

DEAN'S MESSAGE



Dear Alumnus,

Greetings from your Alma Mater in the month of May that brings warmth, blooming flowers, verdant greenery, the luscious mango fruit, and many more exciting promises in anticipation of the monsoon. May is truly a month that warms us inside out and fills our body and soul with a renewed sense of vigour and the possibility of hope, growth, and renewal. It is also that time of the year when a new batch of IIT Bombay students graduate and prepare themselves to embrace the professional world at large, while also elevating their individual status from a relatively shorter association as students to a lifelong engagement as alumni. Please join me in wishing each of them all the

very best as they embark on their exciting journey ahead to meet their aspirations.

So while we bid goodbye to our students who are off to the real world and/or on their summer vacation, the Dean ACR office continues to be busy with our various activities and events. Just in April 2023, we hosted three very crucial events – the inauguration of the Koita Centre for Digital Health (KCDH) and The Centre for Machine Intelligence and Data Science (C-MInDS) and hosted the Valedictory Function for our graduating seniors. Please look for longer writeups on all three in the Special Report section of the newsletter. I have also included a longer write-up of the FAN-DAM event that took place in Chennai earlier in the month of April in the newsletter.

We have three major events coming up in the months of June and July. In June, we will host the second edition of our annual Corporate Social Responsibility (CSR) Conclave on June 16, 2023. And in July, we will travel to the US and host the FAN-DAM event in Chicago at Northwestern University Campus between July 7-9, 2023. And from there we will travel to Canada (Toronto and Vancouver) for an Alumni Meet-and-Greet Session in both cities. I look forward to meeting and connecting with you during these events.

On behalf of IIT Bombay, I want to extend my heartiest congratulations to our alumnus, Prof. Jindal Shah (B.Tech., Chemical Engineering, 1996), who won the Excellent Faculty Award from the College of Engineering Architecture and Technology at Oklahoma State University (OSU). Look out for a longer writeup on Prof. Shah in the News section of the newsletter. Also, our own faculty members continue to bring accolades to themselves and the Institute. So please look out for the Faculty Accolades in the News section of the newsletter, as well.

We also have all of our other regular articles including Giving, Chair Professorships, Student Success Stories, Alumni News, Institute Highlights, Upcoming Events, and more in this month's newsletter.

Please join me in commending the excellent work done by our IITB professors who continue to bring accolades to themselves and the Institute. Please look for more details under Faculty Accolades in the News section of the newsletter.

Once again, I want to thank you for your consistent support and generosity to your alma mater, and trust that you will continue the same in the future, as well. Your spirited involvement has contributed immensely to the Institute's advancement. As always, I hope to see you on campus soon.

As we say goodbye to one more month in 2023, I want to leave you with another ode to the glorious month of May. Sam Cooke in 'That's Heaven to Me' spoke for all of us when he said,

*A little flower that blooms in May
A lovely sunset at the end of the day
Someone helping a stranger along the way
That's heaven to me."*

I wish you the very best as we move towards the summer. Please enjoy the warm weather but do not forget to wear sunscreen!

Sincerely,

Prof. Ravindra D. Gudi, Ph.D., FNAE and FIICHe
Dean – Alumni and Corporate Relations
Institute AI & ML Chair Professor

GIVING



Name Your Hostel Room

Late-night rendezvous with roommates...last-minute frantic revisions before midterms...budding romances...sneaking in chai and Maggi noodles / bondaas...carving your name in some corner of your hostel room to leave your mark behind on that small space that was your home away from home...

Some of your best memories as a student at IIT Bombay were the times you spent in your

hostel rooms at your alma mater with your closest friends and other acquaintances, isn't it?

Wouldn't you like to leave a permanent mark on that space that saw you grow from a nervous young student staying away from the comfort of your family home into becoming a confident young person ready to take on the world?

Well? Now you can.

This is your chance to literally stamp your name on the room that nurtured you by naming it after yourself. Or you can pay homage to your loved near and dear ones by naming your hostel room after them like your parents, grandparents, etc.

A donation of Rs. 7 Lakhs/\$10k will ensure that your hostel room will be named after you (or a name of your choice) for a period of 15 years with an option to extend it beyond that period.

You can set up a monthly donation (which will be auto-deducted) or make a pledge and pay it in a few installments. The funds collected will be utilised towards the construction of new hostels and the upkeep of existing hostels.

We urge you to not wait any longer!

Support your alma mater. Support the next generation of students and ensure they have a good quality of life at IITB. Leave your mark behind on the space that is so beloved to you.

'Name Your Hostel Room' and leave behind your legacy in your alma mater!

DONATE <https://portal.iitbacr.com/payments>

DONOR INSTITUTED CHAIR PROFESSORSHIPS



Prof. Subhankar Karmakar Appointed the Vinaya and Samir Kapoor Chair in Climate Studies

About the Donor:

The Vinaya and Samir Kapoor Chair in Climate Studies has been set up with a generous donation from IIT Bombay alumni, Ms. Vinaya Kapoor (B.Tech., Chemical Engineering, 1992) and Mr. Samir Kapoor (B.Tech., Electrical Engineering, 1992). Both of them are committed to furthering the scientific and entrepreneurial talent at IIT Bombay to address climate, energy, and sustainability challenges.

The vision of this chair is to help establish IIT Bombay as a world leader in Interdisciplinary Climate Studies through the pursuit of excellence in research and development, undergraduate engagement, and industry collaboration.

Vinaya and Samir Kapoor are also sponsors of the Kapoor Accelerating Climate Energy and Sustainability Solutions (ACCESS) Competition and Awards at IIT Bombay.

About the Appointee:

Prof. Subhankar Karmakar, Professor and Head, Department of Environmental Science and Engineering
AND

Associate Faculty Member, Inter-Disciplinary Programme in Climate Studies and the Centre for Urban Science and Engineering

Prof. Subhankar Karmakar is currently the Vinaya and Samir Kapoor Chair in Climate Studies at IIT Bombay.

Prof. Karmakar is a Professor and Head at the Environmental Science and Engineering Department (ESED) and an Associate Faculty Member in the IDP in Climate Studies and the Centre for Urban Science and Engineering at IIT Bombay.

Prof. Karmakar obtained a doctoral degree from the Department of Civil Engineering, Indian Institute of Science, Bangalore, India. Based on his academic excellence, he received a recommendation for the upgradation of registration from the Master's degree programme to the Ph. D. degree programme by the Senate Committee, Indian Institute of Science, Bangalore.

Before joining IIT Bombay, he worked as a Postdoctoral Fellow at the University of Western Ontario, Canada. He also received a BOYSCAST Fellowship from the Government of India to pursue research at Duke University, North Carolina, USA.

His primary research interests are Environmental Systems Analysis, Uncertainty Modelling, and Risk-Vulnerability Analysis of Climate-induced Natural Hazards. Some of his recent research contributions include understanding flood-generating mechanisms and identification of flood drivers, mapping disaster vulnerability for densely populated coastal urban catchments, mapping agricultural vulnerability at a national scale, and developing lifecycle-based decision support tools for selecting wastewater treatment alternatives.

He has published over 100 international journal papers, several book chapters, and international conference proceedings.

Over the years he has also won several awards and accolades. At IIT Bombay, he received the Professor S. P. Sukhatme Excellence in Teaching Award in 2019 and the Research Excellence Award in 2020. He is also an Associate Editor of the Frontiers in Water and Built Environment Journal and an Editorial Board Member (Environmental Engineering) of the Scientific Reports journal published by Nature Portfolio.

Over the years he has been an active part of organizing committees of several prestigious national and international conferences. He also continues to be the Vice-Chairperson of the prestigious International Conference on Flood Management (ICFM) Ad Hoc Committee since 2020.

Prof. Karmakar has also successfully completed several sponsored research projects. The current phase of the DST-sponsored Centre of Excellence in Climate Studies at IIT Bombay initiated in March 2018 is running successfully under the leadership of Prof. Karmakar as its Principal Investigator. This project is a part of the National Mission on Strategic Knowledge for Climate Change (NMSKCC), Science and Technology, Government of India, for steering high-impact research in climate science and policy.



