Minister of Human Resource Development Shri. Ramesh Pokhriyal 'Nishank' Addresses 57th Convocation Of IIT Bombay

(L-R) Mr. Nandan Nilekani, Co-founder and Chairman, Infosys Technologies Limited, Bengaluru and former Chairman, UIDAI, Government of India, Minister of Human Resource Development Shri. Ramesh Pokhriyal 'Nishank', Professor Subhasis Chaudhuri, Director, IIT Bombay on the dais and the Senate members (Centre) during the 57th Convocation

The Indian Institute of Technology Bombay held its 57th Convocation at the Convocation Hall of IIT Bombay on August 10, 2019. **Shri. Ramesh Pokhriyal 'Nishank',** Hon'ble Minister of Human Resource Development, was the Chief Guest and delivered the Convocation Address.

In his address, Shri. Pokhriyal told the students that education is a weapon using which they can transform their life, family and society. He said that convocation is a momentous occasion when students embark on the journey of taking the fruits of education to the outside world. The Minister said that culture should be joined with education, so that the individual has an enduring and firm foundation for growth.

Shri. Nishank encouraged the students to dream and to commit every moment of their life for the realization of their dreams. Saying that little things can make a big difference, he asked the students to plant a sapling on their birthday every year and to conserve water.

The graduating students this year include 301* PhDs, 27* Dual Degree (MTech/ MPhil+PhD) and 35* Dual Degrees (MSc+PhD). Out of these, 38 research scholars were selected for the award of 'Excellence in PhD Research' for the year 2017-19. In addition, 23 joint PhD degrees, in association with Monash University, were also conferred by the Vice-Chancellor and President of Monash University Prof. Margaret Gardner, present on the occasion. (*including PhD degrees awarded during interim convocation).

This year, two joint PhDs of IITB-National University of Singapore, and one Cotutelle PhD (joint supervision) agreement with Université du Québec à Trois-Rivières in Canada were also awarded.

Besides these, 12 MS (by Research), 6 Dual Degrees (MSc+MTech), 576 MTech, 56 MDes, 27 MPhil, 110 MMgt, 226 two-year MSc, 10 five-year integrated MSc, 368 Dual Degrees (BTech+MTech), 4 Interdisciplinary

Dual Degrees (BTech/ BS + MTech/ MSc), 6 Dual Degrees (BS+MSc), 683 BTech Degrees, 21 BS, 15 BDes and 14 PGDIIT degrees were awarded at the Convocation.

Presenting the Institute's Report for the year 2018-19, Prof. Subhasis Chaudhuri, Director of IIT Bombay informed that IIT Bombay continues to be a much sought-after destination for UG and PG studies. *"Among 23 IITs in the country, 47 out of top 50 rankers and 63 of top 100 rankers in JEE 2019 have joined IIT Bombay,"* he said. Wishing the graduating students the best in life, Prof. Chaudhuri said, *"The education you have received at IIT Bombay is comparable to the best in the world and you are now ready to take greater challenges and overcome them. Continue to develop your knowledge and skills and always keep in mind how you can help our society and the nation through your work. I wish you all the success in your future endeavors."*

Mr. Srivatsan Sridhar, a student of Department of Electrical Engineering, receiving the The 'President of India Medal' from the Chief Guest during the 57th Convocation

Mr. Nandan Nilekani, Co-founder and Chairman, Infosys Technologies Limited, Bengaluru and former Chairman, UIDAI, Government of India receiving the Doctor of Science (Honoris Causa) degree from the Chief Guest Shri. Ramesh Pokhriyal 'Nishank' with Prof. Subhasis Chaudhuri, Director, IIT Bombay

This year, 4 students were presented the Gold medals for their exemplary performance. The **'President of India Medal'** was bestowed on **Mr. Srivatsan Sridhar,** a student from the Department of Electrical Engineering. The **'Institute Gold Medal (2017-18)'** was awarded to **Mr. Shashank Vijayakumar Obla,** a student from the Department of Electrical Engineering, the **'Institute Gold Medal (2018-19)'** was awarded to **Ms. Reebhu Bhattacharyya,** a student from the Department of Mathematics and the **'Dr. Shankar Dayal Sharma Gold Medal'** was conferred on **Ms. Dhruti Shah,** a student from the Department of Electrical Engineering. Additionally, many more students were presented with gold medals sponsored by donors.

The degree of **Doctor of Science (Honoris Causa)** was bestowed on **Shri. Nandan Nilekani,** Co-founder and Chairman, Infosys Technologies Limited, Bengaluru and former Chairman, UIDAI, Government of India for his outstanding contribution as an industrialist and an ardent supporter to the social development with the use of technology.

Addressing the audience, **Shri. Nandan Nilekani** said that the five years he spent at IIT Bombay has been a defining experience for him. Speaking of his experience in building Infosys and later on the Aadhaar project and others, he said that it taught him that large scale development problems can be addressed using technology.

On the occasion, the Chief Guest for the function, Honourable Minister of Human Resource Development **Shri. Ramesh Pokhriyal 'Nishank'** inaugurated Hostel No.18 and planted a tree in the IIT Bombay campus. Earlier in the day, Shri. Pokhriyal interacted with all the IITs through NKN on **"Navbharat Ka Nirman, IITs Ke Saath".**

Professor Margaret Gardner, President and Vice-Chancellor, Monash University, Australia addressing the audience

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, besides the graduating students and their proud parents.

MEDALS AND PRIZES

PRESIDENT OF INDIA MEDAL
(for the year 2018-19)
Srivatsan Sridhar
Electrical Engg. (B.Tech)

Institute Gold Medal
(for the year 2017-18)
Shashank Vijayakumar Obla
Electrical Engg. (Dual Degree)

(for the year 2018-19)
Reebhu Bhattacharyya
Mathematics (5 year Integrated M.Sc)

INSTITUTE SILVER MEDAL
(for the year 2018-19)
BACHELOR OF TECHNOLOGY (B.Tech)

Aerospace Engineering
Karthik Mahesh

Chemical Engineering
K S Reshma

Civil Engineering
Ayush Pandey

Computer Sc.& Engineering
Bharat Khandelwal

Electrical Engineering
Kulkarni Pranav Dhananjay

Mechanical Engineering
Samir Wadhwa

Engineering Physics
Kulkarni Anish Kiran

MASTER OF SCIENCE (M.Sc.)

Applied Geology
Debayan Sengupta

Applied Geophysics
Debraj Midya

Chemistry
Puneet Goel

Mathematics
Garima Thareja
Deepanshu Verma (for the year 2016-17)

Physics
Shruti Gupta

Biotechnology
Moulisubhro Datta

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

Aerospace Engineering
Tejaswi K C

Electrical Engineering
Shashank Vijayakumar Obla

Mechanical Engineering
Chinmay Maheshwari

Metallurgical Engineering and Materials Science
Mapuskar Pratik Sushant

Energy Science Engineering
Rohan B Vora

MASTER OF TECHNOLOGY (M.Tech.)

Aerospace Engineering
Vishnu Pratap Patel

Chemical Engineering
Irfan Arif

Civil Engineering
Poojari Dheeraj Rama

Computer Science & Engineering
Vyas Parjanya Hiteshbhai

Electrical Engineering
Rishab Anand
Susmi T S

Mechanical Engineering
Vegesna Satya Venkata Rama Raju

Metallurgical Engineering and Materials Science
Darothi Bairagi

Materials, Manufacturing and Modelling
Panchal Neelkumar Hasmukh

Biomedical Engineering
Aishani Patnaik

Environmental Science & Engineering
Mridula Singh

Geoinformatics and Natural Resources
Shukla Megh Hiren Asavari

Earth Sciences
Anjali Upadhyay

Energy Systems and Engineering
Priya Sogani

Systems & Control Engineering
Vaze Aniket Sunil

Technology & Development
Anwesha Lahiri

Industrial Engineering and Operations Research
Inderjeet Singh

MASTER OF DESIGN

Industrial Design
Minal Agarwal

MASTER OF PHILOSOPHY (M.Phil.)

Planning & Development
Suchisree Chatterjee

MASTER OF MANAGEMENT (M.Mgt.)
Gauri Sharma

OTHER MEDALS

Miss Jayati Deshmukh Memorial Gold Medal
Bharat Khandelwal
Computer Sc. & Engg. (B.Tech)

Dr. Shankar Dayal Sharma Gold Medal
Dhruti Shah
Electrical Engineering (Dual Degree)

Vidyasagar Nehra Gold Medal
Sudip Kumar
Civil Engg. (B.Tech)

Prof Madhav Kulkarni Lt. Col.(R) Gold Medal
Sudip Kumar
Civil Engg. (B.Tech)

Rajit Bhagwati Memorial Gold Medal
Mridula Singh
CESE (M.Tech)

Hindi Vidya Bhavan Gold Medal
Gauri Sharma
M.Mgt

Sharad Maloo Memorial Gold Medal
Chadha Karan Naresh
Electrical Engineering (Dual Degree)

PRIZES

Prof K C Mukherji Award
Srivatsan Sridhar

Tulsiram Devidayal, P.M. Natu, Damle Trust Prize
Samir Wadhwa
Vegesna Satya Venkata Rama Raju

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

Chandrashekhar Prize
Triesha Singh

Shri R Vembu Iyer Memorial Prize
Debayan Sengupta

Dilip R Limaye Academic Excellence Award
Srivatsan Sridhar

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

Dr. Gargi Vishnoi Memorial Prize
Shalini Srivastava

Prof. Hiralal Memorial Award
Susnata Bhowmick
Puneet Goel

Shri Ashok Chaturvedi Memorial Prize (M.Tech)
Vegesna Satya Venkata Rama Raju

Prabhulal Bhatnagar Memorial Prize
Triveni Prasad Shukla

Mrs. Rama Mathur Memorial Prize
Garima Thareja

Ajit Shelat Award
Susmi T S
Rishab Anand

Bhavesh Gandhi Memorial Prize
Chadha Karan Naresh
Krishna Rijal

Akshay Dhoke Memorial Award
Shashank Vijayakumar Obla

Mrs. Charusheela Dange Award
Arkya Chatterjee

Prof. K.C. Khilar PhD Award
Sudip Kumar Das
Tamaghna Chakraborti

Prof. K.C. Khilar Prize (M.Tech)
Irfan Arif

R. G. Manudhane PhD Excellence Award
Sandip Mandal
Shamik Misra

**R.G. Manudhane M.Tech student
Excellence Award Best M.Tech Thesis**
Rohan Ohri

Indira Manudhane Student Excellence Award
Triesha Singh

Mr. Pranab Ranjan Sen Award
Arjun Prashant Agrawal
Kewal S Bhat

Shubhada Mulekar Joshi Award
Aishani Patnaik

Prof. S N Sinha Memorial Award
Arjun Prashant Agrawal

Dr. P.V. Sukhatme Memorial Award
Garima Thareja
Rati Ludhani
Prasanjit Dubey
Shravana Kumar Yadav

