

Inside this Issue

Adapting to Challenges

9th Convocation

Giving Back:
Social Service Council

A Tale of Silver Lining
in the Pandemic

A Helping Hand

The online metamorphosis of the
Training and Placement Cell In
talks with

हिन्दी पत्रवाड़ा

Sponsored Projects and MoU

Faculty Corner

Publications

Students Achievements

In talks with Miss Sweta Suman

In talks with strategic minds

Start-Up Corner

Development of compact
hybrid heat pump dryer

All-inclusive Centre:
The Gymkhana

Obituary / स्मरण

CELEBRATING CENTENARY



IIT (BHU) VARANASI



INDIAN
INSTITUTE OF
TECHNOLOGY
BANARAS HINDU UNIVERSITY

IIT
BHU
connect

सम्पर्क

Volume 5, Issue 1
The Institute Newsletter, March 2021

Editor's Desk

The editorial team is pleased to present the eighth edition of the institute newsletter IITBHU Connect. Amidst the global pandemic, the IIT BHU community has been proactively helping people throughout various means. This issue begins with the activities carried out by the Social Service Council. The following section addresses the challenges faced by the newly admitted and the existing students and the institute's measures to make online education a seamless process. At its heart, the beginning of the academic year is a fantasy of newness and the chance to do things differently and with more attention to

purpose. We present a separate column on the placement challenges and statistics, which presented a new dimension during the 2020 placement session. With strong students' demand for enlightening interviews, we present exclusive interactions with our young alumni who have successfully competed for IIM and IAS.

We express our deepest condolences to the family of the deceased institute members who succumbed to Covid. It is an incalculable loss to our whole IIT BHU family as we try to keep our heads up in these grim times. Lastly,

we express our sincere gratitude to the entire faculty, staff, student fraternity, and alumni for their valuable inputs and cooperation. The team is grateful for the encouragement, guidance and support received from the honorable Director. I encourage you all to take a break from all the chaos and flip through the next pages enthusiastically. You might find some inspiration needed to reorganize and recollect yourselves. We are always open to your feedback and suggestions. You can reach out to us anytime at: editor.newsletter@itbhu.ac.in

Editorial Board Members:

| | | |
|-------------------------------|---|--|
| Chief Editor | : | Dr. Indrajit Sinha, Department of Chemistry |
| Faculty Members | : | Prof. S.K. Pandey, Dr. Ajit Mishra, Dr. V. Ramanathan, Dr. Rosalin Sahoo |
| Former Student Editor: | | Raghavendra Saddalgari, Department of Mechanical Engineering |
| Student Editor | : | Nikhil Kumar Lal, Department of Pharmaceutical Engineering |
| Student Team | : | Ajinkya Srivastava, Akshat Jain, Bhavya Malhotra, Bhavya Mekala, Dakpin Bam, Debanjan Kundu, Mahashay Jee, Manoj Patidar, Megha Singh, Niyati Srivastava, Prachi Raj, Pranav Chopra, Pratik Kagale, Pratyusha Pramanik, P.S. Priyadarshini, Priyanka Soni, Shreyansh Vinit, Suyash Tripathi. |
| Photography | : | Photography Club, IIT (BHU), Varanasi |

The Student Editorial Team



Adapting to Challenges: Online Semester Experience of Freshers.

"Live as if you were to die tomorrow; study hard as if you live forever."

These words are embedded in every JEE aspirant's heart who try to give their best to secure admission to the prestigious IITs. Every year about 1.5 million students compete to secure admission in IITs. Last year (2020), their preparation came to a standstill as the entire nation was shut down following the safety protocols for checking the spread of COVID-19. Aspirants who studied at coaching hubs like Delhi, Mumbai, Kota were forced to return to their home in those times of peril.

However, the aspirants did not give up on their preparation. They performed meritoriously. Still, the challenges were far from ending. The selected students were worried about the counselling and admission process, which were also a significant challenge for the authorities.

Following the safety of everyone, the usual methods of counselling couldn't be followed last year. Nevertheless, JAB (Joint Admission Board) acted promptly and came up with tranquil methods for conducting the counselling procedure. The students were asked to upload all the documents on the JOSAA (Joint Seat Allocation Authority) portal. The concerned authorities verified them, and the fee was also paid online, eliminating the need for any physical meetings.

"Today is not just another day. It's a new opportunity, a new chance, a new beginning. The first day of your college life, embrace it."

When students join college, they are full

of enthusiasm to learn new things and make new friends. However, the excitement was somewhat damped when they learnt that the colleges were not opening.

Here at IIT BHU, after the admission process was over, an orientation program was conducted. It allowed students to learn how things work at their new college and meet other students as well as faculty and staff members. It smoothened the transition to campus life and the independence that comes with it. The orientation program took place on 16 November 2020 at 10:30 am. It began with the rendition of the "KULGEET", the anthem of BHU. After that, the Deans described to the students various aspects of their forthcoming college life. The Dean of Academic Affairs (DoAA) briefed the students about academic procedures. The Dean of Student Affairs (DoSA) informed students about sports, cultural, science and technology, film and media council activities at IIT BHU. The Dean of Research and Development (DoRD) informed them about the ongoing projects in the institute. At last, the Director enlightened the students and their parents about students' well-being on the campus.

Conducting online classes for freshers was quite a big challenge for everyone. Many students did not have access to fast internet service, which reduced their chance of interacting with teachers regularly. The interactions between student and teacher are significant for developing academic self-concept and enhancing his/her enthusiasm and success.

Even some disruption in the online class delivering platform affected the students' concentration and overall drive to study.

"When the going gets tough, put one foot in front of the other and keep going. Don't give up."

In addition to students, the online semester was also challenging for the teachers. Within a short time they developed a systemic methodology for teaching the students, which ranged from organising quizzes, giving assignments, arranging video demonstrations of the practicals. The teachers tried their best to make the classes interactive and exciting. The faculties were always there for answering queries through email, Whatsapp and other possible means. Apart from the teachers, the students also tried to comprehend the new way of learning by attending classes regularly, asking queries, and submitting all the assignments and quizzes on time.