Prof. Akash Kumar Appointed the J.R. Isaac Chair

About the Donor:

IIT Bombay alumnus, Mr. Vincent Fernandes (B. Tech, Electrical Engineering, 1975) set up the J.R. Isaac Chair to honour his teacher and mentor, Prof. J.R Isaac, who retired from IIT Bombay in 1990. A renowned academic, Prof. Isaac was instrumental in setting up the Computer Centre and, later, the Department of Computer Science and Engineering at the Institute.

The goal of this Chair is to recognize a young faculty member in the Department of Computer Science and Engineering for his/her achievements at a young age and support the faculty member's R&D activities.

About the Appointee:

Prof. Akash Kumar, Assistant Professor, Department of Computer Science and Engineering.

Prof. Akash Kumar is currently the J. R. Isaac Chair Professor at IIT Bombay.

Prof. Kumar is currently an assistant professor in the Department of Computer Science and Engineering at IIT Bombay.

Prof. Kumar obtained his Masters in Computer Science from Georgia Tech in 2011. He then went on to receive his Ph.D. at Purdue University in 2020 under the masterly supervision and mentorship of the highly accomplished Prof. Saugata Basu. Prof. Kumar's doctoral work led

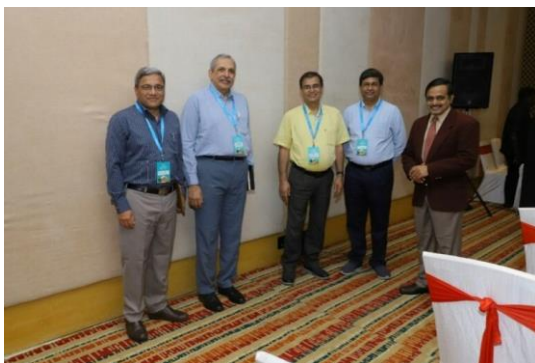
to the resolution of a couple of decade-long conjectures in Graph Property Testing. His work in this area led him to bag the prestigious Cagiantas Fellowship which supported his living expenses during the final year of his Ph.D.

For his postdoc, he spent two wonderful years at EPFL, Switzerland.

Prof. Kumar is broadly interested in Theoretical Computer Science, Spectral Graph Theory, and the applications of ideas from Geometry and Analysis to Modern Graph Algorithms.

In his spare time, he loves reading biographies, playing table tennis, and making dad jokes.

SPECIAL REPORT



Faculty Alumni Network – Distinguished Alumni Meeting (FAN-DAM) Chennai

Celebrating Excellence: IIT Bombay Welcomes Esteemed Faculty and Distinguished Alumni for FAN-DAM Chennai

Some of the best minds in academia and research come together to network and join forces during IIT Bombay's annual FAN-DAM event.

IIT Bombay is an "Institute of Eminence" that established the FAN network to attract researchers from across the

globe to develop solutions to some of the most pressing challenges in science and technology. The FAN meeting brings together IITB's current faculty, IITB's alumni members in faculty positions, as well as industrial researchers from both sides, to meet and deliberate on emerging areas of research, and nucleate collaborative programs.

The Distinguished Alumni Meeting (DAM) celebrates IITB's distinguished alumni who bring their real-world expertise and collaborate with IITB's faculty to strategize and map out ways for the growth of the Institute.

Together, they mentor students, create opportunities, and develop mutually beneficial and transformative initiatives that can positively impact the world around us.



The Institute hosted the India edition of FAN-DAM in Chennai between March 31 – April 2, 2023. The event was organized after 4 years in the country and brought together several of IIT Bombay's accomplished alumni serving in the industry and academia together with IITB senior administration and faculty. Over the course of three days, they deliberated on several strategic matters related to both Institute growth as well as research forays.

The three-day event began with a welcome address given by Prof. Subhasis Chaudhuri, Director IIT Bombay. Prof. Ravindra D. Gudi, Dean ACR, IIT Bombay then addressed the attendees. Prof. Neela Nataraj, Dean, Faculty Affairs, IIT Bombay, gave the audience an overview of IIT Bombay which was followed by a segment on 'IITB Vision 2030 and Strategy' by Mr. Ramesh Mangaleswaran, Senior Partner Emeritus, McKinsey & Company.

FAN-DAM Breakaway Sessions



The event then broke off into breakaway sessions. While Day 2 hosted breakaway sessions of DAM, Day 3 featured sessions of FAN, with both events hosting five sessions each.

The five sessions for DAM included the following topics:

- Session 1: Internationalisation and Faculty Value Proposition
- Session 2: Industry-Academia Interaction
- Session 3: Maturation and Translation of Academic Research towards Entrepreneurship:
- Session 4: Holistic Development of IITB Students
- Session 5: Educational Outreach and Societal Impact

The five FAN breakaway sessions included the following topics:

- Theme 1: Semiconductors & Quantum
- Theme 2: Circular Economy and Sustainability
- Theme 3: Health Science and Engineering
- Theme 4: Sensors Development and IoT
- Theme 5: Advanced Forays into AI/ML

Each of the above sessions featured some of the top thought leaders, researchers, faculty members, and distinguished alumni who came together and discussed the salient aspects concerning the core topic. Both the DAM and FAN breakaway sessions included detailed discussions and after each session, the committee provided a way forward to the Institute by recommending actionable and tangible suggestions to the issues that were raised.

The FAN-DAM event held at Chennai was a huge success for IIT Bombay and the Institute is looking forward to implementing the suggestions put forth by the panellists from the various sessions. With the success of FAN-DAM Chennai, IIT Bombay is eagerly looking forward to the next FAN-DAM event in Chicago in July 2023.

For more details on the various dignitaries who attended the three-day event, the panellists, session conveners, faculty members, IITB alumni, and more – click and/download the FAN-DAM Chennai brochure:

[FAN-DAM Chennai brochure](#)



IIT Bombay Launches the Koita Centre for Digital Health (KCDH)

When Innovation Meets Healthcare: Spearheading the Digital Health Revolution in India

IIT Bombay inaugurated the Koita Centre for Digital Health (KCDH) on campus and, with it, the Institute, moved one step closer to revolutionising digital

healthcare in India.

Across the world, digital healthcare is proving to be transformative to the traditional medical industry as it increases accessibility, lowers costs, and enables a more data-driven but personalised approach to medicine and diagnostics. In a developing country in India, Digital healthcare has the potential to revolutionise the hitherto expensive medical industry and IIT Bombay is committed to furthering this revolution in the country by leveraging its robust research expertise and technology-driven solutions.



The Inauguration of KCDH

While the Institute announced the establishment of the KCDH back in 2021, it readied the physical space for the Centre in record time and the newly housed KCDH was unveiled with a grand ceremony held on April 17, 2023, at the IITB campus. While the Centre is currently located as part of the KRESIT

building on campus, eventually, the Centre will move to its permanent location on campus.

The inauguration of KCDH was attended by many luminaries including Dr. Rajesh S. Gokhale, DBT Secretary, who was the Chief Guest on the occasion. Dr. Gokhale highlighted the impact of digital health in the modern world and said, “Biology will build the next technology revolution in the world and digital health will play a critical role in this.”

Other dignitaries included Prof. K. V. Krishna Rao, Deputy Director-FEA, IIT Bombay, who gave the welcome address; Dr. Narendra Ahuja, Professor, University of Illinois, USA who was the Guest of Honour; Dr. Manish Gupta, Director, Google Research, India who delivered the keynote address; Dr. Devi Prasad Shetty, Chairman, Narayana Health who gave his expert opinions on the subject; and the founders of KCDH, Mr. Rizwan Koita, and Ms. Rekha Koita.