S C Mehrotra Prize
Sudip Kumar

K Seshia Research Excellence Award
Arkya Chatterjee
Chirame Sanket Sanjivan

**Ramesh Chandra Sinha Academic Excellence
Award**
Simi Karan

Manorama Sinha Academic Excellence Award
Asha Dhaka

Malini Vyavahare (Indore) Memorial Award
Dhua Shyamal Kanailal Dipti

Digamber & Nilima Joshi Award
Ghag Nandini Dilip Veena

Mrs. Charusheela Dange Award
Arkya Chatterjee

Institute Academic Prizes for the year 2018-19
II year B.Tech / Dual Degree (2018 batch)

Sr. No.	Roll No.	Name	Prize	Value of prize	Department
1	180050035	Guntakanti Sai Koushik	I	Rs.3000/-	Computer Sc. & Engg.
2	180050045	Karan Agarwalla	I	Rs.3000/-	Computer Sc. & Engg.
3	180050051	K V R Hemant Kumar Chodipilli	I	Rs.3000/-	Computer Sc. & Engg.
4	180050061	Mohammad Ali Rehan	I	Rs.3000/-	Computer Sc. & Engg.
5	180050078	Pratyush Agarwal	I	Rs.3000/-	Computer Sc. & Engg.
6	180050093	Saurav Garg	I	Rs.3000/-	Computer Sc. & Engg.
7	180050100	Shreya Pathak	I	Rs.3000/-	Computer Sc. & Engg.
8	180070035	Mihir Jayesh Vahanwala	I	Rs.3000/-	Electrical Engg.
9	180050121	Yash Gupta	II	Rs.2000/-	Computer Sc. & Engg.
10	180050092	Saumya Goyal	II	Rs.2000/-	Computer Sc. & Engg.
11	180260027	Pushkar Mohile	Additional	Rs.2000/-	Engg. Physics
12	180050072	Pawan Goyal	Additional	Rs.2000/-	Computer Sc. & Engg.
13	180070050	Samad Rizwan Koita	Additional	Rs.2000/-	Electrical Engg.
14	180050015	Atulya Kumar Verma	Additional	Rs.2000/-	Computer Sc. & Engg.
15	180070046	Rohan Parag Shah	Additional	Rs.2000/-	Electrical Engg.
16	180050086	Rishi Agarwal	Additional	Rs.2000/-	Computer Sc. & Engg.
17	180020101	Shashank Tomar	Additional	Rs.2000/-	Chemical Engg.
18	180110027	Devansh Chandak	Additional	Rs.2000/-	Metallurgical Engg. & Materials Sc.
19	180050075	Pranav Goyal	Additional	Rs.2000/-	Computer Sc. & Engg.
20	180070060	Sumanyu Ghoshal	Additional	Rs.2000/-	Electrical Engg.
21	18D100014	Parth Vipul Sangani	Additional	Rs.2000/-	Mechanical Engg.
22	180050059	Mekala Anmol Reddy	Additional	Rs.2000/-	Computer Sc. & Engg.
23	180050063	Mulinti Shaik Wajid	Additional	Rs.2000/-	Computer Sc. & Engg.
24	180050098	Shivam Goel	Additional	Rs.2000/-	Computer Sc. & Engg.
25	180070058	Shubham Kar	Additional	Rs.2000/-	Electrical Engg.

III year B.Tech. branchwise (2017 Batch)

Sr. No.	Roll No.	Name	Prize	Value of prize	Department
1	170010013	Karthik Anantharaman	I	Rs.3000/-	Aerospace Engineering
2	170010035	Harshvardhan Baldwa	II	Rs.2000/-	Aerospace Engineering
3	170020008	Geetika Jain	I	Rs.3000/-	Chemical Engineering
4	170020047	Sahil Raghunandan Dixit	II	Rs.2000/-	Chemical Engineering
5	170040024	Komal Kundlik Gaware	I	Rs.3000/-	Civil Engineering
6	170040105	Shashanka Katta	II	Rs.2000/-	Civil Engineering
7	170050041	Kushagra Juneja	I	Rs. 3000/-	Computer Sc. & Engg.
8	170260032	Vabilisetti Mohan Abhyas	II	Rs.2000/-	Computer Sc. & Engg.
9	170070004	Syomantak Chaudhuri	I	Rs.3000/-	Electrical Engineering
10	17D070010	Shubham Anand Jain	II	Rs.2000/-	Electrical Engineering
11	170100035	Tezan Sahu	I	Rs.3000/-	Mechanical Engineering
12	170100037	Sravya Devulapalli	II	Rs.2000/-	Mechanical Engineering
13	170110048	Nikhil Choudhary	I	Rs.3000/-	Met.Engg. & Mat.Sci
14	170110082	Sangabattula Lokesh	II	Rs.2000/-	Met.Engg. & Mat.Sci

| 15 | 170260027 | Vijay V Nenmeli | I | Rs.3000/- | Engineering Physics |
| 16 | 170260025 | Guru Kalyan Jayasingh | II | Rs.2000/- | Engineering Physics |

III year Dual Degree branchwise (2017 Batch)

Sr. No.	Roll No.	Name	Prize	Value of prize	Department
1	170040118	Aishwarya Agarwal	I	Rs.3000/-	Electrical Engineering
2	17D070056	Tirupati Saketh Chandra	II	Rs.2000/-	Electrical Engineering
3	170020019	Dhananjay S. Tiwari	I	Rs.3000/-	Mechanical Engineering
4	170020025	R Nambilakshmi	II	Rs.2000/-	Mechanical Engineering
5	17D100022	Prathik Reddy Gunreddy	II	Rs.2000/-	Mechanical Engineering
6	17D110023	Avish Naredi	I	Rs.3000/-	Met. Engg. & Mat.Sc
7	17D170005	Suraj Sudevan	I	Rs.3000/-	Energy Sc. & Engg
8	17D170010	Kasodekar Anant Ajay	II	Rs.2000/-	Energy Sc. & Engg

III year Four year BS branchwise (2017 Batch)

Sr. No.	Roll No.	Name	Prize	Value of prize	Department
1	17B030024	Harshvardhan Nigam	I	Rs.3000/-	Chemistry
2	17B030018	Rishi Tibrewal	II	Rs.2000/-	Chemistry
3	17B080011	Rohan Kumar Garg	I	Rs.3000/-	H & SS
4	17B080018	Vibhor Jain	II	Rs.2000/-	H & SS

IV year B.Tech. branchwise (2016 Batch)

Sr. No.	Roll No.	Name	Prize	Value of prize	Department
1	160010018	Kalpande Shubham	I	Rs.3000/-	Aerospace Engineering
2	160010009	Biswas Pujan Aloke	II	Rs.2000/-	Aerospace Engineering
3	160020109	Binayak Sahu	I	Rs.3000/-	Chemical Engineering
4	160020098	Manan Agarwal	II	Rs.2000/-	Chemical Engineering
5	160040094	P R Sarbajit	I	Rs.3000/-	Civil Engineering
6	160040097	Rohan Agarwal	II	Rs.2000/-	Civil Engineering
7	160050005	Shah Sahil Hiral	I	Rs.3000/-	Comp.Sc. & Engineering
8	160050028	Aman Bansal	II	Rs.2000/-	Comp.Sc. & Engineering
9	160050046	Ankit	II	Rs.2000/-	Comp.Sc. & Engineering
10	16D170005	Bhishma Praful Dedhia	I	Rs.3000/-	Electrical Engineering
11	160070059	Adil Gupta	II	Rs.2000/-	Electrical Engineering
12	160260018	Kartik Patekar	I	Rs.3000/-	Engineering Physics
13	160260005	Janyani Keshav Murli	II	Rs.2000/-	Engineering Physics
14	160100040	T Akshay	I	Rs.3000/-	Mechanical Engineering
15	16D110005	Bohra Ankit Narendra	II	Rs.2000/-	Mechanical Engineering
16	160110012	Bal Pushan Prasanna	I	Rs.3000/-	Met. Engg. & Mat. Sci
17	160110072	Ashutosh Kumar	II	Rs.2000/-	Met. Engg. & Mat. Sci

IV year Dual Degree branchwise (2016 Batch)

Sr. No.	Roll No.	Name	Prize	Value of prize	Department
1	16D070042	Devanshu Singh Gaharwar	I	Rs.3000/-	Electrical Engineering
2	160110085	Archiki Prasad	II	Rs.2000/-	Electrical Engineering
3	16D170024	Sameesh Santosh Baheti	I	Rs.3000/-	Mechanical Engineering
4	16D100004	Konale Aditya G.	II	Rs.2000/-	Mechanical Engineering
5	16D260004	Manu Srivastava	I	Rs.3000/-	Engineering Physics
6	16D170007	Kumaresh Ramesh	I	Rs.3000/-	Energy Sc. & Engineering

| 6 | 16D170009 | Deshpande Varad Pramod | II | Rs.2000/- | Energy Sc. & Engineering |
| 7 | 16D110010 | Itale Anup Hanamant | I | Rs.3000/- | Met. Engg. & Mat. Sc. |

IV year Four year BS (2016 Batch)

Sr.No.	Roll No.	Name	Prize	Value of prize	Department
1	160100046	Valay Agarawal	I	Rs.3000/-	Chemistry

