

IIT Bombay Celebrates Its Annual Alumni Day

- An alumni appreciation and gratitude programme
- Distinguished Service Awards were bestowed on six alumni members
- Chapter Service Awards were bestowed on four alumni members
- Launch of Dean ACR website
- Launch of IIT Bombay's annual fundraiser 'GO-IIT Bombay' campaign
- Project Evergreen: An overview
- The Silver Jubilee batch (Class of '97) pledged Rs. 26 crores towards the Legacy project
- Honoring the Pioneers: IITB Class of '62



Awardees along with Prof. KVK Rao, Deputy Director (Finance and External Affairs) (fifth from right) and Prof. Ravindra Gudi, Dean (Alumni and Corporate Relations), IIT Bombay (fifth from left) during Alumni Day

The **Indian Institute of Technology Bombay** celebrated its annual **Alumni Day** on December 25, 2022 at the IIT Bombay campus. The function was held in a complete in-person mode after a gap of two years. The celebration started with a warm welcome by **Prof. Ravindra Gudi**, Dean (Alumni and Corporate Relations), IIT Bombay.



The Silver Jubilee Batch (Class of 1997) has pledged Rs. 26 crores towards the Legacy Project

Prof. Subhasis Chaudhuri, Director, IIT Bombay gave the visiting alumni an overview of the Institute and its growth over the years. In his address (online), Prof. Chaudhuri informed how the Institute is growing from strength to strength. *"IIT Bombay sees the success of its alumni as its own success like a mother always does about her children. We are delighted to have them all at home and look forward to their continued association with IIT Bombay,"* he said.

The Chairman (BoG), IIT Bombay **Dr. Sharad Saraf** and **Prof. K.V.K. Rao**, Deputy Director, (Finance and External Affairs), on behalf of the Institute, unveiled a donor wall during the function consisting of the names of the donors and the causes they have donated to.

The contributions by IIT Bombay's sister organisations - **IIT Bombay Heritage Fund (IITBHF)** and **IIT Bombay Alumni Association (IITBAA)** were also acknowledged during the function.

As a part of the function, **Distinguished Service Awards** were bestowed on six alumni members this year, who besides being achievers in their own chosen domains, have contributed in a notable and sustained manner to the progress of the Institute. The award, instituted in the year 1999, consists of a certificate, memento and an Uttaria. This year, the award was conferred on

1. **Mr. Ajit Jawle (B.Tech., 1977 & M.Tech., 1979)**
2. **Mr. Nitin Pravinchandra Doshi (B.Tech., 1979 & M.Tech., 1981)**
3. **Mr. Nandkishore Nemade (B.Tech., 1982)**
4. **Mr. Suhas Narayan Mehta (B.Tech., 1983)**
5. **Mr. Mayur Sirdesai (B.Tech., 1987)**
6. **Mr. Jignesh Patel (B.Tech., 1992)**

The **Chapter Service Awards**, instituted during the Diamond Jubilee year celebrations, were conferred on

1. **Mr. Rajendra Melville (B.Tech., 1974);**
2. **Mr. Rijas V. Shareef (M.Tech., 2014);**
3. **Mr. Barsopia Vivek (M.Tech., 2018)**
4. **Mr. Suhas Damodar Deshpande (M.Tech., 1980)**

The award is conferred on select alumni who have contributed in a very notable and sustained manner to the progress of the Chapter and also to the progress of the Institute.

On the occasion, the new website for the office of the Dean (Alumni and Corporate Relations) was launched by the Chairman (BoG), IIT Bombay Dr. Sharad Saraf, Prof. K.V.K. Rao, Deputy Director (FEA) and Prof. Ravindra Gudi, Dean (ACR) in the presence of Institute functionaries, alumni and their family members.

The event witnessed the launch of IIT Bombay's annual fund-raising campaign '**GO-IIT Bombay**' for the year 2022-2023. The campaign aims to raise funds for various campus initiatives including enhancing undergraduate labs, Young Faculty Awards, student scholarships, enhancing hostel infrastructure, and Regular Giving - a different scheme that aims at overcoming resource gaps to support a variety of causes.

An overview on '**Project Evergreen**', an initiative by the alumni of IIT Bombay, to support the Institute in catering to its student housing needs, was presented by IIT Bombay alumnus **Ms. Zenobia Driver** during the function.

The Silver Jubilee Batch (class of 1997) has pledged a sum of Rs. 26 crore towards its Legacy Project. The Legacy Project is envisioned and worked



The Class of '62 - the first batch of IIT Bombay celebrated their Diamond Jubilee this year

upon every year by the batch celebrating its Silver Jubilee anniversary, for the betterment of the Institute and of the people associated with it, as a way of giving back to the alma mater and to leave behind a lasting legacy and remembrance of their silver jubilee reunion.

IIT Bombay honored the **Class of '62 - The first batch of IIT Bombay**, which is **celebrating the Diamond Jubilee** of its graduation this month, for their continuous support and guidance, on the occasion of Alumni Day celebrations.

The entire event was broadcast live on the Institute's YouTube Channel: <https://www.youtube.com/c/IITBombayOfficialChannel>

Alumni of the Institute and their family members participated in the Alumni Day celebrations this year.



Chairman (BoG), IIT Bombay Dr. Sharad Saraf (L) and Prof. K.V.K. Rao, Deputy Director (Finance and External Affairs) (R) during unveiling of Donor Wall

United Nations Secretary-General Mr. Antonio Guterres Visits IIT Bombay

The Indian Institute of Technology Bombay hosted the Secretary-General of the United Nations **Mr. Antonio Guterres** on October 19, 2022.

Mr. Guterres delivered the UN Day Public Lecture titled **“India at 75 – India UN Partnership – Strengthening South-South Cooperation”** at Prof. B. Nag Auditorium, VMCC.

The UN Chief, in his address, urged the students to work on solutions to climate change and desist from working for those who are wrecking the climate.

Esteemed guests, including **Ms. Ruchira Kamboj**, India’s Permanent Representative to the

United Nations; **Mr. Shombi Sharp**, UN Resident Coordinator in India; **Ms. Dia Mirza**, actress and Goodwill Ambassador of United Nations Environment Programme (UNEP); **Mr. Samir Saran**, President of Observer Researcher Foundation (ORF); delegates from the Ministry of External Affairs (MEA), Government of India and United Nations India, graced the occasion.



Mr. Antonio Guterres, Secretary-General of the United Nations, delivering the UN Day Public Lecture titled “India at 75 – India UN Partnership – Strengthening South-South Cooperation” at Prof. B. Nag Auditorium, VMCC



(From L to R): India’s Permanent Representative to the United Nations Ms. Ruchira Kamboj; Secretary-General of the United Nations Mr. Antonio Guterres; and President of the Observer Researcher Foundation Mr. Samir Saran, in conversation with the audience during the Q&A session at IIT Bombay

IIT Bombay dignitaries, including **Prof. S. Sudarshan**, Deputy Director (Academic and Infrastructural Affairs); **Prof. Neela Natraj**, Dean (Faculty Affairs); **Prof. Amit Aggrawal**, Dean (International Affairs); **Prof. Upendra Bhandarkar**, Associate Dean (Research and Development); **Prof. Ravindra Gudi**, Dean (Alumni and Corporate Relations); **Prof. D. Parthasarathy** (Department of Humanities and Social Sciences) and **Prof. Krishna Kaliappan**, Dean (Strategy), among many others, were present on occasion.



United Nations Secretary-General Mr. Antonio Guterres (fourth from right); India's Permanent Representative to the United Nations Ms. Ruchira Kamboj (third from right); IIT Bombay Deputy Director (Academic and Infrastructural Affairs) Prof. S. Sudarshan (second from right); and President of the Observer Researcher Foundation Mr. Samir Saran (first from right) along with other dignitaries during the visit to R&D stalls



United Nations Secretary-General Mr. Antonio Guterres (C) and India's Permanent Representative to the United Nations Ms. Ruchira Kamboj (C) with the audience during the UN Day Public Lecture held at Prof. B. Nag Auditorium, VMCC

Institute Celebrates National Education Day



Awardees of Industrial Research Consultancy Centre (IRCC) Research Awards - 2021 along with Chief Guest Mr. Amit Sharma, Managing Director & CEO, Tata Consulting Engineers Limited - TCE (C), Prof. Milind Atrey, Dean (Research and Development) (seventh from left) and Prof. S. Sudarshan, Deputy Director (Academic and Infrastructural Affairs) (seventh from right)

IIT Bombay commemorated the birth anniversary of India's first education minister of independent India, **Maulana Abul Kalam Azad**, by observing **National Education Day (Rashtriya Shiksha Diwas)** on November 11, 2022. **Mr. Amit Sharma**, Managing Director and CEO of Tata Consulting Engineers Limited, was the Chief Guest on the occasion.

As part of the celebration, the **IRCC Research Awards - 2021** were conferred on select faculty during the programme. These awards have been instituted for the last several years to recognize the R&D efforts of our faculty members and are given in various categories. The awards are selected based on a call for nominations every year and following a selection process by a committee. Each award consists a citation and a cash prize of Rs. 50,000. In addition, the awardees will be invited to submit a research proposal to the IRCC for possible funding of up to Rs. 5,00,000. Chief Guest, Mr. Amit Sharma, presented the Research Excellence Awards to the awardees.

Following are details about the Research Excellence Awardees:

Research Publication Award:

Prof. Sudarshan Kumar , Department of Aerospace Engineering	Prof. Rajdip Bandyopadhyaya , Department of Chemical Engineering
Prof. Chandra M. R. Volla , Department of Chemistry	Prof. Anil Kottantharayil , Department of Electrical Engineering
Prof. Atul Srivastava , Department of Mechanical Engineering	

Impactful Research Award

Prof. Debabrata Maiti , Department of Chemistry	Prof. Rajneesh Bhardwaj and Prof. Amit Agrawal , Department of Mechanical Engineering
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Research Dissemination Award

Prof. Debabrata Maiti , Department of Chemistry	Prof. Santanu Banerjee , Department of Earth Sciences
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Early Research Achiever Award

Prof. Rahul Maitra , Department of Chemistry	Prof. Swatantra P. Singh , Environmental Science and Engg. Department
Prof. Dipanshu Bansal , Department of Mechanical Engineering	Prof. Rohan Chinchwadkar , Shailesh J. Mehta School of Management

Institute Holds Award Lecture Series



The Institute's Research and Development (R&D) Office organized a two-day **award lecture series** during Nov. 1-2, 2022 where the recipients of the IIT Bombay Research Awards 2021, presented their research works.