Also, the rules for branch change were modified this year significantly. Branch change is an essential process in which students aspiring for a desired branch can change to it based on their performance. This year, the first semester was online, branch change was permitted only after the second semester, i.e. at the end of the first year.

"Make the most of yourself.....for that is all there is of you."

College is not a platform just for academics but also for extracurricular activities. Various clubs help students to pursue their interests beyond normal subject studies. Various clubs are present in IIT BHU, which



can be chosen by the students based upon their interests. Despite the online college life, the seniors took a lot of pain organising orientations for the clubs and events like iMaze (Robotics contest) and many other engrossing events. These activities ensure the student's overall development and help them develop valuable qualities in every step of life.

Intra Freshers Competition is organised

every year in which the freshers are given a chance to portray their talent, AAGMAN. The Intra Freshers Competition marks the induction of new members of the Cultural Council. It's an Intra-Freshmen Cultural Fest filled with various competitions and events hosted by the clubs of the council, especially for all freshmen. The seniors mentor the newcomers to bring out their best for the competi-

tion. The event included competitions ranging from dramatics, singing to quizzing. The number of students participating in AAGMAN was quite baffling. It cemented the love and excitement of freshers for their college.

"Life's like a movie, write your own ending. Keep believing, keep pretending."

9th Convocation

After a year filled with unexpected events, our Institute acted promptly to ensure that the teaching and learning process continues without any delays. This year's Convocation too was held virtually at Swatantrata Bhawan. Students and professors enthusiastically organized and participated in the 9th Convocation of IIT BHU, Varanasi. The institute held convocation (8th of February 2021) in the presence of inspiring minds who graduated from our institute namely, Padmashri Dr Kota Harinarayana, (Chairman of the Board of Governors, IIT BHU), a former scientist at DRDO and Jay Chaudhary, a successful entrepreneur, (CEO, Zscaler) as the chief guest.

For the first time, the IIT-BHU held its convocation ceremony using mixed reality technique, which allowed our chief guest and Dr. Kota Harinarayana to attend the ceremony and address the graduates virtually.

The convocation began with Dr. Bhavana Verma, our host for this year's convocation, welcoming everyone and our honourable director Prof. Promod Kumar Jain paying floral tributes to the great founder of our institute, Mahamana Pandit Madan Mohan Malviya, followed with tributes by Prof. S.B Dwivedi (Dean Academic Affairs) and Mr Rajan Srivastava (Acting Registrar). All of this happened with holy chants of mantras in the background. The tribute was followed by holy Manglacharan, performed by students of Panini Kanya Mahavidyalaya. It was then followed by Kulgeet of BHU, written by Late Prof. Shanti Swaroop Bhatnagar and composed by legendary music composer Pandit Omkarnath Thakur. It was performed gracefully by the Kulgeet team.

Our Director greeted and welcomed everyone to convocation. While speaking about the chief guest, he threw light on his

education and professional achievements. Mr. Jay Chaudhary graduated in Electronics engineering in 1980 from our institute. He founded different companies such as AirDefense, CipherTrust, CoreHarbour and Zscaler. He has many accolades cementing his passion for innovation and entrepreneurship including being honoured with Ernst & Young "Entrepreneur of the Year" twice and an Information Week "Innovator & Influencer".

This year, total of 52 students were awarded medals and prizes (80 Gold and Silver medals and 16 prizes), along with that 775 B.Tech degrees, 258 IDD(Integrated Dual Degree), 294 M.Tech/M.Pharma degrees and over 130 PhD degrees were awarded. The Director spoke about two new (two years) M.Sc. programs in Physics and Chemistry started from the academic session 2019-20. He went on to outline the main facilities available in the institute for research and learning purposes including tinkering labs set up for encouraging research. He talked about current projects initiated by our institute and how they are focused on efficient energy generation methods. The total extramural grant obtained under sponsored research projects in the current year rose 58% compared to last year.

He then talked about the LEAP programme conducted in collaboration with the University of Cambridge (UK). A total of 39 patents were filed with 16 being published this year. Two technology transfers were also accomplished. He mentioned the newly established supercomputing centre, inaugurated by Prime minister PM Modi and gave some insight about supercomputer Param Shivaay. Also, our institute was recognised as a collaborative research centre for the Indian Pharmacopoeia Commission (IPC)

to promote quality research in pharmaceutical and medical devices. National Mission on Interdisciplinary Cyber-Physical Systems identified our institute as one of the institutes for establishing Data Analytics and innovation hub. All of these recognitions have further solidified the fact that our institute has an important role to play in digital India. He praised the IIT-BHU foundation, founded by our alumni in the USA for raising funds for our institute.

Talking about infrastructural development in the institute, we were pleased to know that apart from renovation/up-gradation in various departments and hostels, a new building is being constructed for teaching/learning purposes. Furthermore, two new hostels namely Dhanrajgiri-2 and Morvi -2 are under construction. A new student's activity centre with indoor sports for cultural and club activities is also in progress. Construction of a lightweight structure for the department of architecture and planning is also underway.

Everyone was updated with placement information as well last year 198 companies visited our campus and a total of 1076 offers were made in 2019-20, with 7.07% rise in number of offers and 5.15% rise in the average pay package. Also, there has been an increase in the number of publications, with 1186 publications this year compared to 1036 in last year.

Talking about important partnerships, our institute has entered into an MoU with IIT Guwahati to offer a joint PhD degree program. Also MoU was signed with ISRO to set up a regional academic centre for space research.

Following the director's speech, the graduands were pledged and admitted to their respective degrees with convocation pledge, by our honourable

director. This was immediately followed by some wise words outlining duties of a responsible citizen given by our director.

Owing to the pandemic situation, only recipients of medals were present at the venues. Institute medal was awarded to the student securing the highest CPI in his/her branch. Some medals were also awarded recognising student's contribution in academic projects, social contribution, leadership and organisational ability. Ankan Bohara of computer science engineering was awarded the President's medal and a silver, and the Dr Annie Besant Prize. Ananya Gupta of electrical engineering was awarded the Directors Gold Medal and Indira Tripathi Gold Medal for overall performance, as the best graduate of her batch. Avanish Singh of chemical engineering bagged whopping six Gold and two prizes. Many other deserving candidates were also awarded with medals for their academic achievement

This was followed by a brief address by Dr Kota Harinarayana. He congratulated everyone and extended warm gratitude to the chief guest. He advised everyone to never stop learning, in order to survive in this fast-changing world.