A pleased Prof. Subhasis Chaudhuri, Director, IIT Bombay said, “India continues to face unique disease patterns and challenges related to healthcare delivery. Our country is in dire need of smart, effective, and affordable healthcare solutions and this is where digital health comes into play. With KCDH, IIT Bombay has taken a monumental leap in its resolve to create a robust ecosystem for digital healthcare in India. I am confident that our students and faculty will leverage this Centre to create a profound impact in the healthcare space. I am deeply grateful to our alumni Mr. Rizwan and Ms. Rekha Koita and the Koita Foundation, for their generous contribution towards this Centre.”

Watch the full recording of the event here:

<https://www.youtube.com/live/49WHPO9yoQY?feature=share>

The People Behind KCDH



Ms. Rekha Koita



Mr. Rizwan Koita

KCDH has been generously funded by the Koita Foundation, which was formed by IIT Bombay’s Distinguished Alumnus and co-founder of CitrusTech, Mr. Rizwan Koita (B.Tech., 1992, Electrical Engineering) and Distinguished Service Awardee, Ms. Rekha Koita (B.Tech., Metallurgical Engineering & Material Science, 1992).

Keenly understanding the country’s need for engineering, clinical professionals, and entrepreneurs in the Digital Health domain, Mr. Rizwan and Ms. Rekha Koita spearheaded KCDH as the first of its kind in India.

KCDH is focused on driving academic programs, research, and industry collaborations in this space. The Centre also envisions playing a leading role in digital health and informatics and is aligned with India’s Ayushman Bharat Digital Mission (ABDM) that “aims to develop the backbone necessary to support the integrated digital health infrastructure of the country.”

KCDH is pursuing research in areas of healthcare applications, data management, analysis and AI/ML, consumer health and telemedicine, computational biology and bioinformatics, and population health and public health policy. It is also expected to create research and employment opportunities in these domains. Further information on the research projects can be found at this link here: <https://www.kcdh.iitb.ac.in/research/>

Over the past two years, KCDH has entered into partnerships with several entities including the National Health Authority, Bill and Melinda Gates Foundation, UNICEF, AIIMS, Bajaj Health, and ICICI Lombard.

Speaking on this path-breaking occasion and outlining her vision for the Centre, a gratified Ms. Rekha Koita said, “Our vision is for KCDH to become a globally renowned centre in Digital Health informatics. It will drive research and entrepreneurship and hone some of the best minds, creating a cadre of professionals who can truly create an impact in terms of improving healthcare quality, accessibility, and affordability.”

Mr. Rizwan Koita echoed her sentiment and said, “Use of digital tools and technologies are critical for a large country like India to support its vast and distributed population, with limited resources and qualified healthcare professionals. IIT Bombay and KCDH can provide a strong impetus in driving digital health innovation in India. Moreover, IIT Bombay and KCDH can create a successful blueprint of collaboration between technology institutions and healthcare organisations, which can be replicated across the country.”



Prof. Bhagawati Prasad

Prof. Ganesh Ramakrishnan

The core KCDH team also includes Prof. Bhagawati Prasad, who is the Chief Operating Officer, and Prof. Ganesh Ramakrishnan, who is the Professor-in-Charge of KCDH.

Speaking during the inauguration, Prof. Ramakrishnan said, “Improving healthcare is one of the biggest priority areas for all countries worldwide, including India. Improving healthcare has several dimensions: increasing the number of healthcare professionals, enhancing healthcare infrastructure, improving the quality of healthcare service and overall, advancing the science and engineering that underlie healthcare informatics. It is globally recognised that the availability of high-quality healthcare information and the ability to provide clinical intelligence to healthcare professionals at the point of care can have a profound impact on the quality of care and the efficiency of healthcare delivery. KCDH is uniquely positioned to contribute to interdisciplinary research that brings together clinical domain expertise and engineering expertise across hospitals and research institutions in India and abroad. We are also aligned closely with the national disease modelling ecosystem and playing a leadership role in this endeavour.”

KCDH SYMPOSIUM

The day also saw the hosting of a symposium that was attended by several scientists, researchers, and thought leaders representing the healthcare space including from the government, academia, and industry. The symposium featured several panel discussions on subjects connected to digital health who presented their views on how digital solutions can transform the healthcare space in India. Some of the more dominant themes from the various sessions included managing large healthcare data sets, the use of advanced technologies like AI/ML in personalised medicine, disease modelling for public health, the importance of local innovation in digital health, and the need for nation-wide capacity building in digital health.

Panel Discussions and Virtual Colloquiums

Three panel discussions were held during the symposium. The session started with a discussion on the topic: Panel Discussion: *Past, Present, and Future of Digital Solutions in Indian Health & Wellness*. This was followed by a panel discussion on *Startups in Healthcare – Leading the Digital Health Revolution for*

India. The final session of the day was a virtual panel discussion on *Challenges and Directions in bringing AI to the Clinics*.

The symposium also featured two virtual colloquiums.

The colloquium on *NMR in Healthcare* was chaired by Prof. Ashutosh Kumar whilst the colloquium on *Disease Modelling Colloquium* was chaired by Prof. Siuli Mukhopadhyay.

KCDH Joins Other Healthcare Centres of Excellence at IIT Bombay

IIT Bombay is home to several academic departments and research centres that continue to solve India's healthcare challenges through disruptive research and unique technology solutions.

These include the Department of Biosciences and Bioengineering, the recently inaugurated Sunita Sanghi Centre for Ageing and Neurodegenerative Diseases (SCAN), the Wadhvani Research Centre for Bioengineering (WRCB), the Biomedical Engineering and Technology Innovation Centre, and more.

And now, KCDH joins the Institute's mission to revolutionise healthcare in India.

India is in critical need of cost-effective, accessible, and impactful digital solutions that can truly transform the healthcare sector. And undoubtedly, KCDH will play an instrumental role in this endeavour. IIT Bombay is honoured and privileged that two of its most distinguished alumni, Ms. Rekha Koita and Mr. Rizwan Koita, contributed so generously to their alma mater. Their keen involvement and enthusiastic support have played an instrumental role in the setting up of and the continuing progress of KCDH.



Valedictory Function (Valfi) 2023

Reflecting on the Past, Honouring Excellence, and Bidding a Warm Farewell: IIT Bombay Says 'Until We Meet Again' to its Graduating Seniors

"Education is the most powerful weapon which you can use to change the world."

– Nelson Mandela

As IIT Bombay bid adieu to its graduating seniors, the Institute was confident that the students present during the 2023 edition of its annual Valedictory Function would follow and live Dr. Mandela's words. And remember that their years at IIT Bombay were more than attending classes and getting good grades and that they would continue to learn, grow, and follow their passions.

IIT Bombay's 2023 Valedictory Function took place on April 29, 2023, on campus from 5:00 pm to 8:00 pm.

Every year, the Institute invites illustrious alumni and eminent industry professionals to be speakers at this event. The Institute was delighted that this year's Guests of Honour included Dr. Lalit Kanodia, Distinguished Alumnus & Chairman, Datamatics Group of Companies, and Mr. Karthik Ganapathy, Co-Founder & VP, BillDesk. Given their extraordinary professional journeys, as well as their commendable personal experiences, the evening proved to be a big success as the graduating students took away many of life's key lessons from these two inspirational industry doyens.

The guests of honour were joined by other esteemed Institute dignitaries including Prof. Subhasis Chaudhuri, Director, IIT Bombay; Prof. Ravindra D. Gudi, Dean, Alumni and Corporate Relations, and Prof. Suryanarayana Doolla, Dean, Student Affairs. The function was also attended by hundreds of IITB students.

Prof. Chaudhuri gave the Outstanding Contribution awards to four core members of the Students Alumni Relations Cell (SARC). The SARC members honoured were Ms. Vivitsa Jain, Mr. Naresh Balamurugan, Mr. Shiven Raut, and Ms. Priyam Vijavargia.



Ms. Kirti Agrawal and Mr. Shikhar Tandon then shared their Institute journeys with their classmates, peers, and other attendees.