The following award recipients presented their talk during the lecture series:

Research Publication Award

Speaker	Title
Prof. Rajdip Bandyopadhyaya, Department of Chemical Engineering	Continuous disinfection of water by innovative nanoparticle-hybrid materials in filter devices and membrane modules
Prof. Chandra M. R. Volla, Department of Chemistry	Cobalt-Catalyzed C-H Activation Reactions with Allenes
Prof. Anil Kottantharayil, Department of Electrical Engineering	Dust on Solar PV (Panels) - What does it mean?
Prof. Atul Srivastava, Department of Mechanical Engineering	Breaking the barrier of three-dimensional time-resolved measurements in flow and thermal systems
Prof. Sudarshan Kumar, Department of Aerospace Engineering	'Combustion-based Micropower Generators'

Impactful and Research Dissemination Award

Speaker	Title
Prof. Debabrata Maiti, Department of Chemistry	Designing catalyst for effective transformation decoding reactive functional moiety

Research Dissemination Award

Speaker	Title
Prof. Santanu Banerjee, Department of Earth Sciences	Green silicate formation on ocean floor through time

Early Research Achiever Award

Speaker	Title
Prof. Rahul Maitra, Department of Chemistry	Molecular electronic structure algorithms for classical and quantum computers
Prof. Swatantra P. Singh, Environmental Science and Engineering Department	Electroconductive surfaces and membranes for desalination and wastewater treatment
Prof. Dipanshu Bansal, Department of Mechanical Engineering	Real-time mapping of energy carriers
Prof. Rohan Chinchwadkar, Shailesh J. Mehta School of Management	Launching India's Entrepreneurship and Innovation Ecosystem into a Higher Orbit

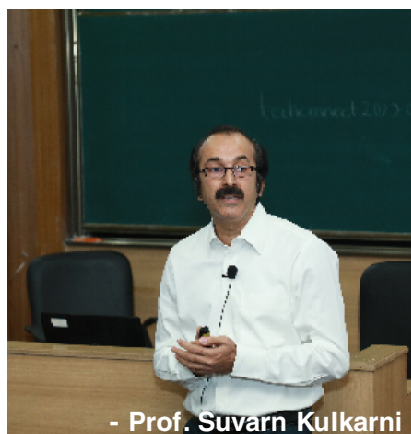
Impactful Research Award

Speaker	Title
Prof. Rajneesh Bhardwaj and Prof. Amit Agrawal, Department of Mechanical Engineering	Fomite and airborne transmission of COVID-19

IIT Bombay Conducts Lectures On Nobel Prizes 2022



- Prof. Sudha Shastri



- Prof. Suvarn Kulkarni



- Prof. Kiran Kondabagil



- Prof. Aditi Chaubal



- Prof. Sai Vinjanampathy

The **Industrial Research and Consultancy Centre (IRCC)** has been organizing lectures on Nobel Prizes from 2009 onwards annually. The lectures are focussed on the significance of the work leading to the award of this coveted prize and are presented at a level accessible to a literate audience. Lectures on **Nobel Prizes 2022** were organized on November 10, 2022, at Prof. B. Nag Auditorium, Victor Menezes Convention Centre of the Institute. **Prof. Milind D. Atrey**, Dean (R&D) gave introductory remarks about the programme.

Experts who gave lectures this year are as follows:

Category	Laureate(s) [Prof.] and Awarded work	Speaker [Prof.]
Literature	Annie Ernaux "For the courage and clinical acuity with which she uncovers the roots, estrangements and collective restraints of personal memory"	Prof. Sudha Shastri , Department of Humanities and Social Sciences
Chemistry	Carolyn R. Bertozzi , Morten Meldal and K. Barry Sharpless "For the development of click chemistry and bioorthogonal chemistry"	Prof. Suvarn Kulkarni , Department of Chemistry
Physiology/ Medicine	Svante Pääbo "For his discoveries concerning the genomes of extinct hominins and human evolution"	Prof. Kiran Kondabagil , Department of Biosciences and Bioengineering
Economics (Sveriges Riksbank Prize)	Ben Bernanke , Douglas Diamond and Philip Dybvig "For research on banks and financial crises"	Prof. Aditi Chaubal , Department of Humanities and Social Sciences
Physics	Alain Aspect , John F. Clauser and Anton Zeilinger "For experiments with entangled photons, establishing the violation of Bell inequalities and pioneering quantum information science"	Prof. Sai Vinjanampathy , Department of Physics

A large number of faculty members, students and the staff attended the programme. **Prof. Atrey** gave a vote of thanks to all the speakers and participants of the programme.

IIT Bombay Hosts An Awareness Workshop On National Credit Framework

Indian Institute of Technology Bombay (IIT Bombay) held an Awareness Workshop on **National Credit Framework (NcrF)** on November 28, 2022. Hon'ble Minister of State for Education **Smt. Annpurna Devi** was the Chief Guest of the function. The Hon'ble Minister was welcomed by the Institute's Director **Prof. Subhasis Chaudhuri**.

Dr. Vinita Aggarwal, Executive Member and **Lt. Col. Gunjan Chowdhary**, Director, National Council for Vocational Education and Training (NCVET); **Dr. Saroj Sharma**, Chairperson, National Institute of Open Schooling (NIOS); **Dr. Avichal Kapur**, Joint Secretary, University Grants Commission (UGC);



Institute Director Prof. Subhasis Chaudhuri welcoming Hon'ble Minister of State for Education Smt. Annpurna Devi during the National Credit Framework (NcrF) workshop held at IIT Bombay



Hon'ble Minister of State for Education Smt. Annpurna Devi addressing the audience during the National Credit Framework (NcrF) workshop held at IIT Bombay

Mr. Nilambuj Sharan, Senior Economic Advisor, Ministry of Skill Development and Entrepreneurship (MSDE); **Prof. Rajive Kumar**, Member Secretary, All India Council for Technical Education (AICTE); **Prof. Vinay Swarup Mehrotra**, Joint Director, Pandit Sunderlal Sharma Central Institute of Vocational Education (PSSCIVE), Bhopal; and **Ms. Niti Shankar Sharma**, Dy. Secretary of Central Board of Secondary Education (CBSE) were the panelists.

Speaking on the occasion, **Smt. Annpurna Devi** said that NEP 2020 envisages universalization of credit framework for removing barriers between knowledge, skills and employability, establishing a credit accumulation & transfer system for all kinds of learning for ensuring seamless mobility between learning and skilling pathways.

The Minister stated that NCrF will provide us with an opportunity to

recognize applied aspects of knowledge and skills. It will also create new possibilities for lifelong learning and skilling. NCrF will boost per capita productivity, empower all and lay a strong foundation for India to lead this century, she further added.

Link of the event: <https://youtu.be/yF7R9Q7KNQY>

Union Minister Mr. Nitin Gadkari Visits IIT Bombay

The Indian Institute of Technology Bombay hosted the Hon'ble Union Minister of Road, Transport and Highways, Government of India, **Mr. Nitin Gadkari**, during **Alankar** - the Shailesh J. Mehta School of Management's Global Leadership Summit held at VMCC, IIT Bombay on October 29, 2022.

Mr. Gadkari shared his experiences and expertise with the students and faculty and urged them to address societal issues in their research projects. **Mr. Sunjay J. Kapur**, President of the Automotive Component Manufacturers Association of India (ACMA) and Chairman of Sona Comstar Ltd., also attended the event.

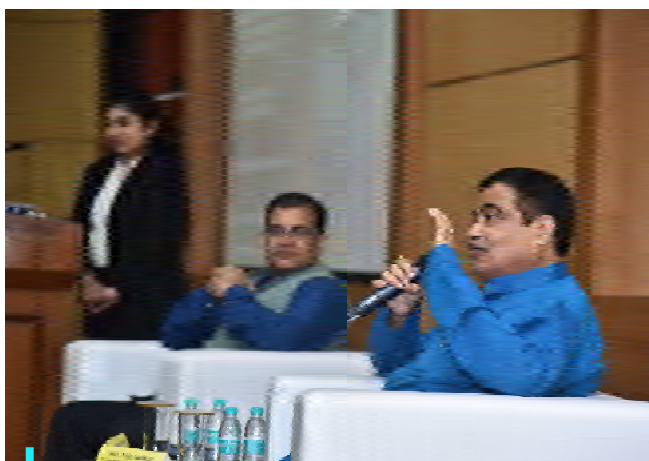
The Union Minister also visited the R&D stalls and interacted with the faculty and students of IIT Bombay. The stalls exhibited projects on Indigenous and Reliable Motors & Power Electronics; Manufacturing, Ergonomics and Stability; Battery Technology: Safety & Sustainability; Transportation Planning and Grid Integration; Green Hydrogen and Devices & Electronics.



IIT Bombay Director Prof. Subhasis Chaudhuri felicitating Hon'ble Union Minister of Road, Transport and Highways, Government of India Mr. Nitin Gadkari during the Shailesh J. Mehta School of Management's Global Leadership Summit 'Alankar'



Hon'ble Union Minister of Road, Transport and Highways, Government of India Mr. Nitin Gadkari addressing students during the Shailesh J. Mehta School of Management's Global Leadership Summit 'Alankar'



(From R to L): Hon'ble Union Minister of Road, Transport and Highways, Government of India Mr. Nitin Gadkari in conversation with the audience during the Q&A session along with IIT Bombay Director Prof. Subhasis Chaudhuri



Hon'ble Union Minister of Road, Transport and Highways, Government of India Mr. Nitin Gadkari (third from left) interacting with the faculty and students of IIT Bombay during his visit to R&D stalls along with IIT Bombay Director Prof. Subhasis Chaudhuri (fifth from left)

IIT Bombay Staff Take Integrity Pledge During Vigilance Awareness Week



Joint Deputy Registrar (Human Resources-I) Mr. C.P. Joglekar administering the 'Integrity Pledge' in Hindi to the IIT Bombay staff during the Vigilance Awareness Week

To observe **Vigilance Awareness Week** from October 31-November 06, 2022, IIT Bombay staff undertook a pledge to promote integrity in public life and achieve a corruption-free society. The '**Integrity Pledge**' was administered to employees of IIT Bombay in Hindi by Deputy Registrar (Human Resources-I) **Mr. C.P. Joglekar** and in English by Joint Registrar-Human Resources, HR-2 (HCM) Section, IIT Bombay **Dr. K.V. Reghuthaman** at the ground floor foyer of IIT Bombay's Main Building.

IIT Bombay staff pledged to foster a culture of honesty and integrity and to remain committed to good corporate governance-based transparency, accountability and fairness. This year's theme of Vigilance Awareness Week is "**Corruption-Free India for a Developed Nation**". The Vigilance Cell of IIT Bombay has also organised an essay-writing competition for the campus community on the topic "**Corruption Free India: Steps Ahead for Developed India**".

IIT Bombay Observes Rashtriya Ekta Diwas

The Indian Institute of Technology Bombay commemorated the birth anniversary of the Iron Man of India, **Sardar Vallabhbhai Patel**, by observing National Unity Day (Rashtriya Ekta Diwas) on October 31, 2022. The '**Rashtriya Ekta Diwas Pledge**' was administered to employees of IIT Bombay in Hindi by the Registrar **Mr. Ganesh Bhorkade** and in English by Joint Registrar - Human Resources, HR-2 (HCM) Section **Dr. K. V. Reghuthaman** at the ground floor foyer of IIT Bombay's Main Building.

An exhibition depicting the life and activities of Sardar Vallabhbhai Patel was organised at the same venue.



IIT Bombay employees look at exhibition posters depicting the life and activities of Sardar Vallabhbhai Patel during Rashtriya Ekta Diwas



Institute students presenting musical songs during Rashtriya Ekta Diwas

IIT Bombay Organizes Unity Run 2022



In commemoration of the birth anniversary of the Iron Man of India, Sardar Vallabhbhai Patel, IIT Bombay observed Rashtriya Ekta Diwas (National Unity Day) by conducting 'Unity Run' on October 31, 2022, in the Institute campus. Enthusiastic students, staff and faculty participated.