It was time for the chief guests address. Mr Jay Chaudhary congratulated everyone and acknowledged the contributions of

parents, friends as well as professors in one's graduation journey. Talking about his early childhood, he expressed his love for learning and how he read all books in his small school library. He was kind enough to share two life lessons from his experience. While sharing first lesson he asked everyone to uncover and follow

contacts with Indian people in the USA. Talking about his second lesson, he advised everyone to take risks and think big. When he was planning for a startup, no one was willing to fund it. So, he decided to put all his earnings into his idea and from there he never looked back. He concluded his speech with some



their passion. He discovered his passion when he got involved with a startup dealing with sales. He shared how he overcame the difficulties he faced initially, and how he used "Ethnic Marketing" to build new customer relations by making

words of wisdom from Napoleon Hill.

The convocation continued with rest of degrees being conferred to respective students. Everything went on smoothly, although some online viewers may have faced some audio issues for few seconds.



Giving Back: Social Service Council

The Social Service Council, IIT (BHU) Varanasi, with its four dedicated clubs- The Health & Hygiene club, Kashi Utkarsh, Sahyog club, and Social Projects' club- aims to bring about a positive change in society. Despite the tribulations caused by the pandemic, the SSC volunteers ventured out to extend a helping hand to those who needed it the most!

Food for All: Ferrying the Food

During the nationwide lockdown, many families from the villages of Tikri and Saraidangri couldn't even arrange proper meals for the day. SSC immediately approached Asha Workers and formed a dedicated 'Emergency Food Response Team.' They tried to seek help from the village Pradhan, Robin Hood Army, and Roti Bank, but they couldn't comply. At such testing times,

Professor PK Mishra from the Chemical Department of IIT BHU and Mr. Brijesh Singh, our Alumni, came forward and helped in ration distribution among 9 families. Not just that, after the lockdown was lifted, some willing people got work at the construction sites of IIT BHU. The mission of ferrying the food ferried smiles too!

Mess Workers Relief Movement

March onwards, with empty hostels, it was challenging for the mess workers to meet the ends. After knowing about their plight, SSC volunteers contacted the administration and, through a dense network of our prosperous alumni, raised a whopping sum of 61 lakhs! The institute has been regularly paying the sum to over 400 mess workers and dhobies, thus helping them row the boat of life. When

asked what this initiative means to the mess workers, Maharaj ji said with music in his voice, "We feel really blessed!" which justifies the cause of SSC!

Kindling the flames of Education

Slashing the geographical barriers, the volunteers connected digitally with the government school children living in bastis, and educated them on crucial topics like basic sanitation, the importance of personal hygiene, and actions to be taken in emergency situations. Moreover, they also formed a Whatsapp group and periodically sent worksheets and tutorial videos to keep the flames of Education ignited. Those who didn't have the internet received the material from tuition teachers. Many students are preparing for Navodaya under this guidance. May success find its way into their pockets!



A Tale of Silver Lining in the Pandemic: Students Counselling Service

18th March 2020- a mail arrived asking the students to vacate their hostels, in response to the rising cases of COVID-19 in India and the world. By 21st March 2020 almost entire campus was deserted, marking the beginning of a gloomy period

of total uncertainty. As the time passed, the world stood still, trying to fight off a microscopic entity that had shaken the macrocosmic existence's very roots. In those dark days, the Students Counseling Services (SCS) came forward

to counsel the students in a completely unbiased manner. Since its inception in 2019, SCS has mainly been functional under five verticals: Wellness, Academics, Skill Development, Career, and International Exchange. Under the able

leaders, SCS has genuinely made its mark in the lives of the students of IIT (BHU).

One of the first things that the Wellness vertical of SCS did was to circulate a document - "Minding Our Minds during the COVID-19," explaining the importance of the lockdown in a very lucid language. The document made noteworthy presumptions about how the overwhelming exposure to pandemic-related information could lead to a great deal of anxiety and stress. It further highlighted fundamental steps to keep ourselves engaged during the period of extended lockdown and keep our sanity and emotional health intact. The next BIG step taken by SCS was in mid-April 2020 when they initiated the "21 Day Habit Challenge", which saw over 100 students taking part in the activity, experiencing the science of breaking, making, and enhancing a habit.

The first webinar's central theme was "Emotional Wellness during COVID-19", organised by SCS in collaboration with YourDost in which Ms Puroitree Majumdar, Clinical Psychologist, mentored over 130 students. Weekly Online Meditation Sessions too garnered a positive response from the audience's end. Series of videos and podcasts on mental health awareness were prepared by IIT (BHU)'s counselling psychologist, Dr Laxman Yadav and SCS volunteers, which aided students to battle out emotional trauma during isolation in the pandemic.

The Academics vertical of the SCS also

was to bridge the void created by the sudden disruption in the college life culture. Acing the Internships- This was a series of panel discussions, organised

Academics and Career go hand in hand, and so the Career Vertical of SCS organised SPARK- to connect enthusiasts with achievers, comprising guidance