V year Dual Degree branchwise (2015 Batch)

Sr. No.	Roll No.	Name	Prize	Value of prize	Department
1	15D070022	Karan Taneja	I	Rs.3000/-	Electrical Engineering
2	150260025	Shashwat Shukla	II	Rs.2000/-	Electrical Engineering
3	15D170003	Kesha Tamakuwala	I	Rs.3000/-	Energy Sc. & Engineering
4	150040084	Prakhar Jain	I	Rs.3000/-	Mechanical Engineering
5	15D100004	Shah Nikunj Minesh	II	Rs.2000/-	Mechanical Engineering
6	150110001	Viren Chetan Patel	I	Rs.3000/-	Met. Engg. & Mat Sc.
7	15D260009	Mandar Milind Sohoni	I	Rs.3000/-	Engineering Physics

II Year M.Sc.(2 year) (2017 Batch)

Sr.No.	Roll No.	Name	Prize	Value of prize	Department
1	185030011	Subhabrata Dutta	I	Rs.3000/-	Chemistry
2	185030015	Neha Idnani	II	Rs.2000/-	Chemistry
3	185060019	Rohan Nandy	I	Rs.3000/-	Earth Sciences
4	185060005	Subhrajyoti Behera	II	Rs.2000/-	Earth Sciences
5	185120021	Shirke Swarnim Sunil	I	Rs.3000/-	Physics
6	185120040	Siddhi	II	Rs.2000/-	Physics
7	185300019	Priya Kumar	I	Rs.3000/-	Biosciences & Bioengineering
8	185300003	Barnava Banerjee	II	Rs.2000/-	Biosciences & Bioengineering
9	185280001	Arjun V	I	Rs.3000/-	Applied Statistics & Informatics
10	185280002	Shuvayan Banerjee	II	Rs.2000/-	Applied Statistics & Informatics
11	185090007	Javadekar Omkar Deepak	I	Rs.3000/-	Mathematics
12	185090012	Mohammed Saad Munaf Qadri	II	Rs.2000/-	Mathematics
13	185320003	Megha Chakraborty	I	Rs.3000/-	Applied Geophysics

2015 Batch B.Des students for the year 2017-18

Sr.No.	Roll No.	Name	Prize	Value of prize	Department
1	15U130001	Shanbhag Maulashree	I	Rs.3000/-	IDC School of Design
2	15U130010	Avyay R Kashyap	II	Rs.2000/-	IDC School of Design

2016 Batch B.Des students for the year 2017-18

Sr.No.	Roll No.	Name	Prize	Value of prize	Department
1	16U130006	Richa Agrawal	I	Rs.3000/-	IDC School of Design
2	16U130016	Nebin Biju	II	Rs.2000/-	IDC School of Design

2017 Batch B.Des students for the year 2017-18

Sr.No.	Roll No.	Name	Prize	Value of prize	Department
1	17U130002	Harshit Satija	I	Rs.3000/-	IDC School of Design
2	17U130008	Sargam Prakash	II	Rs.2000/-	IDC School of Design

Other Prizes

Name of the Prize	Roll No.	Name of the Awardee	Total Amount
Shri Rakesh Mathur Excellence Award Excellence Award	160050005	Shah Sahil Hiral	Rs. 1,00,000/- IV Yr. UG Student..
Shri T.K. Subramanian Prize For Academic Excellence	160100040	T Akshay	Rs.1000/- IV Yr. B.Tech., Mech.Engg.
Urvish Medh Memorial Prize (For Electrical Engg.)	190070027	Harsh Vinayak Borkar	Rs.2000/- I Yr. B.Tech., Electrical Engg.
	180070035	Mihir Jayesh Vahanwala	Rs.2000/- II Yr. B.Tech., Electrical Engg.
	17D070019	Siddharth Chandak	Rs.2000/- III Yr. B.Tech., Electrical Engg.
	16D170005	Bhishma Praful Dedhia	Rs.2000/- IV Yr. B.Tech., Electrical Engg.
Prof. M.N. Vartak Memorial Prize	185280001	Arjun V	Rs.6000/- II Yr. M.Sc., Applied Statistics & Informatics
Mrs. Rama Mathur Memorial Prize	185090007	Javadekar Omkar Deepak	Rs.2000/- II Yr. M.Sc., Mathematics
Aditya Choubey Memorial Prize	180070035	Mihir Jayesh Vahanwala	Rs.4000/- II Yr. B.Tech., Electrical Engg.
S C Mehrotra Prize	170040105	Shashanka Katta	Rs.10000/- Topper of II Yr B.Tech Civil
	160040097	Rohan Agarwal	Rs. 10000/- Topper of III Yr B.Tech Civil
Prof. A.K. Mallik Award	160110012	Bal Pushan Prasanna	Rs.5000/- IV Yr. B.Tech / Dual Degree Met. Engg. & Mat. Sc.
Shri Ram Kumar Gupta Merit Award	160020048	Ashi Gupta	Rs. 10000/- IV Yr. B.Tech Chemical Engg. (Topper)
Shrimati Prakashvati Devi Gupta Merit Award	160020098	Manan Agarwal	Rs. 7500/- IV Yr. B.Tech Chemical Engg. (2nd Highest)
Praj Industries Academic Excellence Award	16D170007	Kumaresh Ramesh	Rs. 30000/- Topper in 3rd yr (VI semester) UG Programme in Energy Sc. & Engg.
	183170003	Savaliya Nikitkumar Mansukhbhai	Rs. 30000/- Topper in 1st yr. (II semester) Masters programme in Energy Sc. & Engg.
Late Prof. R. Subrahmonia Ayyar Academic Excellence Award	160040085	Sigireddi Yamuna Devi	Rs. 15000/- (Topper female student in B.Tech 3rd year Civil Engg.)
	183040025	Sanjukta Das	Rs. 15000/- (Topper female student in M.Tech 1st year Civil Engg.)

Institute Celebrates Teachers' Day With Fervour

(L-R) Prof. Prita Pant, Associate Dean (AP), Chief Guest Prof. Varun Sahni, Vice-Chancellor, Goa University, Prof. Subhasis Chaudhuri, Director, IIT Bombay, Prof. Milind Atrey, Dean (R&D) on the dais

Commemorating the birth anniversary of noted philosopher, educationist and statesman Dr. Sarvepalli Radhakrishnan, IIT Bombay celebrated 61st Teachers' Day on September 9, 2019.

The Chief Guest **Prof. Varun Sahni**, Vice-Chancellor, Goa University presented awards for **'Prof. S. P. Sukhatme Award for Excellence in Teaching'** and **Dr. P. K. Patwardhan Technology Development Award'** to select faculty members.

Congratulating the awardees, **Prof. Subhasis Chaudhuri,** Director of IIT Bombay informed that IIT Bombay continues to be a much sought-after destination for Under Graduate and Post Graduate studies. *"Among 23 IITs in the country, 47 out of top 50 rankers and 66 of top 100 rankers in JEE 2019 have joined IIT Bombay", he said.*

The function began with an Indian classical dance performance arranged by the students of IIT Bombay to convey their gratitude towards their teachers. Students introduced their professors and presented their perceptions of what made them notable teachers.

Recipients of Prof. S. P. Sukhatme Award for Excellence in Teaching 2019 :

Prof. M. B. Patil, Department of Electrical Engineering

Prof. Ratheesh Radhakrishnan, Department of Humanities and Social Sciences

Prof. Sauvik Banerjee, Department of Civil Engineering

Prof. George Mathew, Department of Earth Sciences

Prof. S. V. Sabnis, Department of Mathematics

Prof. Prabhu Ramachandran, Department of Aerospace Engineering

Prof. G. G. Ray, IDC School of Design

Prof. J. K. Verma, Department of Mathematics

Prof. Subhankar Karmakar, Department of Environmental Science & Engineering

Prof. Bhalchandra Puranik, Department of Mechanical Engineering

Prof. Ravi Poovaiah, IDC School of Design

Prof. Pooja Purang, Department of Humanities & Social Sciences

Prof. A. M. Kulkarni, Department of Electrical Engineering

Prof. A. S. Athavale, Department of Mathematics

Dr. P. K. Patwardhan Technology Development Award (2018)

The Dr. P. K. Patwardhan Technology Development Award for the year 2018 was awarded to **Prof. Shreevardhan A. Soman & team,** Department of Electrical Engineering for *"Development and deployment of analytics for streaming the data of the power grid"*

Prof. Shreevardhan A. Soman and his team members (Prof. Anil M. Kulkarni, Dr. Rajeev Gajbhiye, Dr. Gopal Gajjar, Dr. Prashant Navalkar) from Department of Electrical Engineering receiving Dr. P.K. Patwardhan Technology Development Award (2018)

Annual Tree Plantation Drive Van Mahotsav – 2019
Creates Awareness of Conservation of Trees

(L-R) Mr. K.P Unnithan, Superintending Engineer, Estate office, Prof. B.V.S. Vishwanadham, Dean (Infrastructure Planning and Support), Prof. A.K. Suresh, Deputy Director (AIA) and Mrs. Alpana Bhagwat, Principal, Campus School during Van Mahotsav celebration at the Institute

In an endeavour towards maintaining the green cover of its campus and spreading the message of conserving nature, Indian Institute of Technology Bombay (IIT Bombay) celebrated Van Mahotsav – the annual tree plantation drive on July 13, 2019 on its campus. As part of the celebrations, about 850 saplings were planted by school students and teachers of Kendriya Vidyalaya and Campus School (both located within IIT Bombay campus) and the students, faculty and staff of the Institute this year. The saplings were planted on the hill slope beyond the pipeline at the rear side of Hostel 3 and 4 at IIT Bombay campus.

On the occasion, **Prof. A.K. Suresh,** Deputy Director (Academic and Infrastructural Affairs), IIT Bombay spoke on the significance of trees in our lives and encouraged the student participants to develop interest in building the greener environment by planting more trees.

Prof. B.V.S. Vishwanadham, Dean (Infrastructure Planning and Support), IIT Bombay, encouraged the participants to develop a sense of responsibility for the planted trees.