Unity Day Celebrations At KV School

To mark the birth anniversary of Sardar Vallabhbhai Patel (Unity Day), Kendriya Vidyalaya IIT Powai conducted various activities. Some glimpses of the events are as below :



Remembering Mahatma Gandhi And Lal Bahadur Shastri

On their birth anniversary, IIT Bombay paid homage to the Father of the Nation **Mahatma Gandhi** and former Prime Minister **Lal Bahadur Shastri**. The Institute Cultural Council organized the Jayanti celebrations at P.C. Saxena Auditorium. IIT Bombay functionaries, including Director **Prof. Subhasis Chaudhuri**; Dean (Student Affairs) **Prof. Tapanendu Kundu**; Registrar **Mr. Ganesh Bhorkade** and Institute Cultural Chairperson **Prof. Somnath Basu**, lighted the lamp and paid floral tributes to Gandhiji and Shastriji on October 02, 2022.

The students of IIT Bombay enthralled the audience with musical performances in Hindustani Classical, Carnatic, Assamese and a violin chorus on the occasion.



Garlanded photos of Mahatma Gandhi and Lal Bahadur Shastri during their birth anniversary celebrations held at P.C. Saxena Auditorium, IIT Bombay



IIT Bombay Director Subhasis Chaudhuri lighting the lamp at the birth anniversary celebrations of Mahatma Gandhi and Lal Bahadur Shastri



IIT Bombay students performing classical musical programme during the birth anniversary celebrations of Mahatma Gandhi and Lal Bahadur Shastri at P.C. Saxena Auditorium, IIT Bombay

IIT Bombay Observes National Constitution Day



Registrar Mr. Ganesh Bhorkade during the workshop

As a part of **National Constitution Day (Samvidhan Diwas)**, IIT Bombay organised a workshop titled “*How to Achieve Success in Various Competitive Examinations?*” on November 26, 2022. The Registrar **Mr. Ganesh Bhorkade** conducted the workshop. He shared various tips to succeed in competitive examinations. The workshop was well-attended by the staff and residents alike.

IIT Bombay Inaugurates ‘Deepak and Maya Satwalekar Design and Making Lab’

IIT Bombay inaugurated the ‘**Deepak and Maya Satwalekar Design and Making Lab**’ on December 19, 2022 with a special ceremony held on campus. The lab has been established through the generous support of the Institute’s Distinguished Alumnus **Deepak Satwalekar [B.Tech. (Hons), Mechanical Engineering, 1971]**, who graced the event accompanied by his wife **Maya Satwalekar**.

This lab forms an integral part of the larger **Maker Space initiative** at the Institute. The programme

has been implemented with a vision to promote hands-on learning amongst engineering students as they begin their academic journey with IIT Bombay. This modern facility comprises advanced equipment, over 250 workstations and will be accessible to nearly 1,400 first-year engineering students.

The event saw Deepak discussing the deep passion he shares for providing a well-rounded education to students as the incentive behind his generous donation towards the lab. He also explained the instrumental role that hands-on learning plays in helping students create real- world applications for classroom concepts. The event culminated with talks by **Prof. Varun Bhalerao**, Associate Professor, Department of Physics, and **Prof. Darshan Shah**, Assistant Professor, Department of Mechanical Engineering, both of whom are core members of the Makerspace Committee at IIT Bombay. The professors provided an overview of the meticulous preparation and design work involved in the successful establishment of the lab and the amenities that will be available in this facility.

The Institute is grateful to Deepak for his generosity. With the inauguration of this lab, IIT Bombay takes a progressive step in its endeavour of making experiment-based learning an essential part of its curriculum.



Glimpses of ‘Deepak and Maya Satwalekar Design and Making Lab’ inauguration held on December 19, 2022

IIT Bombay Research Park Hosts One-Day Conclave On Sustainability

On November 30, 2022, IIT Bombay Research Park organised a one-day interdisciplinary conversation with stakeholders to build a sustainable world.

The speakers, delegates and participants congregated at IIT Bombay to discuss and deliberate on vital environmental topics and the sustainable way forward.

The event began with a welcome address by IIT Bombay's Deputy Director (Academic and Infrastructural Affairs) **Prof. S. Sudarshan**. The Chief Guest, Hon'ble Secretary, Ministry of Earth Sciences, Government of India, **Dr. M. Ravichandran**, attended the event virtually. In addition, the Additional Chief Secretary of the Revenue and Forest Department, Government of Maharashtra **Dr. Nitin Kareer** and the Additional Secretary Department of Administrative Reforms, Public Grievances and Pensions **Mr. Amar Nath** were the guests of honour.

The plenary speaker for the conclave was **Mr. Nadir Godrej**, Chairman and Managing Director of Godrej Industries Ltd., who shared his insights beautifully rendered in the form of a poem.

There were six parallel sessions on the topics of air and water quality; the food-energy-water nexus; sustainable and resilient infrastructure; climate change mitigation and green technology; climate policy and the circular economy; and AI for sustainability. The outcomes and engagement opportunities that this conclave offered are sure to get the ball rolling towards a community to champion sustainable development, comprising science, technology, and policy leaders from academia, industry and government. The IIT Bombay faculty shared the ongoing initiatives on the campus with the attendees.

The day concluded on a high note with a stimulating panel discussion between stakeholders on the topic **"Academia, Government, Industry, Community: Nexus for Sustainability,"** with the panelists including, Additional Chief Secretary, Department of General Administration, Government of Maharashtra **Ms. Sujata Saunik**; CEO of Paani Foundation **Mr. Satyajit Bhatkal**; Executive Director of Center for Study of Science, Technology and Policy (CSTEP) **Dr. Jai Asundi**; Senior Manager - Climate, World Resources Institute (WRI) India **Ms. Ashwini Hingne**; Director and CEO, Causis E-Mobility **Mr. Ravi Panga** and Faculty at Climate Studies, IIT Bombay **Prof. Raghu Murtugudde**.

The pledge for sustainability conclave encouraged attendees to make a sustainable choice that can be implemented on daily basis.



(From L-R) Mr. Nadir Godrej, Chairman and Managing Director of Godrej Industries Ltd. in conversation with IIT Bombay Director Prof. Subhasis Chaudhuri, Prof. Subimal Ghosh (Department of Civil Engineering and Convener of Interdisciplinary Program in Climate Studies) and Prof. Swaroop Ganguly (Department of Electrical Engineering) during Conclave on Sustainability 2022



Various stakeholders from industry, academia and the government took part in Sustainability 2022 Conclave

IIT Bombay Inaugurates 'Class of 1980 Design and Making Lab'



Glimpses of 'Class of 1980 Design and Making Lab' inauguration held on November 03, 2022

IIT Bombay inaugurated the '**Class of 1980 Design and Making Lab**' on November 3, 2022, set up through the generous contribution of the **Class of 1980**. **Mr. Vinay Somani**, the batch leader, addressed the gathering on occasion and spoke about the determination of the Class of 1980 to give back meaningfully to their alma mater which led to the establishment of the Lab. He also expressed his happiness at the rapid progress IIT Bombay has made since the batch's time on campus.

The lab, which comprises the latest digital and mechanical equipment (laser cutters, 3D printers, etc.), will be accessible to the Institute's first-year students. The young minds of IIT Bombay will have the opportunity

to learn modern designing and manufacturing practices through a multidisciplinary course. This lab forms an essential part of the Institute's larger **Maker Space initiative**, which envisions providing a comprehensive education to students through exposure to state-of-the-art thematic labs.

The members of the Maker Space committee, **Prof. Varun Bhalerao**, Department of Physics and **Prof. Darshan Shah**, Department of Mechanical Engineering, gave a brief overview of the Lab and the instrumental role it will play in revolutionising learning practices for students.

The Maker Space programme is an important step that aligns with the substantially revised

curriculum recently recommended by the Committee under the Chairmanship of **Prof. Kishore Chatterjee**, Department of Electrical Engineering. Significant components of this revamp were adapted from the recommendations made under the updated National Education Policy, which also emphasises hands-on, experimental-based learning.

IIT Bombay is grateful to the Class of 1980 for their generosity, which will aid the Institute in its endeavour to continue providing a world-class education to its students.

The '**Class of 1980 Design and Making Lab**' will also serve as an exemplar for other institutes across the country to follow and be aligned with the tenets of the National Education Policy.

IIT Bombay Inaugurates 'Brijraj Chandra Mansingh Chemical Instrumentation Laboratory'



Glimpses of 'Brijraj Chandra Mansingh Chemical Instrumentation Laboratory' inauguration held on November 07, 2022

IIT Bombay established the '**Brijraj Chandra Mansingh Chemical Instrumentation Laboratory**' on November 7, 2022, through a generous contribution from IIT Bombay's alumnus, **Mr. Sanjay Mansingh** (B.Tech., Electrical Engineering, 1992). The lab is a state-of-the-art facility housed in the Department of Chemistry on campus.

Set up in memory of Mr. Sanjay's father, **Mr. Brijraj Chandra**

Mansingh, the lab will provide the latest and advanced equipment to students pursuing cutting-edge innovative research projects under the guidance of the Chemistry Department's faculty. This modern facility will be accessible to all students and researchers of the Institute through an online booking portal and will also cater to more than 1,000 BTech, 200 BS/ MSc and 350 PhD students. In addition, this lab will aid the Chemistry

Department's efforts to upgrade its research infrastructure.

The lab will play an instrumental role in the mission of the Department of Chemistry, to ensure high-quality training of students in the best practices of this discipline and help push the frontiers of our understanding of Chemical Sciences. IIT Bombay is grateful to Mr. Sanjay Mansingh for his generosity towards establishing the lab.

Class Of 2010 Reunites For Its Decennial Celebrations

IIT Bombay was abuzz with excitement and activity as it held the much-awaited **Decennial Reunion** for the **Class of 2010**. The reunion was in collaboration with the **IIT Bombay Alumni Association** and **Student Alumni Relations Cell - SARC, IIT Bombay**, after two years since the pandemic.

Prof. Ravindra D. Gudi, Dean (Alumni and Corporate Relations), briefed the alumni on IIT Bombay's significant advancement over the years. He summarized the strategic steps planned by the Institute to accomplish its mission of being among the top science and technology institutes in the world by 2030.



Class of 2010 at its Decennial reunion held at IIT Bombay

The event witnessed a detailed presentation by our *Distinguished Alumnus Awardee* **Mr. Kirat Patel** (*B. Tech., Mechanical Engineering, 1975*) on **#ProjectEvergreen**. It is a first-of-its-kind alumni-led initiative to design, fund and build a world-class hostel complex on campus. The project will replace Hostels 7 and 8 along with the construction of a girls' hostel (Hostel 21) to house the growing number of students on campus. The reunion concluded with the Class of 2010 taking a monetary pledge as a part of their Legacy Project that supports critical initiatives at the Institute. IIT Bombay is thankful to the Class of 2010 for their generosity and for taking a trip down memory lane with their alma mater!

IIT Bombay Celebrates The Golden Jubilee Reunion For The Class Of 1972

The IIT Bombay Alumni Association organised the much-awaited **Golden Jubilee Reunion** for the **Class of 1972** during November 7–11, 2022, at the Institute campus. About 175 Institute alumni from all across the globe took part and attended the special occasion.