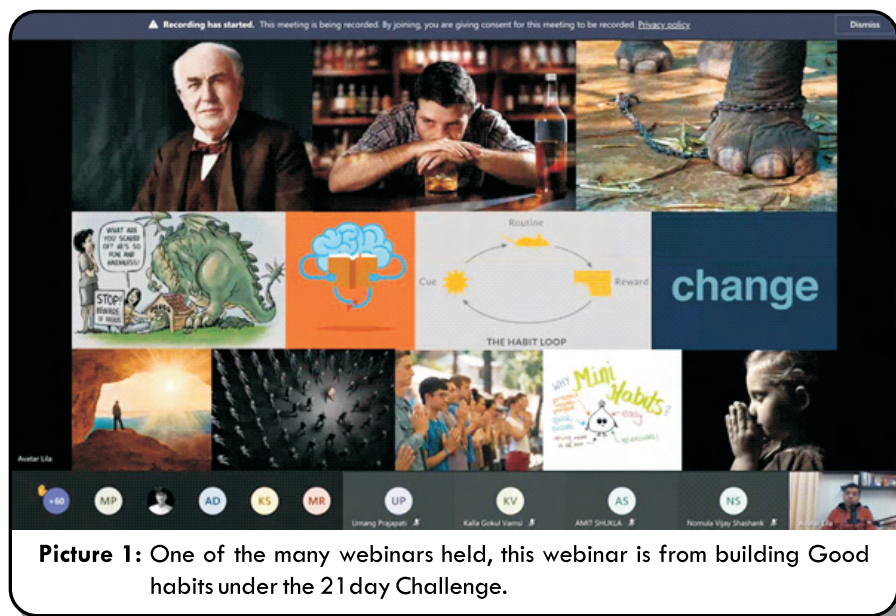


Picture 2: A snapshot from the webinar held on the theme of curbing any forms of addiction.

keeping in mind the jittery phase that young undergraduate students might face while preparing to apply for the same in their dream companies. In a country that is flagged by thousands of Civil Services Aspirants, a panel discussion on Acing UPSC would be served on a golden platter. Mr Aniket Sachan, a graduate from the Department of Electrical Engineering, 2018, holding an AIR 285 in the Civil Services Examination, 2019,

sessions for GATE and ESE examinations. During the pre-placement session, the Career vertical went another mile ahead and carried out panel discussions with members from top branded companies like Flipkart, Amazon, Microsoft and Mastercard. One of the signature moves by the SCS Skills Team was the launch of the SCS Skills Bootcamp. The camp focused on engaging the students during the fall of 2020 by developing various skills, from handling basic Microsoft Excel/ PowerPoint to the blockchain. The SCS skills went a notch ahead when they assembled the Exhort- SCS Speak Up, under which three consecutive webinars ran: The Art of Writing, Effective communication and Tech-Enabled Presentation Skills.

To give us hope for a better tomorrow, SCS IIT (BHU) came up with its annual celebration: Dawn to Dusk. It commenced with a "Fitness Session", followed by a Virtual Heritage Walk around the campus and the mesmerising VT. A CV and SOP writing workshop on choosing a career in Academics and Research was also included among professional aspects. For all the Future Wolves, A random walk down Wall Street was organised, succeeded by the Flagship event SCS-Speak Up: The Service Paradigm and ending a long day with some laughter and tears in Twilight Rhapsodies by sharing short stories. Students participated with zest and zeal and made the day hopeful from Dawn to Dusk. Even during the plight of the pandemic, SCS kept its torch alight.



Picture 1: One of the many webinars held, this webinar is from building Good habits under the 21 day Challenge.

has been playing a pivotal role along with the Wellness Team. One of the primary objectives, as iterated by Divyank, Student Head, Academic Vertical, SCS,

guided more than 260 aspirants. Among other sessions, Acing CAT was also held, chaired by Ms Anoushka Pal and attended by over 150 candidates.

A Helping Hand: Proactive Support by the Institute Community

In an unexpected turn of events, we were all tremendously stupefied by the onset of the Covid-19 pandemic. In the wake of this, some unfortunate students facing adverse health situations in their families requested the Institute community to lend them a helping hand.

Many close ones of the students were able to recuperate from the virus through the benign acts of generosity and the proactive support of the Institute community. We extend our deepest commiserations to the bereaved and commend the people who were instrumental in helping out the deeply affected students. Here are a few messages of gratitude from the students who received support from the institute fraternity.

"A student's father contracted the Covid-19 virus, and a blood clot matured in his leg. Due to these complications, he urgently required plasma. The student tried to find a plasma donor nearby, but it was all in vain. Then, he came up with the idea of mailing the Blood-Connect

organization of the institute. In a brief interval, he received numerous calls from the people willing to donate in his region. After these strenuous efforts, a gentleman from Agra donated plasma, and due to his efforts, the patient is healthy today. He is grateful to the institute for helping him in such difficult times."

"The institute helped another student currently pursuing his MTech from IIT-BHU. His mother developed swelling in the gallbladder. The swelling had increased so much so that it could cause a tear in the gallbladder. Also, she developed a stone in her gallbladder. Due to this, she required urgent medical treatment. They were in dire need of financial aid for the surgery. He came across many emails of the students who had successfully organized financial help in similar hardships. With a heart full of hope, he requested aid as well. Shortly, in a span of merely 4-5 days, he received benign donations from fellow students, and they could raise 60000 rupees. Presently, with

the goodwill of all the individuals involved, one operation has been carried out successfully, and the other will follow soon. We hope that the further procedures will be carried out with utmost efficacy."

"One more student's father was diagnosed with Covid-19. The doctor advised them to look for a donor who had recovered recently from Covid-19 and was willing to donate plasma. The Vice President, Gymkhana, circulated this dire requirement to all the students. There was an overwhelming response to his plea, and subsequently, he was able to find an appropriate donor merely a day after the doctor had prescribed convalescent plasma therapy. The student is exceptionally grateful for every ounce of help he received, from spreading the mail and to contacting different NGOs who had plasma donation schemes."

"Always have a willing hand to help someone. You might be the only one that does"

The online metamorphosis of the Training and Placement Cell In talks with

Prof. A. K. Agarwal, Incharge TPC

1. How different is it for the TPC administration to manage the placement activities when compared to the previous years?

In previous years, it was a different ball-game due to the students being in the campus and companies visiting us physically. But amidst a pandemic, it was not possible to have the two major stakeholders in the campus. With the uncertainties involved with COVID pandemic, the management of placement activities, particularly planning and execution of various activities, became a very difficult task due to dynamism and randomness involved. Hence, the Cell had to decide to follow a dynamic approach. This dynamic approach helped TPC to keep improvising its virtual operation over the time. To get a better contrast we can divide our major activities in four parts: (1) Students Registration & Verification, (2) Handling of Companies' Process, (3) Final Placement Interviews and (4) Training Activities.

