

IIT Bombay Celebrates Alumni Day 2024

- Distinguished Service Awards bestowed on three alumni
- Chapter Service Awards bestowed on six alumni
- The Silver Jubilee batch (Class of '99) pledged Rs. 21.2 crores towards the Legacy Project
- Alumni appreciation and gratitude programme
- Launch of IIT Bombay's annual fundraiser 'GO-IIT Bombay' campaign



The Silver Jubilee Batch (Class of 1999) has pledged Rs. 21.2 crores towards the Legacy Project

The Indian Institute of Technology Bombay observed its annual **Alumni Day** on 29th December, 2024 at VMCC on the campus. The event began with a condolence offering to former Hon'ble Prime Minister of India late Manmohan Singh. This was followed by a warm welcome by **Prof. Ravindra Gudi**, Dean (Alumni and Corporate Relations), and an address by **Prof. Shireesh Kedare**, Director, IIT Bombay, in presence of **Prof. Milind Atrey**, Deputy Director (Academics, Research and Translation) and **Prof. K.V.K. Rao**, Deputy Director (Finance, Infrastructure and Administration), highlighting the Institute's progress over the years.



Prof. Shireesh Kedare, Director of IIT Bombay addressing the audience

In his address, **Prof. Kedare** said, "Alumni are a big asset for IIT Bombay. They are not only bringing in resources, but also expertise as well as industry connect".

This year's **Distinguished Service Award** (instituted in 1999) was bestowed on **Mr. Rajindra Harcharan Singh** (B.Tech., Mechanical Engineering, 1988); **Mr. Sandeep Asthana** (B.Tech., Chemical Engineering, 1990) and **Mr. Sudhir Jayram Nikam** (B.Tech., Chemical Engineering, 1993). Besides being an achiever in their own chosen domain, they have made a significant and enduring contribution to the advancement of the Institute. The award consists of a certificate, a memento and an uttaria.



Prof. Ravindra Gudi, Dean (ACR), welcoming the guests

The **Chapter Service Awards** (instituted during the Diamond Jubilee year celebrations) are given to select alumni who have contributed consistently to the progress of their Chapters and the Institute. The awardees for this year include **Mr. Rajesh Soy**, B.Tech. (1993) and M.Tech. (1997), Computer Science and Engineering (Chapter: Seattle, USA); **Mr. Ranjan Ojha** B.Tech., Metallurgical Engineering and Materials Science, 1998 (Chapter: Chicago, USA); **Ms. Shweta Bhandari**, B.Tech., Metallurgical Engineering and Materials Science, 2002 (Chapter: Greater New York, USA); **Mr. Sagar Shah**, Dual Degree, Chemical Engineering, 2008 (Chapter: Greater New York, USA);

Ms. Sita Mahalakshmi Durvasula E-MBA, Shailesh J. Mehta School of Management, 2016 (Chapter: Hyderabad, India) and **Mr. Sunay Wagle**, M.Tech., Mechanical Engineering, 2017 (Chapter: Pune, India).

In the **alumni appreciation and gratitude segment** of the event, **Mr. Ravishankar Gedela**, CEO of the *IIT Bombay Development and Relations Foundation (IITB-DRF)*, on behalf of the Institute, expressed gratitude to all the major donors of the year whose generous contributions benefited IIT Bombay in a significant way. Recognizing the alumni community for their continued support and giving back to the Institute, IIT Bombay honored its top donors of 2024 by unveiling a Donor Wall on the occasion.



(From L-R) IIT Bombay dignitaries Prof. K.V.K. Rao, Deputy Director (FIA), Prof. Shireesh Kedare, Director and Prof. Milind Atrey, Deputy Director (ART) during unveiling of Donor Wall

Acknowledging their selfless giving, **Prof. Kedare** said, *“The contributions by these donors have helped the establishment of Centres of Excellence and Chair Professorships, as well as facilitated the enhancement of infrastructural facilities on campus and played a key role in student development”*.

IIT Bombay honored the Class of 1963 - the second batch of IIT Bombay, for their continuous support and guidance, on the occasion of Alumni Day celebrations. The batch representative of the Class of 1963 **Dr. Dharendra Nath Buragohain** [former Dean of Planning, IIT Bombay (1984-87) and the Head of the Department of Civil Engineering, IIT Bombay (1988-91)] shared his memories of the time he spent on campus.



Dr. Dharendra Nath Buragohain addressing audience



Ms. Zenobia Driver sharing overview of 'Project Evergreen'

The event witnessed the launch of the **4th edition** of its **annual fund-raising campaign ‘GO-IIT Bombay’** for the year 2024-25. The campaign is a concerted effort by the Institute to engage a wide spectrum of its alumni community. The Institute aims to harness the power of collective giving and welcomes all contributions - substantial or modest - towards the various causes that will propel IIT Bombay on its continued journey of excellence.

An overview of **‘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 alumna **Ms. Zenobia Driver** during the function.

The Silver Jubilee Batch (class of 1999) has pledged a sum of Rs. 21.2 crores towards its Legacy Project. A Legacy Project is a project adopted by the batch celebrating its Silver Jubilee anniversary, for the betterment of the Institute and of the people associated with it, as a way of giving back to the alma mater and leaving behind a lasting legacy and remembrance of their silver jubilee reunion.

The funds raised by the Class of 1999 will help the Institute support key academic projects and the research landscape at IIT Bombay. The contributed funds raised will also help drive IIT Bombay’s ambitious 2030 vision of ranking among the world’s top 50 universities and foster a legacy of excellence on the global stage.

Several Institute functionaries, alumni and their family members, faculty, staff and students attended the function. They served as a testament to the Institute’s profound legacy and the steadfast dedication of its alumni. The collaborative spirit among the attendees transformed the occasion into a genuinely memorable and enriching experience.



The Class of 1963, the second batch of IIT Bombay, honoured during Alumni Day celebrations

A Gift From Class Of 1969



The Chairperson of the Institute’s Board of Governors (BoG), IIT Bombay **Mr. Sharad Kumar Saraf** and the Director **Prof. Shireesh Kedare** along with other Institute functionaries attended a ceremony on 4th December 2024, where paintings created by members from **Class of 1969** were displayed and handed over to the Institute. The effort was led by alumnus **Mr. Arun Joshi** of Class of 1969. The paintings will adorn walls of Padmavihar guest rooms.

Celebration of National Education Day 2024

IIT Bombay celebrated the **National Education Day** on 11th November, 2024, honouring the birth anniversary of **Maulana Abdul Kalam Azad**, the first Education Minister of Independent India. **Prof. Vasudha Kamat**, former Vice-Chancellor of SNDT Women’s University, Mumbai, graced the event as the Chief Guest.



Prof. Shireesh Kedare, Director, IIT Bombay, addressing the audience

As part of the celebration, the **Research Excellence Awards 2023** (instituted in 2004) were conferred on select faculty members to recognize their R&D efforts. The awards are selected based on a call for nominations every year and following a selection process by a committee. Each research award carries a citation, a cash award and an internal research grant. Chief



Felicitation of the Chief Guest Prof. Vasudha Kamat by IIT Bombay Director

Guest Prof. Vasudha Kamat, along with the Director, presented the Research Excellence Awards to the recipients.

Following are the Research Excellence Awardees:

Sr. No.	Awardees	Department	Awarded in the theme/ areas
Research Publication Awards 2023			
1.	Prof. Samir Maji and his team	Department of Biosciences and Bioengineering	Protein Phase Separation and its association with Neurodegeneration
2.	Prof. Gopal Patil and his team	Department of Civil Engineering	Maneuvering of pedestrians and vehicles at uncontrolled road crossings
3.	Prof. Aswani Yella and her team	Department of Metallurgical Engineering and Materials Science	Halide Perovskites: From New Materials to Energy Conversion Devices
4.	Prof. Supratik Chakraborty & Prof. S. Akshay and their team	Department of Computer Science and Engineering	Automated Boolean functional synthesis
5.	Prof. Harish Phuleria and his team	Environmental Science and Engineering Department	Environmental Assessment – Air Quality and Emissions
Impactful Research Award 2023			
6.	Prof. Ganesh Ramakrishnan	Department of Computer Science	Natural language processing, Machine and Engineering learning, Machine Translation
7.	Prof. Sahana Murthy and Prof. Sridhar Iyer	Centre for Education Technology	Educational Technology

Apart from the research awards, the Institute also presented the **Institute Academic Prizes 2023** to the top-performing students of each class. About **91** students were felicitated by the Institute Director Prof. Shireesh Kedare for their superlative academic performance.



Awardees with the Chief Guest Prof. Vasudha Kamat, Prof. Shireesh Kedare, Director (center); Prof. Sachin Patwardhan, Dean (Research and Development) (second from right) and Prof. Pratibha Sharma, Associate Dean (Academic Programmes) (first from right)

Institute Holds Lecture Series

The **IIT Bombay Research Awards 2023** recipients presented their research work during a **lecture series** organized by the Institute’s Research and Development (R&D) Office on 8th and 22nd November, 2024. The presentations reflected their commitment to addressing significant challenges through rigorous research and innovation.



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

Research Publication Awards 2023	
Speaker	Talk Title
Prof. Samir Maji, Department of Biosciences and Bioengineering	<i>Phase separation of biomolecules: The new era of modern biology</i>
Prof. Gopal Patil, Department of Civil Engineering	<i>Maneuvering of Drivers at Uncontrolled Road Intersection</i>
Prof. Supratik Chakraborty and Prof. S. Akshay, Department of Computer Science and Engineering	<i>Automated Functional Synthesis: Towards Correct-by-Construction Designs</i>
Prof. Harish Phuleria, Environmental Science and Engineering Department	<i>Urban Aerosols: Characteristics and Impacts</i>
Prof. Aswani Yella, Department of Metallurgical Engineering and Materials Science	<i>Hybrid Perovskites: Beyond Photovoltaics</i>

Impactful Research Award 2023	
Speaker	Talk Title
Prof. Ganesh Ramakrishnan, Department of Computer Science and Engineering	<i>The Udaan Project ecosystem for Data-Efficient and Scalable End to end Document Machine Translation</i>
Prof. Sahana Murthy and Prof. Sridhar Iyer, Centre for Education Technology	<i>Designing learner-centric MOOCs</i>



IIT Bombay Research Awardees 2023 while presenting their research work during the lecture series



IIT Bombay Observes Swachhata Pakhwada 2024



As part of the nationwide initiative, IIT Bombay actively participated in **Swachhata Pakhwada 2024**, reinforcing its commitment to cleanliness and sustainability.

The Institute organized a series of events, including cleanliness drives, awareness campaigns and interactive sessions that promoted a culture of hygiene and environmental responsibility among students and staff.

Key Highlights:

- **Swachhata Pledge:** Employees of IIT Bombay gathered to take the Swachhata Pledge, emphasizing their commitment to cleanliness on campus.



- **Tree Plantation:** The Institute held a tree plantation event, "*Ek Ped Maa Ke Naam*", promoting a greener future with **Dr. Shekhar C. Mande**, a distinguished professor from the National Centre for Cell Science in Pune, gracing the occasion.

- **Sustainability Efforts:** The PHO established a shredding machine facility to encourage proper disposal of unwanted documents. Furthermore, an email was circulated to Institute residents regarding abandoned bicycles on campus, inviting them to claim these items. PHO also implemented QR codes across hostels, academic and residential areas to collect feedback and suggestions, for improving sanitation services.

- **Safai-Mitra Suraksha Shivir:** The PHO organized workshops for housekeeping staff, focusing on their health and well-being.

- **Dignity Camps:** The PHO conducted camps for sanitation workers, offering preventive healthcare screenings and information sessions on welfare schemes from central and state governments.

- **Rabies Awareness Camp:** The PHO conducted a camp featuring speakers **Dr. Sneha Ramesh Tatelu**, Senior Veterinary Officer at BMC and **Adv. Bhavya Poojari** from Mission Rabies, Mumbai, raising awareness about rabies prevention.



- **Mega Cleanliness Drive:** As part of the *Swachhata Me Jan Bhagidari* campaign, a mega cleanliness drive was organized, attracting significant participation from IIT Bombay residents.

- **Student Initiatives:** Various students-led hygiene and awareness campaign activities were organised, including **Cyclothon**, **Nukkad Natak (Street Play)** and **Powai Lake Cleanup Drive**.

- **Competitions:** Competitions on various topics, including cleanliness, the elimination of single-use plastics and the conservation of water and forests were organised by both schools at IIT Bombay to engage students about environmental issues.



Overall, the Swachhata Pakhwada celebrations at IIT Bombay concluded successfully, reinforcing the Institute's commitment to environmental responsibility.

Remembering Gandhiji And Shastriji On Their Birth Anniversary

On 2nd October, 2024, IIT Bombay paid homage to the Father of the Nation, **Mahatma Gandhi** and the third Prime Minister of India, **Lal Bahadur Shastri**, during a function held at P.C. Saxena auditorium. The Institute had also organised prize distribution of Swachhata Pakhwada 2024 on the occasion.

IIT Bombay functionaries including **Prof. K.V.K. Rao**, Deputy Director (Finance, Infrastructure and Administration); **Prof. P. Vedagiri**, Dean (Infrastructure Planning and Support); **Prof. Anurag Garg**, Associate Dean-III (IPS); **Prof. Suryanarayana Doolla**, Dean (Student Affairs); **Mr. Ganesh Bhorkade**, Registrar and other dignitaries lighted the lamp and paid floral tributes to Gandhiji and Shastriji during the function.