On November 8, a celebratory event was held in honour of the Class of 1972 as IIT Bombay Director **Prof. Subhasis Chaudhuri** welcomed alumni back to campus. He provided them with an overview of their alma mater's progress over the years, followed by a gala dinner for alumni networking. The following days saw Institute alumni taking a trip down memory lane through a tour of the campus as they witnessed the infrastructural developments at the Institute in recent decades. They also visited their respective departments and interacted with the faculty. An exhibition was also held for showcasing the unique ongoing research projects by IIT Bombay students and some of Institute Centres of Excellence and Innovation Labs. The alumni got to interact with the well-known Indian film director **Mr. Subhash Ghai** as he regaled them about his personal and professional journey at an informal programme held at the Institute.



IIT BOMBAY HELD THE GOLDEN JUBILEE REUNION FOR THE CLASS OF 1972 ON CAMPUS FROM NOV 7, NOV 11, 2022

One of the highlight moments from this Golden Jubilee reunion was a generous and substantial pledge by the Class of 1972 towards the progress of IIT Bombay. This contribution is a part of the Legacy Project, an initiative that was started by IIT Bombay that sees its legacy batches supporting and implementing critical projects of the Institute.

The reunion concluded with the alumni enjoying a trip to the Yeoor Hills in Thane. IIT Bombay is thankful to the class of 1972 for their generosity towards the steady progress of their alma mater.

Professor S.P. Sukhatme To Support Annual Scholarships For Children Of IIT Bombay's Non-Academic Staff

IIT Bombay's former Director and Professor Emeritus of the Department of Mechanical Engineering, **Prof. S.P. Sukhatme**, will support annual scholarships for meritorious children of employees of IIT Bombay's non-academic staff. And to that end, IIT Bombay signed a **Memorandum of Understanding (MoU)** with him on October 11, 2022. Through this initiative, annual student scholarships for meritorious children of employees of the Institute's non-academic staff including regular, temporary (on consolidated pay), and CHMS (mess workers amongst others who are pursuing their higher studies in India) will be established. The scholarships will be named after Prof. Sukhatme to honour his philanthropic contribution.



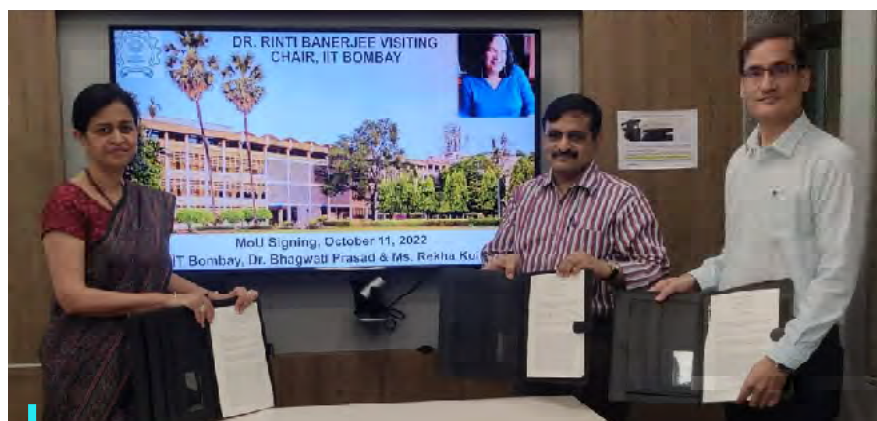
Former Director and Professor Emeritus of the Department of Mechanical Engineering, Prof. S.P. Sukhatme along with IIT Bombay Director Prof. Subhasis Chaudhuri during the signing of the MoU

One of IIT Bombay's key missions is to provide an equitable launchpad for success to students hailing from economically strapped backgrounds. Granting students with scholarships forms an integral part of the Institute's endeavour of providing equal opportunities to these young and bright minds who have the potential to change the world. These annual student scholarships will add to Prof. Sukhatme's legacy of giving back to IIT Bombay, which includes the setting up of the **Chair Professorship in Biostatistics** at the Institute.

Prof. Sukhatme's leadership and mentorship of students, faculty and alumni continue even after his tenure at the Institute. His considerate gesture has touched the hearts of the IIT Bombay community, who still look up to him as a father figure.

IIT Bombay To Establish The Dr. Rinti Banerjee Visiting Chair Professorship

IIT Bombay signed a **Memorandum of Understanding (MoU)** to establish the '**Dr. Rinti Banerjee Visiting Chair**' on October 11, 2022, with **Dr. Bhagwati Prasad** (husband of the late Dr. Rinti Banerjee; also IITB alumnus, Ph.D., Biomedical Engineering, 2000); **Ms. Rekha Koita**, (Distinguished Service Awardee, B.Tech., Metallurgical Engineering, 1992, IITB, Co-Founder, Koita Foundation); and **IIT Bombay Heritage Foundation**, for a first-of-its-kind initiative that will bring leading women medical researchers, academicians, industrialists, practitioners and entrepreneurs from various corners of the world to IIT Bombay.



(From R-L) Dr. Bhagwati Prasad [husband of the late Dr. Rinti Banerjee; IITB alumnus and Chief Operating Officer, Koita Centre for Digital Health (KCDH)]; Dean (Alumni and Corporate Relations), IIT Bombay Prof. Ravindra Gudi along with IIT Bombay alumna Ms. Rekha Koita during the signing of the MoU

The MoU will establish a Visiting Chair Professorship, called the '**Dr. Rinti Banerjee Visiting Chair**' in memory of the **late Professor Dr. Rinti Banerjee**, who was a doctor herself. She was an eminent researcher, professor, and former head of the Department of Biosciences and Bioengineering at IIT Bombay. She was also an alumna of IIT Bombay (Ph.D., Biomedical Engineering, 2000). The initiative will continue Dr. Rinti Banerjee's legacy. The late Dr. Banerjee was one of the rare faculty members at IIT Bombay with an MBBS degree and made exemplary contributions to translational research in the healthcare sector in India.

Women with MBBS degrees and an outstanding record in healthcare will be appointed to the Chair to provide leadership in multidisciplinary translational work at IIT Bombay and to enhance multidisciplinary teamwork with the aim of lowering costs and making healthcare more accessible to Indian citizens.

IIT Bombay Alumni Association Bengaluru Chapter Meet Over Networking

IIT Bombay, in collaboration with the **IIT Bombay Alumni Association Bengaluru Chapter**, hosted the much-awaited interactive and networking session with its alumni members based in Bengaluru, Karnataka. The gathering was a lively and spirited affair with around 450 members in attendance.

The event was presided over by IIT Bombay's Distinguished Alumnus **Dr. K Sivan**, former Chairman of *ISRO - Indian Space Research Organisation* and Secretary of the Department of Space who addressed the audience and spoke about his glorious professional journey with ISRO. In addition, he highlighted the several ways in which IITians can contribute towards advancing space science and research. Dr. Sivan also dedicated his precious time to our alumni as he learned about their exemplary research work and their contributions to society.



Glimpses of IIT Bombay Alumni Association Bengaluru Chapter networking session held during November 05-06, 2022



Dr. K. Sivan addressing the audience

The event also saw an engaging address by IIT Bombay's former Director **Prof. Ashok Misra**, as he spoke about the strong kinship that the Institute has built with its alumni over the years. He also highlighted the unique ways (collaborations, volunteering opportunities etc.) through which IIT Bombay has involved its alumni community in its journey of excellence. IIT Bombay's current Director **Prof. Subhasis Chaudhuri** presented the Institute's milestones over the decades and the way forward.

Prof. Ravindra D. Gudi, Dean (Alumni and Corporate Relations) spotlighted the critical initiatives being undertaken by IIT Bombay that need immediate support. In addition, IIT Bombay alumnus and CEO and Co-Founder, *Vedantu* **Mr. Vamsi Krishna**, (B.Tech., Civil Engineering, 2005), gave a talk and encouraged young alums to contribute towards the thriving entrepreneurial ecosystem that IIT Bombay

has fostered. The gathering also proved to be nostalgic for our alumni as they networked with their fellow alumni and reminisced about the great time spent on campus.

IIT Bombay is thankful to all the alumni in Bengaluru for participating in huge numbers and making this occasion memorable. We are grateful for your continued support and look forward to collaborating with you to create a glorious future for the Institute.

QS Asia University Rankings 2023: IIT Bombay Ranks 1st In India

Indian Institute of Technology Bombay (IIT Bombay) secured the **first** position in India and **40th rank** this year in the **QS Asia University Rankings 2023**. The results were released on November 8, 2022, by QS, a British company.

IIT Bombay secured an overall score of 68.7 out of 100. The Institute has scored 83.1 in academic reputation, 97.1 in employer reputation, 17.1 in citation per paper, 28.4 in faculty-student ratio, 100 in staff with PhD, 83.1 in papers per faculty, 80.3 international research network, 9.8 in international faculty, 3.4 in international students, 4.4 in inbound exchange and 2.9 in outbound exchange all scores out of a maximum of 100 points. Among these 11 indicators, Staff with PhD indicated the strongest one for IIT Bombay with a rank of 18 regionally.

In the 2023 edition of regional rankings, the Institute performed among the top 6% in the QS Asia University Rankings 2023. The Institute was ranked 42nd last year.



IIT Bombay Tops The QS Sustainability Ranking 2023 In India



IIT Bombay secured first place in India and is ranked in the range 281-300 globally in the **QS Sustainability Ranking 2023**. The Institute is ranked **173rd** in the 'Environmental Impact Performance' and **484th** rank in the 'Social Impact Performance' category of the QS Sustainability Ranking 2023. The result was released on October 26, 2022.

IIT Bombay Wins Questel IP Excellence Award 2022



IIT Bombay has won **Questel IP Excellence Award 2022** in the **Academic Sector** for creating incredible Intellectual Property (IP) Portfolios (Patents, Trademarks, and Industrial Designs Publications) having Indian priority during the period of January 2021 to October 2022.

US Roadshow 2022: IIT Bombay Delegation Covers 5 Cities To Meet 500 Alums!

A delegation from IIT Bombay featuring Chairperson, Board of Governors, IIT Bombay **Dr. Sharad Saraf**; IIT Bombay Director **Prof. Subhasis Chaudhuri**; Dean, (Alumni and Corporate Relations) **Prof. Ravindra D. Gudi**; and CEO, IIT Bombay Development and Relations Foundation (DRF) **Mr. Ravishankar Gedela** visited the United States for the annual 'US



Roadshow' held during November 09-22, 2022. They were accompanied by IIT Bombay Heritage Foundation (IITBHF) President and Vice-President, **Mr. Vinay Karle** and **Mr. Sreedhar Kona**, respectively. The events were hosted by IITBHF. In a first, the delegation covered a total of 5 cities - **Houston, San Francisco, Southern California, Seattle** and **New York**.

During their trip, the delegates met and interacted with nearly 500 alumni and made detailed presentations on the rapid progress made by the Institute in academics, research and industry collaboration. IIT Bombay's impressive growth trajectory was met with a positive and joyful response from alumni who lauded the students, faculty, scientists, researchers and staff members for IIT Bombay's growth into an "Institute of Eminence".

The delegation presented IIT Bombay's vision and plan for 2030 and sought their support in their alma mater's journey to be among the best universities in the world. Alumni were apprised of the Institute's focus on building world-class research in emerging areas of science and technology, through multidisciplinary Centres of Excellence. Alumni also learned about IIT Bombay's fundraising priorities, its future goals and the various ways





in which alumni can contribute to the Institute's mission of becoming a global leader in engineering education and research. In return, alumni provided the delegation with constructive feedback on how the Institute can continue to grow and advance rapidly in the upcoming years.

