The Director of the Institute **Prof. Subhasis Chaudhuri** said, "IIT Bombay places a great emphasis on innovation and entrepreneurship and strives hard to ensure that the fruits of research get translated to products, benefitting the country."

IIT Bombay stood second in the ARIIA rankings in 2019.

**Prof. Milind Atrey**, Dean (R&D), IIT Bombay said, "IIT Bombay strives to cultivate a vibrant industry-academia symbiosis to ensure innovations and technologies developed in the laboratories reach the society at large."

Atal Ranking of Institutions on Innovation Achievements (ARIIA) was initiated by the Ministry of Human Resource Development (MHRD), Government of India on August 30, 2018, to systematically rank all major higher educational institutions and universities in India on parameters related to "Innovation and Entrepreneurship Development" amongst students and faculty members. The parameters used for consideration for ARIIA rankings include budget, facilities, awareness, entrepreneurship, commercialization, learning methods and governance.

## IIT Bombay Celebrates Hindi Pakhwada 2020

IIT Bombay celebrated 'Hindi Pakhwada' from September 1 to 14, 2020. Due to the pandemic this year, the competitions were held using online platforms. The Hindi Cell held an online essay writing competition for all faculty, staff members and students of the Institute, which received an overwhelming response.

As part of the celebrations, various posters with important quotes with eminent personalities signifying the importance of Hindi language were displayed in the Institute.

On Hindi Diwas celebrated on September 14, 2020, a message of Honourable Education Minister **Shri. Ramesh Pokhriyal 'Nishank'**, along with the message of Honourable Union Home Minister **Shri. Amit Shah** was circulated to all members of the Institute.

### Following are Hindi Essay Competition winners (Faculty/ Staff members):

|             |                            |
|-------------|----------------------------|
| First       | – Prof. Rajkumar Pant      |
| Second      | – Jitendra Kumar Jain      |
| Third       | – Shamal S Mahadik         |
| Consolation | – Dheeraj Yadav            |
| Consolation | – Jayshree Purandare       |
| Consolation | – Preeti S Jogle           |
| Consolation | – Mahendra Kumar Palsaniya |

### (Students):

|             |                           |
|-------------|---------------------------|
| First       | – Rajan Rahul             |
| Second      | – Mayank R Bradiya        |
| Third       | – Preeti Tiwari           |
| Consolation | – Aditya Raj Singh Udawat |
| Consolation | – Mukesh Kumar Vishal     |
| Consolation | – Subhendra Prasad Balodi |
| Consolation | – Janak M Patel           |



## Van Mahotsav Helps Spread Awareness On Environment Conservation

To maintain the greenery of the campus and spread awareness on environment conservation, Van Mahotsav was celebrated at IIT Bombay on August 30, 2020. As a COVID-19 precautionary measure, only few functionaries of IIT Bombay participated this year in the annual tree plantation drive programme by maintaining social distancing.

Few select IIT Bombay functionaries including former Director of IIT Bombay **Prof. Devang Khakhar**, Deputy Director (AIA) **Prof. S. Sudarshan**, Dean (IPS) **Prof. BVS Viswanadham**, Associate Dean-II

(IPS) **Prof. Vedagiri Perumal**, Associate Dean-II (IPS) **Prof. Santanu Bandyopadhyay**, Superintending Engineer (Estate) **Mr. KRP Unnithan**, Registrar **Dr. R. Premkumar**, Hostel 18 Warden **Prof. Himanshu Bahirat** participated in the Van Mahotsav celebration.

Out of the 400 saplings planted on the campus, 70 saplings were planted in Hostel 18 premises during the annual tree plantation drive this year. Saplings like Arjun, Ashoka, Bakul, Kaduneem, Awala were planted.



Glimpses of the plantation drive during 2020 Van Mahotsav celebrations



## IIT Bombay Students Discover Closest Known Asteroid To Fly By Earth

An SUV-sized asteroid soared just 2950 km above the surface of Earth. IIT Bombay students **Kunal Deshmukh** and **Kritti Sharma**, working on a research project, discovered this object just hours later using data from the robotic Zwicky Transient Facility (ZTF) in California. Designated 2020 QG, it is the closest known asteroid to fly by Earth without impacting the planet. The previous known record-holder is asteroid 2011 CQ1, discovered by the Catalina Sky Survey in 2011, which passed above Earth about 1,550 miles (2,500 kilometers) higher than 2020 QG.

On Sunday, August 16, Kritti Sharma's third day on a research project to search for Near Earth Asteroids. Sharma and Kunal Deshmukh were analysing ZTF data on Sunday afternoon, they reported five "streaks" in the data as potential asteroids. Little did they know that one of them was a record-breaking asteroid. *"The data looked like all other Near-Earth asteroids we have seen so far,"* said Kunal, a final year student in the Department of Metallurgy and Materials Science at IIT Bombay.

After the ZTF team reported their finding to the International Astronomical Union Minor Planet Center, several telescopes followed up to learn more about the asteroid's size and orbit, proving that it had passed very close to Earth. *"Helping make a discovery like this, so early in my research project, is beyond what I had ever imagined,"* added Kritti, a third year undergraduate student of IIT Bombay's Department of Mechanical Engineering.

Their faculty guide, **Prof. Varun Bhalerao**, Department of Physics, IIT Bombay proudly said, *"It is wonderful to see these students coming from diverse backgrounds and contributing to astrophysics research. We are very excited about our next phase: studying such objects with the robotic GROWTH-India Telescope at Hanle, Ladakh"*.

Asteroid 2020 QG is about 10 to 20 feet (3 to 6 meters) across, or roughly the size of an SUV, so it was not big enough to do any damage even if it had been pointed at Earth; instead, it would have burned up in our planet's atmosphere.

*"The asteroid flew close enough to Earth that Earth's gravity significantly changed its orbit,"* says ZTF

co-investigator Tom Prince, the Ira S. Bowen Professor of Physics at Caltech and a senior research scientist at JPL, which Caltech manages for NASA. Asteroids of this size that fly roughly as close to Earth as 2020 QG do occur about once a year or less, but many of them are never detected.

*"ZTF's large-field of view and rapid data processing allows it to find rare asteroids like this that other telescopes might not find,"* says George Helou, ZTF co-investigator and director of IPAC, an astronomy centre, at Caltech.

ZTF, which is funded by the National Science Foundation (NSF) and other collaborators, scans the entire northern sky every three nights in search of supernovas, erupting stars, and other objects that otherwise change or move in the sky. As part of a NASA-funded program, ZTF team members search for near-Earth asteroids. When these space rocks speed across the sky, they leave streaks in the ZTF images. Each night, machine-learning programs automatically sort through about 100,000 images in search of these streaks, and then narrow down the best asteroid candidates to be followed up by humans. This results in about 1,000 images that team members and students sort through by eye every day.

Asteroid 2020 QG was identified by Kunal Deshmukh, a student at the Indian Institute of Technology Bombay. Deshmukh had been scanning that day's images along with Kritti Sharma, also at the Indian Institute of Technology Bombay, and Chen-Yen Hsu at National Central University in Taiwan.

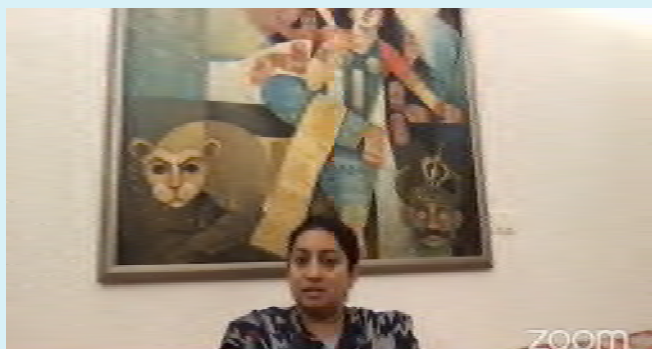
*"A lot of the streaks are satellites, but we can quickly go through the best images by eye to find the actual asteroids,"* says Bryce Bolin, postdoctoral scholar in astronomy at Caltech and a member of the ZTF team, who regularly hunts for asteroids. *"This latest find really demonstrates that ZTF can be used to locate objects very close to Earth that are on potentially impacting trajectories."*

GROWTH-India is a partnership between the Indian Institute of Astrophysics, Bangalore and the Indian Institute of Technology Bombay, with support from the Indo-US Science and Technology Forum (IUSSTF) and the Science and Engineering Research Board (SERB) of the Department of Science and Technology (DST), Government of India.