Students Registration & Verification: In the previous years, registration and verification were done physically with the help of the departments/schools. This year all the registration and verification was done virtually. With the use of existing technologies like Google Drive, Form & meet and upgrading our portal, we are able to do the same smoothly. In addition, the Cell also carried out internship resume verification for the first time. Verification of academic credentials, co-curricular and extra-curricular activities for thousands of students was not a simple task. Now with the confidence built-up by carrying out this successfully, the Cell plans to transit the registration and verification processes virtually.

Handling of Companies' Process: All the companies' processes, scheduling dates and slots for Online-test to calling of applications from students, were conducted virtually. The process was managed with help of google sheet and Whatsapp group in contrast to previous

year where the whole process was managed physically. Besides the online-tests were supervised with complete and transparent proctoring. It was a very tedious task where individuals were to be continuously monitored compared to a single person monitoring about hundreds of students. Given that there were hundreds of companies and hundreds of students taking the test, one can imagine how tedious this task was. Probably, it was the only institute and IIT to carry out the whole process successfully making effective use of the digital technology and the great support of its students without taking help from any outside agency.

Placement Interviews: Most extensive and sensitive event of TPC was December Placement Interviews. These interviews starting from 1st Dec 2020 (12:00 AM) are conducted slot wise. In some slots, we had more than 20 companies and more than 100 interviews were conducted in parallel. Making students available for interview by

some 4 companies in the same slot was not an easy task, but was carried out successfully using an in-house developed system by the TPC development team. More than 150 companies conduct their interviews in this phase and 700+ students earned final placement offers. In previous years, a good majority of the companies used to visit the campus to conduct these interviews. Some IIT Hostel was allotted to TPC to manage the same. This process involved a lot of operating cost. The institute could save a lot on this count due to the great support received from the students' body, in particular from the Core Team student members.

Phase I interviews were to be conducted until 14th December 2021. To conduct this event successfully special permission was granted to few members of the students' team to visit IIT (BHU) in December to manage this process efficiently. As compared to previous years, the Cell did not restrict Phase I interviews till 13 December 2021 but to be continued until 25th December 2021 to maximize offers to students.

Training activities: In previous years, the training activities were mostly limited to soft skills and workshops. Due to various constraints, the number of these activities were very limited. This session, the culture of virtual webinar was efficiently used. A number of training programs for final year students were organized. Programs like Marg conducted many webinars on multiple profiles (SDE, Analyst, Product management, etc) to give students a holistic picture of these profiles and how to prepare for them. Many soft-skill webinar were also conducted and also many prominent personalities like Mr. Sarvesh Agrawal (Founder & CEO, Internshala) delivered a talk on career planning for the post Covid era. Such activities were conducted throughout the year.

2. What were the challenges for you while organizing the placement activities at each step of the process like document verification, online tests, and interviews?

o Below are the list of challenges faced during below mentioned processes:

o Transition of Document Verification from physical to virtual. On average more than 2000+ students register for the FT & Internship Process.

o Restricted hiring of the companies. Many major companies tend to prefer Top 3-4 IITs.

o Fair conduct of Online Tests

o Common framework for a company's

process.

o Conduct of Final Placement Interviews during December

3. How did you overcome those challenges and what are the new policies and procedures adopted for this placement season for the students' ease? [Like online test proctoring]

o Below are the methods achieved by us for the above-mentioned challenges:

o Document Verification: The team opted for a decentralised model and the task of verification was assigned to the respective branch TPRs while maintaining the record of proofs for each & every field added in the resume. Features were integrated on the placement portal which helped them to verify each field.

o Invitation to major Companies: As few major companies have restricted hiring this year. We applied the method of top to down approach, where the Professor Incharge and the team approached the alumni in the senior level positions in these companies and requested them to visit IIT (BHU) which leads to higher conversion. We extensively followed a vast number of company's activities on other major campuses and invited them for the same. We used LinkedIn Subscription actively which helped us to invite new companies. These efforts from the team lead to an increase in 20% more companies in full time from previous year and it is still going up.

o Conduct of Online Test & Pre-Placement Talks: The method of proctoring was introduced using Microsoft Teams for reducing the usage of unfair means during online tests. The Pre-placement talks were made more interactive by the companies.

o Common framework for company's Process: The platform used for conveying the information during the process was the TPO' Forum & designated WhatsApp groups for the company's process. For a single process, 3-4 WhatsApp groups were made for the real-time update of the process & information to be conveyed to the stakeholders involved. (Students & Company Personnel)

o Conduction Final Placement Interviews during December:

1) One major step taken was to invite a few important members of the student team to visit IIT (BHU) during December 2020 to work in a Control Room. One designated hostel was allotted to them with all facilities taking complete care on

safety & comfort for the team.

2) To manage each interview process, the development team created an in-house system to track students and schedule interviews. The technology used APIs on Google Calendar to help to track students' interviews and also to send interview meeting invites.

4. How many placement offers were revoked in the session 2019-2020 due to the lockdown. And how TPC ensured its students that they can rely on TPC for bringing up new opportunities for such students.

o Around 37 placement offers were revoked due to the COVID-19 pandemic.

o Below are some of the steps taken by the TPC team to bring new opportunities for students whose offers were revoked-

o We conducted a special recruitment process for revoked students. Even we allowed those students whose offers were deferred with considerable duration.

o Companies with excellent relationships with IITs were re-invited like Cisco, Paytm which gave more than 10+ offers to these students.

o Actively invited new companies through LinkedIn and alumni connection

o This year we provided a special permission to those students who lost their offers to reappear for campus placement for session 2020-21.

o Over the whole session we kept sending the companies details who were looking for immediate hiring to the 2020 batch and also shared the details with a few firms.

5. How many internship offers were revoked in the session 2019-2020 due to lockdown and how TPC facilitated such students by providing them alternatives such as to take up in-house projects under our professors etc.

o Major challenge faced during Covid was due to uncertainty in the academic schedule and lockdown imposition. During this tenure, the effective communication from the Professor Incharge, both oral and written, helped in retention of offers by more than 85% companies.

o Around 24 internship offers by 13 firms were revoked due to the COVID-19 pandemic and these were mostly by hard-core companies where physical and on-site presence was a must.

o To tackle this with help from some distinguished alumni, the Cell invited more than 20 companies during April-May 2020 to hire for internships and also we shared

numerous off-campus internship opportunities directly to the students. This effort led to more than 130 internship offers.