IIT Bombay is grateful to its alumni community in the US for spending their valuable time with members of the delegation and looks forward to the next US roadshow!



Dr. V. Narayanan Inaugurates TechConnect 2022



Glimpses of TechConnect 2022 held during October 16-18 as a part of TechFest at IIT Bombay campus

Dr. V. Narayanan, Director, Liquid Propulsion Systems Centre (LPSC), *Indian Space Research Organisation (ISRO)* along with Director of IIT Bombay **Prof. Subhasis Chaudhuri**, Dean (Research and Development) **Prof. Milind Atrey** and other Institute functionaries inaugurated **TechConnect 2022** on December 16, 2022. TechConnect is IIT Bombay's largest research outreach activity inspiring, influencing, and kindling the scientific temperament of children, students and adults of all ages alike.

Conducted as a part of **Techfest**, this exhibition showcases the Institute's R&D achievements in reaching out to critical societal needs and industry

requirements, as well as contributions to basic research. TechConnect 22 had ninety exhibition booths covering, among other areas, educational outreach, student tech teams, startups from Institute incubator SINE and technologies ready for transfer, held during December 16-18, 2022 in the campus.

The organizing team this year included **Prof. Prasanna Gandhi** and **Prof. Vikram Vishal** as *Overall Institute Co-ordinators*, **Dr. Sreelekha** and **Mr. Rohan** from Industrial Research and Consultancy Centre (IRCC), **Mr. Tejas Gathoria** and **Mr. Dipanshu Gayakwad** as *Overall Student Co-ordinators* along with several faculty and students.

IIT Bombay Hosts 'The Tech And R&D Expo 2022'



Glimpses of Tech and R&D Expo 2022 held at IIT Bombay campus

The student-run **Institute Technical Council** of IIT Bombay organised its flagship event, the **Tech and RnD Expo**, during October 15-16, 2022, the largest since the pandemic lockdown.

Over 10,000 people attended the Tech and R&D Expo 2022, including IIT Bombay alumni and well-known industry leaders. Seventy guests from various companies witnessed the technological innovations by students of the finest engineering institute in the country.

The event featured an open exhibition with stalls showcasing current and past projects undertaken by

the Institute's technical teams. Another major event organised by the ITC was the exhibits from the Institute Technical Summer Projects 2022, spanning over three months. The exhibition included fun activities such as virtual reality gaming and drone flying, besides several interactive talks and panel discussions with guest speakers from leading positions in technical and research fields. Students enjoyed the talks, which ranged from advanced cryptography to EV innovations. The Tech and R&D Expo 2022 concluded with a spectacular drone show that was well-received by all.

IIT Bombay Showcases 8 Industry-Ready Technologies At InvenTiv 2022

- Out of the 75 selected innovations from 23 IITs, IIT Bombay exhibited 8 Industry-ready technologies
- IIT Bombay's Bahubhashak project was among the 6 showcase projects



Hon'ble Minister of Education, Skill Development and Entrepreneurship Mr. Dharmendra Pradhan inaugurating InvenTiv, the mega R&D showcase held at IIT Delhi

The **Indian Institute of Technology Bombay** showcased eight of its critical R&D projects at **InvenTiv**, the mega R&D Showcase amongst all the 23 IITs held during October 14-15, 2022, at the Indian Institute of Technology Delhi. The inaugural session was graced by Hon'ble Union Minister for Education and Skill Development and Entrepreneurship **Mr. Dharmendra Pradhan**.

Prof. Subhasis Chaudhuri, Director, IIT Bombay, was among the key members of the Steering Committee headed by **Dr. Pawan Goenka**, Chairman, (BoG) IIT Madras, and **Dr. BVR Mohan Reddy**, Chairman, (BoG) IIT Hyderabad and IIT Roorkee. The event aimed to create holistic awareness around the research and innovation work being done by the IITs and seek collaborative avenues among state universities and institutes, industry and the IITs for better development and reach of the innovations at the grassroots level.

InvenTiv commemorated **Azadi Ka Amrit Mahotsav** and showcased 75 projects from the 23 IITs, along with 6 showcase projects on diverse themes. Among the 75 projects, IIT Bombay demonstrated eight of its projects, while also leading one of the 6 showcase projects. IIT Bombay made the announcement by

highlighting the projects through a press conference held in the presence of **Dr. Debjani Paul**, Department of Biosciences and Bioengineering; **Prof. Leena Vachhani**, Department of Interdisciplinary Programme in Systems and Control Engineering; **Prof. Ramesh Singh**, Department of Mechanical Engineering; **Prof. Rajesh Zele**, **Prof. Swaroop Ganguly** and **Prof. Udayan Ganguly**, Department of Electrical Engineering; and **Prof. Sagar Mitra**, Department of Energy Science and Engineering.

Talking about IIT Bombay's participation in the event, **Prof. Subhasis Chaudhuri**, Director, IIT Bombay said, "Over the last three decades, IIT Bombay has prioritised Research and Development across sectors to put India at the global innovation map, in addition to its core objective of providing high-quality education. More than 100 technologies and products developed at IIT Bombay have been deployed already. IIT Bombay is committed to assist the nation with world-class innovations that can help realize the vision of an Atmanirbhar Bharat. In accordance with that, we are glad to be showcasing eight of our projects at the InvenTiv 2022, which will bring the academia and industry together under one roof to showcase India's research and innovation capabilities and to seek out newer possibilities".

One of the six showcase projects at InvenTiv, the **Bahubhaashak** project, developed by IIT Bombay, IIT Madras, CDAC and IIIT Hyderabad enables speech-to-speech translation of over 40,000 videos available on Swayam Central AICTE (All India Council for Technical Education) and National Programme on Technology Enhanced Learning (NPTEL). The attempt is in line with the vision of National Education Policy 2020 to enable ease of learning in local languages.

In the Robotics, Sensors & Actuators and Semiconductors sector, IIT Bombay showcased the **Matsya 5.0 AUV** developed by **Prof. Leena Vachhani, Prof. Hemendra Arya and team**, and the **Global Navigation Receiver Chip (Dhruva)** developed for NAVIC and GPS, among others. Matsya 5.0 is a low-cost, indigenously developed, and fabricated Autonomous Underwater Vehicle (AUV) capable of navigating obstacle-filled underwater arenas, detecting obstacles, and avoiding them; while the Global Navigation Receiver Chip (Dhruva) is capable of integrating into Security Operations Centres (SoCs) for large-scale deployment in commercial applications such as vehicle tracking, marine vessel tracking, rail/ road/ water transportation monitoring, and other navigation applications.

Apart from this, IIT Bombay's healthcare innovations such as the **Portable Digital Inverted Microscopes** with single and variable magnifications developed by **Prof. Debjani Paul and team**, are among the key highlights.

The 2-day event brought academicians, faculties, students of IITs and other CFTIs, industry representatives, administrators, all under one platform to showcase India's global R&D prowess and to seek out more collaborative avenues.



Hon' Minister of Education, Skill Development and Entrepreneurship Mr. Dharmendra Pradhan addressing audience at InvenTiv, the mega R&D showcase amongst all the 23 IITs held at IIT Delhi



(From L-R) IIT Bombay Director and Convener of Steering Committee InvenTiv Prof. Subhasis Chaudhuri; Chairman, (BoG) IIT Madras and Chairman of Steering Committee InvenTiv Dr. Pawan Goenka; Hon. Union Minister for Education and Skill Development and Patron-in-Chief of InvenTiv Mr. Dharmendra Pradhan; Founder and Chairperson of Bharti Enterprises Mr. Sunil Bharti Mittal; Chairman, (BoG) IIT Hyderabad & IIT Roorkee and Co-Chairman, Steering Committee of InvenTiv Dr. BVR Mohan Reddy; and IIT Delhi Director Dr. Rangan Banerjee during the launch of the InvenTiv brochure

IIT Bombay Volunteers Clear 267 Kg Garbage From Powai Lake

More than 20 enthusiastic students, campus residents and PHO staff participated in the Powai lake bed cleanup drive held on December 18, 2022. The drive was a collaborative effort by the Institute Public Health Office (PHO) along with IIT Bombay Wildlife Club.

All necessary materials - two types of trash bags (one for plastic waste; another for glass etc), protective gloves, face masks and first aid kits were provided by the PHO staff. Additionally, they also carried iron rods and rakes to help extract some of the tougher trash.

The activity started at 7 am near the Jalvihar guest house ramp. Volunteers concentrated their efforts on two areas along the lake bed that were particularly dense with garbage. They collected nearly 100 bags of plastic bottles and 50 bags of glass bottles from the lake bed, amounting to 267 kg of trash in total!

The Institute appeals to campus residents to dispose of bottles and plastic material only in dustbins and not throw them anywhere else to protect our beautiful lake. IIT Bombay also encourages residents to help restore Powai lake and its surrounding environment to a natural and clean state and help in other conservation efforts.



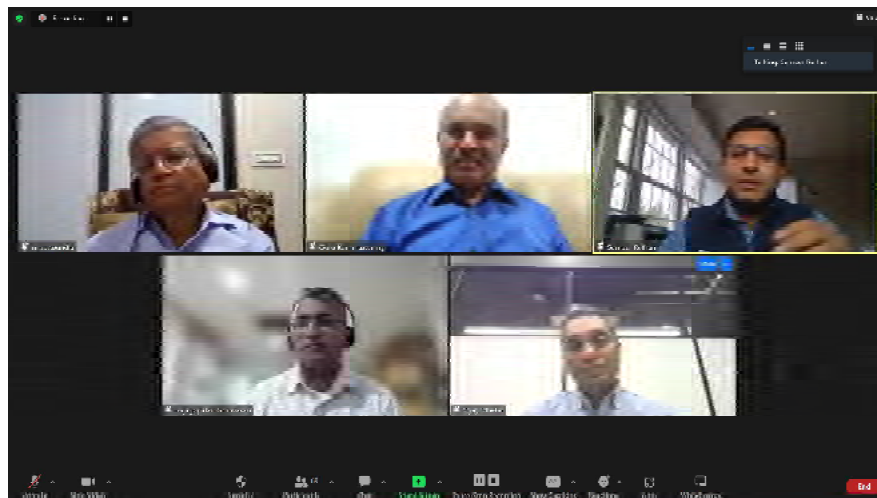
Volunteers from IIT Bombay (IITB) community including Public Health Office (PHO) staff and IIT Bombay Wildlife Club took part in the Powai lake bed cleanup drive



Photos of before and after clean up drive of Powai lake bed

Panel Discussion On “Changing Role Of Chemical Engineers”

The **Department of Chemical Engineering at IIT Bombay** held the latest edition of the panel discussion series ‘**Changing Role of Chemical Engineers**’ (a series of online panel discussions organised by the Chemical Engineering alumni of IIT Bombay in collaboration with the Department) on November 05, 2022. The discussion focused on Circular Economy of Materials and explored the current trends and future directions of important science and technology-driven industries.



The panel comprised **Dr. Vijay Mhetar** (CTO of DL Chemicals/ Kraton Corporation, IIT Bombay, '94); **Dr. Sameer Raihan** (SVP and CFO of The Chemours Company, IITB, '95); **Dr. Srinivasan Rajagopalan** (Manager-Materials at Exxon-Mobil Tech & Engg, IITB, '94) and **Mr. Rajeev Pandia** (Past President, ICC, IITB, '71) and was moderated by **Prof. Guruswamy Kumaraswamy** (Chem Engg, IITB, '94). The panelists highlighted issues related to materials waste and approaches to tackling this critical problem.