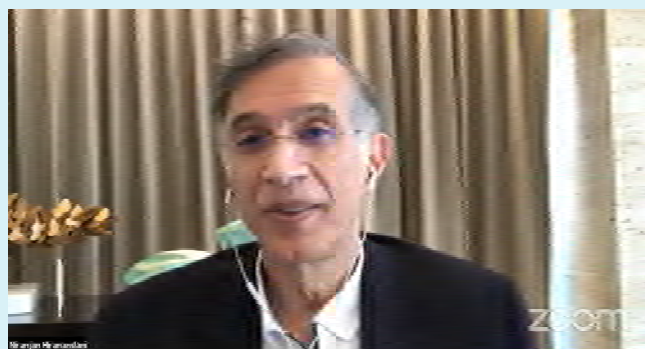


IIT Bombay students  
Kritti Sharma (L) and Kunal Deshmukh  
(R) discovered closest-known asteroid  
to fly by Earth

## Institute Cultural Council Holds Panel Discussions On Critical Issues Related To Pandemic



Mrs. Smriti Irani, Union Minister of Textile speaking during 'The New Education Policy' session



Dr. Niranjana Hiranandani, Co-Founder and MD of the Hiranandani Group of Companies, explaining difficulties in the functioning of industries due to pandemic



Mr. Kapil Sibal, Rajya Sabha Member, INC speaking on how students can play a part in rebuilding the economy

In a series of interactive panel discussions named 'Brave New World', organized by We Speak and Institute Cultural Council (ICC), the organizers aim to discuss the country's critical issues amidst the new normal with different leaders.

The first session of Brave New World conducted on August 8, 2020, was on the topic 'Understanding the effects of Covid-19 on the Indian Economy'. The second session was held on September 6, 2020 on the issue 'The challenges faced by the Industrial sector in the New Normal'. The third panel discussion organized on September 11, 2020 on the topic 'The New Education Policy'.

The Chief Guest for 'Understanding the effects of Covid-19 on the Indian Economy' Session was **Mr. Kapil Sibal**, who is currently Rajya Sabha Member from the Indian National Congress. The experts spoke about the current state of the economy which provided a clear picture of the magnitude of damage done to the economy due to COVID-19. The discourse covered pressing issues, from the migrant crisis to the destruction of small businesses. The discussion ended with Mr. Sibal talking about how the students can play a part in rebuilding the

economy and prospects of future policies by the government.

**Dr. Niranjana Hiranandani**, Co-founder and Managing Director of the Hiranandani Group of Companies, was the Chief Guest for the second-panel discussion on the issue 'The challenges faced by the Industrial sector in the New Normal' session. The discussion aimed to understand the difficulties in the functioning of industries due to the adverse situations created due to the pandemic. The discussion provided an insight into the sectors which have the possibility of tremendous growth and the possibility and extent of popularly predicted recession after COVID-19.

The third discussion on 'The New Education Policy' session was attended by **Mrs. Smriti Irani**, Minister of Textile in the current government, as the Chief Guest. An extremely insightful discussion between Mrs. Irani and students began by students getting an idea about the need of evolution of the current education system. The conversation entailed the expectations from the new policy and the feasibility of the proposed change. It provided a great deal of understanding to the students about the motivation and efficiency of the New Education Policy in a comprehensively modernizing age.

## IIT Bombay's Alumni Supports Students With IT Infrastructure

With the help of alumni donors and individuals, an approximate contribution of Rs. 4 crores was received from the IIT Bombay's alumni in response to fund-raising campaign to provide IT infrastructure to current batch students.

The E-learning sessions for the current academic session 2020-21 started from August 10, 2020. Due to the pandemic crisis, the online mode of learning required digital learning IT infrastructure such as laptops and data card for the students to attend virtual classes. While a sizeable population of Institute's students did not have the financial capability to afford the IT infrastructure, the Institute had initiated a fund-raising campaign to help support our needy students to become ready for the online classes in July 2020.

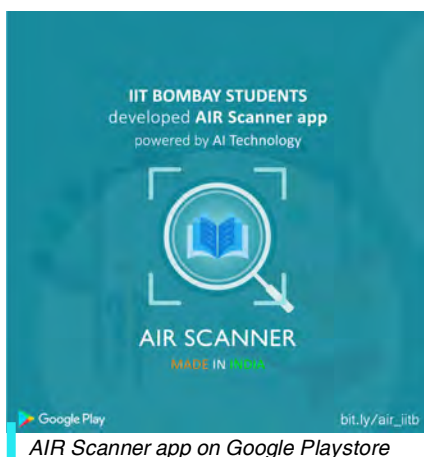
The Institute acknowledges all the alumni donors and individuals, who have extended their support. Rs. 1.25 crores were contributed by the Batch of 1994 (having celebrated their Silver Jubilee Reunion in December 2019) in response to the campaign till July 9, 2020. Combining this with the donation of Rs. 2.35 crores from IIT Bombay Heritage Foundation (IITBHF) in USA, the Institute has reached around 81.07% mark of the target of Rs 5 crores. Almost 700 students have benefitted.

The 1994 batch leaders, on behalf of the batch said, *"The IIT Bombay Batch of 1994 is pleased to donate INR 1.25 crores towards the Director's initiative on providing laptops and connectivity for needy students. This initiative is critical for launching the Institute's plan to hold online classes for the coming semester starting August. It will provide hundreds of IIT Bombay students the financial support needed to obtain a laptop and adequate connectivity at home. Our batch was unanimous in their support of this critical initiative by our beloved alma mater."*

**Prof. Subhasis Chaudhuri**, Director of IIT Bombay said, *"I wish to express my sincere gratitude to the alumni who have come together and made a very timely contribution to support the IT infrastructure requirements of our students to have access to online learning. Our alumni have always been a strong pillar of support to the Institute and there is no better proof that there is always a piece of IIT Bombay in their hearts."*

**Prof. Chaudhuri** further added, *"The actual number of needy students could be much higher than the funds that are currently available. I therefore appeal to our alumni and well-wishers to continue to support this initiative so that no needy student is deprived of quality education in the time of this pandemic."*

## IIT Bombay Students Develop AIR Scanner



The AIR Scanner is an Artificial Intelligence (AI) based Reading Assistant & Document Scanner app developed by a team of final year undergraduates students in the Department of Civil Engineering of the IIT Bombay. To fulfill the Prime Minister's vision of 'Atma Nirbhar Bharat', the students built a Made-In-India EdTech product with powerful and unique features. The AIR Scanner app can give fierce competition to existing non-Indian apps such as Adobe Scan and CamScanner.

In this COVID-19 crisis, it can prove to be of immense help for citizens studying online and doing work from home. It has all the ideal document scanner features like scanning, organizing, and sharing documents.