IIT Bombay Director Prof. Shireesh Kedare (fourth from left) along with other Institute functionaries paying tribute to Mahatma Gandhi and Lal Bahadur Shastri on their birth anniversaries

Appreciation certificates for various competitions held as part of **Swachhata Pakhwada 2024** were presented to students of IIT Bombay Campus School and Jr. College, PM SHRI Kendriya Vidyalaya and IIT Bombay.

Prof. K.P. Kaliappan, Dean (Strategy), on behalf of the Institute Cleanliness Assessment Committee, announced the top three winning departments as a part of the **“Clean & Green Campus Initiative 2024”**.

The event was well-attended by IIT Bombay community members in large numbers.

Winners of Clean & Green Campus Initiative 2024:



Department of Civil Engineering (1st prize)



Department of Aerospace Engineering (2nd prize)



Department of Industrial Engineering and Operations Research (3rd prize)



Mesmerizing musical programme **“Swaranjali”** by IIT Bombay students

Hindi Pakhwada Celebrations At IIT Bombay

To promote Hindi language and highlight its significance, the Indian Institute of Technology Bombay celebrated **Hindi Pakhwada (Fortnight)** during 14th-30th September, 2024. The celebration commenced with the inauguration of **Hindi Diwas** at the 4th Akhil Bharatiya Rajbhasha Sammelan, organized by the Department of Official Language at Bharat Mandapam, New Delhi, during 14th-15th September, 2024. IIT Bombay representatives, including **Prof. Nand Kishore**, Dean (Administrative Affairs); **Mr. Ganesh Bhorkade**, Registrar; **Ms. Vrushali Sansare**, Senior Assistant Registrar and **Ms. Vaishali Bahulkar**, Hindi Officer attended this event, which marked the 75th anniversary of Hindi being declared an official language by the Union of India.



Prof. Shireesh Kedare, IIT Bombay Director (second from right) felicitating chief guest Dr. Shekhar Mande



Prof. Milind Atrey, Deputy Director (Academics, Research and Translation) (right); Mr. Ganesh Bhorkade, Registrar (second from left) while inaugurating the book exhibition

During the celebration, the Central Library at IIT Bombay hosted a **Hindi book exhibition** during 23rd-29th September, showcasing various literary works that highlighted the richness of Hindi literature. Several competitions were organized for students at the IIT Bombay Campus school, including poetry recitation, dictation and essay writing, along with Hindi essay-writing and poetry recitation competitions for the Institute's students. These activities not only fostered creativity and self-expression among students but also promoted the use of Hindi in an educational context.

Additionally, the Institute conducted various competitions focused on essay writing, quizzes about the Official Language and current affairs, as well as

practical exercises in noting, drafting and letter writing for staff members to encourage and enhance their proficiency in Hindi. A key highlight of the fortnight was the Hindi workshop conducted on 20th September, 2024. **Prof. Ishwar Pawar** from Chandmal Tarachand Bora College, Pune was the Chief Guest and delivered a talk on the diverse applications and impact of the Hindi language in contemporary society. His insights emphasized the importance of Hindi not only as a medium of communication but also as a vehicle for cultural identity and heritage.

On 24th September, the Institute hosted a **Hindi seminar** titled **"Developed India @ 2047"** presented by **Dr. Shekhar Mande**, distinguished Professor and J.C. Bose Fellow at the National Centre for Cell Science. Dr. Mande's lecture offered a thought-provoking perspective on the future of India as the country approaches its centenary of independence. The fortnight concluded with a vibrant cultural evening on 30th September, 2024.

Dr. B. Thiagarajan, Joint Registrar, Academics, IIT Palakkad attended the concluding ceremony as a special guest. The event included a prize distribution ceremony for the various competitions that took place.

The following Section Incharges of the Institute were recognized for their excellent work in promoting Hindi:

- **Ms. Vrushali Sansare**, Senior Assistant Registrar, Internal Audit and Grievance Redressal Section
- **Mr. Pankaj Bhosle**, Public Health Officer, Public Health Office
- **Mr. Yogesh Patil**, Deputy Registrar, Hostel Coordination Unit
- **Mr. Aashish Barnwal**, Manager Telecommunication, Telephone Exchange



(From L-R) Ms. Vaishali Bahulkar, Hindi Officer; Prof. Ravindra Gudi, Dean (Alumni and Corporate Relations); Dr. B. Thiagarajan, Joint Registrar, Academics, IIT Palakkad; Prof. Nand Kishore, Dean (Administrative Affairs) and Mr. Ganesh Bhorkade, Registrar during concluding ceremony of Hindi Pakhwada

IIT Bombay Observes Vigilance Awareness Week And Rashtriya Ekta Diwas

Commemorating the birth anniversary of **Sardar Vallabhbhai Patel**, IIT Bombay celebrated **Vigilance Awareness Week** and **National Unity Day** during 28th October - 3rd November, 2024. The Institute reaffirmed its commitment to promoting ethics, integrity and national unity. This year's theme is *"Culture of Integrity for Nation's Prosperity"*.

On 28th October, the Institute employees undertook the Integrity and Rashtriya Ekta Diwas pledges at the Registrar's Conference Room in the Nandan Nilekani Main Building. **Mr. Akhouri Ashutosh Sinha**, Assistant Registrar (HRM)-II, Administration Section, IIT Bombay, led the pledge in Hindi, while **Ms. Falguni Banerjee Naha**, Public Relations Officer,

administered them in English. In addition, the **Vigilance Cell of IIT Bombay**, organised an essay-writing competition for the campus community on the theme *"Role of educational institutes in the fight against corruption"*.



IIT Bombay staff taking the 'Rashtriya Ekta Diwas' and 'Integrity' pledges on occasion of National Unity Day and Vigilance Awareness Week

"एकता ही संस्कृति से राष्ट्र को रच्यति."



At **PM SHRI Kendriya Vidyalaya, IIT Powai**, students took a **Unity Pledge** during a morning assembly, reinforcing their commitment to unity, integrity and national security. Various activities were conducted, including speeches, quizzes and discussions centered on the contributions of Sardar Vallabhbhai Patel. The highlight of the celebration was the spirited **"Run for Unity"**, a symbolic event designed to embody the enduring spirit of togetherness and the importance of national solidarity reflecting the legacy of Sardar Vallabhbhai Patel's vision for a united India with **Mr. V.S. Wankhede**, Principal of Kendriya Vidyalaya, flagging off the run.

Furthermore, the **IIT Bombay Campus School and Junior College** observed National Unity Day on 26th November, 2024, with an oath-taking ceremony for staff and students to promote unity and harmony within the community. Competitions like drawing, quizzes, poetry and elocution, all reflecting the theme of unity in diversity, were conducted for students. The event was attended by **Mrs. Valsala Kumari**, Principal; **Ms. Geeta Shewde**, Vice-principal and **Ms. Ruby Samy**.



IIT Bombay Campus School and Jr. College students showcasing their drawings on the theme 'Unity in Diversity'

Celebration of Jan Jatiya Gaurav Divas At IIT Bombay



IIT Bombay staff during Jan Jatiya Gaurav Divas celebrations

IIT Bombay has recently launched year-long celebrations for ‘**Jan Jatiya Gaurav Varsh**’ to honour the 150th birth anniversary of respected tribal leader **Bhagwan Birsa Munda**, known for his significant contributions to India’s struggle for independence.

The celebration kicked-off with the **Jan Jatiya Gaurav Divas** on 18th November, 2024, in the Institute campus. The event began with floral tributes to prominent Indian leaders, including Chhatrapati Shivaji Maharaj, Dr. Babasaheb Ambedkar and Bhagwan Birsa Munda.

Mr. Ganesh Bhorkade, the Registrar of IIT Bombay, was the Chief Guest at the event. He extended heartfelt wishes to everyone present and emphasized the importance of community support in achieving collective goals. The Guest of Honour, **Prof. Nand Kishore**, Dean (Administrative Affairs), IIT Bombay, highlighted the enduring values of courage and resilience exemplified by Birsa Munda.

Representatives from the **IIT Bombay SC/ ST Welfare Association (MKS)**, including **Mr. Vilas Belekar** (ex-General Secretary), **Mr. Ramesh Gaikwad** (President) and **Mr. Sanjay Bhuyal**, highlighted Birsa Munda’s significant role in advocating for tribal rights.

Additionally, **PM SHRI Kendriya Vidyalaya, IIT Powai** marked a week-long observance beginning with the celebration of **Tribal Pride Day** on 15th November, with a prayer meeting led by Principal **Mr. V.S. Wankhede**, who paid floral tribute to Bhagwan Birsa Munda. The week-long activities featured documentary screenings, seminars on tribal culture and student-led discussions on the significance of tribal heritage and the Constitution. Students actively participated in artistic expressions, including murals depicting tribal folk art and a street play portraying the life of Birsa Munda.



The **IIT Bombay Campus School and Jr. College** organized an awareness programme on 22nd November, featuring a skit, poetry and poster-making activities. Students dressed in traditional Adivasi attire to represent the culture of the tribal community and shared insights on supporting and protecting tribal rights, further honouring Birsa Munda’s legacy.

These events reflect IIT Bombay’s commitment to celebrating and preserving India’s rich cultural diversity.



IIT Bombay Celebrates 75th Constitution Day

On 26th November, 2024, IIT Bombay celebrated the **75th Constitution Day** to honour the adoption of the Indian Constitution in 1949. The festivities showcased the Institute's unwavering commitment to the principles of justice, equality, liberty and fraternity, reflecting a vision for a better future for all Indians. The day began with floral tributes to the original photocopy of the Constitution at the Central Library, and to the statues of Dr. Babasaheb Ambedkar and Chhatrapati Shivaji Maharaj, located at the Nandan Nilekani Main Building.

Commemorating the occasion, the **IIT Bombay SC/ ST Welfare Association (MKS)** organized an event at the PC Saxena Auditorium. The event commenced with a welcome address by **Mr. Bhagwan Pagare**, Executive Member of MKS, followed by the ceremonial lighting of lamps and floral tributes to the photographs of Babasaheb Ambedkar and Chhatrapati Shivaji Maharaj. The attendees then collectively read the Preamble to the Constitution of India, reflecting a shared commitment to the values enshrined in the document. In his address, **Prof. Shireesh Kedare**, the Director of IIT Bombay, emphasized the significance of our Constitution. The highlight was the Constitution Day address by the Chief Guest **Prof. Milind Gawai**, B.S.L., LL.B., LL.M. and NET (LAW), where he shared valuable insights into the relevance of the Constitution in contemporary society.

The **IIT Bombay Buddhist Cultural Association** organized a vibrant Constitution Glory procession from the Institute Main Gate to the statue of Dr. Babasaheb Ambedkar. Various organizations, including NASA, MKS, OBC and the Sthaniya Lokadhikar Samiti, actively participated in the rally. All attendees gathered to recite the Preamble of the Constitution, reaffirming their commitment to its principles.

At **PM SHRI Kendriya Vidyalaya, IIT Powai**, the day began by garlanding of Dr. Ambedkar's portrait.

Mr. Rajesh Kumar Shukla, a postgraduate teacher in Hindi, articulated the Constitution's inclusive nature, while Principal **Mr. V.S. Wankhede** discussed the historical significance of its creation. In a remarkable display of participation, approximately 1,022 students accompanied by 54 dedicated teachers and staff, united in reading the Preamble, echoing the core values of democracy and justice. Adding an artistic touch, enthusiastic Class VIII students presented a visually captivating representation of the importance of fundamental rights and duties. Their creativity resonated with the audience while reminding everyone of their rights and responsibilities in a democratic society.



Prof. Shireesh Kedare, Director of IIT Bombay addressing the audience during the Institute's Constitution Day Celebration



Furthermore, the **IIT Bombay Campus School and Junior College** held a special morning assembly led by Principal **Mrs. Valsala Kumari**, who emphasized the Constitution's significance. Throughout the day, the School organized various competitions, including drawing, poster making, a spelling bee, quizzes and essay writing, to creatively engage students and encourage them to reflect on the Constitution's importance. Students, teachers and staff participated in an oath-taking ceremony, reaffirming their commitment to constitutional values. **Prof. Rahul Suresh Sakpal**, the guest speaker, delivered an insightful talk on citizens' duties and responsibilities, engaging young minds through an interactive session.

Conclave On The Future Of Libraries And All IIT Librarians Meet 2024

The Director of IIT Bombay **Prof. Shireesh Kedare** inaugurated a two-day conclave on the '**Future of Libraries**' and **All IIT Librarians Meet 2024** on 25th October, 2024. **Prof. K.V.K. Rao**, Deputy Director (Finance, Infrastructure and Administration); **Prof. Irishi N. N. Namboothiri**, Convenor of the Library Committee; **Prof. Nand Kishore**, Dean (Administrative Affairs); **Mr. Ganesh Bhorkade**, Registrar; Library Committee members, faculty and guests were present. **Dr. Manju Naika**, Chief Library Officer and organizing secretary welcomed the guests. Librarians from across the country attended the Conclave.



Prof. Shireesh Kedare, IIT Bombay Director and Prof. K.V.K. Rao, Deputy Director (FIA) lit the ceremonial lamp

In his inaugural address, **Prof. Kedare** emphasized the transformative changes in library services and the importance of making knowledge accessible. He shared his personal connection to libraries, highlighting their potential as dynamic collaborative spaces for students. He encouraged librarians to foster environments that inspire curiosity and engagement.