The various topics covered in the discussion included a review of the awareness of the state of knowledge at a global and national level on the issue of sustainability, circularity, and recycling of materials; the current trends and future direction for new technologies to extend the service life of materials and polymers; the role played by chemical engineers in developing and deploying relevant technologies or informing policy and the mantle of IIT Bombay and other institutions in India to develop better policies, practices and implementations for improving efficiency in the recycling of waste.

Army Launches Solar Electrification Project In LoC Village Jabri With Technical Support Of IIT Bombay

Jabri, a remote village in the border area of Jammu & Kashmir was recently electrified with *solar PV installations*. “**Aseem Foundation**”, a Pune-based NGO is executing a solar electrification project with the technical support from **IIT Bombay** and the **Technical University of Munich (TUM), Germany**. The project is named “**SEED Himalaya**” and is funded by TUM under the umbrella of **SEED (Sustainable Energies**



and Entrepreneurship Development) Center. The first phase of the installation was inaugurated on November 19, 2022 by **Maj. Gen. A S Pendharkar**, YSM, General Officer Commanding 28 Infantry Division via video conferencing. In the next phases of the project, additional generation capacity using solar PV panels, installation of a water wheel designed by TUM and activities related to social enterprise development have been planned.

Mr. Afsal Najeeb and **Mr. Omkar Buwa**, Ph.D. research scholars from the **Centre for Technology Alternatives for Rural Areas (CTARA)** are looking after the project under the guidance of **Prof. Anand B Rao**. The students had accompanied the “Aseem” and “TUM” teams for a recent site visit to the village and inauguration. The project was conceptualized and initiated by **Dr. Ganesh Hegde**, a former PhD student from CTARA, IIT Bombay.

IIT Bombay Hosts Techfest 2022



Techfest, the annual science and technology festival of IIT Bombay, held its 26th edition during December 16-18, 2022, after two long years of the pandemic. The TechFest was full of highlights and show-stoppers that drew people from all over the country while introducing them to some unprecedented technological marvels.

This year, Techfest lit up the skies of Mumbai with a magnificent **Drone Light Show**, with hundreds of drones creating a captivating experience for all attendees. A perfect fusion of art and technology, the show included dazzling choreography and was a once-in-a-lifetime experience for all. For the first time in the history of Techfest, IIT Bombay organized a drone show at its campus against the dramatic backdrop of the Mumbai skyline and the Arabian Sea on December 18, 2022.

Techfest, in association with **Reliance Jio**, launched the **5G network** for consumer testing in India, making IIT Bombay the first 5G-fied Institute and Mumbai the first city with a 5G consumer operating network in India. With this launch, India became the 11th country in the world to have a 5G network, alongside China, the USA and South Korea.

Techfest Drone Racing League, one of Night Drone Racing's most elite extravaganza events, was held at Techfest for the first time. The audience witnessed the drones slicing through the air with absolute speed on December 16 at the IIT Bombay Gymkhana grounds.

Techfest hosted **MADDIX** as the Headliner for the **EDM Night**, the producer of world-famous remixes like **Prophecy**, **Smash the Beat**, and **Bella Ciao**. The finale for the 26th edition of Techfest was loaded with

beats and rhythms at the Gymkhana grounds of IIT Bombay, held on December 18.

This year's Techfest Lectures featured the 11th president of Finland and the first-ever woman president of Finland **Ms. Tarja Halonen**; Former Indian Railway Minister **Mr. Suresh Prabhu**; Co-founder of *Google Maps* **Mr. Lars Rasmussen**; Administrator of the *Human Exploration and Operations (HEO)*, *National Aeronautics and Space Administration (NASA)* **Ms. Kathryn Lueders**; former Chairman of Defence Research and Development Organisation (DRDO) **Dr. G. Satheesh Reddy**; Member of the International Olympic Committee (IOC) **Mr. Octavian Morariu**; Co-founder and CEO of the *Spacetime Foundation* **Mr. Masayasu Ishida** and Director of the *Liquid Propulsion System Centre (LPSC)* at *Indian Space Research Organisation (ISRO)* **Mr. V. Narayan**.

The Techfest exhibition displayed some of the best and most unique innovations in the field of science and technology, like **BrahMos** - The world's fastest Anti-Ship Cruise Missile; **Formula E M8 Electro Gen2**; **Unitree GO1**- The World's First Intelligence Bionic Quadruped Robot; **SpaceHopper** - A Small Scale Legged Robot for Low-Gravity Space Exploration by ETH Zurich ; **Raptor** - A drone for quickly picking objects of any geometry by ETH Zurich; **INDRO** - Tallest humanoid robot built in India and **ISRO** - Indian Space Research Organisation, among many others.

In addition to this, Techfest competitions such as **International Robowars**, **International Full Throttle** and **Boeing Aeromodeling Challenge** garnered huge participation from all over the world.



- Ms. Tarja Halonen



- Ms. Kathryn Lueders



- Mr. Lars Rasmussen



International Full Throttle



International Robowars

Mood Indigo 2022

The 52nd edition of IIT Bombay's cultural fest '**Mood Indigo**' was organised in the campus after a gap of three years. Spanning four days, the fest was conducted during December 27-30, 2022, on the theme '**A Reverie of Exuberance**'.



The dynamic duo Vishal and Shekhar mesmerized the audience with their iconic performances at the popular nite concert of Mood Indigo 2022



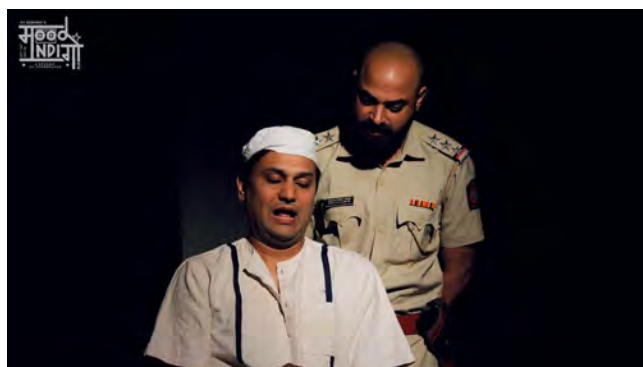
Michelin Star Chef Vikas Khanna, actors Vidya Balan and Vikrant Massey shared interesting anecdotes from their life journeys at Mood Indigo's Eloquence



Indie music sensations The Yellow Diary and Antariksh rocked the international nite concert with their amazing performances



Renowned actor Makarand Deshpande and artists from 5 Senses captivated the audience with their plays Ram and Kiss of the Spider Woman respectively during the Mood Indigo Theatre Fest



Stellar performances by music phenomenon Sunidhi Chauhan and Naalayak band during the Euphonic Nite concert



Comedy sensations Anubhav Singh Bassi and Samay Raina entertained everyone with their rib-tickling performances at Mood Indigo's humorfest



55th Inter-IIT Sports Meet 2022

The 55th Inter-IIT Sports Meet was jointly organised by IIT Delhi and IIT Roorkee after a gap of three years during December 14-22, 2022 at IIT Delhi. IIT Bombay contingent including 162 students along with sports officers, coaches and staff has made the Institute proud at the **55th Inter-IIT Sports Meet 2022**. The student team stands fifth in the Overall Championship. The Institute won medals in following categories:

Gold:

Basketball (Men)

Athletics - Javelin (Men)

Chess

Silver:

Table Tennis (Men)

Discuss

Athletics (Women – 100m)

Bronze:

Football

Squash (Men)

Hockey

STAFF INTER-IIT RESULTS

ATHLETICS
 400m (MEN): **Gold Medal**
 800m (MEN): **Silver Medal**
 4x100m (MEN): **Gold Medal**
 Long Jump (MEN): **Bronze Medal**

BADMINTON
 WOMEN: **Silver Medal**

FOOTBALL
 MEN: **Silver Medal**

LAWN TENNIS
 MEN: **Gold Medal**

SQUASH
 MEN: **Silver Medal**

TABLE TENNIS
 MEN: **Silver Medal**
 WOMEN: **Silver Medal**

OVERALL STANDING: 3RD POSITION
OVERALL MEN STANDING: 2ND POSITION
#GOBOMBAY#FIGHTFORFIFTYFIVE

OVERALL RESULTS

ATHLETICS
JAVELIN - GOLD
 RANGASWAMY PATHULOTHU
#GOBOMBAY#FIGHTFORFIFTYFIVE

OVERALL RESULTS

BEST PLAYER - CHESS
 ATHARVA TAYADE
#GOBOMBAY#FIGHTFORFIFTYFIVE



BEST SWIMMER AWARD

KAUSHAL KHUNTETA
 (2 GOLD & 1 SILVER)

Research in focus

Researchers find a new way of building voltage controlled quantum circuits using a combination of graphene and alpha molybdenum trioxide.

Valleytronics is an emerging quantum technology that promises high-speed data processing compared to present-day electronics. In valleytronics-based quantum computing, valleys—local minima in the energy band structures of electrons, are used to encode, process and store information. One of the ways to switch the valley states is by using infrared light. Valleytronics-based quantum computing would need low-cost infrared sources with selective control on the direction of light propagation.

Researchers from IIT Bombay have proposed a new technology platform that uses voltage to control the intensity of light emission and the direction of light propagation. It can be used to control valley states for quantum computing and also to detect chemical molecules, perform biological imaging, or design a brighter light source. The researchers have used a heterostructure of graphene—a two-dimensional material whose optical conductance can be controlled using voltage and alpha molybdenum trioxide—another layered two-dimensional material whose optical properties are different in different directions—to create the platform. The study was published in the journal *De Gruyter Nanophotonics*. The study was funded by the Department of Science and Technology, Government of India. The current research is the first time researchers have used voltage to control light in an alpha molybdenum trioxide and graphene heterostructure.

Two-dimensional materials are becoming more and more significant due to their unique and unusual properties, making them suitable for quantum computing and nanotechnology. They are in the form of one-atom-thick sheets. This sheet material exhibits some interesting properties, different from the bulk form of the same material.

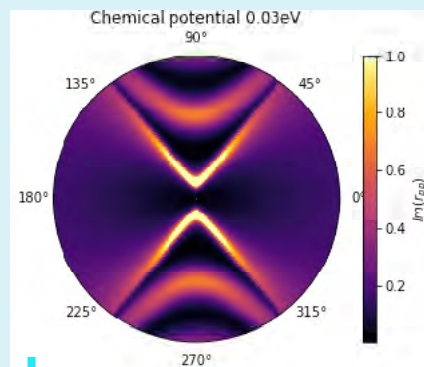
Infrared Light Control At Nanoscale For Quantum Computation



The proposed heterostructure has a thin film of alpha molybdenum trioxide over a silicon substrate. On top of alpha molybdenum trioxide is a single layer of graphene attached to a terminal called the gate. The gate is used to apply voltage. The intensity of infrared emission due to the interaction of infrared light with electrons in graphene can be controlled using voltage. However, more useful and exciting applications are possible if the direction and polarisation of the light can be controlled too. Alpha molybdenum trioxide is an interesting material in which the permittivity of light in different directions in a plane is different. Light of a specific polarisation is blocked in one direction but passes through in another direction. The combined properties of the two materials give rise to a fascinating light emission pattern in the heterostructure plane.