The AI Reading Assistant is powered by AI technology that understands words in a page and on just a single tap on word boxes, the user gets its full-fledged meaning including examples, synonyms, pronunciation, and

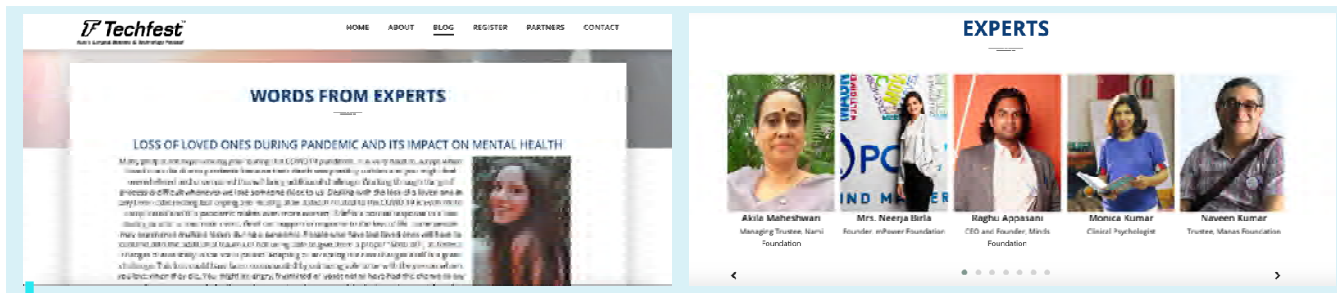
translation in more than 40 languages. People can import E-books or capture newspaper snippets with the help of the app and the AI Narrator will read it aloud for them.

The founders of the AIR Scanner app have been working on the development of an AI Reading Assistant app for a long time but when the government banned several Chinese apps including CamScanner, they surveyed and realized that the majority of the people were facing difficulties in scanning, organizing, and sharing documents. As a result, the developers **Rohit Kumar Chaudhary & Kavin Agrawal** decided to add scanning features too in app development and build a document scanner app packed with a powerful AI Reading Assistant feature. They named it AIR Scanner.

The app can be found on Google Playstore. Link: [bit.ly /air\\_iitb](https://bit.ly/air_iitb)



## 'HOPE' For Mental Health



Glimpse of the HOPE website

With the help of more than 10 NGOs across the country, the Techfest team of IIT Bombay launched 'HOPE: Healing Occurs with Positivity and Expression' initiative to address the mental health issues across India.

The initiative is dedicated to defeating stigma related to mental health problems and raising awareness about various mental health issues. The HOPE website features an interactive 'Query Section' where people can post their queries and mental health-related issues anonymously and get help from professional counsellors. Helpline numbers from more than 10 prominent Indian NGOs are available on the website for the public.

Various numerous blogs addressing general mental health issues will also be published on the website time to time.

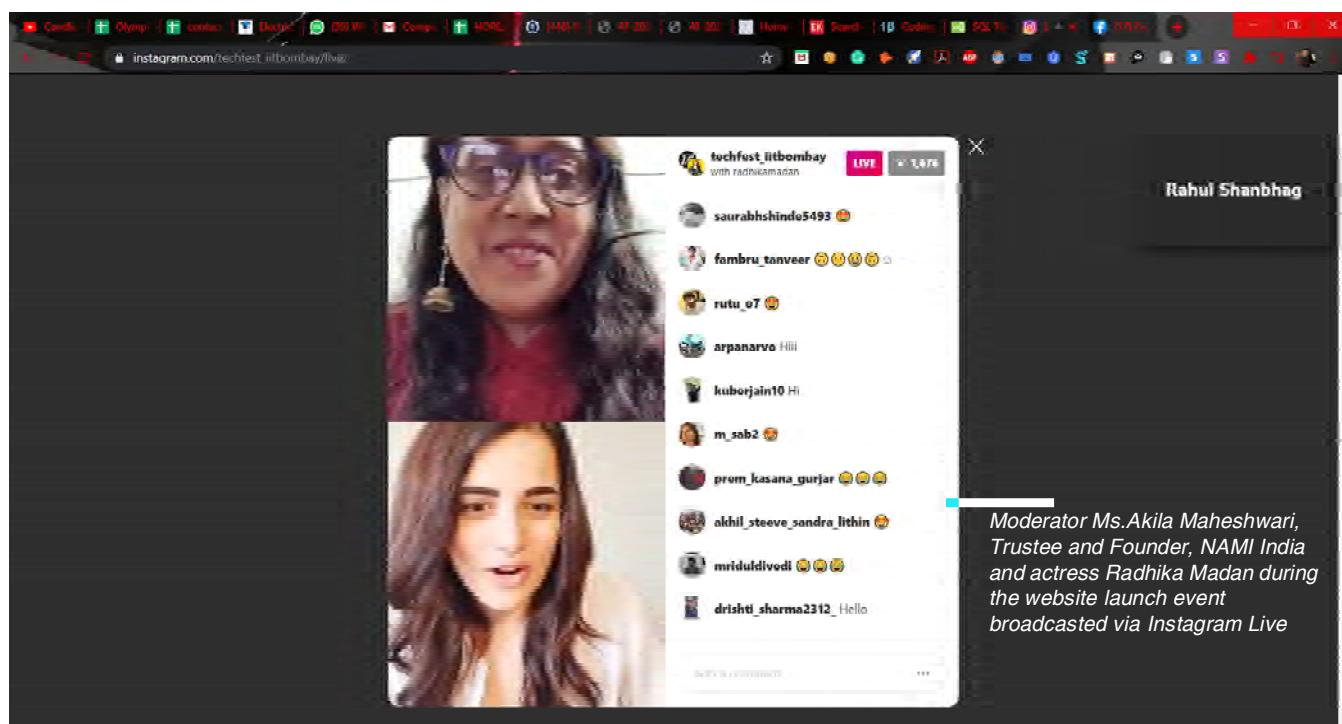
According to World Health Organization (WHO), cases of depression and high levels of stress and anxiety in college-going students have significantly

escalated owing to the Covid-19 pandemic.

To address this problem, Techfest plans to conduct online mental health workshops for college students. To make mental health treatment more accessible for all, Techfest will launch a new website on which students can interact with mental health professionals anonymously.

The launch event of the HOPE was broadcasted via Instagram Live on September 13, 2020, with multi-talented Indian actress, **Radhika Madan**. The session was moderated by **Ms. Akila Maheshwari**, trustee and founder of NAMI India. This non-profit organization works towards eradicating and treating mental illness in India by integrating and involving mentally challenged people, doctors, healthcare workers, and the government.

Further, the Techfest team had organized online mental health workshops on September 26, 2020 with the help of more than 90 professional counsellors from across the country. The sessions targeted college students as their primary participants.



Moderator Ms. Akila Maheshwari, Trustee and Founder, NAMI India and actress Radhika Madan during the website launch event broadcasted via Instagram Live

## Research in focus

## What influences coronaviruses' survival on different surfaces?

*Researchers find how temperature, humidity and properties of different surfaces influence the evaporation rates of respiratory droplets infected with COVID-19.*

Ever since the COVID-19 pandemic struck the world, there is a frenzy of guidelines advocating us to go 'contactless'. We are urged to use masks, maintain distance from others and avoid touching anything while stepping out. This respiratory illness, caused by a kind of coronavirus, is thought to spread through respiratory droplets of infected people, which are ejected when they sneeze, cough or talk. These droplets can land on surfaces and pose a risk to others, who may touch it and get the infection. Hence, wiping and disinfecting frequently touched surfaces, like door handles and elevator buttons, and washing hands often, are suggested to keep the disease at bay.



In a new study, researchers at the Indian Institute of Technology Bombay (IIT Bombay) have explored how long it takes for such respiratory droplets to evaporate from different surfaces. They found that humidity, temperature and the properties of the surface are vital in determining when the droplets dry up. The study was published in the peer-reviewed journal *Physics of Fluids*.

Like many respiratory illnesses, COVID-19 spreads through respiratory droplets, whose size is around twice the thickness of human hair. "The survival of the virus inside the droplet depends on how fast it dries," says **Prof. Rajneesh Bhardwaj**, who led the study. He is a professor at the Department of Mechanical Engineering, IIT Bombay. Studies in the past have shown that coronaviruses need a medium, like a saliva droplet, to survive. "Once there is no medium, because of the evaporation of the droplets, the chances of the survival of the virus are very less," he adds.

The researchers built a mathematical model, validated by previous experiments, to estimate the time it takes for respiratory droplets to evaporate. This model considered the ambient temperature, type of surface, size of the droplet and the relative humidity in its calculations. On surfaces that repel water, like the touch screen of our phones, they found that the evaporation time is slower by 60% when compared to surfaces like glass or steel. On water repelling surfaces, the droplets don't spread out flatly and hence take a longer time to evaporate. Besides, the size of the droplet also influences the time it takes to dry up.