In her heartfelt and, often, humorous speech as she recalled her time at her beloved Institute, Ms. Agrawal said, “We have abundant intellectual capital in the form of faculty members committed to creating a dynamic learning environment for us. We thank our dearest faculty members for imparting us valuable education. I also want to express gratitude to our alums & seniors for providing constant support and guidance. Our journey has been incredible, which has tested us at every step, challenged us in an unusual manner & transformed us in ways we could have never imagined. IIT Bombay had been a dream for most of us, which kept us motivated during the JEE days. Today we have fulfilled that dream & we stand here as confident, capable, accomplished individuals and future leaders ready to take on the world. If something has taught me perseverance, it’s the fact that I have never faced more rejections in life than I did from Mumbai auto wallas!”

Mr. Tandon recalled the wonderful memories of his time on campus and said, “I am happy and honoured to have been a part of this ecosystem, thankful for all the experiences and memories this place has given me. But I am also sad, sad because this has come to an end. Sad because I might not get to experience this again. Those late-night long walks with friends, enjoying the cool breeze on terraces, munching at canteens, and finally sleeping at dawn and still managing to attend the 9 AM lectures. Rushing in between lectures to Kresit for ‘Bhaiya ek chai ek vada pav’ and then cold coffee at Gullu for lunch. I think we have all been there. And I know for sure we’ll all miss this. The hot days are a bit hard to get by but the evening breeze here coupled with watching sunsets from hostel terraces has always managed to bring a sense of calm in me. I’ll also miss playing late-night table tennis where it was less about the game and more about the conversations we had.”

Mr. Naman Agrawal, the Overall Coordinator of SARC then presented the Year Song and provided an overview of SARC activities, wished the upcoming SARC core team the very best, and bade goodbye.



Prof. Suryanarayana Doolla delivered the vote of thanks.

The evening ended with a series of spirited performances by the graduating students.



A key part of the function was when the graduating students took the “Give One for IIT Bombay” pledge and promised to contribute a percentage of their future earnings to their alma mater. As always, participating in this tradition strengthens the bond between our students and the Institute, even as they become IIT Bombay’s concerned stakeholders forever.

The Valedictory Function, as always, was a heartwarming and inspirational evening for the students of IIT Bombay. The annual Valedictory function is extra special both to the Institute’s students and faculty members. For the former, Valfi is the last official Institute event they attend while for the professors, the event is a bittersweet reminder that some of their beloved students will be leaving IIT Bombay behind to start a brand-new life.

We wish our graduating seniors the very best as they move forward to bigger and better things after their lives at the Institute. While IIT Bombay has set the foundation of their lives and equipped them to deal with the challenges of the real world, we know that our students will use their education, seize opportunities that come their way, and make a tangible impact and difference in the world. As delighted and eager as we are to see what they will do with the rest of their lives, we hope they will never forget their alma mater and drop by and say hello to their beloved Insti.

Onwards and upwards!



IIT Bombay Inaugurates the Centre for Machine Intelligence and Data Science (C-MInDS)

IIT Bombay Taps into the Boundless Potential of Artificial Intelligence

Inauguration of C-MInDS

IIT Bombay launched the Centre for Machine Intelligence and Data Science (C-MInDS) on April 28, 2023, at the Institute’s campus. C-MInDS will be temporarily housed at the Kanwal

Rekhi School of Information Technology (KRESIT) building and will move to its permanent space within its Powai campus in a few years.

C-MInDS is a unique alumni-led initiative that saw several of IIT Bombay’s alumni coming together and contributing to this facility. In what is IIT Bombay’s largest alumni-driven donation to the Institute, a group of 11 alumni has committed a significant amount towards the setting up of C-MInDS. Over the years, IIT Bombay has fostered and nurtured a robust alumni network comprising several members who are extensively involved in the sustained progress of the Institute. From extending financial support to providing mentorship to students, to initiating and implementing critical projects at IIT Bombay, alumni have created immeasurable impact through their generous giving.

The coming together of alumni to augment the activities of C-MInDS at IIT Bombay is a stellar example of the rich legacy of alumni giving. C-MInDS has been established to contribute to the growing significance of the role of Artificial Intelligence, Data Science, and related areas in different application domains. The Centre envisions

being a thought and technology leader in this space through impactful teaching, research, academic outreach, and industry collaboration.

The inauguration of C-MInDS was presided over by Chief Guest, Dr. Samir Kamat, Secretary, DDR&D and Chairman, Defence Research and Development Organisation (DRDO). Other attendees included Dr. Ambica Rajagopal, Chief Data Officer, Michelin; Prof. Sunita Sarawagi, Founding Professor-in-Charge of C-MInDS; Prof. Manjunath, Current Professor-in-Charge; Prof. Ravi Gudi, Dean ACR, who welcomed and felicitated the key donors of C-MInDS; donors, dignitaries, faculty, students, and other guests. The event also included a two-day (April 28 & April 29, 2023) “AI Impact Workshop,” that brought together thought leaders and experts across academia, industry, defence, and government to discuss AI/ML applications in diverse fields including defence, engineering, and manufacturing amongst others.

C-MInDS and How It Came To Be



IIT Bombay is an ‘Institute of Eminence’ and its motto ‘Tryst with Excellence’ has seen it become one of the leading technology institutes in the world. The prestigious QS India Ranking has ranked the Institute amongst the top two educational institutes in India over the past several years. In recent years, IIT Bombay has established several Centres of Excellence (CoE) in the domains of healthcare, climate studies, sustainability, and advanced manufacturing.

Back in 2019, Prof. Subhasis Chaudhuri floated the idea of IIT Bombay looking into the rapidly developing areas of AI and ML, and a committee was formed to look into the same. Given that AI and DS were not just the domain of one department but had started to pervade every aspect of science, technology, and humanity itself, the committee formed was multi-disciplinary in nature. It included faculty members Prof. Sudarshan, Prof. Biplab Banerjee, Prof. Manoj Gopalkrishnan, Prof. Ravi Gudi, Prof. Manjesh Kumar Hanawal, Prof. Shivaram Kalyanakrishnan, Prof. Ankur Kulkarni, Prof. Sanjeev V. Sabnis, Prof. Sunita Sarawagi, Prof. Amit Sethi, and Prof. Sunoj.

Working synergistically, the committee met over the next three months and recommended setting up a Centre for Machine Intelligence and Data Science (C-MInDS). The formal approval for the Centre came through in early 2020 and C-MInDS was set up in February 2020 with the vision to provide leadership in Machine Intelligence and Data Science through teaching, research, and academic outreach.

The Centre launched its very first academic programme with a Minor in AI And DS. This was followed by an interdisciplinary dual degree programme in AI and DS where B. Tech students from any department could spend an extra year and get a masters in AI in DS. The Centre plans to launch a Master’s and the Ph.D. programme soon.

But early on in the setting up of C-MInDS, it became apparent that for the Centre to scale up it needed infrastructure, full-time faculty members, and funding support for research. By the end of 2021, the Centre reached out to multiple alumni and was pleasantly surprised at the incredibly heartening response they received from them. The fundraising campaign was led by Mr. Kashyap Deorah (Class of 2000, CSE) and Mr. Shariq Rizvi (Class of 2003, CSE). Prof. Sudarshan recalls, “The alumni we reached out to roped in a whole group of alumni and spread the word around that IITB is starting C-MInDS. Within a short span of a few months, we had a solid commitment to the Centre including infrastructure, student fellowships, etc. Today the Centre is three years old and the academic programmes have been underway for two years and are going on smoothly. We are also in the process of recruiting full-time faculty. The construction of the new building that will house C-MInDS will begin soon.”

Work in the AI and DS domains has increased exponentially across departments over the past couple of years and across several departments. C-MInDS is starting to make both an internal and external impact already. Internally, a significant number of students have already opted for AI and DS as their minors. Externally, the sheer volume of research papers that have been generated by faculty and students has increased sharply. The Centre has also been regularly interacting with industry, government, and the non-profit and social sectors.