With in-house projects, we also collaborated with Internshala to run special campaigns for IIT (BHU) students to avail

various internship opportunities.

भारतीय प्रौद्योगिकी संस्थान (का.हि.वि.), वाराणसी

हिन्दी पखवाड़ा (सितंबर 04–18, 2020)

संस्थान में हिन्दी पखवाड़ा का आयोजन दिनांक 04.09.2020 से दिनांक 18.09.2020 तक किया गया। हिन्दी पखवाड़ा के दौरान निम्नलिखित आयोजन किये गए—

1. हिन्दी पखवाड़ा का उदघाटन :

संस्थान में 04 सितंबर, 2020 को हिन्दी पखवाड़ा का शुभारंभ हुआ, जिसके अंतर्गत निम्नलिखित कार्य किये गए—

- संस्थान में वर्ष 2019–20 के अंतर्गत हिन्दी में किये गये कार्यों की आख्या प्रस्तुत की गयी।
- हिन्दी पखवाड़ा के शुभारंभ के अवसर पर निदेशक महोदय की अपील जारी की गई।
- संस्थान के प्रशासनिक भवन में हिन्दी आदर्श-घोषों की पताकाएँ प्रदर्शित हुईं।

2. हिन्दी पुस्तकों की प्रदर्शनी :

संस्थान के मुख्य ग्रंथालय में हिन्दी पखवाड़ा के अंतर्गत हिन्दी के पुस्तकों की प्रदर्शनी का आयोजन 04 सितंबर 2020 से 18 सितंबर 2020 तक किया गया। उक्त प्रदर्शनी में हिन्दी से संबन्धित विभिन्न पुस्तकों का संग्रह उपलब्ध था।

3. काव्य गोष्ठी का आयोजन :

संस्थान में 12 सितंबर, 2020 को ऑनलाइन मंच पर काव्य संध्या का आयोजन हुआ। निदेशक

महोदय ने अध्यक्षता की। उक्त कार्यक्रम का संयोजन आचार्य संजय कुमार पांडेय, गणितीय विज्ञान विभाग एवं संचालन डॉ. भावना वर्मा, रासायनिक अभियांत्रिकी विभाग ने किया। कवि आचार्य प्रयास चतुर्वेदी, फ्रेंच विभाग, काशी हिन्दू विश्वविद्यालय ने मुख्य अतिथि के रूप में काव्य संध्या को गौरवान्वित किया। आचार्य अनिल कुमार त्रिपाठी, डॉ. अनीता मोहन, आचार्य संजय कुमार पांडेय, आचार्य सुशांत कुमार श्रीवास्तव, आचार्य बी. मिश्रा एवं डॉ. भावना वर्मा ने मोहक काव्य पाठ प्रस्तुत किये। कार्यक्रम के अंत में, आचार्य संजय कुमार शर्मा, खनन अभियांत्रिकी विभाग ने काव्य संध्या को सफल बनाने पर कार्यक्रम के अध्यक्ष, संयोजक, संचालक, कवियों और श्रोताओं को धन्यवाद ज्ञापन किया।

4. हिन्दी दिवस समारोह :

संस्थान में दिनांक 14.09.2020 को हिन्दी दिवस समारोह का आयोजन ऑनलाइन मंच पर गूगल मीट के माध्यम से किया गया, जिसमें संस्थान के लगभग 42 शैक्षणिक और प्रशासनिक अधिकारियों/कर्मचारियों ने सहभागिता की। कार्यक्रम संस्थान के निदेशक महोदय की अनुमति से प्रारम्भ हुआ। हिन्दी पखवाड़ा आयोजन समिति- 2020 के अध्यक्ष आचार्य संजय कुमार पांडेय द्वारा स्वागत

सम्बोधन किया गया एवं आचार्य सुशांत कुमार श्रीवास्तव द्वारा हिन्दी दिवस के अवसर पर माननीय शिक्षा मंत्री जी के संदेश का वाचन किया गया। संस्थान के कुलसचिव डॉ. शुभेन्दु प्रकाश माथुर द्वारा हिन्दी पखवाड़ा की अवधि में संस्थान में आयोजित कार्यक्रमों की आख्या प्रस्तुत की गई। इस अवसर पर मुख्य अतिथि वक्ता के रूप में उपस्थित डॉ. सतीश देशपांडे, अतिरिक्त निदेशक, उच्च शिक्षा विभाग, छत्तीसगढ़, रायपुर ने हिन्दी पर व्याख्यान दिया। डॉ. देशपांडे ने भाषा के साथ भावनात्मक सम्बन्धों पर बल दिया तथा मानवीय मूल्यों और पारिवारिक संवेदनाओं के संरक्षण हेतु बच्चों की शिक्षा का माध्यम मातृभाषा होना आवश्यक बताया।

संस्थान के निदेशक आचार्य प्रमोद कुमार जैन द्वारा कार्यक्रम का अध्यक्षीय सम्बोधन प्रस्तुत किया गया। अपने अध्यक्षीय भाषण में निदेशक महोदय ने नई शिक्षा नीति 2020 में प्राथमिक शिक्षा के मातृभाषा में दिये जाने का उल्लेख किया तथा संस्थान में हिन्दी के प्रति बढ़ते अनुराग पर प्रसन्नता प्रकट की।

कार्यक्रम का समापन संस्थान के संयुक्त कुलसचिव (प्रशासन) श्री राजन श्रीवास्तव के धन्यवाद ज्ञापन से हुआ।