"Our study suggests that surfaces such as smartphone screens and wood need to be cleaned more often than glass and steel surfaces," says **Prof. Amit Agrawal** from IIT Bombay, who was also involved in the study. He also suggests sun-drying surfaces to destroy the virus, in places with lower humidity, as pointed out by other studies.

The current study also found that temperature and humidity affect the evaporation time, which is reduced by half for every 15°C rise in temperature. When the researchers changed the relative humidity from 10% to 90%, the drying time increased almost sevenfold. "A higher ambient temperature helps to dry out the droplet faster and drastically reduces the chances of the survival of the virus. With higher humidity, the droplet stays on the surface longer and hence the virus has a greater chance to survive," explains Prof. Agrawal.

The researchers further explored the relationship between the droplet drying time and the growth rate of COVID-19 infections in five cities, which have varying humidity and temperature values. They selected New York, Chicago, Los Angeles, Miami, Sydney and Singapore, and found that the cities with a more significant growth rate of the pandemic, like New York, had a higher drying time. Singapore, on the other hand, which had the highest ambient temperature, despite the high humidity, has the lowest number of infections.

Prof. Bhardwaj points out a similar trend in India, where higher temperatures in Delhi may have slowed down the infection rate, as compared to Mumbai, where the humidity is high. While he acknowledges that the handling of the pandemic by the governments may have played a role, "ambient weather is an important factor to be considered," he says.

With the arrival of the southwest monsoon in India, these findings have implications in managing COVID-19 in the country. "There is a likely scenario that humidity may help the virus survive in droplets for a longer time," cautions Dr. Bhardwaj. He urges authorities to enforce a stringent rule to use masks in areas with higher humidity. The proposed model of estimating the survival of a virus in a drying droplet, the researchers say, can also aid in understanding other diseases that are transmitted through respiratory droplets, like influenza A.

**Article written by :** Spoorthy Raman

**Image credits :** Photo by Wengang Zhai on Unsplash

**Link to**

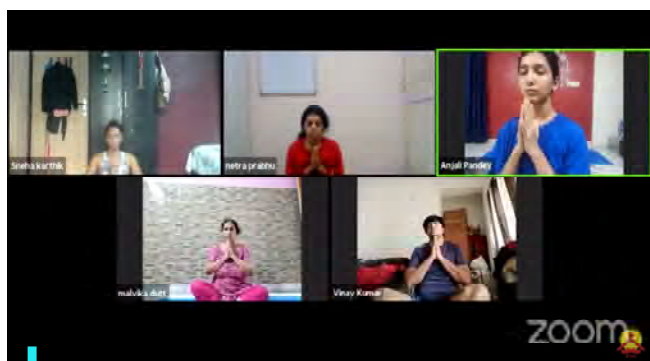
**published work :** <https://researchmatters.in/news/what-influences-coronaviruses%E2%80%9999-survival-different-surfaces>

Likelihood of survival of coronavirus in a respiratory droplet deposited on a solid surface

## Yogastha Hosts Online Workshops



Yoga instructor Anjali Pandey during the online yoga workshop



The workshop in attendance by participants via a zoom videocall



Participants performing Yoga asanas during online workshop

With an aim to maintain good health and mental peace in the midst of COVID-19 indoor lifestyle, the Yogastha club of IIT Bombay has been organizing different online workshops and talks to engage with the Institute's members.

On September 6, 2020, the Yogastha club had organized an online talk on **"Science of Self-Management: Lessons Through Yogic Knowledge"** by **Prof. R.V. Hosur**, Padma Shri awardee and distinguished alumnus of IIT Bombay. The talk included a lecture on how proper management of 'SELF' is the key to success in all our efforts in life. YOGA provides the right knowledge and directions, and when practiced with full faith, it frees us from all miseries and

leads to peace. Due to the pandemic, many people ail from issues like anxiety, lack of focus and direction, isolation, apathy, and more. To reinvigorate the mind and spirit, the Yogastha club conducted a webinar talk.

The talk was attended by more than 200 participants. During the interactive session, the participants discussed perspectives and actions, the reason we do what we do, and lessons from the ages. This was followed by a Q&A session of 20 minutes, moderated by the members of Yogastha.

Besides this, an online workshop with a theme **'Ashtanga Vinyasa Yoga'** was held on September 2, 2020, via Zoom video calls. Ashtanga yoga is an 'eight-limbed

approach' to the practice and philosophy of Yoga. Vinyasa means flow. The workshop included Yoga asanas with a proper understanding of breath and techniques for all levels and understanding of the body with asana practice using the traditional Mysore Style Ashtanga Vinyasa method. **Anjali Pandey**, a passionate yoga practitioner was, the yoga instructor for the workshop.

The workshop was attended by more than 100 participants including staff members, students, and residents of IIT Bombay via Zoom video call. **Prof. Neeraj Kumbhakarna**, the faculty mentor for Yogastha concluded the workshop with a vote of thanks.

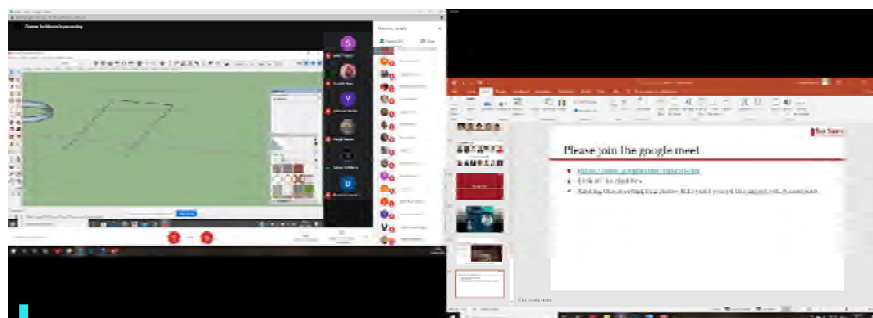


## Team Shunya Holds Online Workshops

Team Shunya, IIT Bombay organized various webinars and online workshops for the students to learn and interact with the experts while staying indoors due to the pandemic. The innovative workshops helped the participants learn new technical skills and get practical learning from the experts.

The series of workshops conducted included –

### Let's SketchUp



Poster on Google Sketch Up software learning for beginners

A two-day workshop to teach SketchUp software from the very basic tools. The speaker **Ar. Manish Sharma** - Founder of Opame Architects Jaipur, Young Achiever of the Year 2017 and architect for our Project Solarise, 2018, taught the participants commonly used commands, scene creation, materials, and textures, and how to import pictures in SketchUp. The software is a 3D modelling computer program for a wide range of drawing applications such as architectural, interior design, civil and mechanical engineering. It is a great initial design tool that can generate several designs for the project.

### Using AI for creativity

The workshop provided an overview of artistic exploration using Machine Learning (ML) algorithms. The speaker for the workshop was **Mayur Mistry**, who is currently pursuing his Master's Degree at the University of Illinois at Urbana-



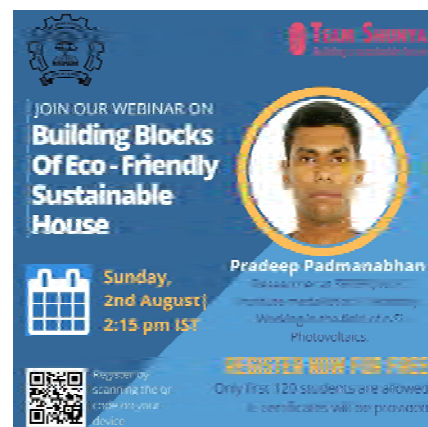
Champaign, USA and was awarded Technical Person of the Year 2016-17 while pursuing his B. Tech in Civil Engineering at IIT Bombay for his contribution to Team Shunya as Structure Design Head, Project Solarise.