The Donors Behind C-MInDS



The philanthropic and extremely generous donors to C-MInDS have been categorized into three broad categories.

These include:

- Founding Donors (the largest donors)
- Sponsors (those who have sponsored specific programs or facilities at the Centre)
- Donors (those who have contributed towards the Centre's operations)

CATEGORY 1 – FOUNDING DONORS – THE LARGEST DONORS

The Founding Donors are integral to the setting up of C-MInDS. They include:

MR. MOHAN LAKHAMRAJU



Mr. Mohan Lakhamraju (B. Tech., B. Tech, Computer Science and Engineering, 1998), is the Founder and CEO of Great Learning and the Vice Chairman of the Great Lakes Institute of Management.

Mr. Lakhamraju is very passionate about high-quality education and its transformational impact on one's life, having experienced it personally as a student of IIT Bombay. He has dedicated himself over the past 13 years to building and developing learning-focused organizations that have transformed the careers of over one lakh learners in India and abroad.

C-MInDS will eventually move from its current location to the “Lakhamraju Building,” currently in the works. The impending construction of this building has been made possible due to Mr. Lakhamraju's generous contribution. Mr. Lakhamraju's philanthropic contribution to his alma mater is in honour of his parents Dr. (Mrs.) Vijaya Lakshmi and his late father Mr. A.R.R. Lakhamraju, who valued education above all else.

Mr. Lakhamraju was present at the inauguration of the Centre and spoke about his vision for C-MInDS. “I believe that AI is going to be a utility that is going to be pervasive in our lives and it's actually happening as we speak. There is a need for IIT Bombay, as the foremost academic institution in India, to be a leader in the AI space not just in India but in the world. When I heard about the C-MInDS initiative, it was timely and made a lot of sense and I decided to wholeheartedly support it. It is a privilege and a matter of great pride for me to be able to play a role in the development of this Institute, which really marked the beginning of my own career journey.”

MR. BEERUD SHETH



Mr. Beerud Sheth (B. Tech., Computer Science & Engineering, 1991) is the Co-Founder and CEO of Gupshup, the world's leading conversational messaging platform for commerce, marketing, and support.

He recalled his time spent at IIT Bombay warmly and said, “My fondest memories of IIT Bombay are connected with relationships I built during my stay on campus that continue to be a part of my entrepreneurial journey to this day. Many of my co-founders, investors, and employees are fellow alums from campus days.”

Mr. Sheth's donation will go towards establishing the “Gupshup AI Conversational Hub,” at the Centre. The hub will act as a centralized platform for businesses and developers to create chatbots, voice assistants, and other conversational AI applications.

Although Mr. Sheth was not personally present at the inauguration, his passion for his alma mater and his belief in the power of AI and DS was felt throughout the celebrations.

MR. ARPIT MATHUR



Mr. Arpit Mathur (B. Tech. & M. Tech., Computer Science & Engineering, 2006) is the Portfolio Manager of Segantii Capital Management. As a dual-degree Computer Science student who graduated in 2006, Mr. Mathur was always fascinated with AI and DS.

Present at the inauguration of C-MInDS with his father, Mr. Mathur said, “IIT Bombay is the biggest brand on my CV. The most pleasant days of my life have been spent here. The thing that struck the most to me about C-MInDS is that this Centre comprises faculty from the Institute’s various departments. That is my notion of AI as well. I do not think this space is limited only to Computer Science, it does encompass other disciplines too and it’s growing

rapidly. AI needs to be embraced and that is exactly what IIT Bombay is doing. I fully believe that C-Minds will go places and take India forward in the field of AI.”

MR. KASHYAP DEORAH



Mr. Kashyap Deorah (B. Tech., Computer Science & Engineering, 2000) is the Founder and CEO of HyperTrack.

MS. SHRUTI MAHAJAN DEORAH



Ms. Shruti Mahajan Deorah (B. Tech., Electrical Engineering, 2003) is the Director, India Energy and Climate Centre, Goldman School of Public Policy, UC Berkeley.

The Deorahs’ generous contribution to their alma mater is in honour of Mr. Kashyap’s parents Ms. Nirmala Deorah and Mr. Ashok Deorah.

CATEGORY 2 – SPONSORS

(DONORS WHO HAVE SPONSORED SPECIFIC PROGRAMS OR FACILITIES AT THE CENTRE)

MR. SHARIQ RIZVI



Mr. Shariq Rizvi (B.Tech., Computer Science & Engineering, 2003) is the Executive Vice President of Monetization, Reddit, and has committed a significant amount towards the Shariq Rizvi Seminar Hall, as part of the Centre.

MR. VARUN KACHOLIA



Mr. Varun Kacholia (B. Tech., Computer Science & Engineering, 2004), is the Co-Founder and CTO of eightfold.ai.

Dr. Shashidhar Thakur



Dr. Shashidhar Thakur (B. Tech., Computer Science & Engineering, 1990) is the Vice President and General Manager, Consumer Shopping, Google.

Both Mr. Kacholia and Mr. Thakur have sponsored fellowships and Faculty Chairs at the Centre.

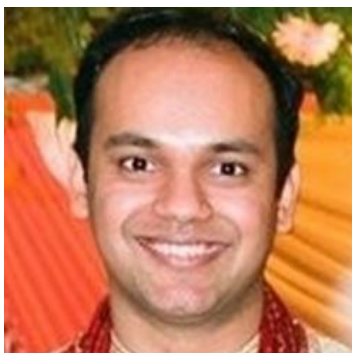
CATEGORY 3 – DONORS

MR. ROHIT KARNIK



Mr. Rohit Karnik (B. Tech, Mechanical Engineering, 2002) is a Professor at the Massachusetts Institute of Technology (MIT), USA.

MR. ABHINANDAN DAS



Mr. Abhinandan Das (B. Tech., Computer Science & Engineering, 2000) is a Senior Director of Engineering at Google.

MR. VIJAY KRISHNAN



Mr. Vijay Krishnan (B. Tech. & M. Tech., Computer Science & Engineering, 2005) is the Founder and CTO of Turing (Mr. Krishnan's company Turing.com has also contributed to the Centre).

M/S Turing.com

M/S Turing.com is an AI-powered platform for hiring s/w engineers globally.

Looking Ahead: C-MInDS – The Future

The three pillars of C-MInDS are academic programmes, outreach, and research and development. Currently, 70 faculty across 18 different departments at IIT Bombay are associated with the centre, providing fertile grounds for interdisciplinary research. C-MInDS has also witnessed monumental progress in building robust collaborations with the industry in various thematic R&D areas Healthcare & Life Sciences, Data analytics for Financial Organisations, Transportation, Materials and Mechanics, and more. Going forward, the Centre will actively nurture and develop strong industry collaborations and create cutting-edge solutions that will help the future of mankind.

The role of AI and DS is becoming more and more crucial to the world. Whether it's enhancing and strengthening industry and corporations or driving innovation to better humanity, the possibilities and potential of AI and DS to transform the world for the better are endless.

IIT Bombay's foray into AI and DS is a game-changer for the Institute, India, and, humanity, as a whole. With the setting up of C-MInDS, IIT Bombay has forged ahead and taken centre stage in the development of AI and DS. Undoubtedly, the Centre and its pursuit of cutting-edge research and interdisciplinary academic pedagogy will produce the next generation of skilled researchers, scientists, innovators, and entrepreneurs and lead the way for a technologically advanced and socially responsible India.

STUDENT SUCCESS STORIES



Sayoni Sarkar: Nanotechnology Researcher Making Waves - The Journey of a Ph.D. Student to a CAS Future Leader

Meet Sayoni Sarkar

an outstanding young researcher from IIT Bombay who was recently selected to join a cohort of exceptional scientists from around the world as a CAS Future Leader. Sayoni is passionate about nanotechnology and providing low-cost treatment options to cancer patients (details later in the article). Her passion and cutting-edge research have already earned her widespread recognition and we are delighted to speak with her for the May 2023 Dean ACR Newsletter. In the following conversation, Sayoni tells us about her research and how the IIT Bombay ecosystem

helped her thrive, and what she dreams of in the future. Read on to discover more about our student scientist, Sayoni Sarkar.