Prof. Suresh, Prof. Vishwanadham, faculty, staff, students along with teachers of Kendriya Vidyalaya and the Campus School planted saplings during the event.

Cultural performances by the students of Campus School and Kendriya Vidyalaya, highlighting the importance of trees in our lives, were much appreciated by the gathering. The event was organized by the Horticulture Section of the Estate Office, IIT Bombay, which takes care of the saplings planted at Van Mahotsav throughout the year.

Cultural performance by the students of Campus School

Cultural performance by the students of Kendriya Vidyalaya

IIT Bombay Hosts Smart India Hackathon 2019 – Hardware Edition

IIT Bombay, the nodal centre of **Smart India Hackathon 2019,** hosted the grand finale of Smart India Hackathon 2019 - Hardware Edition during July 8-12, 2019 at the Computer Centre, IIT Bombay. Smart India Hackathon 2019 – Hardware Edition, an event by the MHRD's Innovation Cell (MIC), was a five-day non-stop event where participating teams from all over India built a prototype to give solutions against the problem statements provided by various ministries and companies. The competition was for undergraduate students from institutions all over India selected by MHRD's Innovation Cell earlier.

The Grand Finale of the Smart India Hackathon 2019 – Hardware Edition was an initiative to make development a comprehensive mass movement and innovate on all fronts. MHRD, AICTE, i4c and Persistent Systems came together to organise Smart India Hackathon (SIH) 2019 - a unique Open Innovation Model for identifying new and disruptive technology innovations to solve the challenges faced by our country.

In SIH 2019 hardware edition, a total of 198 problem statements sourced from nine Union Ministries and Departments and 40+ industries were posed. A total of 1,20,000 students from 2,235 institutions took the challenge, which resulted in 20,000 mini-submissions.

A team of experts from the Industry and Ministry shortlisted 250 teams for the grand finale consisting of 1,500 students, who took part in this event. The Grand Finale was hosted in 18 nodal centres across the country, including IIT Bombay.

IIT Bombay saw participation of nine teams and 90+ students from various institutions, who worked on

problem statements provided by Department of Atomic Energy, Flucon, Marico, Harman and Suguna Rural Foundation on themes such as healthcare and biomedical devices, clean water, agriculture and rural development.

Prof A.K. Suresh, Deputy Director (AIA), IIT Bombay inaugurated the SIH on July 8. The nine teams who competed at IIT Bombay nodal center were 'Satark' (Bharatiya Vidya Bhavan's Sardar Patel Institute of Technology, Mumbai), 'Technocrypts' (Abes Institute of Technology, Uttar Pradesh), 'Mechlads' (R.M.D. Engineering College, Tamil Nadu), 'Team Electro' (Sir C R Reddy College Of Engineering, Andhra Pradesh), 'Anvesht' (Shri Guru Gobind Singhji Institute of Engineering And Technology, Nanded, Maharashtra), 'Shasun Girls' (Shri Guru Gobind Singhji Institute Of Engineering And Technology), 'Biomed' (Indian Institute Of Technology, Bhubaneshwar), 'Geeknovation' (R.M.K. Engineering College, Tamil Nadu) & 'Mechnovative' (Poornima College of Engineering, Rajasthan). The infrastructure needed to accomplish the various tasks was made available by facilities at IIT Bombay such as Tinkerer's Lab, Workshop and Machine Tools Lab.

Leadership talks were organized for the benefit of the participants by **Mr. Chandrasekhar Inamdar, Prof. Sathish Agnihotri** and **Prof. Kannan Moudgalya.** Also, daily yoga sessions and one special cultural performance by IIT Bombay students featured in the event.

The teams **Satark**, **AnveshT** and Team **Electro** emerged as the winner in the Grand Finale of Smart India Hackathon 2019 Hardware Edition at IIT Bombay.

Faculty / Student News

Ms. Aisha Anam, Final Year M.Des. Interaction Design Student of IDC School of Design, and her team won the design challenge in **MECHATON International Programme 2019** conducted by SCE Shamoon college of Engineering, Be'er Sheva, Israel. Students from various countries and Institutions participated to take the design challenge floated by different companies, organisations and medical centers based in Israel. Her team consisted of engineering students from SCE and UTC, USA and the product was designed for the rehabilitation department, Soroka Medical Centre, Israel. The design solution was much appreciated by the jury and is being listed for further procedures to take it forward.

Mr. Prashant Motwani, PhD student under **Prof. A. Laskar,** Department of Civil Engineering secured 3rd position and a prize money of £100 in the **Three-Minute-Thesis (3MT)** competition held at Queens University Belfast in June 2019.
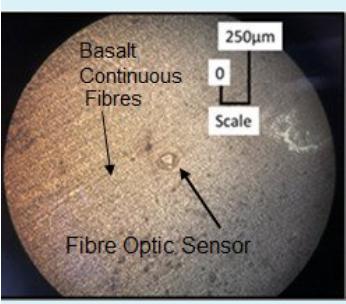
Prof. A. Laskar and **Mr. P. Motwani,** Department of Civil Engineering developed a *'A Smart BFRP Bar with Embedded FBG Sensors'* in collaboration with Prof. S. Taylor and Dr. N. Perogamvros from the School of Natural and Built Environment (SNBE) of Queens University Belfast (QUB) in Northern Ireland, U.K. under the joint ownership agreement. The commercial product 'Smart Bar' will be launched in the infrastructure market.

Smart BFRP Bar

Dr. Dinesh Katre (Visual Communication batch 1990-92), won the **National Digital Stewardship Alliance (NDSA) Individual Innovation Award 2019.** The award will be conferred during a ceremony at DigiPres Conference in October 2019, Tampa, Florida. The National Digital Stewardship Alliance (NDSA), hosted by the Digital Library Federation is a consortium of more than 220 partnering organizations including universities, professional associations, businesses, government agencies, and nonprofit organizations, all committed to the long-term preservation of digital information. NDSA began as an initiative of NDIIPP, Library of Conference (LoC), Washington D.C. This award is an international recognition for his notable contributions to the development of technological solutions in this domain since 2008, as part of the Indian National Digital Preservation Program which was started by Dr Katre. NDSA recognized Dr Katre's concerted efforts to build a complete ecosystem for digital preservation by setting up *"World's first ISO 16363 Certified Trustworthy Digital Repository"* in India in 2017.

A team comprising of **Prof. Sugandh Malhotra** and his PhD student Ms. Deepshikha Dash of IDC School of Design has won the prestigious *"Joseph Jaworski's Next-Gen Foresight Award"* in the Group Special Award category for their project on "Future Design Possibilities for Mobility".

Research in focus

Bacterial Remedy For The Toxic Pesticide Carbaryl

The memories of the Bhopal gas tragedy that claimed thousands of lives and injured a few lakhs of people, haunts us even after three decades. The culprit was a toxic gas used to produce a pesticide called 'Carbaryl', in the Union Carbide India Limited Factory. Sadly, the use of Carbaryl continued amid growing concerns about its side effects. The need to completely remove it from the environment or break it down into less harmful substances is of primary importance. Dr Phale and his team from the Indian Institute of Technology Bombay (IIT Bombay), and collaborator Dr Sharma from Institute of Genomics and Integrative Biology (CSIR-IGIB), Delhi, have achieved a significant breakthrough in identifying bacteria which can clean up this pesticide from the environment and understanding exactly how the breakdown occurs.

Carbaryl, most commonly sold under the trade name 'Sevin' was a preferred pesticide for agricultural as well as non-agricultural use (lawns, home garden, and roadside greenery) against aphids, spiders, fleas, ticks, and many other pests. Carbaryl inhibits the enzyme responsible to carry nerve impulses and paralyses the nervous system of pests. This makes it difficult for the pests to breathe, leading to their death.

Like most other insecticides, Carbaryl has adverse effects on humans and other organisms

and can cause cancer. "Where at minor exposure, one might face problems like skin irritation and swelling of the eyes, it might cause asthmatic, respiratory and paralytic symptoms at a higher concentration," explains Dr Phale. Carbaryl kills earthworms, reducing the fertility of the soil and paralyses and kills pollinators such as honey bees, thus affecting agricultural production. Traces of carbaryl remain in the soil and the field even months after the crop is harvested. "Carbaryl may stay back for years after the crop is harvested because it degrades slowly in the acidic soil as compared to alkaline soil. Also, repeated application of Carbaryl in the fields increases its concentration to a level lethal for living beings", informs Dr Phale.

Finding the pathway to break down

Breaking down, or degradation of Carbaryl is a multistep process. Bacteria use enzymes to convert Carbaryl to the first intermediate compound, then at each step, they convert it to a different intermediate compound to form a pathway. "Our interest was to dissect the process of carbaryl degradation by the microbes in the agricultural field," says Dr Phale, speaking about the motivation behind their studies.

Scientists knew about some species of microbes that could degrade Carbaryl. Yet, the complete degradation process was still unknown. Dr Phale and his team collected soil samples from fields and isolated strains of bacteria which can degrade carbaryl. They found three strains of the bacteria Pseudomonas which efficiently remove Carbaryl. The researchers identified intermediate products like 1,2-dihydroxy naphthalene generated during the degradation process and described a complete pathway for degradation. They used the Pseudomonas strain 'C5pp' in the follow-up studies to understand the degradation process.

To begin with, a bacterial enzyme 'carbaryl hydrolase' acts on Carbaryl to generate '1- naphthol' and 'methylamine'. 1-naphthol acts as a source of carbon for the bacteria and methylamine serves as a source of nitrogen. In this way, Carbaryl—a poison for others—acts as food and source of energy for these bacteria.

Many microbes can degrade carbaryl, but the Pseudomonas strains reported in this study were more efficient. They could degrade the pesticide in 12-13 hours, which is 4-5 time faster than other bacteria reported in the scientific literature.