Prof. Rao discussed the role of libraries in the digital age. He prompted a critical evaluation of the necessity of physical libraries versus virtual resources and underscored the importance of libraries in research dissemination. He raised concerns about India's approach to open access and the financial sustainability of library services.

Prof. Namboothiri spoke on the future of library systems. He stressed the importance of redesigning library infrastructure and fostering reading habits. He advocated for integrating advanced technologies like AI and virtual reality to enhance library services and called for greater support from institutions.

Prof. Nand Kishore shared insights on the future of education and library evolution. He highlighted the importance of learning consistency across languages and proposed innovative translation services to enhance resource accessibility. He urged institutions to improve library services to serve students' needs better.

Mr. Bhorkade shared his experiences with various state-of-the-art libraries, emphasizing the significance of robust collections and green library concepts. He commended the library's transformation into a leading learning space on campus.

In his remarks, **Dr. Naika** highlighted the alignment of the conclave with International Open Access Week, emphasizing libraries' vital role in educational, research and cultural development. He discussed the challenges posed by rapidly evolving technology and user behaviour, particularly in the post-COVID landscape, noting increased foot traffic in libraries. The Conclave aimed to explore how libraries can adapt to contemporary demands and remain essential institutions for societal progress.

The event featured a diverse program, including 13 speakers addressing critical topics. Day one comprised nine talks, while day two included three presentations and six-panel discussions. Engaging activities like an online quiz and a roadmap development session were organized to encourage participant interaction and knowledge sharing.

The Conclave served as a vital platform for dialogue on the future of libraries, fostering innovation in information systems and addressing the essential intersection of research and accessibility. **Mr. L. P. Engole**, Assistant Librarian, delivered the vote of thanks, effectively concluding the event, which was followed by a delightful high tea. **Ms. Vrushali Sansare** anchored the proceedings, ensuring a smooth and engaging experience for all participants.



Dignitaries and participants during the Conclave and All IIT Librarians Meet 2024

Overall, the event marked a significant step forward in addressing the challenges and opportunities libraries face in the digital age, fostering collaboration and innovation among IIT librarians.

Observation of World Mental Health Day

On **World Mental Health Day**, IIT Bombay hosted an insightful discussion titled “**Mind Matters for Well-Being**” on 10th October at the Institute’s Victor Menezes Convention Centre.

The event commenced with a welcome address by the Institute Director **Prof. Shireesh Kedare**, in the presence of Institute functionaries, including **Prof. Milind Atrey**, Deputy Director (Academics, Research and Translation); **Prof. K.V.K. Rao**, Deputy Director (Finance, Infrastructure and Administration) and **Prof. Ravindra Gudi**, Dean (Alumni and Corporate Relations).



Prof. Shireesh Kedare, IIT Bombay Director, addressed the audience alongside Vice Admiral Dr. Vivek H. Murthy, MD, MBA, U.S. Surgeon General, Department of Health and Human Services and Ms. Ira Khan, Founder and CEO of Agatsu Foundation during World Mental Health Day

In his welcome address, **Prof. Kedare** said, “As educators and mentors, the Institute plays a pivotal role in shaping not just the intellectual growth of students, but also their emotional and psychological well-being. Creating a supportive environment where open dialogue around mental health and loneliness can thrive will be of great help”.

The event also featured an engaging fireside chat featuring Vice Admiral **Dr. Vivek H. Murthy**, MD, MBA, U.S. Surgeon General, Department of Health and Human Services and **Ms. Ira Khan**, Founder and CEO of *Agatsu Foundation*. The conversation touched on the complexities of mental well-being, the challenges of isolation and the importance of fostering supportive communities.

In his remarks on World Mental Health Day, **Dr. Vivek Murthy** underscored the necessity of recognizing mental health as an integral part of overall health, reflecting on his personal and professional experiences. “Today is World Mental Health Day. My hope is that one day in the future, there won’t be a need for Mental Health Day because we will see it just as important as our physical health,” he said.

It was a day of reflection and action, bringing mental health to the forefront of discussions at IIT Bombay. The event was attended by faculty, students, staff and the alumni community of IIT Bombay at large.

The **Student Wellness Center** successfully organized a fun-fest for IIT Bombay students during the Mental Health Week celebrations (5th-11th October, 2024). This lively event featured a variety of physical activities designed to help students relax, unwind and release stress. The interactive environment allowed participants to engage with each other, promote well-being and foster a sense of community within the campus.



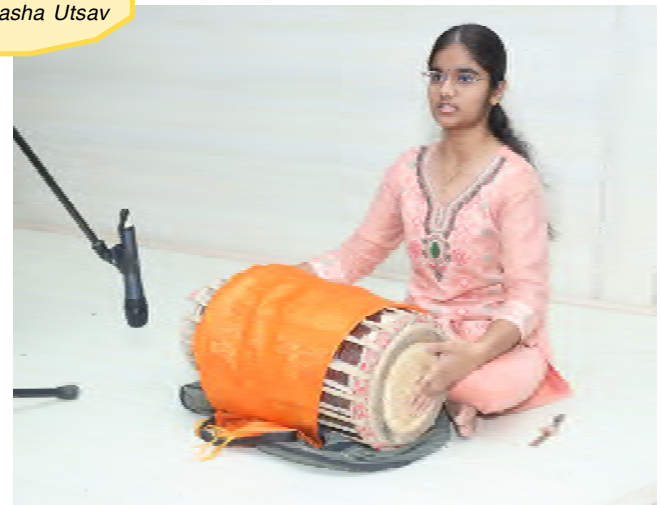
Students participating in fun interactive activities held during Observance of Mental Health Week

IIT Bombay Celebrates Bharatiya Bhasha Utsav

IIT Bombay commemorated **Bharatiya Bhasha Utsav** on 11th December, 2024, honouring the birth anniversary of poet **Subramania Bharati**, also known as **Mahakavi Bharathi**. On the occasion, the Institute organised a vibrant cultural programme celebrating the significance of India's diverse languages and promoting cultural heritage.



Glimpses of Bharatiya Bhasha Utsav



QS Asia University Rankings 2025: IIT Bombay Ranks 2nd In India



IIT Bombay has secured **48th rank overall** and **second-rank in the Southern Asia region** in the **QS Asia University Rankings for 2025**. The results were announced on 6th November, 2024, by QS, a British company.

IIT Bombay received an overall score of 73.1 out of 100. The Institute's scores include 96.6 in academic reputation, 99.5 in employer reputation, 16.9 in citations per paper, 17.9 in faculty-student ratio, 96.3 in staff with PhDs, 96.2 in papers published per faculty and ranks 78th for international research network. Additionally, it scored 13.1 in international faculty ratio, 3.6 in international students ratio, 6.9 in inbound exchange, and 6.4 in outbound exchange, with all scores based on a maximum of 100 points. Among the 11 indicators evaluated, employer reputation emerged as the strongest for IIT Bombay.

QS Sustainability Ranking 2025

IIT Bombay secured **third place** (out of 78 participating institutions) in India, 234th (out of 1751 institutions) overall globally and 28th (out of 661 institutions) in Asia in the **QS Sustainability Ranking 2025**.

Of select performance parameters, the Institute is ranked 101st in the 'Environmental Impact Performance' category, 429th in the 'Social Impact Performance' category, and 819th in the 'Governance' category of the QS Sustainability Ranking 2025. The results were released on 10th December, 2024.

IIT Bombay and TU Dortmund Forge New Academic Partnership



IIT Bombay, India and **Technical University (TU) of Dortmund, Germany**, have formed an academic partnership by signing a generic Memorandum of Understanding (MoU) on 18th November, 2024. The MoU was exchanged by **Prof. Milind Atrey**, Deputy Director (Academics, Research and Translation) at IIT Bombay and **Prof. Dr. Tessa Flatten**, Vice President of TU Dortmund, representing the leadership of both institutions.

This partnership aims to strengthen academic and research collaborations, with a particular focus on student mobility, especially for PhD candidates. This partnership follows a successful meeting between faculty members from IIT Bombay's Desai Sethi School of Entrepreneurship and the TU Dortmund School of Entrepreneurship. As **Prof. Atrey** stated, *"This collaboration opens doors for exciting academic exchanges and joint initiatives"*.

MoU To Boost Decarbonization In Petroleum Sector



IIT Bombay has signed a Memorandum of Understanding with the **Directorate General of Hydrocarbons (DGH), Ministry of Petroleum and Natural Gas, Government of India** on 14th November, 2024, to foster R&D in enhanced hydrocarbon recovery and geologic carbon dioxide storage.

The MoU was signed in the presence of **Dr. Pallavi Jain Govil**, IAS, Director General, DGH; **Prof. Shireesh Kedare**, Director, IIT Bombay;

Dr. Kaustav Nag, Additional Director General (Exploration), DGH; **Prof. Sachin Patwardhan**, Dean (Research and Development) and **Prof. Vikram Vishal** (Department of Earth Sciences), among others.

With renewed enthusiasm, DGH and IIT Bombay have joined hands to drive the advancement of new energy and decarbonization technologies in India through collaborative learning, joint research, innovative breakthroughs and potential deployment.

IIT Bombay Signs MoU With Government Of Maharashtra

IIT Bombay, represented by **Geospatial Information Science and Engineering (GISE) Hub** signed a Memorandum of Understanding (MoU) with the **Government of Maharashtra (GoM)**, represented by **Yashwantrao Chavan Academy Of Development Administration (YASHADA)** at Mantralaya, Mumbai on 30th September, 2024.

The MoU will enable alignment of research and consultancy projects at IIT Bombay with initiatives and projects of GoM under a Program of collaboration. It will support engagements for the advancement of technology-driven solutions for



government departments, foster capacity building through fellowships, training programs and open learning initiatives including Free and Open Source Software (FOSS). The MoU was signed by **Prof. Sachin Patwardhan**, Dean (Research and Development), IIT Bombay and **Mr. N. K. Sudhansu**, Director General, YASHADA in the presence of **Ms. Sujata Saunik**, Chief Secretary, GoM; **Prof. Milind Atrey**, Deputy Director (Academics, Research and Translation), IIT Bombay. Also present were **Prof. Sarthak Gaurav**, Shailesh J. Mehta School of Management and PI-GISE Hub; **Mr. Sumit Sen**, GISE Hub; **Ms. V. Radha**, Additional Chief Secretary, General Administration Department (GAD) and other officials of GoM and YASHADA.

IIT Bombay And Tohoku University Sign MoU



Prof. Teiji Tominaga, President of Tohoku University, Japan; Prof. Shireesh B. Kedare, Director of IIT Bombay; Dr. Sharad Kumar Saraf, Chairperson, Board of Governors, IIT Bombay along with other Institute functionaries during signing of the MoU

In a landmark step towards advancing global academic collaboration, **IIT Bombay** and **Tohoku University, Japan**, have signed an MoU to establish the **IIT Bombay-Tohoku University Joint Academic and Research programme**. This academic and research initiative will offer collaborative Master’s and Ph.D. programmes, providing students with unparalleled opportunities for dual mentorship, access to world-class resources and immersion in the academic ecosystems of two world-class institutions.

MoU With TriNano Technologies Pvt. Ltd.



IIT Bombay has signed a **Memorandum of Understanding (MoU)** with **TriNano Technologies Pvt. Ltd.** This partnership aims to advance the development and application of anti-soiling coatings, focusing on testing their performance and quantitatively assessing their effectiveness in outdoor test systems and large-scale PV power plants.

The teams from the **Photovoltaics Technology and Innovation Centre (PoTIC)** and the **National Centre for Photovoltaic Research and Education (NCPRE)** at **IIT Bombay**, in collaboration with TriNano Technologies Pvt. Ltd., look forward to strengthen the technological capabilities of India’s PV manufacturing sector. This collaboration will pave the way for innovative systems to evaluate the durability and reliability of anti-soiling coatings

Inauguration Of A91 Eco Hub

As a step towards a dynamic transformation and fostering innovation and academic excellence, IIT Bombay **inaugurated a new A91 Eco Hub** at its campus on 14th October, 2024.

Designed to foster collaboration across disciplines, the **A91 Eco Hub will house the Department of Economics, Humanities and Social Sciences (HSS) and Industrial Engineering and Operations Research (IEOR). This state-of-the-art facility will also house the Technocraft Centre for Applied Artificial Intelligence (TCA2I)**, which seeks to bridge the gap between academic innovation and industry needs, driving impactful advancements in AI-powered solutions.



Alumni Mr. Abhay Pandey and Mr. Sudarshan Kumar Saraf along with other dignitaries during the launch of A91 Eco Hub



Prof. Shireesh Kedare, the Director of IIT Bombay, alumni Mr. Abhay Pandey (along with wife) and Mr. Sudarshan Kumar Saraf; Prof. Ravindra Gudi, Dean (Alumni and Corporate Relations); Prof. Vedagiri Perumal, Dean- IPS (Infrastructure, Planning and Support) and Prof. K.V.K. Rao, Deputy Director (Finance, Infrastructure and Administration) during plaque unveiling of A91 Eco Hub

This landmark addition to the campus is designed to drive academic excellence and innovation. This cutting-edge facility will be instrumental in nurturing the next generation of scholars and leaders, particularly as Economics has emerged as the fourth most popular discipline at IIT Bombay. The A91 Eco Hub is purpose-built to support this growing interest, providing a dynamic space where students can collaborate and address complex economic challenges, further reinforcing IIT Bombay's commitment to shaping future thought leaders.