Hi Sayoni, a big round of applause to you for being selected for the CAS Future Leaders Program 2023. What an incredible honour! But before I ask you more about the programme, can you take us through your academic background first?

Sure! After schooling, I joined NIT Tiruchirappalli to pursue my B. Tech in Metallurgical and Materials Engineering. During my undergraduate years, I worked with the Japan Advanced Institute of Science and Technology (Japan), IIT Kanpur, IISc Bangalore, and RINL Vishakhapatnam on several computational materials science-centric short-term research projects that intrigued me. These experiences ignited my fascination with the world of nanotechnology. Subsequently, I was awarded the Prime Minister's Research fellowship in 2019 and joined the Centre for Research in Nano Technology and Science, IIT Bombay, and jumpstarted my journey as a Ph.D. student. My supervisors are Prof. Ajit Kulkarni (Department of Metallurgical Engineering and Materials

Science) and Prof. Rohit Srivastava (Department of Biosciences and Bioengineering). The interdisciplinary nature of my work involves translating low-cost, bioactive, nanostructures for cancer prevention and therapy by utilizing sustainable flow chemistry platforms. My research interests lie at the crossroads of materials chemistry, nanomedicine, chemical engineering, and physics.



Tell us about the CAS Future Leaders Program 2023. How did you hear about it and what was the whole process like?

The CAS Future Leaders program is an annual flagship event organized by the Chemical Abstract Service (a division of the American Chemical Society). It has been instrumental in the advancement of exceptional early-career scientists worldwide, in the field of chemistry. The fundamental aim of this programme is to empower emerging scientists (like myself) to nurture our scientific leadership skills through meaningful training, perceptions, and professional development and equip us to mentor the next generation of young scientists. The programme is extremely diverse in terms of the varied facets of chemistry that future leaders work on and the countries they represent. The rationale behind this approach is that a scientific leader must drive innovations that are not only cross-thematic but also focus on exigent challenges across varied geographies.

This programme includes a fully-funded trip to the CAS Headquarters in Columbus, Ohio, and will allow me to engage in cross-disciplinary collaborations with peer researchers, entrepreneurs, and experts and acquire valuable insights through networking. I will then participate in the ACS Fall meeting in San Francisco, California. The additional benefits include a \$1,000 prize, a 3-year ACS membership, and a profile featured in C&EN (a weekly magazine published by the American Chemical Society for the dissemination of the latest news about Chemistry and associated fields).

The selection process was very competitive and only 35 early-career researchers (doctoral students and post-doctoral fellows) were picked out of hundreds of exceptionally qualified applicants from around the globe.

I came to know about this programme from my supervisor – Prof. Ajit Kulkarni, who was apprised by CAS to nominate an early-career researcher for the programme. My application was evaluated based on an essay sketching out two aspects (which included “Your current research projects and future goals” and “The value of CAS SciFinder[®] or other information solutions to your research”), my CV, and a letter of recommendation from my supervisor.

What happens next with the CAS Future Leaders Program 2023?

I will travel to CAS Headquarters in Columbus, Ohio from August 7-12, 2023. This 6-day event will train the awardees in science leadership, and effective science communication, provide insights on the CAS SciFinder tools, and provide us with invaluable networking possibilities. This will be followed by a paper presentation by the Future Leaders at the ACS Fall meeting in San Francisco, California. One of the best parts of this programme is becoming a lifetime member of the CAS Future Leaders Alumni Community. At present the global network of the CAS Future Leaders Program consists of 260 alumni from 35 countries/regions across the globe.

How would you explain your research to a layman?

The current nanotherapeutic platforms with synergistic effects of chemotherapy and radiation therapy, that work in tandem for cancer mitigation are plagued with inherent shortcomings, despite years of intensive research. One of the biggest challenges is the lump-sum amount involved in effective treatment. Against this framework, our research has several vital strengths. It is focused on creating low-cost, surface-engineered, nanomaterial-based platforms that can bind to the receptors overexpressed by certain cancerous cells in the tumour microenvironment. We are now striving to establish them as economical nanoplatforms through proof-of-concept studies, which could serve as alternatives to the traditional, cost-intensive, gold nanoparticle-mediated, cancer therapies. The structure of the nanocrystals is tailored to incorporate additional benefits of overcoming hypoxia (a condition of insufficient oxygen in tumour cells) while ensuring that the healthy cells remain intact during radiation therapies.

The other facet of my research is based on innovating an engineered nano-ZnO based-broad spectrum UVR absorbent for skin cancer prevention. For successful clinical deployment of our technologies, we have utilized in-house developed sustainable flow chemistry platforms. This robust synthesis strategy will serve as a nexus between lab-scale fabrication and successfully engineered value-added products. This will lead the lab-to-clinic transition of the nanoformulations to homogenize the landscape of cancer therapeutics by making it affordable for all.



**How does your research help the world around us?
What role does your research play in helping societal needs?**

The contemporary statistics of cancer in India present a disheartening picture, with an incessant surge of fresh cancer cases amounting to millions every year. Tragically, less than 30% of them survive for more than five years. These cancer-related deaths are predominantly the result of acute socioeconomic disparities, inequitable access to medical facilities, limited public awareness, and the dearth of resources and infrastructure. These factors

create formidable impediments to the prompt and efficient administration of cancer care, rendering the task of ensuring equitable healthcare provisions in India a daunting challenge.

My quest is to create inexpensive, safe, novel, surface-engineered nanocrystal-based platforms for cancer therapeutics and prevention. This is inspired by the dreams of millions who grapple with being able to access quality treatment owing to the exorbitant costs and paucity of early diagnostic services. This pursuit aligns with the global vision of achieving Sustainable Development Goal (SDG)-3, which aims to foster “Good health and well-being for all.”

From the perspective of socio-economic relevance, one of the significant barriers in the field of precision nanomedicine for healthcare is the design and utility of a manufacturing platform that enables seamless development, optimization, and up-scaling of prospective nanotherapeutic agents. Therefore, there is a pressing need for a synthesis methodology for these multifunctional nanostructures that surpasses the limitations of scalability beyond the confines of the laboratory bench.

To overcome this challenge, I have ideated, simulated, and implemented a versatile flow chemistry platform that guarantees precision-controlled production of nanostructures, leading to high space-time yields. This economical and sustainable process has concurrently curtailed the timeline and operating cost for the successful lab-to-clinic translation. Ramping up the production will make these nanoformulations cost-effective and help those in need achieve maximum health security.



How did IIT Bombay's ecosystem help you on your academic path toward excellence?

IIT Bombay, unequivocally, has been indispensable in shaping and nurturing my curiosity through its cutting-edge research environment. The vast alumni network, top-notch infrastructure, and amenities serve as a gateway of unprecedented opportunities and have helped unleash my fullest potential. The access to mentorship and teaching by some of the great minds in academia have facilitated my learning beyond the boundaries of coursework and have allowed me to pursue combating some of the most exigent issues of global importance.

IIT Bombay transcends the realms of blackboards and innovations. It's the energy and inquisitiveness of the people here, and their unfathomable passion for all things, that spurs me forward. Moreover, the enriched start-up ecosystem of IIT Bombay that cultivates the spirit of entrepreneurship and a multidisciplinary mindset has given wings to my diverse ideas for making a difference.

What does the future hold for you? Do you foresee more of an academic path ahead of you? Or will you work in the industry?

After I complete my Ph.D., I hope that the nanoformulations are readily accessible to patients from all walks of life. IIT Bombay's ecosystem has strengthened my vision further. Besides, I have always been passionate about research, and knowledge-exchange opportunities through teaching in the frontier areas of nanotechnology, flow chemistry, and how leveraging the structural modifications of materials result in fascinating properties.