What could be the secret of this high efficiency? A study of the genome of Pseudomonas strain C5pp showed that the genes responsible for the Carbaryl degradation are arranged into three different sets referred to as 'operons'. The bacterium might have acquired these genes from species Ralstonia or other species of Pseudomonas, capable of breaking down hazardous compounds. This process of movement of genetic material between unicellular or multicellular organisms is called 'horizontal gene transfer' and is different from vertical gene transfer from parent to offspring. "Nature acts as a laboratory on its own. Organisms in the ecosystem interact with each other and exchange genetic material for their benefit and survival", explains Dr Phale. This smart bacterium acquired genes from other organisms capable of degrading various aromatic compounds as well as Carbaryl partly or partially, arranged these genes together and used this machinery for efficient utilization of Carbaryl as food and hence its survival.

Pseudomonas: the smart bacteria

Carbaryl is not the only toxic compound that bacteria have to face. The first breakdown product, 1-naphthol, produced within the body of the bacterium is even more toxic than Carbaryl itself. Then how does this tiny bacterium survive this toxicity? Follow up of this question revealed some interesting findings.

Bacteria like Pseudomonas have two membranes- inner and outer, with a compartment called periplasm between them. Degradation of the pesticide carbaryl into 1-naphthol takes place in the periplasm. The inner membrane protects the main body, or cytoplasm, from 1-naphthol, which can be fatal in high concentration, but less toxic in smaller concentration. It allows 1- naphthol to slowly enter into the cytoplasm. 1-naphthol is converted into a more watersoluble, nontoxic compound in the cytoplasm and then to organic acids which the cell consumes, to synthesize amino acids, nucleotides, and sugars. So smart compartmentalisation of the degradation pathway is another strategy used by this bacterium.

These Pseudomonas strains can be used for eliminating pesticides from heavily contaminated agricultural fields. They might also be useful to treat effluents or wastewater, in industries producing or using carbaryl or 1-naphthol. "The strains isolated by us are wild natural culture and not genetically modified organisms, so there is no restriction on their use," say the researchers.

Pesticide contamination and associated health hazards are a growing concern globally. The research of Dr Phale's and team provides a natural solution to get rid of a hazardous pesticide. Information about the degradation process and the bacterial mechanism also opens up a possibility to design genetically modified organisms to address specific pesticide contamination.

Additionally, Pseudomonas are known to promote plant growth. The researchers believe that the isolated strains might be producing various enzymes and proteins, organic acids and metabolites which can act as growth booster for plants. "We are currently studying these plant growth-promoting activities," concludes Dr Phale.
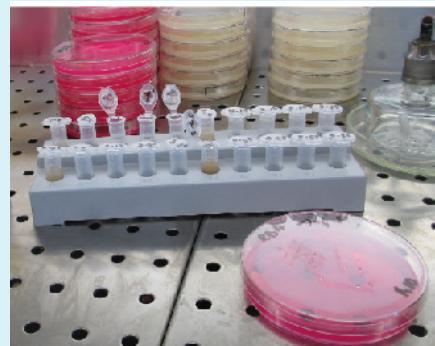
Link to published work :
1. Compartmentalization of the Carbaryl Degradation Pathway: Molecular Characterization of Inducible Periplasmic Carbaryl Hydrol
2. Carbaryl as a Carbon and Nitrogen Source: an Inducible Methylamine Metabolic Pathway at the Biochemical and Molecular Levels

IIT Bombay Conducts World's First Massive Hardware Workshop Using eSim
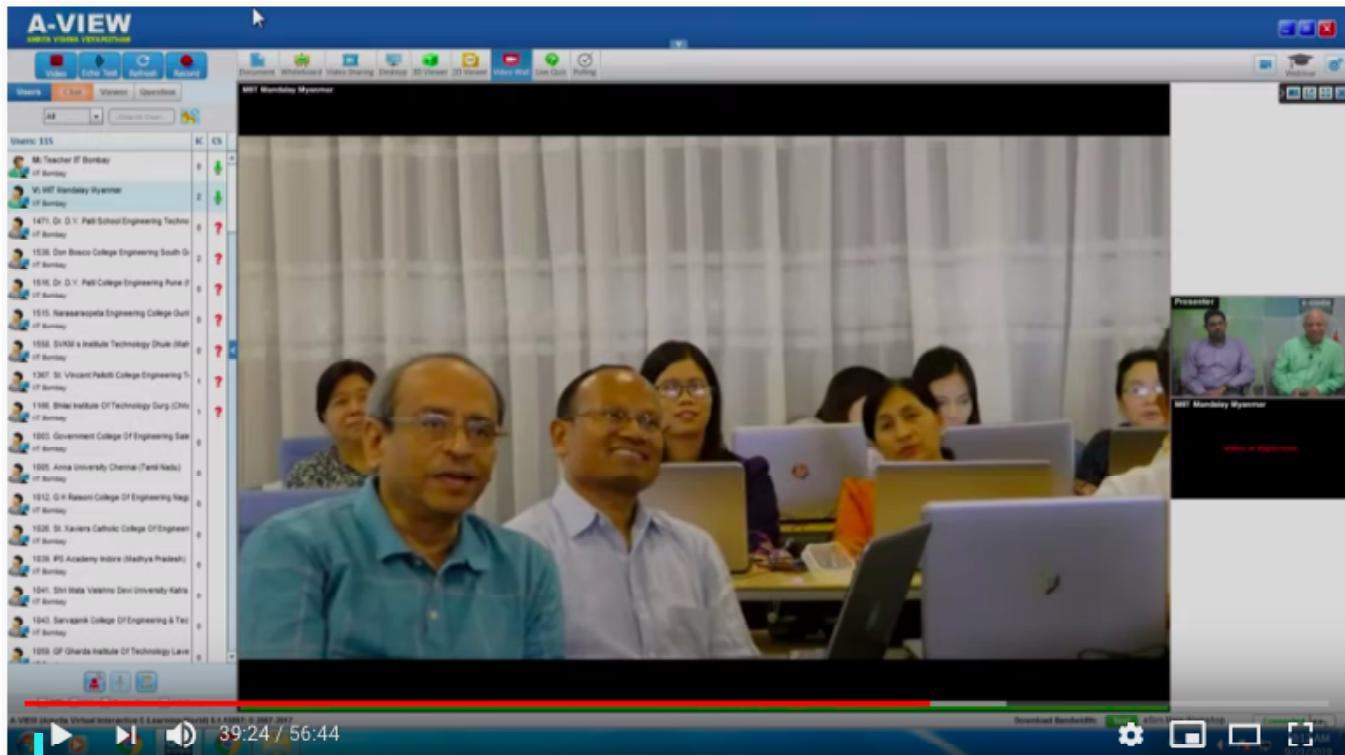
Dr. Raja, Director and Prof. Sinha, Senior Faculty, MIIT Myanmar along with faculty participants from six universities in Myanmar taking part in the program
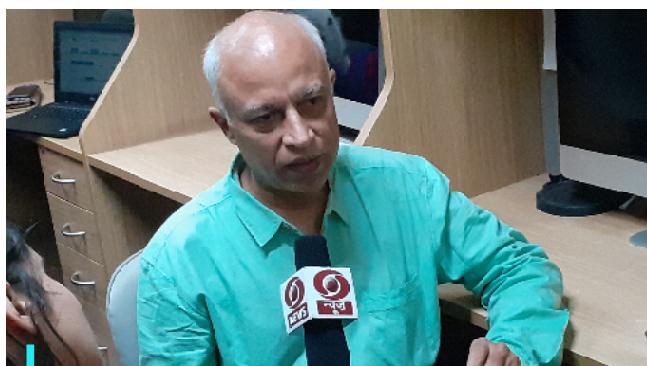
Prof. Kannan Moudgalya, E.M.M. Advanced Education Technology Chair Professor, IIT Bombay briefing Doordarshan on the massive hardware workshop for more than 3500 teachers across India

The eSim circuit developed by the FOSSEE project, IIT Bombay used for the massive hardware workshop for more than 3500 college teachers across, more than 120 remote centers in India including one in Myanmar (MIIT, Mandalay)

The Teaching Learning Center (Information Communication Technology), IIT Bombay on September 21, 2019 conducted the first-of-its-kind hardware workshop for more than 3500 college teachers through 120+ remote centers spread across India, including one in Myanmar using a free software named "eSim", developed by the FOSSEE project, under the aegis of Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching, MHRD, Government of India.

Prof. Kannan Moudgalya, Principal Investigator, TLC (ICT), Spoken Tutorial & FOSSEE inaugurated the program. Mr. N. K. Mohapatra, CEO, Electronic Skills Sector Council of India (National Skill Development Corporation) was the guest of honour. Prof. Pramod Murali (EE Department), the eSim course Instructor, gave the introductory remarks. The award winning Spoken Tutorial methodology was used to train the participants on eSim software.

The workshop is first-of-its-kind in the world as it caters to our nation's need by training the teachers on hardware technology, who in turn will train their students on hardware skills to make them employment-ready. The main topics covered include Schematic creation and simulation; simulating an astable multivibrator; mapping components and footprints; setting parameters for PCB Design; Create Gerber files, etc.

IIT Bombay Faculty Inaugurates Massive Scaled Linux Workshop from Myanmar

The Spoken Tutorial project at IIT Bombay has trained about 50,00,000 students on various IT topics that will help them do well in studies and improve their employment potential. Spoken Tutorials and Train 10,000 Teachers (T10KT), the IIT Bombay team, has trained more than 4,000 teachers in Moodle and Scilab. It has also trained 5,300 teachers in Python. As part of the project, Linux workshop was organised by the Teaching Learning Centre (TLC) at IIT Bombay on August 23, 2019 funded by the Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching (PMMMNMTT), MHRD, Govt. of India. The workshop was a blended training programme that used A-VIEW for live interactions

Prof. Kannan Moudgalya, IIT Bombay with the faculty participants of the Linux workshop at MIIT, Mandalay, Myanmar

and Spoken Tutorials to learn to use Linux. The Principal Investigator of the Spoken Tutorial and TLC projects, **Prof. Kannan Moudgalya**, the Erach and Meheroo Mehta Advanced Education Technology Chair Professor at IIT Bombay, visited MIIT in Myanmar to explore how effectively the benefits of this education technology can be transferred to Myanmar. Prof. Moudgalya addressed more than 3500 college teachers across 120 remote centres in India from MIIT, Mandalay through A-View software as a technology demonstration.