This new Hub has been made possible through the generous support of alumni, including **Mr. Abhay Pandey** (B.Tech., Computer Science and Engineering, '93), **Mr. Sudarshan Kumar Saraf** (B.Tech., Mechanical Engineering and Manufacturing Engineering, '70) and **Dr. Sharad Kumar Saraf** (B.Tech., Electrical Engineering, '69, and current Chairperson, BoG, IIT Bombay). The Institute is grateful to its alumni for their vision and generosity.

Groundbreaking Ceremony Of PM SHRI Kendriya Vidyalaya New Wing At IIT Bombay

On 11th October, 2024, IIT Bombay marked a significant milestone with the groundbreaking ceremony for the new wing of **PM SHRI Kendriya Vidyalaya** at IIT Bombay Campus, performed by **Prof. Shireesh Kedare**, the Director of IIT Bombay.

The construction of the new wing has been undertaken by KV IIT Powai alumni **Mr. Prashant Sharma** and **Mr. Himanshu Sharma**, Trustees of the Smt. Durga Devi Sharma Charitable Trust along with **Mr. Narottam Sharma** and **Mr. Chandan Sharma**, Trustees of Sharma Foundation.

This new wing has been dedicated to the memory of their grandfather, **Pandit Chandrabhan Bhuramal Sharma**, a freedom fighter who dedicated his life to the welfare of the underprivileged and played a key role in helping IIT Bombay acquire the land in 1957. The groundbreaking of the new wing serves as a testament to the continual pursuit of progress. This building will provide students with additional learning spaces that will complement their educational journey. The Institute is grateful to the donors and alumni for bringing this vision to life and fostering a brighter future for the students.



Prof. Shireesh Kedare, the Director of IIT Bombay (center) along with Mr. V.S. Wankhede, Principal of Kendriya Vidyalaya (center) and others during groundbreaking ceremony at Institute Campus

Inauguration Of New Telephone Exchange

On 25th November, **Prof. Milind Atrey**, Deputy Director (Academics, Research and Translation), inaugurated the new Telephone Exchange on the Institute campus. The event was attended by **Prof. Prabhu Ramachandran**, Head of the Computer Centre. Institute staff welcomed the new initiatives of the Exchange, which promises to greatly enhance communication infrastructure and efficiency across the campus.



Inauguration Of New Cash Section Office



The newly-refurbished Cash section Office of IIT Bombay was inaugurated by the Director **Prof. Shireesh Kedare** on 27th November, 2024. This inauguration ceremony saw various Institute functionaries and staff members in attendance, marking a renewed commitment to improving administrative services and facilities for all.

New Souvenir Shop Unveiled In The Campus

IIT Bombay Director **Prof. Shireesh Kedare** inaugurated the Institute’s new souvenir shop on 22nd October, 2024. This vibrant new space on campus will enable visitors to collect elegant memorabilia celebrating the legacy of our Institute.



TechConnect 2024

The inaugural event of **TechConnect 2024**, the premiere research and development outreach event of IIT Bombay, took place on 17th December, 2024. Various innovations showcasing IIT Bombay's research prowess was open to public including students, industries and academia.

The Chief Guest, **Dr. Samir Kamat**, Secretary - DDR&D and Chairman - Defence Research and Development Organisation (DRDO), along with **Prof. Shireesh Kedare**, Director, IIT Bombay inaugurated the event. Dr. Kamat visited various stalls and interacted with the participants.



Dr. Samir Kamat, Secretary-DDR&D and Chairman-DRDO, Prof. Shireesh Kedare, Director, IIT Bombay along with others during inauguration of TechConnect 2024



Chief Guest interacting with students at TechConnect 2024

The highlight of the inaugural event was the lecture by **Dr. Samir Kamat** on the topic - **“Defense R&D - Challenges & Opportunities”**. Dr. Kamat underscored the various innovative technologies developed by DRDO, collaborative initiatives like industry academia centres of excellence and urged the young minds to pursue a career in DRDO for even amazing innovations. This lecture attracted an enthusiastic audience, who later engaged in a lively interaction with Dr. Kamat, enriching the event's interactive and collaborative spirit.

The event presented technology showcases, scientific models, interactive games and laboratory prototypes during the three-day event. The event was successfully organised by faculty coordinators **Prof. Amber Shrivastava** (Department of Mechanical Engineering)

and **Prof. Himanshu Bahirat** (Department of Electrical Engineering) under the guidance of **Prof. Sachin Patwardhan**, Dean (Research and Development) and **Prof. Upendra Bhandarkar**, Associate Dean (R&D) whereas enormous support was provided by student volunteers **Mr. Mohan Krishna Katta** and **Mr. Aleem** along with logistic support by **Dr. Sreelekha Gopinathan**, **Ms. Tanvi Mehta** and **Mr. Rohan Bhardwaj** from the Office of Dean (R&D).

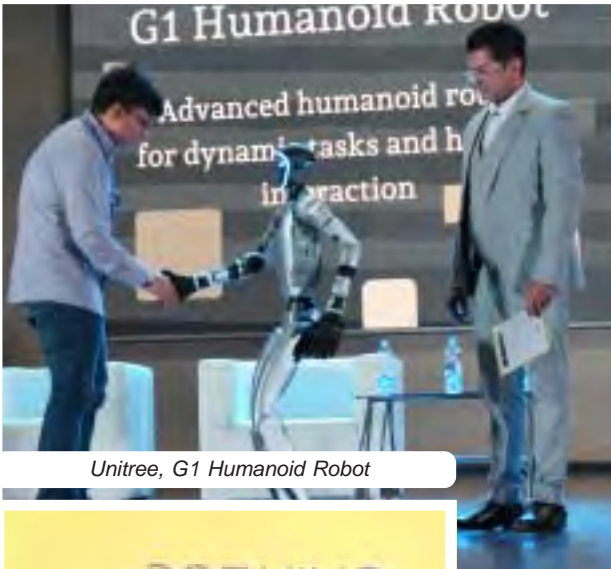


Various R&D exhibits at display during TechConnect 2024



Techfest 2024 - A Grand Celebration of Innovation, Inspiration And Excitement

Techfest 2024, the annual science and technology event of IIT Bombay, concluded its spectacular three-day celebration during 17th-19th December, 2024. The festival brought together thousands of participants from around the world, offering a platform for learning, collaboration and showcasing cutting-edge advancements.



Unitree, G1 Humanoid Robot



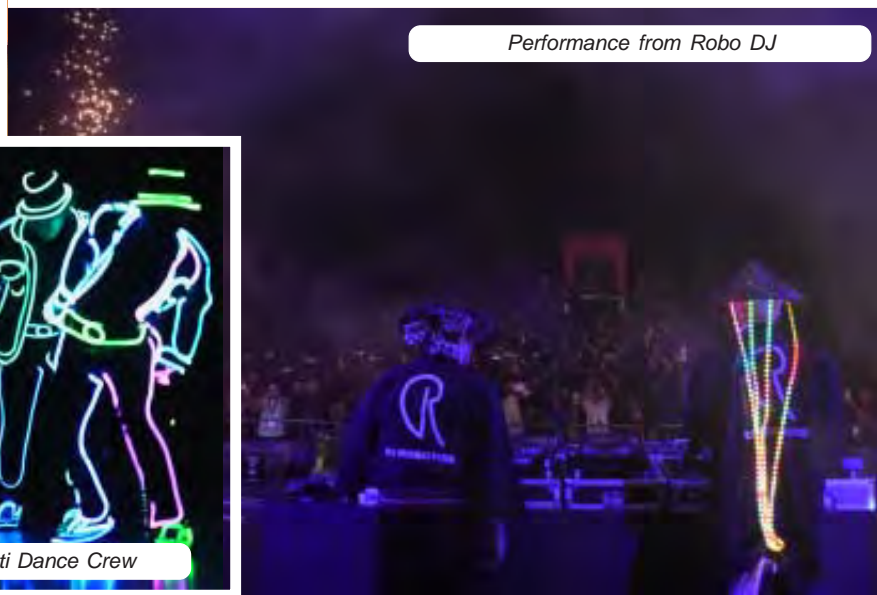
International Robowars



Entrepreneur Ananya Birla introduced a private Beta version of Sophius, an advanced Indian AI Chatbot, developed by her during Techfest 2024



Vintage car at display during TechFest 2024



Performance from Robo DJ



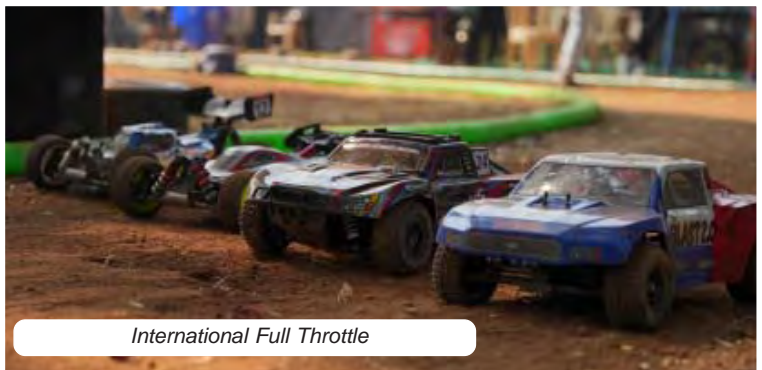
An exceptional performance by Illuminati Dance Crew



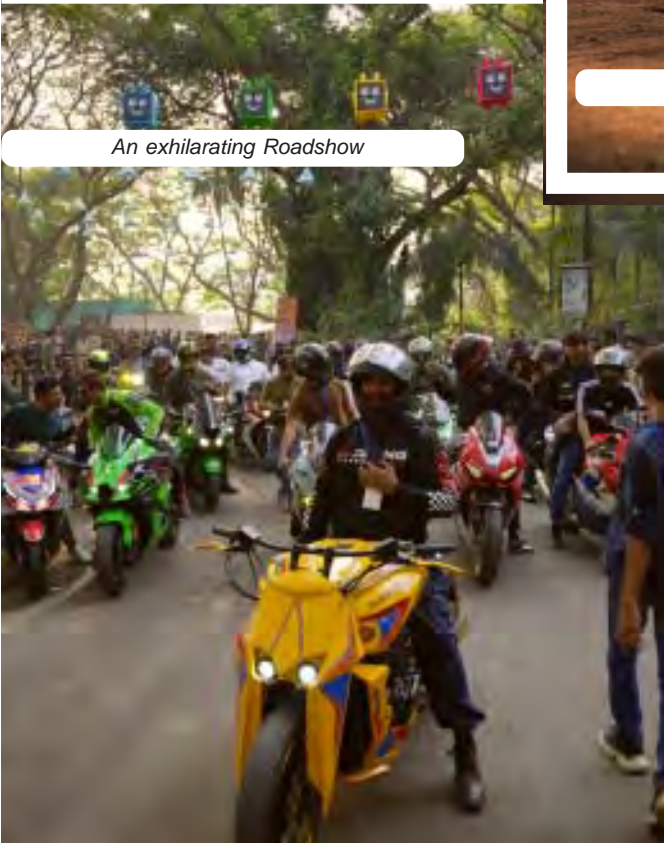
Exhibition from Bharat Forge Limited



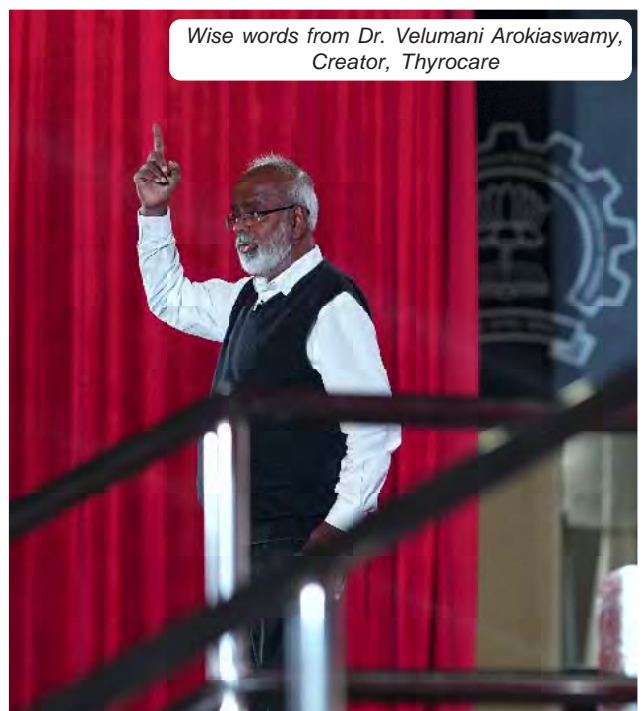
A captivating talk by Jeet Adani, Director, Adani Airport Holdings Ltd.



International Full Throttle



An exhilarating Roadshow



Wise words from Dr. Velumani Arokiaswamy, Creator, Thyrocare

Mood Indigo 2024: A Spectacular Celebration Of Culture And Creativity

The **2024 edition of Mood Indigo**, Asia's largest college cultural festival, was held during 25th-26th December, 2024 at IIT Bombay. With this year's theme '**Enigma of Ethnicity**', the campus transformed into a vibrant canvas of colours, traditions and cultural narratives, offering attendees an unforgettable experience.