MOU- NATIONAL

| S.No. | Particulars | MoU Coordinator Name and Address | Area of Interest | Year | MoU and Date |
|--|---|---|---|------------|--------------|
| List of National Collaboration of IIT (BHU) | | | | | |
| 1 | National Highways Authority of India (NHAI), New Delhi | Dr. Ankit Gupta/Nikhil Saboo, Deptt. Of Civil Engg., IIT(BHU) | Development of performance based mix design process for production of strong and durable bituminous mixes | 21.07.2020 | 03 Yrs. |
| 2 | National Highway Authority of India (NHAI), UP-East, Varanasi | Dr. Ankit Gupta, Deptt. Of Civil Engg., IIT(BHU) | Mutual cooperation for dissemination of respective expertise in Civil/highway engineering field through the road infrastructure development. | 11.08.2020 | 05 Yrs. |
| 3 | Rashtriya Ayurveda Vidyapeeth (National Academy of Ayurveda) Ministry of AYUSH, New Delhi | Prof. Pradeep Kr. Shrivastava, School of Bio-Chemical Engg., IIT(BHU) | Both the Parties agree to start upon research between these partner institutions to promote evidence-based research in the field of Ayurveda through contemporary sciences. | 22.09.2020 | 05 Yrs. |
| 4 | Ministry of Micro Small & Medium Enterprises (MSME), New Delhi | Dr. Zahir Khan Yusuf Zai, Deptt. Of Mechanical Engg. | Provide advice and assistance to MSMEs in process design and development and cost of a developed product such as alternate material usage improvement in designing etc. | 06.10.2020 | 31.03.2021 |
| 5 | Indian Institute of Technology Guwahati, Guwahati | Dr. Rajesh Kr. Upadhyay, Chemical Engg. & Tech. | Joint Degree Programme and Centre of Excellence | 27.11.2020 | 05 Yrs. |
| 6 | RI Instruments and Innovations and group company RINZTECH, Uttarakhand | Dr. Ashish Kumar Mishra, SMST | Sharing a common desire to explore, extend and strengthen the functional relationship between the Academic Institution and Industry. | 23.12.2020 | 05 Yrs. |
| 7 | Indian Space Research Organisation (ISRO), Bengaluru | Dr. Shishir Gaur, Deptt. Of Civil Engg., IIT(BHU) | Advanced research in the areas of relevance to the future technological and programmatic needs of the Indian Space Programme. | 23.12.2020 | 10 Yrs. |
| 8 | Mission Director, Mission Office NM-ICPS, IIT(BHU), Varanasi and I-DAPT-HUB Foundation | Dean R&D | Technology Development, HRD And Skill Development, Innovation, Entrepreneurship and Start-UP Ecosystem, International Collaboration | 30.12.2020 | 12 Yrs. |
| 9 | Kantas Track-Pack India Limited, Delhi | Prof. Rajiv Prakash, SMST | Work jointly for the common research and commercial interest at national and international levels. Support the exchange of innovation, research and training especially development of nano-ink in anti-counterfeit domain. | 20.01.2021 | 02 Yrs. |
| 10 | Ministry of Road Transport & Highway Chair, New Delhi | Dr. Ankit Gupta, Deptt. Of Civil Engg., IIT(BHU) | Creation of MoRTH Professorial Chair at IIT(BHU) Varanasi shall focus on research and development, teaching and training in the area of Development of Highway sector. | 03.02.2021 | 10 Yrs. |
| 11 | Centre for the Development of Glass Industry, Firozabad | Head, Ceramic Engg., IIT(BHU) | To complement the strengths of the two institutions with respect to design, scientific, technological, infrastructural and outreach capabilities and channelize it for the development of the aligned MSMEs. | 05.02.2021 | 03 Yrs. |

Sponsored Project

| S.No. | Name of Principal Investigator | Title of Project | Sponsoring Agency | Date of Sanction | Duration | Value of Project |
|-------|---|---|--------------------------------------|------------------|----------|------------------|
| 1 | Dr. Ashok Kumar Mondal (PI), Dr. Joysurya Basu (CoPI), Prof N K Mukhopadhyay (CoPI) | In-situ microscopy study of age hardening in dispersion strengthened cast magnesium alloys and its ex-situ correlation with mechanical properties | SERB | 04.03.2020 | 03Yrs | 3,736,064.00 |
| 2 | Dr. N.K. Prasad (PI), Dr. Chandan Upadhyay (CoPI) | High performance rare earth free nanocomposites permanent magnet for advanced motor and alternative energy applications | SERB | 04.03.2020 | 04 Yrs | 5,690,264.00 |
| 3 | Dr. Chandana Rath | Investigation of Structural phase transformation in HfO ₂ thin films using X-ray absorption spectroscopy | CRS | 05.03.2020 | NA | 45,000.00 |
| 4 | Dr. Akhilesh Kumar Singh | Development of High Te Lead Free Piezoelectric Materials for Energy Harvesting | SERB | 13.03.2020 | 3 years | 3,357,066.00 |
| 5 | Prof. Prabhat Kumar Singh | Strategic Planning for Water Resources and Implementation of Novel Biotechnical Treatment Solutions and Good Practices (SPRING) | DBT | 14.05.2020 | 3 years | 3,290,720.00 |
| 6 | Prof Sanjay Kumar Singh | Intelligent system for computer assisted diagnosis (CAD) OF CANINE MAMMARY TUMORS | DBT | 29.04.2020 | 02 Yrs | 2,944,859.00 |
| 7 | Dr. Nikhil Saboo | Development of guidelines for use of waste reclaimed water in pavement construction | Ministry of Road Transport & Highway | 20.05.2020 | 3 years | 551,000.00 |
| 8 | Dr. Arnab Sarkar | Pathology on a Spinning Disc | MHRD - STARS | 21.05.2020 | 3 years | 5,532,000.00 |
| 9 | Prof. Vikash Kumar Dubey | Re-purposing of approved drugs from Drug Bank database for possible treatment for COVID-19 by targeting SARS-CoV-2 main purpose | SERB | 17.06.2020 | 1 year | 1,350,000.00 |
| 10 | Dr. Nikhil Saboo & Dr. Ankit Gupta (Co-PI) | Development of Performance based mix design process: A re-look at the Marshall Mix design process for the production of strong and durable | NHAI | 22.06.2020 | 3 years | 7,058,000.00 |
| 11 | Prof. Pralay Maiti | 3 D Bio Steeolithography for Engineering functional Tissues | SERB | 07.07.2020 | 5 Years | 744,928.00 |
| 12 | Prof. Pralay Maiti | Biodegradable path for faster wound healing including diabetic ulcers using ayurvedic medicine | DBT | 17.09.2020 | 3 years | 900,000.00 |
| 13 | Dr. Puneet Kumar Bindlish & Dr. N.S. Rajput, Dr. Abhishek | Integrative Environment View (IEV) for Sustainable Hyper | Google Asia Pacific Pvt. Ltd | 18.09.2020 | | 146,300.00 |