Mayur gave a hands-on experience of creating images and videos using Artificial Intelligence (AI) in google collab. He provided all the codes and raw images to help the students to understand well. On Day 2, he explained how the codes work and elaborated on how ML and AI can help for creativity by showing more examples and exercises.

Poster on Using AI for Creativity

### Webinar on building blocks of eco-friendly sustainable house

The webinar covered different aspects of the house which made it sustainable. The speaker for the webinar was **Pradeep Padmanabhan**, a researcher at SERIS, NUS. He talked about building materials, HVAC, light systems, electrical, water management, waste management. A meeting with climate change scientists in France motivated him to swap his lucrative career with a career in sustainable energy research. He has since spent almost six years in c-Si PV research. His research area focuses on the transfer of advanced PV technology to industries for commercial production. He is also one of the technical resource group members of the prestigious competition, Solar Decathlon India 2021. He has been the Project Engineer for the 2017 team of Team SHUNYA and Institute medallist at IIT Bombay.



Poster on Building Blocks of Eco-friendly Sustainable House



## Techfest Starts Virtual Exhibit Series



Posters of various virtual exhibit series organized by Techfest

During the pandemic crisis, the Techfest team launched **Virtual Exhibit Series** in August, with an aim to bring cutting-edge technology to people's living room via online series using YouTube Live. The series featured next-generation robots from across the world used in various technology industry.

The first robot in the stellar line-up was **NEXTAGE**, a next-generation industrial robot system developed to work together with humans at production lines under manufacturing environments. The NEXTAGE, designed by Kawada Robotics, Japan is set to revolutionize factory operations all across the globe. The all-in-one Dual Arm Robot has super-human power, speed & precision and will help to increase productivity in industries by undertaking hazardous or repetitive tasks, which will allow human workers to take up more meaningful jobs.

It was followed by a set of robots from Istituto Italino di Tecnologia in Genoa. First in the exhibit series was **IDLIR**, a small crawler bot designed to inspect power generators. Its small size allows it to enter into tiny spaces. Followed by other robots such as **CALM** (Computer Assisted Laser Microsurgery) and laser-assisted **SVEI** (Smart Venous Entry Indicator), which are biomedical robot-based technologies designed by Leonardo De Matteos. It was followed by **VICARIOS**, a Virtual Reality interface for remote control of robotic systems developed by a team led by researcher Nikhil Deshpande at the Istituto Italino di Tecnologia in Genoa. VICARIOS is a virtual reality interface that facilitates teleoperation and immersive visualization of robotic systems in hazardous or hostile environments.

The Virtual Exhibit series will conclude with UC Berkley's **AlphaGarden**, which is an AI system for polyculture gardening or farming with multiple species of plants growing alongside one another. The Techfest team further plans to organize virtual exhibitions from December 4-17, 2020 and from December 18-20, 2020, the exhibitions portal will go live, with 20-30 cutting edge exhibits available on the portal 24/7. The portal will allow the general public to interact with the exhibitors via video conferencing in slots.

## Eco-Friendly Way To Celebrate Festival



Various entries received for eco-friendly Ganesha campaign

In order to highlight the environmental issues during the Ganapati festival, the NSS unit of IIT Bombay had undertaken an initiative of the '**Eco-Friendly Ganesha Campaign**' (EFG). The volunteers of the Sustainable Social Development (SSD) department participate in the EFG campaign every year and make Ganesha idols out of clay and using natural colors. This year, a special awareness campaign was organized where a volunteer demonstrated the making of Ganesha idols purely out of clay, which helped them to urge others to shift to EFG.

The campaign was a huge success and the team received overwhelming responses from people all around the country. The best entries were also featured on Instagram and Facebook pages.

Many idols across the country are made with Plaster of Paris (PoP) which contains calcium sulphate hemihydrate, a material that takes months to fully dissolve in water. In doing so, it reduces oxygen levels in the water, killing the fish and other aquatic life. These materials can cause skin diseases in humans when they come into contact with the water.

## NSS Students Volunteer To Teach Needy Students Via Online Platforms

Over 40 volunteers from the 'Educational Outreach Department' of NSS unit, IIT Bombay, are helping the underprivileged students to study with the help of online learning. Due to the COVID-19 pandemic crisis, while physical access to teaching the underprivileged students has become impossible, the online volunteering programme of the NSS unit has started three initiatives from September 2020 this year.

The three initiatives of the volunteers include -

- **Open Learning Initiative (OLI)** continued to upload top-quality educational content for high school children on the YouTube channel OLI-NSS, IIT Bombay which also crossed the milestone of 10 million views in July this year.
- **Ummeed** is a newly-launched initiative. Through online classes using video conferencing, the volunteers have been actively guiding the children of IIT Bombay working for staff through limited resources.
- **NGO Volunteering:** In continuation with partner NGOs Vidya and LCCWA, the online classes are taken by volunteers. In collaboration with Group for Rural Activities (GRA), they are also involved in teaching students at NGO Teach Me remotely.

In addition to volunteering, the blog page 'Jigyasa' has been revamped, with new blogs on educational and societal issues, including a series on the recently launched NEP-2020.

## 'Thank You' Note To Corona Warriors On Friendship Day

In order to express their heartfelt gratitude towards the unsung heroes working tirelessly during the pandemic, on the occasion of Friendship Day, NSS unit of IIT Bombay thanked and appreciated the doctors of IIT Bombay Hospital, PHO workers and security guards for their valuable contribution with heart-felt greeting cards penned with responses collected through a Google form.

## NSS Conducts Zero Waste Initiative

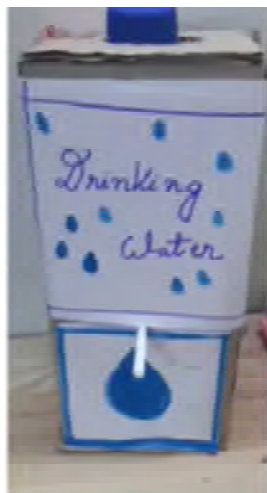
The NSS unit of IIT Bombay conducted a week-long initiative during the **International Zero Waste Week**, celebrated from September 7-11, 2020. The week-long initiative was organized to make people aware of sustainability through various activities.

One of the activities included an online **Best Out of Waste competition** - 'Regard before you Discard', where all discarded materials are designed to become resources for others to use. The activity received a good response with more than 85 entries of different models created by the participants in order to make substantial efforts to minimize the waste around them.

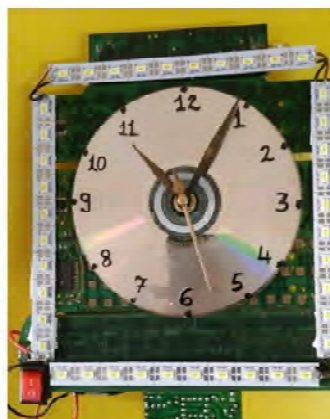
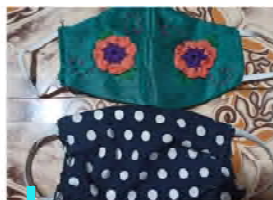
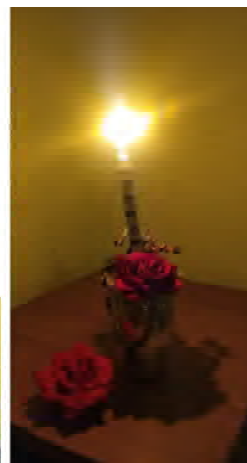
It was followed by daily facts on zero waste and a series of

inspirational stories of innovators and personalities that have been the flag bearers of the zero-waste motto.

Zero Waste is an ethical goal, economical, efficient, and visionary, to guide people in creating lifestyles and practices that emulate sustainable natural cycles.



A few glimpses of  
*Regard before  
you Discard*  
BEST OUT OF WASTE  
COMPETITION



Over 85 entries received for the 'Best Out of Waste' competition

## IIT Bombay Joins Hands With BSNL For DRONE Education Initiative

In Partnership with IIT Bombay and Yupp Masters, the Bharat Sanchar Nigam Limited (BSNL) has launched '**DRONE Education Initiative**,' to improve proliferation of Digital Education Program.