Raftaar, Deep Kalsi and DJ Kan-i delivered a powerhouse performance during Hip Hop Nite



Musa from Taiwan at the International Music Festival



Breathtaking moves by participants during ChoreoNite



Comedy sensations Harsh Gujral and Biswa Kalyan Rath entertained everyone, leaving the audience in splits at Mood Indigo's Humorfest



Singer Armaan Malik during Euphonic Nite concert



Performers during the electrifying streetplay competition Agaz



Participant during bike-stunt event



Participant performing during Mood Indigo Vogue Finals



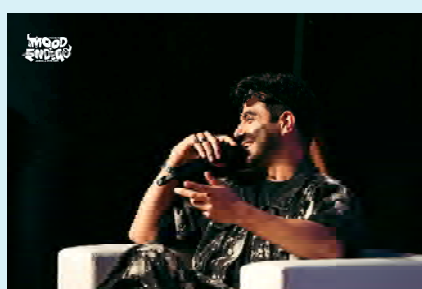
A surprise entry by musical sensation Shekher left the audience in awe



Breathtaking moves by participants during ChoreoNite



Nayab Midha captivated the audience with her poignant poetry and powerful storytelling at Mood Indigo



Chef Sanjeev Kapoor, musical genius Amit Trivedi and versatile actor Aparshakti Khurrana graced Mood Indigo's Eloquence

AUA Executives' Meeting At IIT Bombay



AUA member representatives at AUA Executives' Meeting at Institute campus

IIT Bombay is a member of the **Asian Universities Alliance (AUA)**, a consortium that includes 15 Asian universities. This year, IIT Bombay is holding the AUA Executive Presidency and hosted the **AUA Executives' Meeting** on its campus during 12th-13th November, 2024. The meeting was conducted in a hybrid mode with 39 participants from various member universities.

During the first day, IIT Bombay Director **Prof. Shireesh Kedare**, delivered the opening remarks and welcomed the delegates. The meeting was facilitated by **Prof. Sudarshan Kumar**, Dean of International Relations at IIT Bombay. The agenda included briefings on the progress of the AUA Working Groups, reports on AUA programs, and a review of program policies for the upcoming year.

AUA Youth Forum 2024

As the Presidency of the **Asian Universities Alliance (AUA)** this year, IIT Bombay hosted the flagship program, **AUA Youth Forum 2024**, during 11th-16th November, 2024. The programme focused on **"A Fresh Outlook on Drug Discovery and Personalized Medicine"** and was conducted by **Prof. Sandip Kar** from the Department of Chemistry and **Prof. Abhijit Majumder** from the Department of Chemical Engineering, in collaboration with the Office of International Relations.

The programme included a systems biology approach, foundational training in organ-on-chip technologies and 3D cell culture systems. Participants also had the opportunity to visit an industry facility to gain first-hand insights into cutting-edge work in 3D cell culture and bioprinting. A total of 36 students attended from 10 AUA member universities.



Students from AUA member universities at AUA Youth Forum 2024 hosted by IIT Bombay

FGL-IIT Network Meeting At IIT Bombay

A delegation from the **Fédération Gay-Lussac (FGL)** visited IIT Bombay during 3rd-4th October, 2024, to promote student and faculty exchange and strengthen the partnership through academic and research collaborations, under the **partnership between FGL and IIT**. The theme of the event was **“Building and Renewing Research Collaborations between FGL and IITs”**.

On the first day, the FGL team, consisting of 13 delegates from 11 French universities and led by FGL Vice-President **Prof. Jacques Mercadier**, interacted with IIT Bombay’s **Prof. Ruchi Anand** from the Department of Chemistry and representatives from Society for Innovation and Entrepreneurship (SINE). They had an engaging discussion about the facilities available at IIT Bombay, the national coordinator for the IITs, exploring opportunities for further cooperation. This meeting was followed by a lab visit, where the FGL team interacted with researchers and students from the Chemistry and Chemical Engineering Departments. The day concluded with a keynote address by **Dr. Philippe Maurin**, the Scientific and Academic Cooperation Attaché at the Consulate General of France in Mumbai, India, followed by a welcome dinner.

The second day featured the FGL-IIT Network Meeting, attended by IIT Bombay Director **Prof. Shireesh B. Kedare** and **Dr. Philippe Maurin**. **Prof. Sudarshan Kumar**, Dean of International Relations at IIT Bombay,



French delegation while interacting with Prof. Shireesh Kedare, Director of IIT Bombay (center) during their visit to the Institute

delivered a welcome address to all delegations from FGL and IITs. **Prof. Jacques Mercadier**, FGL Vice-President chaired the first session, which included presentations from the FGL team. **Prof. V.C. Srivastava**, Dean of International Relations at IIT Roorkee, chaired the subsequent session featuring presentations from the IIT team. Both teams engaged in fruitful speed networking during this session, discussing their institutional facilities and exploring opportunities for expanding academic and research collaboration through this network. **Prof. K.P. Kaliappan**, Dean of Strategy at IIT Bombay, concluded the session with a closing remark, emphasizing that **“Balance should be in the equation”** regarding the exchange of students between France and India.

The next Network Meeting will take place in Lyon, France, in 2026.



Glimpses of FGL-IIT Network Meeting at IIT Bombay

IIT Bombay US Roadshow 2024

Yet another vibrant celebration marked institutional pride and global camaraderie, spanning New York, Dallas, Austin, Portland and San Francisco at the recently concluded **IIT Bombay 2024 US Roadshow**. Over 500 alumni participated in the multi-city event that offered a dynamic platform for networking and showcasing the global achievements of the Institute while reaffirming its commitment to strong international ties.

Prof. Shireesh Kedare, IIT Bombay Director and **Prof. Ravindra D. Gudi**, Dean of Alumni and Corporate Relations led the event with engaging fireside chats and presentations, including the vision of IIT Bombay addressing challenges and highlighting priorities. Their sessions included an inspiring video chronicling the Institute journey and a lively Q&A that fostered meaningful interactions.

Highlights from the tour:

- **New York: Mr. Binaya Pradhan**, Consul General of India in New York, unveiled 'GNY Point 2024', the Chapter's magazine and spoke about IITs' global impact. **Mr. Pranay Agrawal**, Co-founder of Fractal Analytics, delivered a compelling talk on AI evolution and its impact.
- **Dallas: Mr. Amarnath Thombre** (B.Tech., Chemical Engineering, 1994) shared his transformative journey at Match.com, transforming business through data and analytics. Chapter President **Mr. Ranganathan Thittai** (B.Tech., Civil Engineering, 1998) celebrated Distinguished Alumnus and Distinguished Service Award recipients.
- **Austin: Mr. Rameshwar Kumar Maini** (B.Tech., Civil Engineering, 1967) reflected on his IIT Bombay experience, professional challenges, learnings and the importance of collaborative workplaces.
- **Portland: Mr. Kaizad Mistry** (B.Tech., Electrical Engineering, 1984) highlighted the role of public-private partnerships in advancing the Indian semiconductor industry.
- **San Francisco: Mr. Ursheet Parikh** (B.Tech., Computer Science and Engineering, 1988) explored AI investment opportunities, while **Mr. Jitendra Mohan** (B.Tech., Electrical Engineering, 1994) shared insights on technology leadership during a fireside chat. A sweet surprise was in store as Prof. Gudi announced a generous gift from alumni couple **Mr. Jitendra Mohan and Ms. Swapna Samant** (B.Tech., Civil Engineering, 1995), supporting Hostel 9 redevelopment, a Chair Professorship and semiconductor research.



Three Teams From IIT Bombay Win Top Prize In SIH 2024

Three teams from IIT Bombay comprising 18 students who collaborated to develop innovative, technology-driven solutions, have won at the **Smart India Hackathon (SIH) 2024**, each receiving the title of “**SIH Grand Finale Winner**” in their respective problem statement categories. The **Institution Innovation Council (IIC) at IIT Bombay** facilitated the participation of our student teams.

The SIH, organized by the Ministry of Education’s Innovation Cell and AICTE, is the world’s largest open innovation initiative for students in India. It addresses some of the most pressing challenges facing the country, encouraging students to find technological solutions. Participants are challenged to collaborate in interdisciplinary teams to develop solutions and striving to outperform other competing teams.



Team Hexasar



Team Alerta



Team Evibe

IIT Bombay Shines At Inter-IIT Tech Meet 13.0



IIT Bombay contingent with their winning trophies

IIT Bombay has secured **Overall Silver** at the **Inter IIT-Tech Meet 13.0**, competing against top talents from other IITs. The contingent achieved 3 Golds, 2 Silvers and 1 Bronze, showcasing their relentless effort and technical brilliance.

Every participant tackled complex problems and developed innovative solutions, embodying the spirit of teamwork and excellence. This victory represents not just medals, but a shared journey of growth and pushing boundaries together.

ACCESS Awards 2024

IIT Bombay is delighted to announce the winners of **ACCESS (ACcelerating Climate, Energy & Sustainability Solutions) Awards Initiative**, supported through the generous contribution of our alumni **Ms. Vinaya Kapoor** (B.Tech., Chemical Engineering, 1992) and **Mr. Samir Kapoor** (B.Tech., Electrical Engineering, 1992).

The ACCESS Awards shine a spotlight on some of the most forward-thinking projects emerging from the IIT Bombay community, with two key themes for 2024:

- **Climate Impacts and Adaptation**
- **Climate Mitigation and Finance**

The winners in both categories have demonstrated remarkable ingenuity and a deep commitment to driving meaningful change in the fight against climate challenges.

Climate and Sustainability: Impacts & Adaptation

SMFI




1st Prize
 They plan to develop a soil moisture forecasting instrument.
 Team members are **Dr. Mayank Gupta** and **Shrawani Dandge**.

THERMOWATCH






2nd Prize
 They plan to develop a web based application for extended range forecasting of heatwaves and its potential impact. Team members are **Dr. Aniket Navalkar, Dr. Sanghita Basu, Gulshan Kumar** and **Anustup Biswas**.

Climate and Sustainability: Mitigation & Finance

NIRVAAN



1st Prize
 They plan to design an ultra-low emission and efficient gasification-based crematorium pyre for sustainable human corpse cremation. Team members are **Sujeet Deore, Nikita Sharma, Prabodh Gadkari, Prof. Sandeep Kumar** and **Prof. Sanjay Mahajani**.

IIT Bombay Secures First Rank In Inter-IIT Sports GC 2024



IIT Bombay achieved a historic milestone at the **57th Inter IIT Sports Meet**, which was jointly hosted by IIT Kanpur and IIT Indore. After seven years, IIT Bombay won the **Overall General Championship**, marking its **13th title**.

The Institute's athletes delivered outstanding performances, with the women's team finishing in 2nd place overall and the men's team in 3rd place overall.

The team excelled in various disciplines, securing numerous podium finishes in several events. Here are the medal results:

Women's Contingent:		Men's Contingent			
Sport	Rank	Sport	Rank	Sport	Rank
Basketball	Gold	Cricket	Gold	Squash	Silver
Volleyball	Gold	Chess	Gold	Hockey	Silver
Squash	Gold	Basketball	Silver	Water Polo	Silver
Athletics	4th position	Badminton	Silver	Swimming	4th position overall

This victory will undoubtedly inspire future contingents to continue striving for excellence and uphold the Institute's position as a leader in sports.

Inter-IIT Aquatics Meet 2024

During the five-day **Inter-IIT Aquatics Meet 2024** held at IIT Indore during 1st-5th October, IIT Bombay received the **best player award** and **first runner-up championship** in the **Water polo** event. In the overall Men's category, our team jumped to **4th position** from the 9th position last year.

A total of 229 participants across 17 IITs participated in the Meet which included 60 female participants. This event was a part of the 57th Inter IIT Sports Meet that was co-hosted by IIT Indore and IIT Kanpur during 10th-17th December, 2024.

The **Fastest Swimmer Prize** was bagged by **Suyash Bhandare**. The **Best Water Polo Player** of the meet was **Saatwik Patnyak**.

A total of 49 events were conducted including freestyle, breaststroke, butterfly, backstroke and water polo matches. The events were conducted by the Swimming Federation of India along with Madhya Pradesh Swimming Association.



Student News

Mr. Roshan Keshari, a PhD student of **Prof. Rohit Srivastava** and **Prof. Shamik Sen** at the Department of Biosciences and Bioengineering, has been honoured with the **India Pharma Award 2024** in the category of *Outstanding Contribution to Pharmaceutical Research by Academic Institutes* for his PhD project titled **“Phytonanogel Shield: Precision Care for Psoriasis Patients”**.

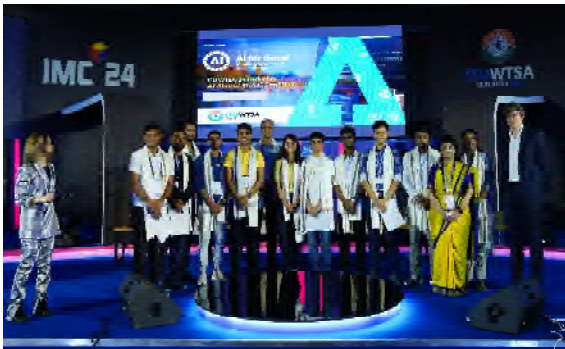


Former PhD student **Dr. Visweshwaran Ramesh**, Department of Civil Engineering and a member of the Hydro-Remote Sensing Applications (H-RSA) group, has been awarded the **Indian Society of Hydraulics (ISH)’s Best PhD Thesis Award-2024** for his work on **“Improving the Performance of Hydrological Models Using Efficient Assimilation Strategies.”** His PhD supervisors were **Prof. Raaj Ramsankaran** and **Prof. Eldho Iype**.