Prof. Kumar Appaiah, Dept. of Electrical Engineering, IIT Bombay, a Linux expert addressing all the faculty participants through the A-View software from the eStudio in campus

Time To Celebrate IIT Bombay !

IIT Bombay received the scroll for being the best ranked university in India from Quacquarelli Symonds (QS) at the hands of Honorable Minister of Human Resource Development **Shri. Ramesh Pokhriyal 'Nishank'** at Shastri Bhavan, New Delhi on July 2, 2019. **Prof. Milind Atrey, Dean (R&D)** represented IIT Bombay.

EVoK, IIT Bombay Participates in the Formula Student Competition

EVoK at the Silverstone Circuit in the UK

IIT Bombay Racing is a team of more than 70 enthusiastic students who engineer an **electric Formula Student car.** Incepted in 2008, IIT Bombay Racing is completing its first decade intending to develop electric sports car technology in, India like that of Tesla in the USA, and working towards the government's target to make India an e-vehicle nation by 2030, through revolutionising electric mobility technology in India. The competition that the team participates in, aims to develop enterprising and innovative young engineers and encourage more young people to take up a career in engineering.

Mr. Ashesh Dhar, Head of sales, marketing and customer support at Tata Motors Electric Vehicle Business Unit accepting a token of appreciation from the racing team

Prof. Amber Shrivastava, Department of Mechanical Engineering and Mr. Ashesh Dhar, Head of Sales, Marketing and Customer Support at Tata Motors Electric Vehicle Business Unit. Mr. Dhar highly appreciated the team's work and reaffirmed his faith in the team's abilities, on behalf of Tata Motors.

With the team's latest car, EVoK, IIT Bombay Racing participated in the Formula Student Competition in July 2019, in the United Kingdom at the Silverstone circuit, home of the British Grand Prix, and was placed 4th overall among the electric cars. The competition runs for 4 days with many static and dynamic events like design presentation and sprint event. This year, 118 teams across the world participated in the event. The team is entirely led by students.

IIT Bombay Racing on September 7, 2019 presented their experience of the Formula Student competition with their sponsors and stakeholders from the Institute. The event comprised of a presentation from the team followed by addresses by Faculty Advisor

Prof. Amber Shrivastava, Department of Mechanical Engineering

Science of Nutrition and Yoga For Healthy Lifestyle

Emeritus fellow Prof. J. Vasi (right) welcoming Sri M (left) with a tulsi plant

Yogastha - The Wellness Club organizes regular yoga sessions, workshops, yoga competitions and various lecture sessions at IIT Bombay campus. The events are organized to help students, faculties and campus residents to live stress-free and develop healthy life style.

Following activities were organized by the Yogastha :

■ Yogastha believes that eating healthy and making sure one's body receives ample nutrition is key to leading a happy and sustainable life. **Ms. Jinal Shah,** a nutrition and exercise expert gave a talk on **Nutrition-Eat Local, Think Global** for the campus residents on August 26, 2019. The talk emphasized not only on eating seasonal, local and traditional food but also on the nutritional value of the food, the economical and ecological aspects of bringing a meal to one's table, explanation of the set of 5 foods to eat and 5 foods to avoid followed by a Q&A session where some of the nutrition-based myths were debunked. **Prof. Neeraj Kumbhakarna** presented a token of appreciation to speaker.

■ **Yogastha-The Wellness Club** of **IIT Bombay** hosted **Sri M** on August 31, 2019 to interact with the students, researchers, faculty and residents of our campus on the topic 'Yoga: The Way to rejuvenate Mind & Body'. **Sri M,** spiritual guide, social reformer and educationist, has penned books like 'Apprenticed to a Himalayan Master: A Yogi's Autobiography', 'Wisdom of the Rishis: The Three Upanishads' & many more. **Sri M,** delivered talk about the various distractions of mind which hinders expanding the horizon, scientific approach to understand yoga. The talk was followed by a Q & A session and launch of the book "On Meditation". **Smt. Alamelu Mani**, Sangeet Akademi Award Winner graced the occasion with her presence.

Speaker Ms. Jinal Shah during a talk on Eat Local, Think Global

Institute Cultural Council Conducts Various Cultural Events

Culturals is about life, surprises and discovery. Numerous cultural events are conducted all year long by the Cultural Council catering to genres like music, dance, dramatics, film, photography, fine arts, classical & folk arts, speaking arts, literary arts and more. **Following are the few glimpses of the event :**

Kavyasandhya GC

Kavya Sandhya General Championship is an inter-hostel poetry competition conducted during 26-27 August, 2019. The event witnessed participation of more than 90 performers.
Poets with command on the language and art participated

Online Photography Competition

On the occasion of World Photography Day on August 19, 2019, Pixel Club (Photography Club) conducted an open Online Photography competition to boost the photography culture and provide an opportunity to amateur photographers to showcase their talent

Charcoal Sketching Session

Charcoal sketching session was conducted on August 31, 2019 where the students were taught the basics of shading techniques. This session marked the presence of more than 75 students who made wonderful artworks during the session

Sameer Hill Photowalk

A photowalk to Sameer hill was conducted on August 17, 2019 where more than 110 students were taught DSLR handling

Chhichhore Screening

A pre-screening of Chhichhore was conducted on September 3, 2019 by the Director of the movie Mr. Nitesh Tiwari (alumnus of IIT Bombay). Actors Mr.Varun Sharma and Mr. Naveen Polishetty also attended. The movie was enjoyed by students, alumni and professors

Longboarding Evokes Interest Amongst Students

IIT Bombay Sports boasts of a rich culture, thriving on immense participation across all hostels and the kind of infrastructure most colleges can only dream of. Under its vast umbrella, the Sports Council arranges sports at several levels. From intra-hostel to inter hostel, and of course, the crowning glory for every sportsperson at IIT Bombay, the Inter IIT Sports meet, students are spoilt for choice.

After witnessing a highly warm and zealous crowd, the debut of 'Sport of the Month' genre - Longboarding workshop was organised by the Sports Council, IIT Bombay on August 25, 2019. It was launched with an

ice-breaking session including the introduction of longboarding and how it feels while surfing on the road. Participants were taught the basics of the sport by professional longboarders. Further, they were given the opportunity of hands-on experience to apply the learning on their longboards, mentored by individuals.

Hosted by **Khaba Maimom**, the recent winner of **Indian Longboarding Championship "OVERBOARD 2019"**, it concluded with high vibes of satisfaction reaping the coveted essence of the genre. IIT Bombay Sports extended their heartiest gratitude to Khaba Maimom and Decathlon R City for being the backbone of the event and making it possible to host such a great event.

Campusites Participate in IIT Bombay Biathlon

The **15th IIT Bombay Biathlon held** on the occasion of 73rd Independence Day witnessed a very energetic crowd of 100+ students and campusites who poured in with breathless enthusiasm into the streets to celebrate the spirit of the day. This event of running and cycling saw professors as well students putting in their best efforts to earn the top positions.

For the Biathlon, in the men's students category, **Avnish Bhagwate** secured the top position while **J P Yadav** took the gold medal amongst the campusites.
In the women's category, **B. Priyanka** stood on the top of the podium. In the unique category of Biathlon Plus, wherein the participants had to additionally complete Stepathlon, **Praveen Kumar** and **Prof. TT Niranjan** displayed great fitness levels to take the top positions in students and campusites categories respectively. IIT Bombay Sports conveys special thanks to **Prof. Kirankumar Momaya** and his team, who have been the backbone of this event since its inception.

Hindi Pakhawada - 2019 Highlights Importance Of Hindi

IIT Bombay celebrated **"Hindi Pakhawada"** during September 1-14, 2019. As part of the celebrations, competitions like Essay writing, Hindi translation were organized to encourage the staff members to use Hindi in official work.

The prize distribution function to felicitate the winners of the competitions was organized on September 13, 2019. **Prof. Sunita Sakhare**, Head of Hindi Department, S.N.D.T was the Chief Guest on the occasion and elaborated on the importance of Hindi as an official language of the nation.

Chief guest Prof. Sunita Sakhare, and Prof. A.K. Suresh, Deputy Director (AIA) on dais during Hindi Pakhawada event

Hindi Officer **Ms. Vaishali Bahulkar** presented a brief report on Implementation of Hindi in the Institute, objective of Official Language Implementation Committee of the Institute, participation of Institute staff in Hindi training typing, basic computer training in Hindi, 'Parangant' programme etc.

The certificates were presented by the chief guest **Prof. Sunita Sakhare**, and **Prof. A.K. Suresh,** Deputy Director (AIA) to the winners in the various competitions.

The vote of thanks was delivered by Hindi Officer **Ms. Vaishali Bahulkar.**

Following winners were felicitated during the Hindi Divas Celebrations 2019 :

Hindi Essay Competition on September 3, 2019

1	Mr. Shekhar Singh	First
2	Mr. Sandeep Chaturvedi	Second
3	Mr. Omesh Kumar Sharma	Third
4	Ms. Shamal Mahesh Padavl	Consolation
5	Mr. Tushit Kumar	Consolation
6	Mr. Mohammad Nasim	Consolation
7	Mr. Kumar Appaya	Consolation

Best Work in Hindi

1 Mr. Tushit Kumar

Hindi Translation Competition on September 4, 2019

1	Mr. Shekhar Singh	First
2	Mr. Jitendra Jain	Second
3	Mr. Ravi Ranjan Kumar	Third
4	Mr. Tushit Kumar	Consolation
5	Mr. Mohammad Nasim	Consolation
6	Mr. Mrityunjay Kumar Mangalam	Consolation
7	Ms. Shamal Mahesh Padavl	Consolation

Hindi book exhibition was also organized in the Central Library during September 12-13, 2019 to encourage all the staff and students to read Hindi books.The inauguration function was held on September 11, 2019.
Publications Vasundhara, Paridrisha and Sahitya Sanskarmala Sahitya were displayed in the exhibition.

Felicitated winners on the Hindi Divas celebrations

Pustak Charcha - 2019 Brings Together Campusites

Hindi Cell organized a **Hindi Pustak Charcha** on September 25, 2019 during of Hindi Pakhawada 2019. A comprehensive book discussion (Pustak Charcha) on three Hindi ghazal books written by three famous Hindi poets was organized on September 25, 2019 under the aegis of Hindi Cell, Indian Institute of Technology Bombay.