The heterostructure provides the benefit of large operational bandwidth and higher propagation distance which we do not obtain from any one material individually. Along with that, we can control the direction of propagation either by using voltage or the polarisation state of the incident light, or both, says **Dr. Saurabh Dixit**, a researcher of the current work.

The researchers made use of the Purcell effect, a quantum phenomenon that suggests that the spontaneous emission of light from a molecule can be enhanced by changing the dielectric permittivity (the ability of a material to store



The spontaneous emission pattern of the researchers' heterostructure shows an interesting pattern as the gate voltage changes.

electromagnetic energy) of the medium surrounding it. We leverage the Purcell effect phenomenon by using voltage to tune the dielectric permittivity of the proposed platform using graphene. Being able to control the emission pattern of light from an emitter in the vicinity of the proposed platform thus allows one to address the valley qubit easily, says **Mr. Aneesh Bapat**, a researcher of the current study.

The researchers used mathematical analysis and computer simulations to analyse the properties of the proposed heterostructure. They showed that the proposed platform could provide a convenient way to realise valleytronics devices. This is an important development since the technology for applying precise voltages is already mature even at the nanoscale. Hence our approach makes it easy to bring an on-chip realisation of valleytronics-based quantum circuits, says **Prof. Kumar**, who led the research.

The platform can also be used for other applications such as sensing biomolecules and cooling nano-sized electronic circuits. It opens new avenues for applications in quantum interference, gate-tunable planar refraction devices, emission pattern engineering and quantum field entanglement.

Article written by:

Prof. Anshuman Kumar, Department of Physics

Link to published work:

<https://www.degruyter.com/document/doi/10.1515/nanoph-2022-0034/html>

Staff News



Mr. Dattaram Gaikar, a retired staff in the Department of Metallurgical Engineering and Materials Science, IIT Bombay, received the **(late) Madhav Patwardhan (Julian) Memorable Award for bibliographic work in the Marathi language** on October 29, 2022. The award includes Rs. 10,000 and a certificate. The Chief Guest for this function was noted scientist **Dr. Anil Kakodkar** (ex-Chairman (BoG), IIT Bombay).

Creating Beauty With Every Brushstroke!

Ms Tanushree Bhattacharya, a campus resident and an Editorial Assistant working at **Geoscience Remote Sensing Letter** with **Prof. Avik Bhattacharya**, has won many accolades including *Biafarin Canada* for her painting skills. Ms Tanushree is a passionate, self-taught painter. She began her painting journey during the COVID-19 pandemic as a stress buster. She has since created more than 200



paintings on different themes including landscape, seascape, cityscape, forest, portrait, animal, bird, and heritage, that were exhibited at various competitions.

She started with oil pastels and gradually progressed to acrylic paint and a mixture of acrylic and poster colours on cartridge papers. She has won many national and international competitions, including *Fine Art America (FAA)* and *Khula Aasmaan*, among many others.

She has earned a Master's degree in Environmental Science and was qualified for the National Eligibility Test (NET) for the same.

She has since created more than 200 paintings on different themes including landscape, seascape, cityscape, forest, portrait, animal, bird, and heritage, that were exhibited at various competitions.



Paintings by Ms. Tanushree Bhattacharya

Awards and Distinctions

Prof. Aparna Singh, Department of Metallurgical Engineering and Materials Science, has been selected for the **INAE Young Engineer Award 2022**

Prof. Sadhana Dash, Department of Physics, has been selected to receive **SERB-POWER** (Promoting Opportunities for Women in Exploratory Research) **Fellowship**

Prof. Haripriya Gundimeda, Department of Humanities and Social Sciences, has been selected for the **Qimpro Platinum Standard 2022** award under the category Environment

Prof. Amit Agrawal, Department of Mechanical Engineering, has been elected as **Fellow of Indian National Science Academy**

Prof. Sudhir Ghorpade, Department of Mathematics, has been elected as **Fellow of Indian National Science Academy**

Prof. Samir K. Maji, Department of Biosciences and Bioengineering, has been elected as **Fellow of Indian National Science Academy**

Prof. Amol Gokhale, Department of Mechanical Engineering, has been selected to receive the **"2022 IIM-Platinum Medal"**

Prof. Alok Porwal, Centre of Studies in Resources Engineering, has been invited to join the Editorial Board of Elsevier Journal *"Ore and Energy Resource Geology"* as an Associate Editor

Prof. Rohit Srivastava, Department of Biosciences and Bioengineering, has been elected as a Fellow of the National Academy of Medical Sciences (FAMS). He is the only 3rd engineer elected by this prestigious academy comprising top medical specialists in the country

Prof. Soumyo Mukherji, Department of Biosciences and Bioengineering, has been elected as a **Fellow of the National Academy of Sciences, India (NASI)**

Prof. Ashish Juneja and his former PhD student **Dr. Rajendra Singh Bisht**, Department of Civil Engineering, have won the **IGS-AIMIL Biennial Award - 2022** for their paper titled **"A New Subtraction-Type Miniature Cone Penetrometer,"** published in the *Indian Geotechnical Journal*, Vol. 50, Issue 4, August 2020 (pp. 550–559), and has been adjudged as **best paper** on "Instrumentation" by the Indian Geotechnical Society

Prof. Sauvik Banerjee, Department of Civil Engineering, has joined the editorial board of the Journal *Nondestructive Testing and Evaluation*, Taylor and Francis, as a Subject Editor, for two years

Prof. Riddhi Singh, Department of Civil Engineering, has been invited to serve as a Co-Editor for *Hydrological Sciences Journal*

Prof. Dipendra Prasad, Department of Mathematics, has been elected to the **Fellowship of The World Academy of Sciences (TWAS)**

Prof. Gulab Singh, Centre of Studies in Resources Engineering, has been conferred the **"National Geospatial Award for Excellence 2021"** by the *Indian Society of Remote Sensing (ISRS)* during the ISRS Symposium held in Hyderabad during November 15–17, 2022. This award has been given in recognition of his outstanding and pioneering contributions in the area of polarimetric synthetic radar remote sensing for monitoring the earth, with a particular focus on its cryosphere and biosphere

Prof. Shripad P. Mahulikar, Department of Aerospace Engineering, has received the **"Excellence in Aerospace**

Education Award" for the year 2019 from the **Aeronautical Society of India** for his contribution towards higher Aerospace Education in Critical Technologies such as Stealth, Infrared Signatures and Heat Transfer to Hypersonic Aircraft"

Prof. Preeti Rao, Department of Electrical Engineering, co-organised the 23rd International Society of Music Information Retrieval Conference (ISMIR 2022) at IISc Bengaluru during December 4-8, 2022

Prof. Rohit Srivastava, Department of Biosciences and Bioengineering, has been elected as a Council Member of NASI

Prof. R. Balaji and his team, Department of Civil Engineering, and his team have been selected for **"Marine Engineering Division Prize"**, for their research article titled, *'Hindcast Modelling of Waves and Estimation of Power Potential in the Bay of Bengal'* in the (Series C/Issue 2, Volume 102) Journal of IEI, published by the Institution of Engineers (IEI), India

Prof. Varun Bhalerao and his Ph.D. student **Harsh Kumar**, Department of Physics, recently published a paper titled, *"A very luminous jet from the disruption of a star by a massive black hole"* on observations and analysis for the GROWTH-India team in the prestigious Journal *Nature*

Prof. Ganesh Ramakrishnan, Department of Computer Science and Engineering and his team received the **"The 25th National E-Governance Gold Award 2022"** on November 26, 2022, from the Honorable Minister **Dr. Jitendra Singh**. The other team members included *SrivisifAI Technologies Pvt. Ltd.* (industry partner of IIT Bombay) represented by its Co-founder **Mr. Yogesh Ray** and research associate **Dr. Pratap Sanap** and **Dr. Vishal Kaushal**, Ph.D. graduate from IIT Bombay

The team has been awarded under the category “**Outstanding research on Citizen Centric services by Academic/Research Institutions**” for their work on **Artificial Intelligence based Video Analytics solutions for Safety, Security and Compliance Monitoring**: <https://www.cse.iitb.ac.in/~vidsurv>. The award consists of a Crystal Trophy, Certificates and a reward of Rs. 5,00,000

The gold award-winning film can be viewed at <https://youtu.be/9pRFPIUPeWk>

Prof. Vivek Agarwal, Department of Electrical Engineering, has been nominated for the **Institute of Electrical and Electronics Engineers (IEEE)PELS (Power Electronics Society)** member-at-large election 2023-2025

Prof. Parinda Vasa, Department of Physics, has been selected for the **Indian Physics Association Hema Ramachandran Lectureship Award for Experimental Physics 2022**

Prof. Sanjeeva Srivastava, Department of Biosciences and Bioengineering, has been selected as “**Humans of Human Proteome Organisation (HUPO)**” (a recognition given to only few scientists from world proteomics community to highlight their work). He will be guest editor for two special issues on clinical proteomics

Paper Presentations

Prof. Srinidhi Balasubramanian and her Ph.D. student

Ms. Deepakshi Babbar, Environmental Science and Engineering Department, have published a News and Views column in Journal *Nature Food*

Prof. G V Sreekumar, IDC School of Design, presented a paper on “**Teaching calligraphy in online mode: a fresh look at design pedagogy**” in the **EDDE 2022 Design Education Conference**,

organised by School of Arts and Letters, Indiana University Southeast, New Albany, Indiana, USA, in collaboration with IDC School of Design, Indian Institute of Technology Bombay, Powai, Mumbai, India. This paper looks at the problems and solutions related to design education during the recent pandemic-enforced online classroom environment

Workshops

Parimal and Pramod Chaudhari Centre for Learning and Teaching (PPCCLT) organized a workshop on “**Team Based Learning (TBL) 101**” on October 13, 2022. The workshop was conducted by **Dr. Briju Thankachan**, Executive Director of EdTech Society and a Visiting Faculty at the Interdisciplinary Programme in Educational Technology (IDP-ET) at IIT Bombay

Yogastha organized “**The Five Tibetans Yoga Workshop**,” a form of yoga originated in Tibet on October 14, 2022. The instructor for the workshop was **Mr. Rohit Pillai**, a yoga teacher

On the 16th of November, 2022, IIT Bombay organized a one-day workshop for educators and professionals in the heritage sector. The workshop introduced participants to two projects, the Indian Culture Portal, and the Digital District Repository that bring together heritage and technology, and seek to democratise and diversify the field of culture. The day-long programme was attended by 60 educators and academic researchers, from educational institutions across Maharashtra. **Prof. Kannan Moudgalya**, Department of Chemistry, was the convener of the workshop

Indian Institute of Technology Bombay organised a first-of-its-kind two-day **Procurement**

Conclave for officers handling procurement of all IITs at the Institute campus on November 18 and 19, 2022. Officers from about 15 IITs took part in the conclave along with officials from the Ministry of Finance and Government e-Marketplace (GeM) as guest speakers

The **Wadhwani Research Centre for Bioengineering (WRCB)** conducted a two-day workshop on “**Understanding Patents**” during November 25-26, 2022. The objective of the workshop was to familiarise IIT Bombay innovators with the basics of intellectual property rights and various aspects of patents necessary for protecting and commercializing innovations. The workshop was conducted by **Dr. Raj Hirwani**, a leading expert in the field of technology management and entrepreneurship, with sessions by **Dr. Nishad Deshpande** and **Dr. M. G. Kulkarni**. **Prof. Debjani Paul**, Department of Biosciences and Bioengineering, was the professor-in-charge of the workshop

Training and Outreach Team, Student Wellness Centre organised a online **Digital Wellbeing Workshop** on November 26, 2022. The workshop aimed to look into practical and tangible steps in order to have a healthy relationship with technology. **Mr. Rijul Arora**, an MSc.(Economics) and B.E. (Hons) in Electrical and Electronics Engineering from BITS Pilani and a Digital Wellness Educator, conducted the workshop

Yogastha organized a session on “**Yogic Ikigai and Yogic Panchsutras**” on November 27, 2022 followed by a yoga workshop on the next day. The instructor for the workshop was **Dr. Vikas Chothe**, an MD, PhD in Ayurvedic medicine with yoga certification from AYUSH and QCI India

Conferences

Wadhwani Research Center for Bioengineering (WRCB)

conducted a one-day summit on 'Next generation therapeutics', themed around drug discovery and delivery to regenerative medicine on November 18, 2022. Representatives from the industry, startups, academia, government and students participated in the event. There were 33 research posters displayed, which catalysed many interesting conversations. **Prof. Abhijit Majumder**, Department of Chemical Engineering and **Prof. Shamik Sen**, Department of Biosciences and Bioengineering, were the convenors for the event.