Vajra Wins ITU WTSA-24 AI Bharath 5G/ 6G Sandbox Hackathon

IIT Bombay Vajra won the 1st prize at the **ITU WTSA-24 AI Bharath 5G/ 6G Sandbox Hackathon** at the recently concluded India Mobile Congress 2024. This Hackathon was part of the AI For Good: Machine Learning in 5G Challenge by the International Telecommunication Union (ITU) along with the Department of Telecom (DoT). Out of the 12 teams that were short-listed in Phase I of the competition, IIT Bombay was declared the winner in Phase II of the competition. The team led by **Prof. Manjesh K. Hanawal**, Mentor (Industrial Engineering and Operations Research), comprised of **Kushal Pawaskar** (Student, Electrical Engineering), **Kunal Randad** (Student Electrical Engineering), **Mayank Gupta** (Postdoc, Civil Engineering) and **Pranav Jha** (Staff, Electrical Engineering).



IIT Bombay Shines In The Simon Marais Mathematics Competition 2024

The Indian Institute of Technology Bombay was placed **joint second** in the University places for the **East Division of Simon Marais Mathematics Competition 2024**. Six BTech students from the Department of Computer Science and Engineering: **Vedant Saini** (First Year), **Anish Kulkarni** (Fourth Year), **Krishna Narasimhan Agaram** (Fourth Year), **Ameya Vikrama Singh** (Fourth Year), **Mehul Borad** (Second Year), **Vavilala Chidvilas Reddy** (Second Year) and one BS student from the Department of Mathematics: **Mahavir Gandhi** (Third Year) have won individual prizes in the competition.

IIT Bombay Students Participate In Sakura Science Exchange Program 2024



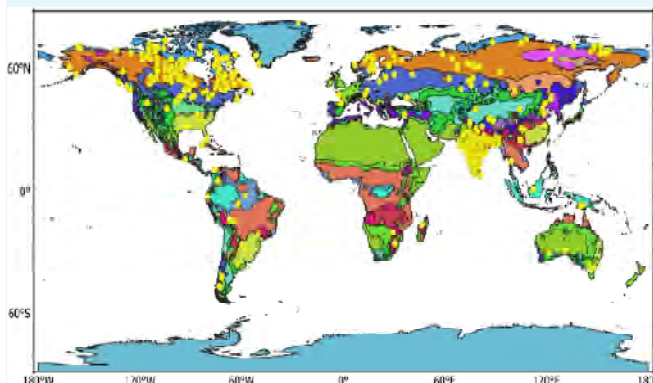
IIT Bombay students **Anmol Jain** (Energy Science and Engineering), **Rakesh Merugu** (Mechanical Engineering), **Sachin Sonage** (Aerospace Engineering), **Amardeep Fulzele** (Aerospace Engineering) and **Roshan Mankhair** (Environmental Science and Engineering Department) successfully participated in the **Sakura Science Exchange Program 2024** organized by **Japan Science and Technology (JST) Agency** held during 7th-14th September, 2024 at Kyoto, Japan.

During the program, the students visited **Kyoto University (Yoshida and Katsura Campuses)**, **Osaka University** and leading companies like **HORIBA Ltd.**

They also explored renowned cultural landmarks such as the **Kitano Tenmangu Shrine** and **Kinkaku-ji (Golden Pavilion)** and engaged in discussions at the Indian University and Company Information Session in Osaka.

Research in focus

IIT Bombay's New Web Application, IMPART, Allows Researchers To Track Changing Water Surface Temperatures And Can Help To Track Climate Change



Map indicating (in yellow) lake locations chosen for the study (Image Credits: Prof. J. Indu and Kumar Nitish)

Studies indicate that sea surface temperatures, along with the surface temperatures of rivers, have consistently increased in recent years. In 2023, sea surface temperatures saw their sharpest rise in more than a century. Climate change and human activities are driving this trend, particularly in Asia, where river surface temperatures are rising rapidly. Lakes, critical sources of freshwater, are also experiencing significant impacts.

Water bodies heat up much slower than materials on land, making their surface temperature a key indicator of global warming and climate change. These changes have profound effects on both aquatic and terrestrial ecosystems over time. Hence, monitoring lake water surface temperatures is essential for managing water resources and tracking climate change. For instance, rising surface temperatures can trigger harmful algal blooms, reduce oxygen levels, and adversely affect aquatic life in the lake. Accurate measurements of lake water surface temperatures are therefore crucial for safeguarding these ecosystems.

To address this need, **Kumar Nitish** and **Prof. J. Indu** from the Department of Civil Engineering and Interdisciplinary Centre for Climate Studies at the Indian Institute of Technology Bombay (IIT Bombay) have developed a novel open-source web-based application called IMPART. Short for Integration of dynamic water extents towards improved lake water surface Temperature, IMPART calculates the temperature of lake water surfaces considering the dynamic changes in lake areas. Their study, published in the *Journal of Environmental Management*, overcomes the shortcomings of traditional methods, which assume constant lake areas—a simplification that can lead to misleading results.

“Accounting for dynamic changes in lake water surface extents significantly improves the accuracy of lake water surface temperature estimations,” remarks **Prof. J. Indu**, the lead researcher of the study. Factors such as growing urbanization, seasonal variations, and rising temperatures alter lake surface areas and volumes from time to time, necessitating a more nuanced approach.

IIT Bombay's IMPART bridges this gap by incorporating real-time changes in lake extents to calculate both static and dynamic lake water surface temperatures. The static temperature assumes a constant lake area, while the dynamic temperature adjusts for changes in water extents. IMPART's intuitive, user-friendly interface makes it easy for individuals, researchers, and organizations to record and access lake water surface temperature data and track lake ecosystems more effectively.

The researchers used the temperature data recorded by satellite instruments (namely, MODIS and LANDSAT) and lake extent data from the lake images obtained from Google Earth Engine for the particular days. Using a combination of these, they determined the temperature of the lake area corresponding to that time. The IMPART toolkit calculated both static and dynamic lake water surface temperatures for 342 lakes worldwide, including 115 lakes in India. For its static module, the software used the same water extent indicated in the databases from where monthly surface temperatures were obtained. For the dynamic module, the IMPART toolkit estimated how the water area changed for each monthly measurement of surface temperature in the database.

“Dynamic considerations have now become feasible thanks to the advancements in remote sensing, cloud-based platforms (such as Google Earth Engine) and algorithms capable of incorporating reflectance data with dynamic lake extents, (thus) enabling a more accurate and comprehensive analysis,” explains **Nitish**.

The findings revealed significant differences between static and dynamic temperature estimates for more than half the lakes studied. Notably, these differences were statistically significant for over three-fourths of Indian lakes. **Prof. Indu** says, *“Our approach highlights the importance of treating lake water surfaces as dynamic rather than static, enabling a more precise understanding of how freshwater ecosystems respond to climate change”*.

The study also identified climatic zones where dynamic measurements are especially crucial. By categorizing locations of the lake into tropical, arid, temperate, cold and polar climatic zones, the researchers found that the differences between static and dynamic temperatures were most pronounced in arid, temperate and tropical zones compared to cold and polar regions.

IMPART allows climate scientists to monitor lake water surface temperatures more accurately and study and mitigate the impact of these changes on the ecosystems within and around. It has a strong potential as a tool for tracking climate change, and the tool's applications can be extended to other research areas.

“IMPART can be applied to water resource management, ecological health assessments of lakes, and early-warning systems for lake ecosystems under environmental stress,” **Prof. J. Indu** concludes.

Article written by: Joel P. Joseph

Link to published work: <https://doi.org/10.1016/j.jenvman.2024.122075>

Institute Colloquium / Lectures

Prof. Nils Andersson, Applied Mathematics, University of Southampton, delivered an Institute Lecture titled “*Fluid Dynamics: From*



Terrestrial to Astrophysical Laboratories” on 7th October, 2024

Mr. Gunjan Samtani, Global Chief Operating Officer of Engineering at Goldman Sachs, Country Head of Goldman Sachs Services



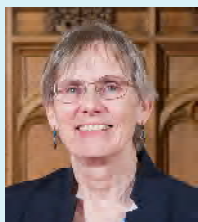
India, delivered an Institute Lecture titled “*Technology Transforming Financial Services*” on 23rd October, 2024

Dr. S. Sampath, Professor in the Department of Inorganic and Physical Chemistry at the Indian Institute of Science (IISc)



Bangalore, delivered Prof. C.N.R. Rao Distinguished Lecture titled “*Nanostructured Materials and Interfaces in Electrochemistry*,” on 28th October, 2024

Prof. Julia Yeomans (FRS), Professor of Physics, The Rudolf Peierls Centre for Theoretical Physics Clarendon Laboratory, Oxford University, UK, delivered an Institute Lecture titled “*Active matter physics: A new approach to mechanobiology?*” on 29th October, 2024



Dr. Tessy Thomas, Distinguished Scientist, Former Director General of Aeronautical Systems and Former Project Director for Agni-IV missile in Defence Research and Development Organization (DRDO), delivered an Institute Colloquium titled “*Opportunities & Challenges for Women Scientists in defense research sector*” on 6th December, 2024



Notifications

Prof. Usha Ananthakumar, Shailesh J. Mehta of Management, has been appointed as the new Dean of Educational Outreach (EO) w.e.f. 7th October, 2024

Prof. Rekha Santhanam, Department of Mathematics, has been appointed as the new Chairperson of Student Wellness Centre (SWC), IIT Bombay w.e.f. 28th November, 2024

Prof. Deepak Marla, Department of Mechanical Engineering, has been appointed as the first Vice-Chairperson of Student Wellness Centre, IIT Bombay w.e.f. 4th November, 2024

Prof. Ranjith Padinhateeri, Department of Biosciences and Bioengineering, has been appointed as Professor-in-Charge of Koita Centre for Digital Health (KCDH) w.e.f. 18th October, 2024

Prof. Rajesh Zele, Department of Electrical Engineering, has been appointed as Professor-in-Charge of Centre for Liberal Education (CLE) w.e.f. 9th September, 2024

Prof. Swatantra Pratap Singh, Environmental Science and Engineering Department, has been appointed as Professor-in-Charge of Gogri Hub for Membranes Research w.e.f. 29th July, 2024

Obituary



IIT Bombay is deeply saddened by the loss of **Prof. Rohini Godbole**, a renowned physicist whose contributions to high-energy physics and passionate advocacy for gender equity in STEM have left an indelible mark. She was a champion of women in science, earning numerous accolades, including the Padma Shri, the Ordre national du Mérite from France and various memberships in prestigious academies. In recognition of her distinguished contributions to science, she was conferred the degree of Doctor of Science (*honoris causa*) in 2023 by IIT Bombay.

The Institute extends heartfelt condolences to her family, friends and colleagues. Her extraordinary legacy will always be remembered and cherished.

Conferences

The IDC School of Design, IIT Bombay, organised a conference on *Visual Discourse* during 6th-8th November, 2024. Prof. Prasad Bokil was the Conference Chair.

The Department of Metallurgical Engineering and Materials Science, IIT Bombay organised an international conference on “*Electronic structure theory of emergent spin orbit driven phenomenon (ESTESODP)*” during 11th-15th November, 2024. Prof. Amrita Bhattacharya, Prof. Avradeep Pal and Prof. Aftab Alam were the organisers from IIT Bombay.

The Department of Biosciences and Bioengineering, IIT Bombay hosted a one-day symposium and workshop titled “*Pioneering the Future of Healthcare and Diagnostics Using 4D Omics*” on 12th November, 2024. Prof. Sanjeeva Srivastava was the convener.

Seed Funding for Collaboration and Partnerships Project (SCPP) - Institution of Eminence (IoE) sponsored Conferences

The Shailesh J. Mehta School of Management, IIT Bombay organised a symposium on *Digital Transformation in Marketing* on 29th November, 2024 at the Institute campus. Prof. Arti D. Kalro and Prof. Dinesh Sharma were the conveners.

The Environmental Science and Engineering Department organised a two-day national symposium on *Circular Economy: Enabling Technologies, Policies and Practices* during 9th-10th December, 2024. Prof. Pradip Kalbar and Prof. Munish Chandel were the organisers.

The Department of Civil Engineering, IIT Bombay, organised a two-day symposium on ‘*Blue Economy*,’ as part of “*Sustainable Ocean Engineering, Technology and Developments*” event during 11th-12th December,

2024. Prof. Manas R Behera and Prof. Srineash V.K. were the organisers.

The Shailesh J. Mehta School of Management, IIT Bombay, organised an International Conference on *Emerging Trends in Business Analytics and Management Sciences* and the 57th Annual Convention of Operational Research Society of India (ORSI-2024), during 12th-14th December, 2024. Prof. Pankaj Dutta was the Organizing Chair.

Workshops

The Department of Physics, IIT Bombay organised a workshop on “*Active & Living Matter*” during 28th-29th October, 2024. Prof. Anirban Sain was the convener.

The Department of Civil Engineering, IIT Bombay organized a workshop on *Advancing Connected and Autonomous Vehicle Technologies for Indian Ecocsystem* on 10th December, 2024. Prof. Archak Mittal was the organiser.

The Department of Civil Engineering, IIT Bombay organized a workshop on “*Implementation of FRP Reinforcements in Concrete Structures - Current Trends and Future Prospects*” on 13th December, 2024. Prof. Arghadeep Laskar was the organiser.