Due to the lockdown, e-learning platforms are gaining massive traction amongst students and educational institutes' faculty.

IIT Bombay, through its award winning "Spoken Tutorial" methodology has developed digital content on topics covering wide aspects of learning needs of the masses. There is online content on IT Literacy (Java programming, Python, C, Scilab, etc), Health and Nutrition (breast feeding awareness), general awareness and lot more for the daily requirements and professional aspects.

Speaking on the occasion, **Prof. Kannan Moudgalya** (Principal Investigator, Spoken Tutorial and FOSSEE projects), said, "The relationship with BSNL is very encouraging for us as it has provided us a platform to reach the masses across the length and breadth of the country, which we were not able to do earlier."

Speaking about the partnership, **Mr. PK Purwar**, CMD, BSNL said, "We have put our best effort in creating an open ecosystem for best talents in education sector to partner with BSNL and drive the Digital India Program through BSNL's pan-India high speed broadband network. Our DRONE (Digitally Rich Online Nationwide Education) initiative allows anyone in the online education industry to partner with BSNL and create a Pan-India presence through our digital platform."

Being the biggest broadband service provider in India, BSNL will help extend Yupp Master's tech-driven learning programs to every nook and corner of the country.



## Conveying Gratitude To Teachers



One of the poems presented by student Zoya on Teachers' Day

Amidst the pandemic, the faculty of IIT Bombay are teaching the students with full energy to ensure that the learning curve of the students remains steady. On the occasion of Teachers' Day, NSS IIT Bombay, via a Google form, provided an opportunity to the students to express their gratitude to their favourite professors by sending wishes and sharing memories.

Students poured in lots of messages sharing their sweet memories with the professors. All the professors felt overwhelmed by the grateful messages and the heartfelt notes made their day memorable.

In another event at **Ummeed**, a student named Ms. Zoya planned and executed a heart-warming session to show her love and respect towards all her teachers who have worked hard to empower her and other students during the pandemic. The student presented poems and fun riddles.

## Women's Equality Day Webinar



Women's Equality Day Webinar Poster

On the occasion of Women's Equality Day on August 26, the Sustainable Social Development (SSD) Department organized a webinar on "**Women Empowerment, Creating Women Leaders.**"

**Ms. Naveli Deshmukh**, Brand Ambassador of NSS for Maharashtra Govt., Miss India Universe 2015, second runner up and **Dr. Shubhra Chakraborty** (MBBS, MBA), founder and CEO of Poshan, Mission Helping Hands were invited as the speakers to address the audience.

Both the speakers, being ideal examples of women leaders of today's era shared their life experiences and the struggles behind achieving their life success. The webinar received an overwhelming response.

## Director Inaugurates Cow Shelter At IIT Bombay



Cattle Welfare Group donating for the shelter

The cow shelter at the IIT Bombay's campus was inaugurated by **Prof. Subhasis Chaudhuri**, Director, IIT Bombay on July 12, 2020 in the presence of **Prof. A. K. Suresh**, former Deputy Director (AIA), **Prof. S. Sudarshan**, Deputy Director (AIA), **Prof. B.V.S. Viswanadham**, Dean (IPS), **Prof. T. Kundu**, Dean (SA) and Convener of the Gaushala Working Committee.

The shelter is a unique initiative started with the support of Cattle Welfare Group (CWG), a voluntary group of faculty, staff and students of IIT Bombay, which has been working for the welfare of the cattle on the campus since 2011. It is built to provide shelter to the cattle, which once roamed freely in the hillside & hostel side areas of the campus. This shelter will also help avert human-animal conflicts in the campus. The day-to-day activities of the shelter are being managed with the help of a NGO.

At the shelter, following arrangements have been made for the cattle: fresh drinking water, shelter, full-time caretakers, medical attention and food supplements. The cattle are left free during the day

for grazing under the supervision of the caretakers and brought back to the shelter in the evenings. At present there are around 100 cattle at this shelter.

The activities of the shelter are being performed under the guidance of Gaushala Working Committee and the Cattle Welfare Group. A similar structure is being planned at the lakeside area (behind Devi Temple) for sheltering the lakeside herd.

During the ceremony, the CWG donated an amount of rupees one lakh towards the cattle welfare activities at the campus. From the Cattle Welfare Group (CWG), IIT Bombay, the following members were present at the ceremony: Prof. Makarand Kulkarni, Prof. M.V. Rane, Prof. Ganesh Ramkrishnan, Prof. S.V. Kulkarni, Prof. G. Sivakumar & Mr. Sudhir Bhawe. From the NGO, Mr. Umesh Gaikwad and Mr. Mehta attended the ceremony.

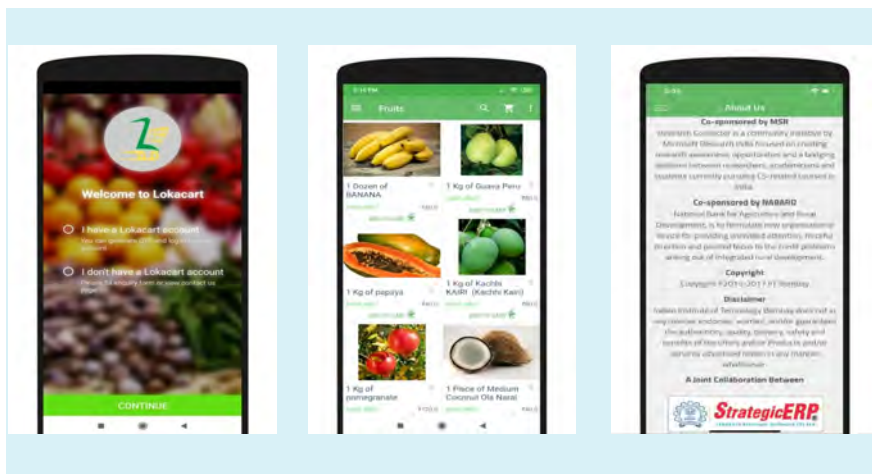
Donations towards the cattle welfare activities are being accepted by the IIT Bombay Dean (ACR) Office (contact no. 022 25767023). For making donations, please visit the following

[link: https://acr.iitb.ac.in/donation/](https://acr.iitb.ac.in/donation/)

*Kindly note that all donations made to support the cattle welfare activities at IIT Bombay are eligible for 100% tax exemption under Sec 80G of the IT Act.*



## IIT Bombay's Step Towards 'Vocal For Local'



For the '**Vocal for Local**' motto, IIT Bombay and StrategicERP launched an application named Lokacart, which revolutionizes the indigenous e-commerce platform enabling farmers for their e-commercialization.

The Lokacart app helps to bring self-dependence and self-reliance to all those farmers, shopkeepers who are struggling in today's economy to compete with big brands and trying to sustain themselves. It also supports consumers who are looking to

connect with stores, vendor, farmer, self-help groups and join the momentum of 'Vocal for Local'. The app works as a bridge between consumers and local suppliers without a middle man. Also, unlike existing e-commerce giants, Lokacart provides the Admin app for sellers to list their own products.

The app has been developed jointly by **Prof. Ganesh Ramakrishnan** (Department of CSE, IIT Bombay) and **Mr. Ashvin Gami** (IIT Bombay alumni and MD at StrategicERP) with guidance from **Prof. Narendra Shah** (CTARA, IIT Bombay).

The technology has been transferred by IIT Bombay to StrategicERP under an exclusive license agreement. StrategicERP will making the product available in the market.

Lokacart application is available in three features on android - Lokacart for buyers, Lokacart Admin for sellers, and Lokacart plus for bulk buyers. This platform automates the process of receiving orders, bill generation, and delivery processing through mobile.