In academia, I believe, the degree of freedom to pursue ideas that invigorate our inner "ikigai" is unparalleled. The sense of satisfaction that comes with empowering students and making a difference in their lives is truly rewarding. Hence, in a few years, I picture myself experiencing the subtle nuances of being a part of the academic fraternity. I am hopeful about successfully mentoring enthusiastic researchers in the future and driving innovations at the intersection of materials chemistry and nanomedicine.

That was an amazing conversation with Sayoni Sarkar. What an inspiring young woman she is! We are delighted at the strides she is making in her cancer research and nanotechnology and her passion for advancing the field is truly inspirational. Undoubtedly, this is just the beginning and she will continue to make significant contributions to the field of nanotechnology and beyond.

We wish Sayoni the very best and look forward to her journey as she will – no doubt – push the boundaries of scientific innovation.

ALUMNI NEWS



IIT Bombay Alumnus, Prof. Jindal Shah, Wins the Prestigious Excellent Faculty Award at Oklahoma State University

IIT Bombay alumnus, Prof. Jindal Shah (B.Tech., Chemical Engineering, 1996) won the Excellent Faculty Award from the College of Engineering Architecture and Technology at Oklahoma State University (OSU). The award, which was given in the post-tenure category, is for, "Overall excellence as a faculty member, as evidenced by teaching excellence, scholarly achievement, research enterprise productivity, collegiality, contributions to professional societies, and student engagement."

Prof. Shah is an Associate Professor and the Anadarko Petroleum Chair at OSU. After graduating from IIT Bombay, Prof. Shah went on to receive his M.S. in Environmental Engineering from the University of Cincinnati in 1999 and his Ph.D. in Chemical Engineering from the University of Notre Dame in 2005.

Prof. Shah's major areas of research include Monte Carlo and Molecular Dynamics Simulations, Phase Equilibria, Ionic liquids, and Dye-sensitized solar cells

Heartiest congratulations to Prof. Shah on this brilliant achievement! We wish him the best moving forward and, undoubtedly, more accolades are coming his way in the future!



IIT Bombay Signs MoU with the Class of 1973

IIT Bombay and the Class of 1973 signed a Memorandum of Understanding (MoU) on April 28, 2023. The MoU was signed as part of the Class of 1973 Legacy Project and will contribute to the following initiatives at the Institute:

- EV Power Train Lab
- Research Excellence Award for faculty members
- Any other mutually agreed activities

The EV Power Train Lab will be a multidisciplinary space shared across departments and faculty members working on EV power trains. The class of 1973 has pledged approximately Rs. 6 Crores (~USD 750K) in funding for the EV Power Trains Lab. Apart from monetary funding, the class of 1973 will also contribute their time and provide their knowledge and expertise, in consultation with the professor in charge of the Lab.

The Research Excellence Award is designed to encourage and recognise excellence in research and innovation amongst eligible faculty members at IIT Bombay. Towards this exciting initiative, the class of 1973 has pledged approximately Rs. 80 lakhs (~USD 100K), and the funds will be kept in an endowment at IIT Bombay and used in consumption mode. One faculty member from each of the 16 departments will be selected to receive Rs. 1 lakh award in the first year.

The Donors have thus agreed to pledge and have utilised an approximate sum of Rs 7 Crores (~USD 875K) as part of the Class of 1973 Legacy Project for the purposes specified above. In the event of the availability of surplus funds and/or non-utilisation of allocated funds for a period of two years or more, the donor representatives of the Class of 1973 will discuss with their alma mater IIT Bombay to repurpose the funds for other causes as mutually agreed.

As always, IIT Bombay is immensely grateful for the continued support from its alumni that will help fulfil its mission and vision for the future.

INSTITUTE HIGHLIGHTS



Team from IIT Bombay Wins the Best Research Award at the 2023 Global Carbon Removal Challenge of the Open Air Collective, USA

A student-led team from IIT Bombay won the superlative 'Best Research' award at the 2023 Global Carbon Removal Challenge of the Open Air Collective, USA during the final showcase event, held recently in New York.

The 2023 OpenAir Carbon Removal Challenge was a worldwide challenge to create new processes, approaches, and prototypes to remove carbon from the land, water, or air.

The IIT Bombay innovators developed a novel, low-cost, sustainable, and scalable solution that not only captures carbon dioxide but also converts it to industrially valuable products using a set of unique biomimetic catalysts designed for carbon dioxide reduction under electrocatalytic conditions. This winning team presented a

unique ‘CO2 electrolyzer’ that delivers a truly carbon-negative pathway for the world’s future energy management.

The team is composed of research scholars: Somnath Guria (Chemistry), Vaibhav Trivedi (Chemistry/ IITB Monash), Shubham Kumar (Earth Sciences/ IITB Monash), senior research scientist Dr. Piyali Majumdar (Earth Sciences), Prof. Arnab Dutta (Chemistry) and Prof. Vikram Vishal (Earth Sciences). The team is also associated with the DST-sponsored National Centre of Excellence in Carbon Capture and Utilization, IDP – Climate Studies, and the SINE-incubated UrjanovaC Private Limited.



IIT Bombay Professors Earn Accolades



Team SHUNYA from IIT Bombay Wins the Runner-Up Title in the US Solar Decathlon Build Challenge 2023

IIT Bombay’s student-driven technical team, Team SHUNYA (Sustainable Housing for an Urbanizing Nation by its Young Aspirants), won the runners-up title (Overall 2nd) in the prestigious US Solar Decathlon Build Challenge 2023. Team SHUNYA was the only team representing India in the competition. As part of its winning presentation, Team SHUNYA successfully demonstrated a house that is Net Positive Energy, Net Zero Water, and Net Zero Carbon.

While over 50 students from IIT Bombay were part of Team SHUNYA, the core student team members include Mr. Prabhat Sharma (Team Lead), Mr. Ayush Singh (Deputy Team lead), Mr. Ankush Pujari (Project Manager – Industry Collaboration), Mr. Ankan Karmakar (Project Manager – Construction), and Mr. Jash Sravia (Project Manager – Outreach).

Faculty members from the Institute who mentored Team SHUNYA include Prof. Venkata Santosh Kumar Delhi, Dept. of Civil Engineering, Prof. Anupama Kowli and Rajesh Zele, Department of Electrical Engineering, Prof. Arnab Jana, Centre for Urban Science and Engineering (CUSE), Prof. Rangan Banerjee, Prof. Zakir Rather and Prof. Anish Modi from the Department of Energy Science and Engineering (ESE), and Prof. Milind Rane, Department of Mechanical Engineering.

Congratulations to Team SHUNYA!

Please look for a detailed write-up on Team SHUNYA’s extraordinary accomplishment in the June 2023 edition of the Dean ACR Newsletter.



IIT Bombay Hosts Commencement 2023

IIT Bombay launched the new Commencement 2023 ceremony for the graduating students of the year 2023 on May 2, 2023. The Hon’ble Minister of Education, Skill Development and Entrepreneurship, Shri Dharmendra Pradhan, was the Chief Guest on the occasion.

Despite his busy schedule, Shri Pradhan joined the event online and addressed the graduating students. “IIT should not be merely

an educational Institute but become a laboratory of public welfare or 'Lok-Kalyan.' IIT must be the hub of entrepreneurship. The students must aspire to be job creators, not just job seekers," he said. Elaborating on how IITs should become the face of a non-discriminatory new India he added, "There should be zero tolerance for discrimination of any form. The main purpose of our education is to serve our society. I ask all the students and alumni to help the children from rural backgrounds around you as well to get into IITs. This will be your 'Vidya Daan,' your 'Vidyanjali' to your society."