Seed Funding for Collaboration and Partnerships Project (SCPP)- Institution of Eminence (IoE) sponsored Workshops

The Centre for Technology Alternatives for Rural Areas, IIT Bombay organised a stakeholder workshop on “*Sustainable Rural Development: Empowering Communities for Progress*”, during 4th-5th October, 2024. Prof. Pennan Chinnasamy was the Chair and Prof. Chaaruchandra A. Korde was the Co-Chair.

The Department of Biosciences and Bioengineering, IIT Bombay organised a workshop on “*Alternative Therapies for Antibiotic Resistance*” on 22nd

October, 2024. Prof. Kiran Kondabagil and Prof. Sandip Kaledhonkar were the organisers.

The Department of Earth Sciences, IIT Bombay organised a national seminar and workshop on “*Recent Advances in Ichnology and Sedimentary Geochemistry*”, during 26th-28th October, 2024. Prof. Santanu Banerjee and Prof. Sudipta Dasgupta were the joint conveners.

The Environmental Science and Engineering Department, IIT Bombay organised a one-day workshop on “*Resource Recovery Options from Waste generated in Sugar mills and Distillery Wastes*” in collaboration with Griffith University, Australia on 28th October, 2024. Prof. Anurag Garg was the convener.

The Department of Civil Engineering, IIT Bombay organised a one-day workshop on “*Advances in Modelling Wave-Structure Interaction Processes*” on 1st November, 2024. Prof. Srineash V. K. was the convener.

The Centre for Climate Studies organised a workshop on *Atmospheric Convection* during 14th-15th November, 2024. Prof. Vishal Dixit was the convener.

The Department of Metallurgical Engineering and Materials Science, IIT Bombay organised a workshop on “*Experimental and Machine Learning Aspects of Material Failure under Cyclic Loading and Hydrogen Environments*,” in collaboration with *Fraunhofer IWM, Freiburg* during 18th-19th November, 2024. Prof. Nagamani Jaya Balila and Mr. Kartikey Sharma (PhD student) were the organisers.

The IDC School of Design, IIT Bombay, organised a workshop on “*Nature Meets AI: Unveiling the Secrets of Growth and Decay in Plants*” during 18th-29th November, 2024. Prof. Sugandh Malhotra was workshop host.

The Laser Advanced Materials Processing (LAMP) Lab, IIT Bombay and Laser Micro-

manufacturing Lab, KU Leuven, Belgium, jointly organized a workshop on **“Ultrafast Laser Micro-Fabrication”** on 22nd November, 2024. **Prof. Deepak Marla** was the convener.

The **Department of Metallurgical Engineering and Materials Science, IIT Bombay** organised a workshop on **“Modeling Deformation and Microstructure Evolution across Length and Time Scales”** on 25th November, 2024. **Prof. Anirban Patra** was the convener.

The **Department of Mechanical Engineering, IIT Bombay** organised a one-day workshop on **“Polymer Processing for Microfluidics”** on 25th November, 2024. **Prof. Prasanna Gandhi** and **Mr. Geetendra Raj (Research Scholar)** were the organisers.

The **Centre for Technology Alternatives for Rural Areas (CTARA), IIT Bombay** organised a two-day workshop titled **“Sustainability of Rural Solar Mini-grids in India and Namibia: Challenges and Opportunities”**, as part of collaborative research project with a team from Namibia University of Science and Technology (NUST), Windhoek, Namibia during 26th-27th November, 2024. The workshop is co-funded through the SEED Centre at TUM, Germany. **Prof. Anand B. Rao** and **Mr. Omkar Buwa (doctoral student)** were the hosts.

The **Department of Metallurgical Engineering and Materials Science, IIT Bombay** organised a workshop on **“Micromechanics and its Applications”**, in collaboration with **Karlsruhe Institute of Technology, Germany** during 26th-27th November, 2024. **Prof. Nagamani Jaya Balila** was the convener.

The **IDC School of Design, IIT Bombay**, in collaboration with Intelligent Mobility Design Centre (IMDC), Royal College of Art, London, organised a workshop on **“Next MoVe: Inclusive Mobility & Vehicle Design”** on 28th November, 2024. **Prof. Nishant Sharma** was the organiser.

The **Department of Computer Science and Engineering, IIT Bombay** organised a workshop on **“Constraint Solving & Synthesis: Two Sides of the Same Coin?”** on 4th December, 2024. **Prof. Supratik Chakraborty** was the host.

The **Department of Civil Engineering, IIT Bombay** organised a half-day workshop on **“Metro Transit Systems in the Cities of Maharashtra”** on 7th December, 2024. **Prof. Gopal Patil** was the organiser.

The **Department of Metallurgical Engineering and Materials Science, IIT Bombay** organised a workshop on **“2D materials: advances in growth, characterization, and applications”** on 9th December, 2024. **Prof. Tanushree H Choudhury** was the convener.

The **Department of Civil Engineering, IIT Bombay** organized a one-day international workshop on **“Seismic Risk and Resilience: Advanced Tools and Methodologies”** on 9th December, 2024 in collaboration with University of Aveiro, Portugal and Global Earthquake Model (GEM) Foundation, Italy. **Prof. Meera Raghunandan** was the organiser.

The **Department of Civil Engineering** organised a one-day workshop on **“Offshore Wind Energy”** as part of ‘Sustainable Ocean Engineering, Technology and Developments’ event on 10th December, 2024. **Prof. Manas R Behera** and **Prof. Srineesh V.K.** were the organisers.

The **Centre for Educational Technology, IIT Bombay** organised a workshop titled **“Co-Intelligence: Designing Technology for Learning using AI (#DTfLxAI)”** on 11th and 14th December, 2024. **Prof. Syaamantak Das** was the organiser.

The **Department of Mathematics** as part of MoU between **IIT Bombay** and **North Carolina State University**, organised a two-day workshop **“Advances in High**

Dimensional Statistical Learning (AHDSL)” during 15th-16th December, 2024. **Prof.**

Radhendushka Srivastava was the organiser from IIT Bombay.

The **Department of Chemistry, IIT Bombay** organised a one-day workshop on **“Advanced synchrotron based characterization of battery materials”**, on 16th December, 2024. **Prof. Srinivasan Ramakrishnan** was the organiser.

The **Department of Biosciences and Bioengineering, IIT Bombay** organised a workshop on **“Integrative Oncology”** during 16th-17th December, 2024. **Prof. Shamik Sen** was the organiser.

The **Department of Chemical Engineering, IIT Bombay** organised a workshop on **“Biomedical Devices & Diagnostics”** on 19th December, 2024. **Prof. Mahesh S Tirumkudulu** was the organiser.

The **Department of Metallurgical Engineering and Materials Science, IIT Bombay** organised a workshop on **“Glasses and glass-ceramics for Dental and Healthcare Applications”** during 20th-21st December, 2024. **Prof. Parag Bhargava** was the organiser.

Awards and Distinctions

Prof. Santanu Banerjee, Department of Earth Sciences, has been elected as a **Fellow of the National Academy of Sciences (FNASc), India 2024**

Prof. Ravindra Gudi, Department of Chemical Engineering, has been elected as a **Fellow of the National Academy of Sciences (FNASc), India 2024**

Prof. Ashwin Gumaste, Department of Computer Science and Engineering, has been elected as a **Fellow of the National Academy of Sciences (FNASc), India 2024**

Prof. Suvarn Kulkarni, Department of Chemistry, has been elected as a **Fellow of the National Academy of Sciences (FNASc), India 2024**

Prof. Ranjith Padinhateeri, Department of Biosciences and Bioengineering, has been elected as a **Fellow of the National Academy of Sciences (FNASc), India 2024**

Prof. Shamik Sen, Department of Biosciences and Bioengineering, has been elected as a **Fellow of the National Academy of Sciences (FNASc), India 2024**

Prof. Swathy Manohar, Department of Civil Engineering, has been selected for the **INSA History of Science Young Associates 2024**

Prof. Manjesh K. Hanawal, Department of Industrial Engineering and Operations Research and his team has won the **1st prize at the ITU WTSA-24 AI Bharath 5G/ 6G Sandbox Hackathon**. This challenge was organized by the International Telecommunication Union (ITU) along with the Department of Telecom (DoT)

Prof. Suvarn Kulkarni, Department of Chemistry, has been inducted in the **Editorial Advisory Board of the journal Organic Letters**

Profs. Ganesh Ramakrishnan and Pushpak Bhattacharya from Department of Computer Science and Engineering, have been listed in the **AIM 100: Top 100 Most Influential Global Leaders in the AI domain**

Prof. Rajakishore Nath, Department of Humanities and Social Sciences, has received 'Best Presenter Award' on his research paper on "Understanding 'Author' or 'Authorless' Literatures Through the Lens of Artificial Intelligence," at Bandung International Conference for Cultural Studies 2024 organized by The Faculty of Art and Design, Institute of Technology Bandung, Indonesia, 16th-17th October, 2024

Prof. Maryam Shojaei Baghini, Department of Electrical Engineering and her team has won the first place winner award in **Electromagnetic Compatability of Integrated Circuits (EMC-COMPO) 2024**, Italy

Prof. Gulab Singh, Centre of Studies in Resources Engineering, has joined the Editorial Board of **Scientific Reports of Nature**

Publishing Group and also been elected as **Fellow of the Indian Society of Geomatics (ISG)**

Prof. Gopalan Rajaraman, Department of Chemistry, has joined the Editorial Advisory Board of **European Journal of Inorganic Chemistry**

Prof. E Chandrasekhar, Department of Earth Sciences, has been appointed as **Chair of Student Affairs Committee (SAC)** by the council of International Association of Mathematical Geosciences (IAMG)

Prof. Dinesh Kabra, Department of Physics, has been appointed as a Governing council member of **National Institute of Solar Energy (NISE) by the Ministry of New and Renewable Energy** and has joined the **Editorial Advisory Board in ACS Applied Materials & Interfaces**

Prof. Smrutiranjana Parida, Department of Metallurgical Engineering and Materials Science, has been awarded the **Corrosion Awareness Award for Excellence in Corrosion Science & Technology** in Research & Education for 2024 from NACE International India Chapter

Former Director of IIT Bombay **Prof. Subhasis Chaudhuri**, Department of Electrical Engineering, has been appointed as the **Chairman on the board of Bombay Stock Exchange Ltd. by Securities and Exchange Board of India (SEBI)** and has been elected as **Fellow of The World Academy of Sciences (TWAS)**, effective 1 January, 2025

Former IIT Bombay Director **Prof. Devang Khakhar**, Department of Chemical Engineering, has been elected as **Fellow of The World Academy of Sciences (TWAS)**, effective 1st January, 2025

Prof. Chandra Venkataraman, Department of Chemical Engineering, has been elected as **Fellow of The World Academy of Sciences (TWAS)**

Prof. Amartya Mukhopadhyay, Department of Metallurgical Engineering and Materials Science,

has been selected by Tata Sons and The New York Academy of Sciences as the **2024 Tata Transformation Prize Winner in Sustainability**

Prof. Parthe Pandit, Centre for Machine Intelligence and Data Science, has been selected as **AI2050 Early Career Fellow for 2024** from **Schmidt Sciences**

Retd. Prof. Sanjeev Sabnis, Department of Mathematics, has been awarded the **Lifetime Service Award from the International Indian Statistical Association (IISA)**, at Cochin University of Science and Technology (CUSAT), Cochin, during 27th-31st December, 2024

Prof. Neela Nataraj, Department of Mathematics, has been elected to be a part of the council of the **National Academy of Sciences India (NASI) for 2025**

Prof. Neeta Kanekar, Department of Biosciences and Bioengineering, has joined the editorial board of the Cambridge University Press (CUP) journal **Wearable Technologies** as an Associate Editor

Prof. Parag Bhargava, Department of Metallurgical Engineering and Materials Science, has been awarded the **DN Agarwal Award** from the Indian Ceramic Society

The start-up Dimira Technologies established by **Prof. Dipti Gupta**, Department of Metallurgical Engineering and Materials Science, has been **recognized and selected for facilitating technological development for National Quantum Mission**

Prof. B. V. S. Viswanadham, Department of Civil Engineering, has delivered the prestigious **46th Annual Lecture of Indian Geotechnical Society (IGS)** at MIT Aurangabad, India during the Annual General Session of Indian Geotechnical Conference (IGC-2024), held during 19th-21st December, 2024

Prof. Deepankar Choudhury, Mr. Tanmoy Das (PhD student) and **Dr. Meghna Sharma** (Postdoctoral

Fellow), Department of Civil Engineering, have been awarded the **IGS-Shri A.G. Dastidar Biennial Prize for the Best Paper on "Ground Improvement" for the years 2022-2023**. Their winning paper is titled **"Bearing Capacity and Liquefaction Assessment of Shallow Foundations Resting on Vibro-Stone Column Densified Soil in Vallur Oil Terminal, India"** and was published in the Indian Geotechnical Journal, Springer Nature, Vol. 53, Issue 4, 2023, pp. 1392-1413 (doi: <https://link.springer.com/article/10.1007/s40098-023-00758-9>). The award was presented during the Indian Geotechnical Conference (IGC-2024) held at MIT Aurangabad, India

Prof. B. V. S. Viswanadham and **Dr. Pankaj Kumar** (Postdoctoral Fellow), Department of Civil Engineering, have been awarded the **IGS-FERROCO YGE Award for the**

Best Paper on Dam Engineering and Allied Areas for the year 2024. Their paper, titled **"Design and Development of Tilt Table-Based In-Flight Simulator for Pseudostatic Loading in a Geotechnical Centrifuge,"** was published in the Geotechnical Testing Journal, ASTM, Vol. 45, Issue 5, 2022, pp. 936-960 (doi: <https://www.astm.org/gtj20210216.html>). This award was presented during the Indian Geotechnical Conference (IGC-2024) at MIT Aurangabad, India