## Documentary On Proteogenomics For Cancer Research

A documentary on Proteogenomics in collaboration with scientists from National Cancer Institute and other leading institutes, is made by the team of **Prof. Sanjeeva Srivastava**, Department of Biosciences and Bioengineering

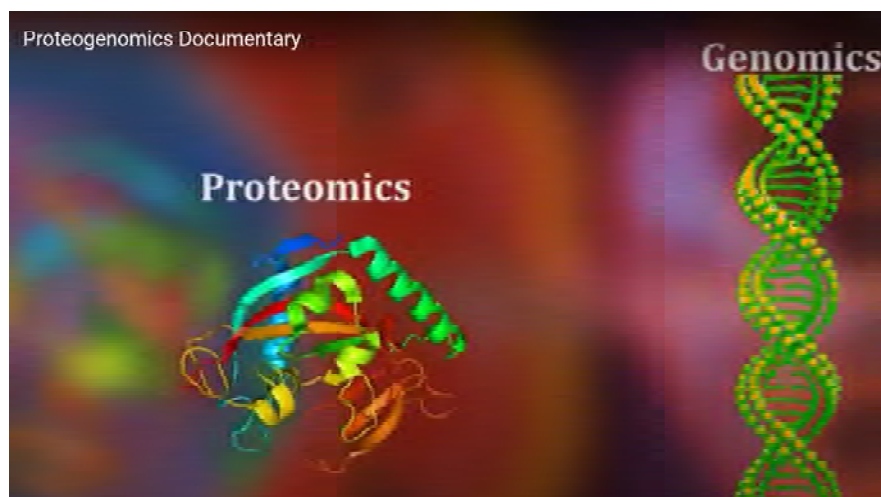
Advancement in high-throughput next-generation sequencing along with mass-spectrometry-based proteomics offers a bridge between mutational landscapes to variant proteins. An integrated proteogenomic approach, including analysis of post-translational modifications holds

the promise of unravelling the links between altered mutational landscape and the proteome in a cancer and generate testable hypotheses about cancer progression and evolution.

This documentary displays few interesting concepts of proteogenomics and features some of the leading scientists working in the area of proteogenomics.

International Cancer Proteogenome Consortium (ICPC) was launched on September 22.

Link of the research - <https://www.youtube.com/watch?v=79cecMk5p2g&feature=youtu.be>





## e-Yantra Innovation Challenge (eYIC 2020-21)

Despite COVID-19 situation, this year, the e-Yantra's Innovation Challenge received over 3308 registrations with participation from 581 colleges (234 having e-Yantra Labs). For the past six years, e-Yantra's Innovation Challenge (formerly known as e-Yantra Ideas Competition) has grown from 431 registrations in 2015 to 5813 registrations in 2019-20.

The competition aims to train participants in Innovation & Entrepreneurship. Till 2019-20, the competition was exclusively available for e-Yantra labs faculties and students, but this year, the

organizers have opened the competition to all colleges and universities.

This year's innovation challenge theme is Disaster Management (DM) domain and comprises a 3-stage process. Shortlisted teams are mentored to build the proposed system which are exhibited in regional finals across the country. Selected teams from the regionals are chosen to participate in a start-up Sprint where they're trained in turning their ideas into a start-up.

## 10412 Students Register For E-Yantra Robotic Competition

The registration for six months long e-Yantra's National Robotics Competition of the year 2020-21 began on August 28 and ended on September 2020. This year, around 10412 students (2603 teams) from different BIMSTEC countries (Bangladesh, Nepal, Bhutan, Myanmar, Sri Lanka, Thailand), ASEAN (+Indonesia, Malaysia, Singapore, Laos, Cambodia, Vietnam, Brunei) and Africa (Namibia & S. Africa) have registered themselves in the competition.

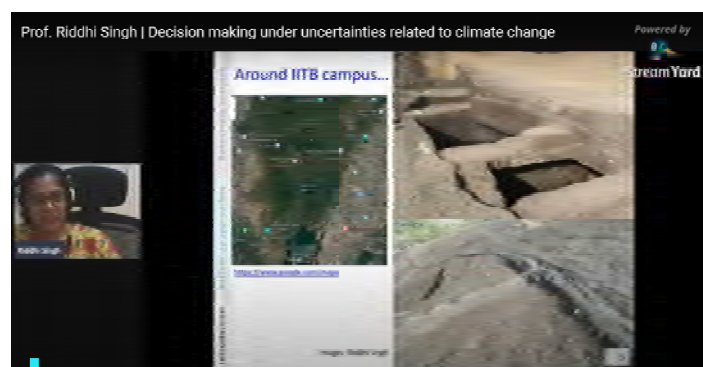
This year's competition focuses on creating the next generation of multidisciplinary engineers with a practical outlook to help solve real problems in society. This is a unique annual competition for students in Engineering/ Science/ Polytechnic colleges. The e-Yantra Robotics Competition is a MOOC (Massively Open Online Course) robotics competition.

e-Yantra models real-world problems in its themes. This year's theme is the Fourth Industrial Revolution (Industry 4.0) that automates manufacturing processes. In previous years, young engineers were served themes from various domains such as: agriculture, urban services, warehouse automation, space exploration, jungle safari, disaster management to name a few.

The registrations for the competition have grown from 4500 registrations in 2012 to some 34,500 registrations in 2019. This year, the competition is open to registrations from the BIMSTEC and ASEAN countries and also Namibia and South Africa in the African Union.

The robotic competition teaches hardcore engineering skills to the participants.

## E-School On Climate Studies & Policy



Screengrab of the YouTube video on climate change lecture

A 12-day E-School on Climate Studies & Policy was organized from August 17-28, 2020. The IDP in Climate Studies is partially sponsored by the Department of Science and Technology under the National Mission on Strategic Knowledge on Climate Change.

As part of the funding for our Centre for Excellence in Climate Studies under this National Mission, an annual Summer School on Climate Science and Policy for around 25-30 UG and PG students around the country was conducted in order to encourage them to shift towards higher education and careers in climate studies.

The E-School proved to be a successful outreach strategy and our centre garnered huge attention as the E-School was kept open for participation to academia and industry alike. The Director of the Maharashtra State Knowledge Management Centre on Climate Change **Mr. Narendre Toke** was invited to give the inaugural address.

More than 1300 registration from across the globe from students, industry professionals and NGO and govt. professionals were received. The online video lectures have over 5000 views till date.

Faculty, staff and students responded well to the challenges of the pandemic in organizing this E-School.

## Awards and Distinctions

**Prof. Arun Iyer**, Department of Humanities and Social Sciences, has been appointed as Associate Editor of the Journal of the British Society for Phenomenology published by Taylor and Francis.

**Prof. Riddhi Singh**, Department of Civil Engineering, has been invited to serve as an Associate Editor of the Journal of Earth System Science, published by the Indian Academy of Sciences for three years from July 2020.

**Prof. Milind Atrey**, Department of Mechanical Engineering, has been elected as the President of "Indian Cryogenics Council (ICC)" for three years.

**Prof. Rajarshi Chakrabarti**, Department of Chemistry, has been invited to serve as an Associate Editor of the International Journal of Chemical Kinetics for three years, starting from June 2020.

**Prof. V. Jothiprakash**, Department of Civil Engineering, has been invited to join as an Associate Editor of Journal of Hydrologic Engineering, published by American Society of Civil Engineering (ASCE).

**Prof. Ruchi Anand**, Department of Chemistry, has been selected to receive Chemical Research Society of India (CRSI) bronze medal.

**Prof. Ruchi Anand**, Department of Chemistry, has been invited to deliver A.V. Rama Rao Foundation lecture on Chemistry by President, JNCASR, Bengaluru.

**Prof. Nina Sabnani**, IDC School of Design, has been elected to the Board of International Association of

Women in Radio and TV (IAWRT).

**Prof. Karuna Jain**, Shailesh J. Mehta School of Management, has been offered to continue as the President of the POMS India chapter for two more years (2020 and 2021) to provide continuity and stability in the Chapter's operations.

**Prof. Arnab Dutta**, Department of Chemistry, has been selected as Associate of the Indian Academy of Science (IASc).

**Prof. Suryanarayana Doolla**, Department of Energy Sciences, has been appointed as Editor of the IEEE Journal of Emerging and Selected Topics in Power Electronics (JESTPE) starting from September 1, 2020.