BOOKS:
♦ **Saaye Mein Dhoop** by Dushyant Kumar
♦ **Samay Se Muthbhed** by Adam Gondavi
♦ **Doobte Waqt** by Dikshit Dankauri

Prof. Karunashankar Upadhyay, Head of Hindi Department, University of Mumbai was the Chief Guest. **Prof. Saurabh Lodha** from IIT Bombay and the chief guest **Prof. K. Upadhyay** lit the lamp and inaugurated the book discussion session.

(R) Chief Guest Prof. Karunashankar Upadhyay lighting the lamp during Hindi Pustak Charcha event

IIT Bombay students, faculty, officers and staff participated in the book discussion. Dr. Vinodkumar Prasad, Assistant Registrar, Industrial Research and Consultancy Centre (IRCC), briefed on the Hindi ghazal genre and apprised the audience about the contribution of Dushyant Kumar, Adam Gondvi and Dixit Dankouri. Vikram, Abhishek and Dr. Kadam Mashruwala introduced the books and recited some portions from the books before the audience.

Pragyan, Aman, Avinash recited portions of **Saaye Mein Dhoop**, Ankesh, Dipanshu, Vasu and Jay recited portions of **Samay Se Muthbhed** while Rajiv and Rony recited portions of **Doobte Waqt**.

Dr. Vinodkumar Prasad, IRCC, Prof. Saurabh Lodha, Department of Electrical Engineering, Dr. Ranjitkumar Das, Assistant Librarian, Central Library, students Abhishek, Vikram, Ankesh from IIT Bombay along with Dr. Karunashankar Upadhyay and Prof. Vanita Sahay, Bombay University participated in a panel discussion.

The audience took keen interest in this book discussion programme. Such events help to increase awareness and interest in Hindi language and literature among the people. Hindi Officer Ms. Vaishali Bahulkar thanked all the attendees for participating in this important program wholeheartedly.

Ms. Vaishali Bahulkar, Hindi Officer presenting books to the Chief Guest Prof. Karunashankar Upadhyay

Awards and Distinctions

Prof. Subimal Ghosh, Department of Civil Engineering and **Prof. Hetu Sheth** of Department of Earth Sciences have been selected to receive the PRL (Physical Research Laboratory, Ahmedabad) Award for the year 2017

Prof. Samir K. Maji, Department of Biosciences and Bioengineering has been selected to receive the NASI-Reliance Platinum Jubilee Award for Application Oriented Innovation for the year 2019 in Biological Sciences

Prof. Neela Nataraj, Department of Mathematics has been awarded the prestigious INSA Teachers Award (2019). This award has been instituted to recognize and honour teachers who have inspired students to take up careers in Science and Technology

Prof. Rohit Manchanda, Department of Biosciences and Bioengineering has been awarded the prestigious INSA Teachers Award (2019)

Prof. Shyamprasad Karagadde, Department of Mechanical Engineering has been selected by the National Academy of Sciences to receive the prestigious 'NASI-Young Scientist Platinum Jubilee Award'

Prof. Debabrata Maiti, Department of Chemistry has been admitted to the Fellowship of Royal Society of Chemistry (FRSC), London

Prof. B. K. Das and **Prof. S. Pal,** Department of Mathematics have been selected as Indian Academy of Science Associates for three years from 2019.

Prof. R. B. Sunoj, Department of Chemistry has been invited to join the Editorial Advisory Board of 'Chemical Sciences", the flagship journal of Royal Society of Chemistry (London) for a period of 2 years.

Prof. G. Rajaraman, Department of Chemistry received Dr. A. P. J. Abdul Kalam HPC Award-2019 from Dr. Shekhar Mande, DGCSIR and Dr.

Madhavan Nair Rajeevan, Secretary, Ministry of Earth Sciences

Prof. Rohit Srivastava, Department of Biosciences and Bioengineering has been admitted as a Fellow of the Royal Society of Chemistry (FRSC), London.

Prof. Subimal Ghosh, Department of Civil Engineering and **Prof. R. Sunoj,** Department of Chemistry have been declared by DG, CSIR to be the winners of this years SS Bhatnagar Prize.

Prof. D. Manjunath, Department of Electrical Engineering has been elected as Fellow of the Indian Academy of Engineering (FNAE).

Prof. Supratik Chakraborty Department of Computer Sciences and Engineering has been elected as Fellow of the Indian Academy of Engineering (FNAE)

Prof. Sachin Patwardhan, Department of Chemical Engineering has been elected as a Fellow of the Indian Academy of Engineering (FNAE)

Prof. S.A. Khaparde, Department of Electrical Engineering has been elected as a Fellow of the Indian Academy of Engineering (FNAE).

Other News

Singer Sithara Krishnakumar and Dr. Sajish's daughter Saawan Rithu has made her acting debut through a short film. Fondly called as Sayu, little girl has debuted in the short film **'Saakshatkaaram'** written and directed by **Prof. Sudesh Balan,** IDC School of Design

Publications

Research Paper *"Mimivirus encodes a multifunctional primase with DNA/RNA polymerase, terminal transferase and translesion synthesis activities"* by **Prof. Kiran Kondabagil,** Department of Biosciences and Bioengineering has been

published online in journal of *Nucleic Acids Research (impact factor of ~ 11)* of Volume 47, Issue 13 2019.

Prof. A. Laskar and **Mr. P. Motwani**, PhD student under the guidance of Prof. Laskar, Department of Civil Engineering, published a journal paper titled *"Influence of Excessive End Slippage on Transfer Length of Prestressing Strands in PC Members",* Structures, Volume 20, August 2019, Pages 676-688.

Invited Lectures / Paper Presentation / Participation in Conferences

Prof. Rohan Chinchwadkar, Shailesh J. Mehta School of Management, gave a lecture titled *"Money: Substance, History and Creation"* at the 2nd Workshop on Advanced Macroeconomics on the topic *'Money and the Economy',* organized by Azim Premji University at Bengaluru during August 16-17, 2019.

Prof. Rohan Chinchwadkar, Shailesh J. Mehta School of Management, presented a paper titled *"Political uncertainty, elections and entrepreneurial finance: A framework"* at the 4th Entrepreneurial Finance Conference, organized by ENTFIN Association at Trier, Germany during July 2-3, 2019.

Prof. A. Laskar, Department of Civil Engineering, presented a keynote lecture on the *"Application of Basalt Fiber Reinforced Polymer (BFRP) as Prestressing Strand"* at the the 14th International Symposium on Fiber-Reinforced Polymer Reinforcement of Concrete Structures (FRPRCS) organized by Queens University Belfast in Northern Ireland, U.K. held between June 4-7, 2019.

Institute Colloquium / Lectures

Dr. Geeta Narlikar, Professor of Biochemistry and Biophysics, Lewis and Ruth Cozen Chair I, University of California, San Francisco, USA delivered an Institute lecture titled *"Beyond the genetic code: how a shape-shifting genome controls cell fate"* on August 19, 2019

Prof. Ajayan Vinu, (Global Innovative Center for Advanced Nanomaterials, The University of Newcastle, Australia) delivered Prof. C. N. Rao Lecture for Nano-science and Nanotechnology on *"Advanced Nano-materials for clean energy, environment, and health"* on September 26, 2019

Prof. Peter Molnar, Distinguished Professor, Dept. of Geological Sciences, University of Colorado, Boulder, Colorado, USA delivered an Institute lecture titled *"The growth of the Himalaya and Tibet and the evolution of Asian climate"* on July 19, 2019

Prof. Kaushik Basu, Professor of Economics and the Carl Marks Professor of International Studies at Cornell University, Ithaca (New York) as well as the former Chief Economist of the World Bank and Chief Economic Adviser to the Indian Government delivered the N. R. Kamath Chair Distinguished Lecture on *"The Economics of Digital Platforms: Theory and Policy Options"* on August 2, 2019

Dr. Vinod Nowal, Deputy Managing Director, JSW Steel delivered the Steel Colloquium titled "Role of Indian Steel Industry in US$ 5 Trillion Economy" on Wednesday, September 18, 2019.

Entrepreneurship World Cup (EWC)

E-Cell IIT Bombay in association with tGELF (The Global Education & Leadership Foundation) and GEN (Global Entrepreneurship Network) organized a global entrepreneurship competition called The Entrepreneurship World Cup was held on July 15, 2019.

The Entrepreneurship World Cup (EWC) is a global pitch competition with life-changing prizes. With 100,000 entrants from around the world, EWC elevates entrepreneurs and provides tools and resources to grow one's venture.

E-Cell, IIT Bombay collaborated as the regional partner for the EWC event held first time in India. The regional finals were held on July 15,2019. The event was a platform for the local entrepreneurs to showcase their innovative capability globally. The participants of 20 team members consisted of both idea-stage and growth-stage start-ups. The best of them will participate in the Global finals, to be held on November 12, 2019. The competition fared well and was highly appreciated by the teams as the event helped to unleash their ideas, hone pitching skills and enabled to engage with a global network of mentors.

Rural Immersion For The Students Of Science And Engineering (RISE)

RISE (Rural Immersion for the students of Science and Engineering) is an unique opportunity for the UG students to spend 2 weeks in rural India. The rural immersion program was launched by the class of 1992 during the academic year 2018-19. The objective of RISE is to expose and sensitize the undergraduate students to the problems faced by the rural India and seek possible solutions through the use of technology. The program aims to support the students having an interest and who wish to pursue this further in developing solutions to the problems identified by them. This becomes a life changing

RISE interns on field with the children in the village

experience for those who get hands on experience of how the 'other' India lives and contribute meaningfully to developmental process.