Prof. Deepankar Choudhury and **Dr. Chaidul Haque Chaudhuri** (Postdoctoral Fellow), Department of Civil Engineering, have been awarded the **IGS-Guwahati Chapter YGE Award for the Best Paper on "Soil Dynamics and Earthquake Engineering" for the year 2024**. Their paper, titled **"Protection of Pipeline below**

Pavement Subjected to Traffic-Induced Dynamic Response," was published in Scientific Reports, Nature, Vol. 13, 4995, 2023 (doi: <https://www.nature.com/articles/s41598-023-31615-7>). The award was presented during the Indian Geotechnical Conference (IGC-2024) at MIT Aurangabad, India

Prof. Pushpak Bhattacharyya, Department of Computer Science and Engineering, has been appointed as **Chair of Reserve Bank of India Committee on Framework for Responsible and Ethical Enablement of Artificial Intelligence (FREE-AI)** in the Financial Sector

Prof. Parinda Vasa, Department of Physics, has been appointed as a **Secretary of International Union of Pure and Applied Physics (IUPAP) Commission (C17) on Laser Physics and Photonics** for the period 2025-2027

Appointments

Dr. Rohit V. Nanavati, has been appointed as an Assistant Professor Grade II in the Department of Aerospace Engineering w.e.f. 24th December, 2024



Dr. Parthanil Roy, has been appointed as a Professor in the Department of Mathematics w.e.f. 18th December, 2024



Dr. Suyash Bire, has been appointed as Assistant Professor Grade I in the Centre for Climate Studies w.e.f. 25th November, 2024



Prof. Sudarshan Vijay, has been appointed as Assistant Professor Grade II in the Department of Chemical Engineering w.e.f. 22nd November, 2024



Dr. Sawan Rathi, has been appointed as Asst. Prof. Grade II in the Shailesh J. Mehta School of Management w.e.f. 7th November, 2024



Prof. Saurabh Jain, has been appointed as Assistant Professor Grade I in the Department of Industrial Engineering and Operations Research w.e.f. 4th November, 2024



Prof. Pintu Parui, has been appointed as an Assistant Professor Grade I in the Department of Economics w.e.f. 14th October, 2024



Dr. Sutanu Roy, has been appointed as an Associate Professor in the Department of Mathematics w.e.f. 1st October, 2024



Dr. Ashwin Seshia, has been appointed as an Professor in the Department of Electrical Engineering w.e.f. 1st October, 2024



Prof. Tushar Kanti Mandal, has been appointed as Assistant Professor Grade II in the Department of Civil Engineering w.e.f. 30th September, 2024



Dr. Manibrata Sen, has been appointed as Assistant Professor Grade I in the Department of Physics w.e.f. 23rd September, 2024



Prof. Solomon Debbarma, has been appointed as Assistant Professor Grade I in the Department of Civil Engineering w.e.f. 17th September, 2024



Prof. Suman Kumar Sahoo, has been appointed as an Assistant Professor Grade I in the Department of Mathematics w.e.f. 16th August, 2024



Retirements on 31st October, 2024

Mrs. Smruti S. Naik, Assistant Administrative Officer (P), Accounts Section, retired after 38 years of service



Mrs. Sumedha M. Gokhale, Assistant Administrative Officer (P), Estate Office, retired after 39 years of service



Mr. Sanjay A. Agawane, Administrative Associate (P), Central Library, retired after 32 years of service



Retirements on 30th November, 2024

Mr. Virendrakumar A. Mam, Assistant Administrative Officer (P), Cash Section, retired after 38 years of service



Ms. Rekha D. Kurde, Multiskilled Assistant A, Physics, retired after 9 years of service

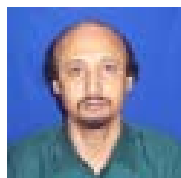


Mr. Gulab Gaikwad, Multi Skilled Assistant C, Hostel No 03, retired after 26 years of service



Retirements on 31st December, 2024

Prof. Goutam Kumar Lahiri, Department of Chemistry, retired after 31 years of service



Mr. Vilas P. Belekar, Sr. Administrative Superintendent (P), Institute of Eminence (IoE) Cell, retired after 34 years of service



Ms. Sulbha S. Bhangre, Administrative Superintendent (P), Accounts Section, retired after 24 years of service



Mr. Rakeshkumar S. Pandey, Assistant Administrative Officer (P), Office of Continuing Education and Quality Improvement Programme (CE & QIP), retired after 40 years of service



Mr. Prakash G. Karwanje, Administrative Associate (P), Department of Chemical Engineering, retired after 39 years of service



CEP courses scheduled January, February and March 2025

No.	Course Title	Course Coordinator/ Department	Duration
Open Programmes : (January 2025)			
1	Electric Vehicle Power Electronics	Prof. Sandeep Anand, Department of Electrical Engineering	January 24, 2025 (3 days)
2	Academic-Ethics, Scientific-Scholarly Writing and Journal Publications	Prof. Ashish Singh, Shailesh J. Mehta School of Management	January 25, 2025 (1 day)
3	Gen AI For Business Operations and Strategy: A Practical Guide	Prof. Lina Sonne Vyas, Desai Sethi School of Entrepreneurship	January 30, 2025 (3 days)
Open House Programmes: (February 2025)			
4	Fundamentals of AI For Entrepreneurs, Corporates and Professionals	Prof. Sandesh Ramu, IDC School of Design	February 8, 2025 (2 days)
5	Advances in Proteomics Technologies: Basic Proteomics Workshop	Prof. Sanjeeva Srivastava, Department of Biosciences and Bioengineering	February 14, 2025 (2 days)

Professor Souvik Mahapatra Honoured With Named Model For Chip Reliability



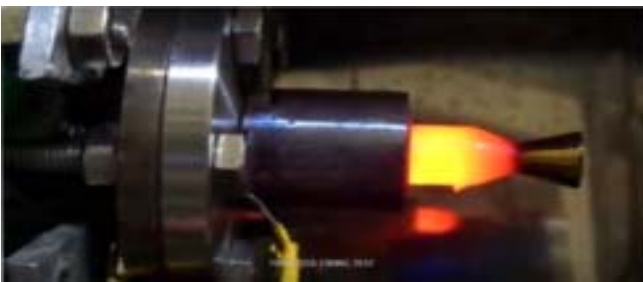
IIT Bombay **Professor Souvik Mahapatra**, Department of Electrical Engineering, has been honoured with a named model for chip reliability using analysis and modeling methodology, which has been helping semiconductor manufacturers to make reliable electronic chips, that is now available as the **“Mahapatra reliability model”** in Sentaurus Device Technology Computer-Aided Design (TCAD) software from *Synopsys*.

Prof. Mahapatra has been spearheading the efforts to characterize, understand, model and control transistor reliability for over two decades. He collaborates closely with several leading industries in the semiconductor chip ecosystem, including IBM, Intel, Micron, Applied Materials and Synopsys, among others.

Dr. Victor Moroz, Fellow, Synopsys, USA, said, *“Synopsys, a leading provider of TCAD software, has been collaborating with Prof. Mahapatra for the past decade. As a result of this collaboration, a reliability model has been developed and incorporated in Sentaurus Device TCAD (named as “Mahapatra Reliability Model”), which is being used by several industries in the logic and memory areas of the semiconductor ecosystem”.*

Synopsys has acknowledged Prof. Mahapatra’s achievement with an award, presented during their event at the *International Electron Devices Meeting (IEDM)* in San Francisco in December 2024.

IIT Bombay Develops First Green Propulsion System For Spacecrafts



First Green Propulsion System for spacecrafts developed by IIT Bombay alumni and professors successfully tested in space IIT Bombay’s space tech startup *Manastu Space*, led by alumni **Tushar Jadhav** (Department of Aerospace Engineering, 2014) and **Ashtesh Kumar** (Department of Mechanical Engineering, 2017) successfully fired their first green Propulsion System onboard PSLV C60 in space on 31st December, 2024 at 8:50 pm at Lucknow.

IIT Bombay faculty **Prof. Jayesh Bellare**, Department of Chemical Engineering; **Prof. Parag Bhargava**, Department of Metallurgical Engineering and Materials Science and **Prof. Amol Gokhale**, Department of Mechanical Engineering were keenly involved in developing the technology.

IIT Bombay PhD Students Visit Tsukuba University

A team of PhD students from IIT Bombay, consisting of **Anamika Laishram** Department of Physics, **Sudha Gautam** Department of Metallurgical Engineering and Materials Science (MEMS) and **Dippin T.**, Department of Chemistry, accompanied by **Prof. Rajiv Dusane** (MEMS), visited the Advanced Materials Science Department at **Tsukuba University, Japan** under the **SAKURA Science Exchange Programme** between IIT Bombay, IIT Guwahati and Tsukuba University. The team spent 20 days in Japan, from 1st-20th December, 2024, to engage in advanced research related to their PhD themes.



The team from IIT Bombay at Tsukuba University, participating in the SAKURA Science Programme administered by Japan Science and Technology Agency

During their academic interactions, the students learned advanced techniques in materials processing and characterization. They also visited the Photon Factory and the Synchrotron Facility at KEK in Tsukuba, where they gained insights into how these beamlines are utilized for material characterization. Additionally, the visiting faculty members addressed graduate students enrolled in the Materials Science programme at Tsukuba University.

Portable And Affordable Tinnitus Diagnosis And Management Device

Researchers from IIT Bombay have developed a **precise tinnitus-matching device and customizable solution (Mobile based software) at an affordable cost.**

Tinnitus is the perception of sound in the absence of any external stimulus.

As per the research data published in **JAMA Neurology 2022**, Tinnitus affects more than 740 million adults globally and is considered to be a major problem faced by more than 120 million people. Tinnitus results in severe sleep disturbance, depression, anxiety, negative impact on mental health, irritability, impacting social life. Overall, tinnitus has a demoralizing impact on the quality of life.

A team of researchers, including **Prof. Maryam Shojaei Baghini**, Department of Electrical Engineering; **Mr. Neeleshkumar Pandit** (Project Staff) and a group of MTech students along with a team of medical experts **Dr. Milind Kirtane, Dr. Arpit Sharma, Dr. Sangeeta Varty** and **Ms. Nishita Mohandas** from *Hindjuja Hospital, Mumbai*, worked on the design, development and the clinical evaluation of innovation in tinnitus diagnosis and its customizable management.

The project has received funding from the **Tata Centre for Technology and Design (TCTD)**, IIT Bombay and the **Wadhvani Research Centre for Bioengineering (WRCB)**, IIT Bombay. The clinical evaluation demonstrated improvement in the tinnitus symptoms for the subjects enrolled in the clinical trial.

The device and the supporting application software offer a comprehensive approach that includes precise tinnitus matching, a customizable multimodal tinnitus



Photo credit: IIT Bombay Research Book-IBIS

management approach and disease progress tracking at an affordable cost. The objective of the project is to equip clinicians with precise tinnitus diagnosis tools and provide each patient with a unique experience in tinnitus management.

The key features of innovation are as follows:

- Precise tinnitus matching device for diagnosis
- Customizable multimodal tinnitus management software for the patient that is IoT and IoMT enabled at the clinic level.
- Indigenous and affordable

The technology is being transferred to the start-up formed out of the project. The start-up team plans to expand clinical trials and work on the regulatory approval for the product's commercialization. The device, software and results of the first clinical trial were reported in the peer-reviewed *International Journal of Clinical Skills* in December 2024.

Needle-Free Shock Syringes For Painless Medical Treatments

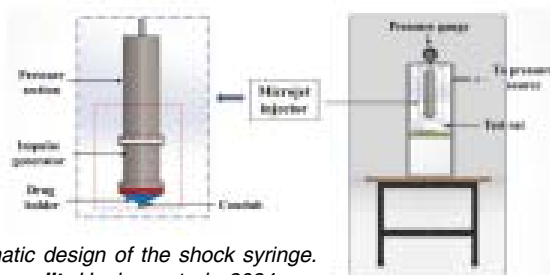
A team of researchers led by **Prof. Viren Menezes** from the Department of Aerospace Engineering at the Indian Institute of Technology Bombay has now worked a way around to deliver drugs without needles by developing a shock syringe. In their study published in the **Journal of Biomedical Materials & Devices**, the IIT Bombay researchers compared the effectiveness of drug delivery by a shock syringe versus a regular needle on laboratory rats.

Unlike syringes with needles, the shock syringe doesn't rely on piercing the skin with a sharp tip. Instead, it uses high-energy pressure waves (shock waves) that can travel faster than the speed of sound to pierce the skin. These waves, when generated, compress the surrounding medium (such as air or liquid) through which they travel. A similar effect happens during a sonic boom; when an aircraft flies faster than the speed of sound, it creates shock waves that push and disturb the air.

The development of a shock syringe promises more than pain-free injections. It could make immunization drives quicker and more efficient for both children and adults. It could prevent the occurrence of bloodborne diseases caused by needle-stick injuries due to mishandling or improper disposal.

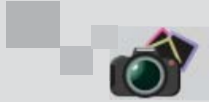
Access complete article at:

<https://www.iitb.ac.in/research-highlight/needle-free-shock-syringes-painless-medical-treatments>



Schematic design of the shock syringe.

Photo credit: Hankare et al., 2024



In the Wilderness



Photo Credit :
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