**Prof. Preeti Rao**, Department of Electrical Engineering, has been selected to receive the "Abdul Kalam Technology Innovation National Fellowship" for a period of three years starting from October 1, 2020.

**Prof. Soumyo Mukherji**, Department of Biosciences and Bioengineering, has been elected as a Fellow of the Indian National Academy of Engineering (FNAE).

**Prof. Maryam Shojaei Baghini** and **Prof. Anil Kulkarni**, Department of Electrical Engineering, have been elected as Fellow of INAE (FNAE) from November 2020.

**Prof. Swatantra Pratap Singh**, Environmental Science and Engineering Department, has been selected for INAE Young Engineer award 2020.

**Prof. Subimal Ghosh**, Department of Civil Engineering, has been awarded the Cray's Dr. A. P. J. Abdul Kalam High-Performance Computing Award 2020 in the area of R&D in HPC applications.

**Prof. Amol A Gokhale**, Department of Mechanical Engineering, has been appointed as the President of the Indian Institute of Metals for one year with effect from August 1, 2020 and **Prof. Amber Shrivastava**, Department of Mechanical Engineering, has been appointed as the Joint Hon. Secretary of the Indian Institute of Metals for one year with effect from August 1, 2020.

**Prof. Vivek Kant**, IDC School of Design, has been invited to be on the editorial board of the journal "Human-Intelligent Systems Integration" published by Springer:

**Prof. Ravi Gudi**, Department of Chemical Engineering, has been elected as a council member of the International Federation of Automatic Control (IFAC) for the triennium 2020-2023.

**Prof. Rajakishore Nath**, Department of Humanities and Social Sciences, has been invited to join as Associate Editor of AI and Society: Journal of Knowledge, Culture and Communication.

**Prof. Avik Bhattacharya**, Centre of Studies in Resources Engineering (CSRE) has been invited to join the Editorial Board of the Journal of Remote Sensing.

**Prof. Arpita Mondal**, Department of Civil Engineering, has been invited to join as an Associate Editor in the International Journal Regional Environmental Change (REEC), Springer.

**Prof. Suryendu Dutta**, Department of Earth Sciences, has been awarded Shanti Swarup Bhatnagar Prize for Science and Technology 2020 in 'Earth, Atmosphere and Planetary Sciences' category.

**Prof. U. K. Anandavardhanan**, Department of Mathematics, has been awarded Shanti Swarup Bhatnagar Prize for Science and Technology 2020 in 'Mathematical Sciences' category.

Institute Colloquium /  
Lectures

Following Institute lectures were held as a part of commemoration of 150th Birth Anniversary of Mahatma Gandhi :



**Prof. Nishikant Kolge**, Associate Professor, Centre for the Study of Developing Societies (CSDS), New Delhi delivered an Institute lecture titled "*Was Gandhi a Champion of the Caste System?*" on September 30, 2020



**Prof. Chetan Singh Solanki**, Department of Energy Science & Engineering, IIT Bombay delivered an Institute lecture titled "*A New Look at Energy & Sustainability through Gandhian Ideals*" on September 30, 2020



**Lord Prof. Bhikhu Parekh**, Emeritus Professor of Political Philosophy at the Universities of Westminster and Hull delivered an Institute lecture titled "*Why is Gandhi the Father of the Nation?*" on October 1, 2020



**Prof. Bindu Puri**, Jawaharlal Nehru University (JNU), New Delhi delivered an Institute lecture titled "*Moving Beyond Liberal Tolerance: Gandhi on Religion and Religions*" on October 2, 2020





**Mr. Tushar Gandhi**, great-grandson of Mahatma Gandhi, delivered an Institute lecture titled *"Relevance of the Gandhian Values in contemporary times"* on September 29, 2020

| CEP courses scheduled during November and December 2020 |           |   |                           |                               |
|---|-----------|---|---------------------------|-------------------------------|
| Duration  | Days      | Course Title  | Course Coordinator        | Department                    |
| <b>Open Programmes : (November 2020)</b>                |           |   |                           |                               |
| 2-11-2020   | 5days     | Predictive Analytics and Predictive Maintenance – With Engineering Applications   | Prof. Paluri Nataraj      | Systems & Control Engineering |
| 23-11-2020  | 5 days    | Introduction To Machine Learning and Deep Learning – With Applications To Engineering Systems                               | Prof. Paluri Nataraj      | Systems & Control Engineering |
| 28-11-2020  | 10 Months | XVIII Batch of Executive Program in Management With Specialization in Marketing and Hrm as Postgraduate Certificate Program | Prof. Shivganesh Bhargava | School of Management          |
| <b>Open Programmes : (December 2020)</b>                |           |   |                           |                               |
| 5-12-2020   | 2 days    | Essentials of Business Analytics  | Prof. Usha Ananthakumar   | School of Management          |
| 7-12-2020   | 5 days    | Biology For Engineers   | Prof. Ambarish Kunwar     | Bioscience and BioEngineering |
| 12-12-2020  | 1 day     | INVENT: Innovation & Entrepreneurship   | Prof. Bhallamudi Ravi     | Mechanical Engineering        |
| 14-12-2020  | 5 days    | Laboratory and Ergonomic Safety For Engineers   | Prof. Ambarish Kunwar     | Bioscience and BioEngineering |

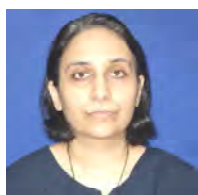
## Appointments

### Prof. Jason Ryan Picardo,



Department of Chemical Engineering has been appointed as Assistant Professor w.e.f. June 30, 2020.

### Dr. Snehal Awate, Shailesh J.



Mehta School of Management has been appointed as Assistant Professor w.e.f. September 1, 2020

### Dr. Sreelaja Nair, Department of



Biosciences and Bioengineering has been appointed as Associate Professor w.e.f. September 28, 2020

## Retirements on July 31, 2020

### Prof. Kannan N. Iyer, Department of



Mechanical Engineering, retired after 34 years of service

### Prof. Amol A. Gokhale,



Department of Mechanical Engineering, retired after 5 years of service

### Mr. Madhaba R. Panigrahy,



Sr. Attendant, Electrical Maintenance Division, retired after 38 years of service

### Mr. Vijaykumar P. Jadiyar,



Sr. Multi Skilled Assistant, Chemical Engineering, retired after 39 years of service

### Mr. Vinod B. Sharma, Sr. Helper,



Central Library, retired after 39 years of service

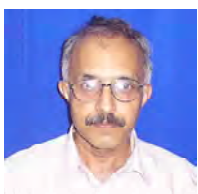
## Retirements on August 31, 2020

### Prof. Pradeep Mathur,



Department of Chemistry, retired after 36 years of service

### Prof. Paik Jayadeva Bhat,



Department of Biosciences and Bioengineering, retired after 27 years of service

### Ms. Kalpana D. Gaonkar, Sr.



Administrative Assistant, Department of Humanities and Social Sciences, retired after 32 years of service

### Mr. Shamrao D. Wakode, Sr.



Administrative Assistant, Estate Office, retired after 30 years of service

## Retirements on September 30, 2020

### Prof. Rekha P. Kulkarni,



Department of Mathematics, retired after 34 years of service

### Ms. Pradnya G. Patade,



Sr. Administrative Assistant, Accounts Section, retired after 36 years of service

## NOTIFICATION

**Prof. S. Sudarshan**, Department of Computer Science & Engineering, has been appointed as the Deputy Director (Academic and Infrastructural Affairs) w.e.f. July 16, 2020.

**Prof. S.V. Kulkarni**, Department of Electrical Engineering, has been appointed as the Dean (Administrative Affairs) w.e.f. August 03, 2020.

**Prof. Perumal Vedagiri**, Department of Civil Engineering, has been appointed as the Associate Dean (Infrastructure Planning & Support-I) w.e.f. August 05, 2020.



## In the Wilderness



**Photo Credit :**  
Mrs. Mukta Atrey

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BOOK POST