This program is anchored in the Centre for Technology Alternatives for Rural Areas (CTARA). During the two weeks immersion, the students are placed with a reputed NGO working in the field of rural development. They get an opportunity to stay at a rural household and experience rural life. The first batch comprising a total of 19 undergrads visited four NGOs viz. Shashwat in Ambegao tehsil of Pune, Paoolwaat NGO in Velhe tehsil of Pune, Vayam NGO in Jawhar tehsil of Palghar district of Maharashtra and BAIF NGO at Vansda tehsil of Navsari district in Gujarat during May 2019. Undergrads wishing to get a glimpse of the hardships as well as the delights of rural life and who are passionate about contributing to the developmental work are encouraged to apply for the RISE program. The details of the program will be available at: (http://www.ctara.iitb.ac.in/en/RISE).

"This experience definitely added value to me as a person. It has given me glimpses of living with less resources and changed my thinking about different aspects such as the scarcity of fundamental resources that these people face and how people in the cities (govt.) violate fundamental rights of these people given by the constitution…" said Pankaj Meena, a third year B.Tech student broodingly. *"I found the process of Technology Detox in the rural area (because there was no cell phone reception) liberating! I got to know how dependent I am on technology and have lost all contact with nature,"* Vedanth Sharma, a first-year B.Tech. student mischievously added.

RISE interns with their host family

RISE intern in conversation with the youths from the village

Appointments

Dr. Deepoo Kumar, Department of Metallurgical Engg. & Materials Science has been appointed as Asst. Professor Grade II w.e.f. July 15, 2019

Dr. Dhwanil Shukla, Department of Aerospace Engineering has been appointed as Asst. Professor Grade II w.e.f. July 29, 2019

Dr. Bellie Sivakumar, Department of Civil Engineering has been appointed as Professor w.e.f. August 2, 2019

Dr. Tabish Nawaz, Environmental Science and Engineering has been appointed as Asst. Professor Grade II w.e.f August 19, 2019

Mr. Shoukkathali K has been appointed as Student Counselor (Scale-1) w.e.f. August 16, 2019

Retirements on July 31, 2019

Prof. N.K. Khosla, Department of Metallurgical Engineering and Materials Science, retired after 34 years of service

Mr. Prakash D. Jadhav, Jr. Technical Supdt., Telephone Exchange, retired after 39 years of service

Mr. Bhurelal D. Dusane, Sr. Mechanic, Estate Office, retired after 29 years of service

Mr. Krishnan K, Sr. Multi Skilled Assistant, Estate Office, retired after 37 years of service

Retirements on August 31, 2019

Dr. Bhagawan S. Patil, Public Health Officer (Scale II) voluntarily retired after 20 years of service on August 30, 2019

Mr. Anil V. Ramugade, Sr. Multi Skilled Assistant, Security Section, retired after 39 years of service

Mr. Anil K. Jadhav, Sr. Multi Skilled Assistant, Academic Section, retired after 37 years of service

Mr. Hariharan S. Iyer, Sr. Multi Skilled Assistant, Electrical Maintenance Division, retired after 37 years of service

Mr. Laxman N Chavan, Sr. Multi Skilled Assistant, Department of Mathematics, retired after 34 years of service

Mr. Damodar K. Ingle, Security Guard C, Security Section, retired after 27 years of service

Mr. Manohar H. Arolkar, Security Guard C, Security Section, retired after 27 years of service

Retirements on September 30, 2019

Prof. Vivek S Borkar, Department of Electrical Engineering, retired after 9 years of service

Ms. Vinaya U. Pradhan, Superintendent, Telephone Exchange, retired after 34 years of service

Mr. Revi Kappikizhakkethil P., Sr.Multi Skilled Assistant, Centre of Studies in Resources Engineering, retired after 34 years of service

Mr. Suresh B. Sawant, Sr. Mechanic, Electrical Maintenance Division, retired after 40 years of service

Mr. Shantaram S. Jangale, Sr. Multi Skilled Assistant, Registrar Office, retired afer 38 years of service

KG School Students Bag Prizes In Science Exhibition Organized By SIES School In Collaboration With ISRO

Upper-KG students Miss. Ezzah Rahib and Mast. Aayush Kuvalekar receiving the award from young ISRO Scientist Mr. Shrikant Patil

The KG School, IIT Bombay was invited to participate in a science exhibition with the theme **'Space Science'**, organised by **SIES School**, Matunga in collaboration with **ISRO** for all age groups of school students during September 18-20, 2019.

The exhibition included Elocution competition in English on the topic **'Our Solar System'**, and **'Drawing and Colouring'** competition on **'Spaceship, Astronaut, Rocket'** for the participating schools. The Upper-KG students of the school visited the exhibition and also participated in the inter-school competitions. Two Upper-KG students **Miss. Ezzah Rahib** and **Mast. Aayush Kuvalekar** from the school were awarded 3rd prize in the elocution and drawing competition respectively by young ISRO Scientist **Mr. Shrikant Patil**. The prize includes **'Model Rocket'** with ISRO printed on it. Other students received the participation certificates.

NOTIFICATION

Prof. Basanta Nandi, Department of Physics has been appointed as the Chairman of JEE (Advanced), UCEED-CEED 2020 w.e.f August 29, 2019

Prof. Suryanarayana Doolla, Department of Energy Science and Engineering has been appointed as the Vice-Chairman of JEE (Advanced), UCEED-CEED 2020 w.e.f August 29, 2019

Prof. B. Ravi, Department of Mechanical Engineering has been appointed as the Professor-In-Charge, Desai Sethi Centre for Entrepreneurship w.e.f. July 17, 2019

Prof. Jayendran V, has been appointed as the Convener, Industrial Engineering and Operation Research w.e.f. August 22, 2019

Prof. Arindam Sarkar, Department of Chemical Engineering has been appointed as the Associate Warden, Hostel. 8 w.e.f. July 1, 2019

Prof. Vikram Vishal, Department of Earth Sciences has been appointed as the Associate Warden, Hostel. No. 5 w.e.f. July 1, 2019

CEP courses scheduled during November and December 2019

Duration	Days	Course Title	Course Coordinator	Department
Open Programmes : (November)				
1-11-2019	3 days	Deep Learning for Remote Sensing Image Analysis	Prof. Biplab Banerjee	Computer Science & Engineering
4-11-2019	1 day	IRC37: 2018: Guidelines for Design of the Flexible Pavements	Prof. Dharamveer Singh	Civil Engineering
9-11-2019	5 days	Aircraft Stealth Technology	Prof. Shripad Mahulikar	Aerospace Engineering
21-11-2019	3 days	Expo Infodesign Information Structuring, Architecture and Visualisation	Prof. B.A. Ravi Poovaiah	IDC School of Design
22-11-2019	2 days	Advances in Urban Planning: Needs of 21st Century Cities	Prof. Arnab Jana	Center for Urban science and Engineering
25-11-2019	5 days	Energy Management	Prof. Rangan Banerjee	Energy Systems Engineering
25-11-2019	5 Days	Unravelling Complexity In Chemical Kinetics - Theoretical And Experimental Approaches	Prof. Akkihebbal Suresh	Chemical Engineering
30-11-2019	1 day	Understanding and Branding Self	Prof. S. Bhargava	SJM School of Management
In House Programmes :				
4-11-2019	5 Days	Mdp For High Potential Employees	Prof. Ashish Pandey	School of Management
11-11-2019	5 Days	Introduction To Machine Learning And Deep Learning - With Applications To Engineering Systems	Prof. Paluri Nataraj	Systems & Control Engineering
11-11-2019	5 Days	Community Driven Environmentally Sustainable Village	Prof. Bakul Rao	Centre for Technology Alternatives for Rural Areas (CTARA)
13-11-2019	2 Days	Digital Enablers	Prof. Makarand Kulkarni	Mechanical Engineering
18-11-2019	5 Days	Emerging Telecom Technologies For Digital Development And Spectrum Management	Prof. Prasanna Chaporkar	Electrical Engineering
27-11-2019	3 Days	People Capability Maturitv Model In Psus: A Practical Approach	Prof. Kirankumar Momaya	School of Management
Gian Courses :				
25-11-2019	5 Days	Theory of Plasticity And Its Applications	Prof. Prashant P. Date	Mechanical Engineering
Open Programmes : (December 2019)				
6-12-2019	2 Days	Basics of Weather Dynamics	Prof. Sridhar Balasubramanian	Mechanical Engineering
7-12-2019	1 Days	Developing Material Safety Data Sheets	Prof. Sandip Roy	Chemical Engineering
9-12-2019	5 Days	Introduction To Medical Device Development	Prof. Rohit Srivastava	Bioscience And Bioengineering
9-12-2019	11 Days	Certificate Course on Piping Engineering	Prof. Madhu Vinjamur	Chemical Engineering
10-12-2019	2 Days	Industrial Effluent Treatment	Prof. Anurag Garg	Environmental Science & Engineering
13-12-2019	3 Days	N=1 Consumer Analytics Using Ai (Artificial Intelligence)	Prof. Rajendra Sonar	School of Management
13-12-2019	2 Days	Optimization And Hydraulic Modelling of Water Supply Networks With Opensource Software	Prof. Pradip Kalbar	Center For Urban Science And Engineering
16-12-2019	5 Days	Biology For Engineers	Prof. Ambarish Kunwar	Bioscience And Bioengineering
17-12-2019	5 Days	A Sparc Course on Flexible Bioelectronics - Sensors, Electronics, Energy Harvesting And Data Analytics	Prof. Pramod Murali	Electrical Engineering
23-12-2019	5 Days	Safety In Teaching And Research Laboratores	Prof. Ambarish Kunwar	Bioscience And Bioengineering
In House Programmes :				
16-12-2019	5 Days	Scientific Computing With Python	Prof. Kumar Appaiah	Electrical Engineering
Gian Courses :				
2-12-2019	10 Days	Numerical Modelling of Metal Forming Processes : Formability And Damage	Prof. Prashant P. Date	Mechanical Engineering
2-12-2019	5 Days	A Hands-on Introduction To Next Generation Sequencing And Metagenomics Analysis	Prof. Kiran Kondabagilu	Bioscience And Bioengineering
2-12-2019	4 Days	Audio Signal Processing For Computational Musicology	Prof. Preeti Rao	Electrical Engineering

In the Wilderness

Photo Credit :
by Mr. Batu S. Kambale
IIT Hospital

BOOK POST