Mr. Anil Kakodkar, Former Chairman of the Board of Governors of IIT Bombay, and Former Chairman of the Atomic Energy Commission, was the Guest of Honour. Congratulating the graduating students he said, "The India growth story has three dimensions. Ensuring security – so that most Indians can continue their lives, and continue their contributions to society and the country in peace, not deterred by security issues both internal and external. Economic prosperity – the per capita income of the country should become comparable with developed countries. Human wellness in all its dimensions – we should try to achieve the best possible standards in terms of human wellness."



The Commencement Ceremony is a new version of the Institute's annual Convocation Ceremony, which is held in August every year, in the Convocation Hall. Commencement 2023 was held in part because several students miss out on the Convocation Ceremony held in August owing to their professional (employment opportunities) and academic (higher education) commitments post their final exams. Many students' parents also, often, miss out on seeing their beloved children pass out of IIT Bombay owing to space constraints at the Convocation Hall that simply could not accommodate them.

The Institute strategically chose to host Commencement 2023 in early May since most of the students were still present on campus owing to their end-semester exams. This additional ceremony afforded them the chance to bid their final adieus to their friends, faculty, and college, even as it allowed their families to be present and cheer them on.



Commencement 2023 was similar to the traditional Convocation Ceremony including uniformly dressed students, an academic procession, an address by the Chief Guest and the Director of IIT Bombay, a photo-op with the Director, and a Pledge. Essentially, while the Commencement Ceremony resembled the Convocation Ceremony, the actual degrees will be awarded to students in August after their graduation requirements in their respective academic departments have been duly verified.



Wishing his very best to the graduating students, Prof. Subhasis Chaudhuri, Director, IIT Bombay said, "The education you have received at IIT Bombay is comparable to the best in the world and you are now ready to take greater challenges and overcome them. Continue to develop your knowledge and skills and always keep in mind how you can help our society and the nation through your work. I wish you all the success in your future endeavours. IIT Bombay has introduced this event 'Commencement' for the first time starting today so that you celebrate your journey through IIT Bombay along with all your batch-mates and family members

while you embark on a new phase in your life," he said.

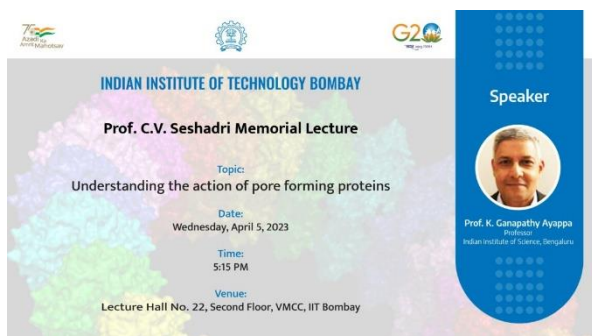
The event was live-streamed on IIT Bombay's YouTube channel for those who couldn't be present during the ceremony.



IIT Bombay Imparts Computer Skills to Nashik Central Prison Inmates

IIT Bombay's Spoken Tutorial Project, jointly with Samta Foundation, trained about 150 inmates at the Nashik Central Prison on computer literacy and office productivity. This is part of the direction from the Maharashtra Govt. that requested IIT Bombay to extend these training sessions to all its prisons.

After the session, the gratified inmates at the Nashik Central Prison commented that they will look forward to their future with hope and confidence.



IIT Bombay Hosts the Prestigious Prof. C.V Seshadri Memorial Lecture series

IIT Bombay hosted the prestigious Prof. C.V Seshadri Memorial Lecture series (as part of its "Institute Distinguished Lecture" series) – on 'Understanding the Action of Pore-forming Proteins.' The lecture was presented by Prof. K. Ganapathy Ayappa, Department of Chemical Engineering, IISc Bengaluru.

Pore-forming proteins, responsible for forming pores or channels in cell membranes, have been found to contribute to diseases such as bacterial infections, neurodegenerative diseases, and cancer. They are also used in many biotechnological applications, such as drug delivery, biosensors, and gene therapy. Therefore, a deep understanding of the action of these proteins can help scientists develop accurate treatments to combat various diseases as well as more effective and efficient biotechnological tools.

The Institute was gratified to have a distinguished professor such as Prof. Ayyapa share his expert knowledge and valuable insights on this subject with its students and faculty.



IIT Bombay Hosts the Makerspace Project Presentation – Part of the Class of 1980's Generous Contribution to the Lab

IIT Bombay hosted the project presentation by first-year students and top performers of the Institute's Makerspace program, held on April 10, 2023, at the Victor Menezes Convention Centre, IITB campus.

Students from all over India compete to join IIT Bombay – India's number one Institute – with the vision to learn, innovate and create an impact. And the Institute is committed to giving wings to these young, eager, and ambitious minds, by enabling them to undergo comprehensive and immersive learning. The 'Deepak and Maya Satwalekar' and the 'Class of 1980' Design and Making labs were set up as a part of the Institute's Makerspace programme which was implemented with the vision of promoting hands-on, experiment-based, learning amongst students (first-year) at the very beginning of their learning journeys.

Two years later – IITB's students did not disappoint!

IIT Bombay recently witnessed the first-ever round of project presentations by toppers of its Makerspace programme and the event thrived with activity and conversations as students displayed their innovative projects.

These innovative, young minds of IIT Bombay demonstrated varied products that they developed over the past year. These included a line follower to an obstacle remover to a seed sower. They left no stone unturned in channelling their creativity into building innovative products!

Congratulations to all the participants of the Makerspace Project Presentation!



Four IITB Students Awarded the Prestigious "Australia India Research Students" (AIRS) Fellowship

Top Left: Ishan Phansalkar - Top Right: Ramengmawia Bawitlung,

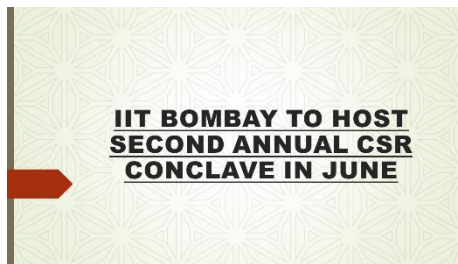
Bottom Left: Sujit Chauhan - Bottom Right: Yagya Narayan

Four students from IIT Bombay have been awarded the prestigious "Australia India Research Students" (AIRS) Fellowship program. Out of 537 applications, 35 Fellows from India and 28 Fellows from Australia were selected for the research program.

Congratulations to Ishan Phansalkar, Ramengmawia

Bawitlung, Sujit Chauhan, and Yagya Narayan!

UPCOMING EVENTS



IIT BOMBAY TO HOST SECOND ANNUAL CSR CONCLAVE IN JUNE

IIT Bombay to Host Second Annual CSR Conclave in June

Technology is becoming increasingly significant to solve societal challenges across various domains including healthcare, education, environmental sustainability, entrepreneurship, and policy development. IIT Bombay is committed to leading this revolution and creating social and economic impact by leveraging its pre-eminent position in engineering and technology.

Over the years, IIT Bombay has achieved substantial progress by developing innovative technology solutions that continue to contribute to nation-building and societal development. Several of these initiatives will be showcased in the second edition of our Annual CSR Conclave. With this prestigious forum, the Institute continues its endeavour of collaborating with socially- conscious corporates in critical areas of research for societal good.

Date: Friday, June 16, 2023

Time: 9:00 AM – 6:00 PM

Venue: IIT Bombay Campus



FACULTY ALUMNI & DISTINGUISHED ALUMNI MEETING (USA)

Faculty Alumni & Distinguished Alumni Meeting (USA)

The next edition of the Faculty Alumni Network (FAN) and the Distinguished Alumni Meet (DAM) in 2023 will be held in the US at the Northwestern University Campus in Chicago. The event will bring several of our highly accomplished alumni who are in leading positions in academia and industry in the US, together with the senior

administration and faculty of IIT Bombay. They will deliberate on several strategic matters related to Institute growth as well as emerging areas of research, to nucleate collaborative programs for mutual impact, and to create opportunities and explore innovative ways to take IIT Bombay to greater heights..

Date: July 7-9, 2023

Venue: Northwestern University Campus, Chicago