The **Water Innovation Center: Technology, Research and Education (WICTRE)** at the Department of Metallurgical Engineering and Materials Science, IIT Bombay, organized the **2nd International Conference on Water Technologies 2022 (ICWT 2022)** during December 1-2, 2022, in a hybrid mode. Leading academicians, scientists,

researchers and research scholars came together to share their scientific findings and most recent innovations on various aspects of emerging research towards development of technologies for water remediation. **Prof. Shobha Shukla**, Department of Metallurgical Engineering and Materials Sciences, was the professor-in-charge of the conference.

IITB-Monash Research Academy hosted the **Global Energy Futures Conclave – 2022** during December 6-8, 2022. Professors from IIT Bombay, Monash University and industry leaders from India and Australia participated in this conclave.

The 3-day conclave saw conversations and collaborations on the future of energy for achieving net zero targets delving deeper into the challenges and opportunities critical to the themes of Carbon Capture, Utilization & Sequestration; New Technology & Policy for Energy Transition; Grid Integration – Renewable Energy & EV Mobility; Battery Storage & Materials; Green hydrogen & Ammonia;

Smart Grid & IoT; Social Impact of Energy Transition and India Australia Energy Policy.

The **4th international conference on the Science and Technology of Ironmaking & Steelmaking, STIS-2022**, was organized by the **Centre of Excellence in Steel Technology (CoEST)**, **Department of Metallurgical Engineering and Materials Science**, IIT Bombay at VMCC, IIT Bombay during December 13-16, 2022. **Prof. Viswanathan N Nurni**, Department of Metallurgical Engineering and Materials Science, was the convener of the conference.

The 14th edition of the **biennial International Conference on Transportation Planning and Implementation Methodologies for Developing Countries (TPMDC)** was held at IIT Bombay during December 19-21, 2022. Around 300 academicians, practitioners, managers and policymakers from all parts of the world came together to share cutting-edge research and state-of-the-art practices. **Prof. Dharamveer Singh**, Department of Civil Engineering, was Chairman of the conference.

Notification

Prof. Aswani Yella, Department of Metallurgical Engineering and Materials Science, has been appointed as Warden of Hostel No.15 w.e.f. November 1, 2022

Prof. Manjesh Hanawal, Industrial Engineering and Operations Research, has been appointed as Warden of Hostel No. 14 w.e.f. November 2, 2022

Prof. Achintya Dutta, Department of Chemistry, has been appointed as Warden of Hostel No. 13 w.e.f. November 10, 2022

Prof. Anupama Kowli, Department of Electrical Engineering, has been appointed as Associate Warden of Hostel No. 15 w.e.f. November 1, 2022

As per sanction of the President of India, the **Centre of Propulsion Technology (COPT)**, IIT Bombay is hereafter renamed as **DIA-COE IIT Bombay (DRDO-INDUSTRY-ACADEMIA Centre of Excellence IIT Bombay)**

Student News



“Nimbus 2.0”, a student team from the Department of Energy Science and Engineering (DESE), won first place and \$10,000 in the **International Switch Energy Case Competition 2022**.

Switch Energy Alliance, an Austin, Texas-based nonprofit organization, organised the competition with support from Sempra and the Hildebrand Department of Petroleum and Geosystems Engineering at The University of Texas at Austin (PGE).

During the competition, 141 teams from 15 countries participated and were tasked with developing a 30-year plan for improving energy access and reliability in countries like Colombia, Ghana and Myanmar. Our

team, which included PhD students **Shivam Kumar and Roopmati Meena**; and DD students **Srushti Bhamare and Shruti Prajapati**, worked on energy poverty issues in Ghana and presented their project to a live audience and a three-member jury, winning the finale out of the top five teams.

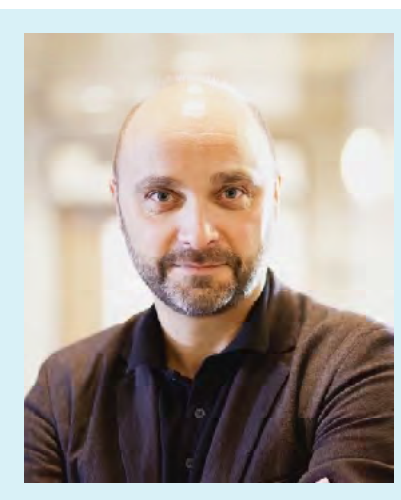
Institute Colloquium / Lectures



Prof. Srijit Mishra, Professor and Dean (Academic and Student Affairs), Indira Gandhi Institute of Development Research (IGIDR), Mumbai, delivered the Institute Talk on *‘Potential of Millets: From Farm to Plate’* as part of *“International Year of Millets”* on November 23, 2022



Prof. Satish K. Tripathi, President, University at Buffalo, The State University of New York, Buffalo, New York, USA, delivered the Institute Lecture titled *“Leading a Comprehensive Research University: Challenges and Opportunities”* on November 24, 2022



Prof. Sylvain Baillet, Professor, Neurology & Neurosurgery, Biomedical Engineering and Computer Science, Canada Research Chair (Tier 1, CIHR) of Neural Dynamics of Brain Systems, Montreal Neurological Institute (MNI), McGill University, Montreal, Canada, delivered the Institute Lecture titled *“The embodied self: the ultimate Turing test for*

AI? How sensory and motor predictions shape human perception and cognition” on December 19, 2022



Obituary

Mr. Ujjwal Kumar, a second-year MTech student from the Department of Chemical Engineering, passed away on October 20, 2022. He suffered a sudden massive intracranial bleeding.

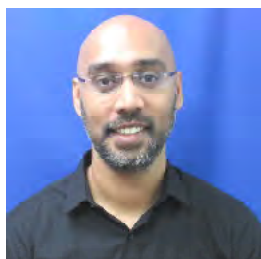
Appointments

Mr. Ninad Shah, has been appointed as



Technical Officer Scale I at Computer Centre w.e.f. October 13, 2022

Dr. Kshitij Jadhav, has been appointed as



Assistant Professor Grade II in the Koita Centre for Digital Health (KCDH) w.e.f. November 01, 2022

Dr. Arun Surendran, has been appointed as



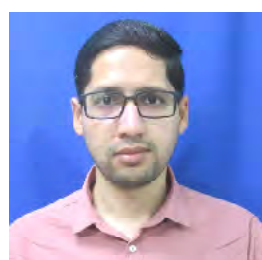
Assistant Professor Grade II in the Department of Electrical Engineering w.e.f. November 17, 2022

Dr. Akash Kumar, has been appointed as



Assistant Professor Grade II in the Dept. of Computer Science and Engineering w.e.f. December 01, 2022

Dr. Manas Thakur, has been appointed as



Assistant Professor Grade I in the Department of Computer Science and Engineering w.e.f. December 19, 2022

Retirements on October 31, 2022

Prof. Sambasivarao Kotha,



Department of Chemistry, retired after 28 years of service

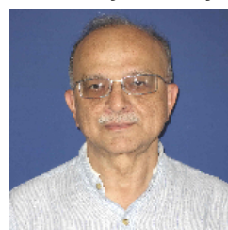
Mr. Ramesh A. Gohil, Multi



Skilled Assistant B, IIT Bombay Hospital, retired after 20 years of service

Retirements on November 30, 2022

Prof. Urjit A. Yajnik, Department



of Physics, retired after 33 years of service

Ms. Anuradha K. Agashe, Junior



Superintendent, Accounts Section, retired after 40 years of service

Retirements on December 31, 2022

Mr. Haridas P. Virghat, Sr.



Mechanic, Electrical Maintenance Division, retired after 32 years of service

Mr. Jaiprakash M. Yadav, Security



Guard C, Security Section, retired after 30 years of service

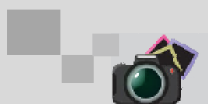
CEP courses scheduled January, February and March 2023

Open Programmes : (January 2023)

No	Course Title	Course Coordinator/ Department	Duration
Open Programmes :			
1	Opensource Computational Fluid Dynamics (CFD)	Prof. S. Gopalakrishnan Department of Mechanical Engineering	January 09, 2023 (1 days)
2	Stone Matrix Asphalt (SMA): Theory To Practice	Prof. Dharamveer Singh Department of Civil Engineering	January 21, 2023 (1 days)
3	Human Centric Eye-Tracking: Theory and Industrial Applications	Prof. Vivek Kant IDC School of Design	January 28, 2023 (2 days)

Open Programmes : (February 2023)

4	Classification Modelling	Prof. Sanjeev Sabnis Department of Mathematics	February 20, 2023 (6 days)
5	Artificial Intelligence And Machine Learning	Prof. Shivaram Kalyanakrishnan Department of Computer Science and Engineering	February 20, 2023 (5 days)



In the
Wilderness

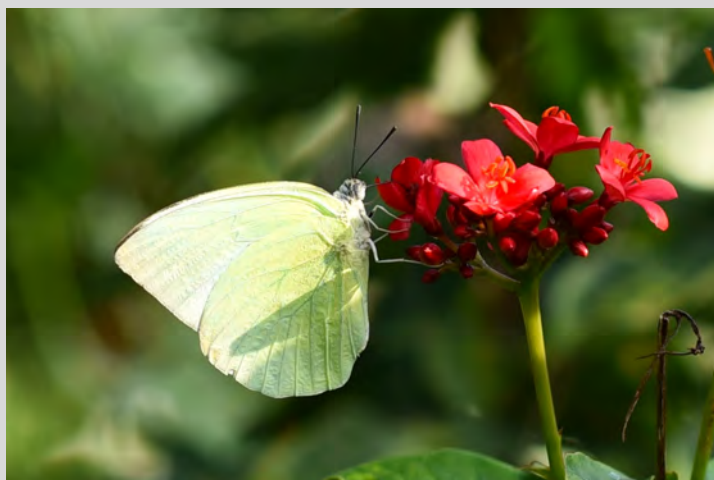


Photo Credit :

by Mr. Sanjay Mohite,

DIA-COE, Department of Aerospace Engg.,
IIT Bombay