| | | | | | | |
|----|--|--|------|------------|----------|--------------|
| | Mudgal, Dr. Amit Verma | Local Temporal & Spatial Environmental Pollution Monitoring : Case of Air Quality in Varanasi City | | | | |
| 14 | Dr. A.K. Verma & Dr. Puneet Kumar Bindlish | Forewarning System for Landslide Prediction along Mangan and Chungthang road, Sikkim India | DST | 16.10.2020 | 3 years | 3,100,282.00 |
| 15 | Dr. Jeyakumar Kandasamy | Design, Synthesis and Biological evaluation of O- and C- derivatives of Phenylethanoid Glycosides as a Multi-targeting Neuroprotective disease modifying agents for Alzheimer's Disease | SERB | 02.12.2020 | 03 YRS | 4,807,264.00 |
| 16 | Prof. Subir Das | Existence and Stability analysis of periodic solution of variable time impulsive neural network | SERB | 11.12.2020 | 03 Yrs | 6,60,000.00 |
| 17 | Dr. Anubhav Sinha | Effect of Jet Pulsation on Reacting Jet in Crossflow | SERB | 17.12.2020 | 2 years | 28,05,500.00 |
| 18 | Dr. M.S. Muthu | AMWATCH: Defining the AMR Burden of Antimicrobial Manufacturing Waste in Puducherry and Chennai | DBT | 14.12.2020 | 3 years | 31,22,280.00 |
| 19 | Dr. Binita Pathak | Impact of a microspray on a bio-mimicking surface | SERB | 14.12.2020 | 2 years | 25,41,830.00 |
| 20 | Dr. Abhisek Mudgal | Factor affecting exhaust emissions of motorized two wheeler in an Indian Tier-II city: A case study of Varanasi | SERB | 17.12.2020 | 2 years | 14,05,300.00 |
| 21 | Dr. Ashish Kumar Mishra | Investigation of two dimensional transition metal dichalcogenides Nanostructure as Effective SERS Substrate | SERB | 25.12.2020 | 3 years | 8,90,800.00 |
| 22 | Dr. R.K. Singh | Scattering assisted imaging: Exploiting randomness of the light. | SERB | 25.12.2020 | 03 Years | 34,21,000.00 |
| 23 | DR. Sanjeev Kumar Mahto | Developing Psyllium Husk Based Polysaccharide Hydrogel into Electrospinnable and 3D Printable Materials : Towards Fabrication and Comparative Evaluation of Lyophilized, Electrospun and 3D Bioplotting Scaffolds for Liver Tissue Engineering | SERB | 26.12.2020 | 3 years | 10,50,000.00 |
| 24 | Prof. M.K. Mondal | Novel integrated engineering approach for effective tar decomposition and its last minute removal to fuel gas reforming in biomass pyro-grasification | SERB | 29.12.2020 | 03 Years | 35,62,685.00 |

| | | | | | | |
|----|--------------------------|---|---------------------------------------|------------|---------|--------------------|
| 25 | Dr. Ajay Pratap | Resource-optimized fog computing for smart healthcare application in IoT-enabled heterogeneous networks | SERB | 29.12.2020 | 02 Yrs | 29,06,970.00 |
| 26 | Dr. Arnab Sarkar | Assessment of Vulnerability of structures in Regard to Cyclonic Wind loads | Bureau of Indian Standards | 30.12.2020 | 2 years | 7,58,390.00 |
| 27 | Dr. Vinod Tiwari | Development of Novel Therapeutics for the Redemption from Frostbite and Burn Injury induced Chronic Pain in Military Veterans | SERB | 31.12.2020 | 3 years | 14,70,000.00 |
| 28 | Prof. Rajiv Prakash | Development of nanoink for anti-counterfeit products and solution | Industry Kantas Track Pack India Ltd. | 20.01.2021 | 2 years | 100000 + As actual |
| 29 | Prof. Vikash Kumar Dubey | Validation of Glutathione synthetase from Leishmania donovani as new drug target or discovery of new drug candidate | ICMR | 29.01.2021 | 3 years | 22,94,880.00 |

Faculty Corner: Achievements/Conferences/Invited Talks

1. Dr. Ashish Kumar Mishra from the School of Material Science and Technology gave three invited talks in three different faculty development programs.

2. Dr. Kalpana Chaudhary from Electrical Engineering has been awarded a fellowship for her outstanding performance in her area of specialization by SERB-POWER (Promoting Opportunities for Women in Exploratory Research). She was also the coordinator of the QIP short-term course, "Transition towards electric vehicles and their charging ecosystem in India (TEVCEI-2021), during January 11-16, 2021. She was also elevated to the prestigious post of IEEE Senior Member.

3. Dr. Ankit Gupta of the Civil Engineering Department, along with Dr. Nikhil Saboo coordinated an Online short-term course on "Data Collection and Analytics in Pavement Management Systems" from 1st to 5th March, 2021. The program was funded by the Technology Innovation Hub (TIH) on

Interdisciplinary Data Analytics and Predictive Technologies (I- DAPT).

4. Dr. Ravi Shankar Singh of the Computer Science and Engineering Department delivered the following expert talks.

- "Parallel Algorithm" at a refresher course on IT at UGC-HRDC, University of Kashmir, Srinagar on 05/03/2021.
- "Computer Algorithms" at a refresher course on IT at UGC-HRDC, University of Kashmir, Srinagar on 18/02/2021.
- "High-Performance Computing-Parallel Algorithms" under ATAL-FDP at IEC, Ghaziabad on 10/11/2020.
- "High-Performance Computing for Machine Learning" under TEQIP-III FDP at Rajasthan Technical University, Kota on 17/09/2020.
- "High-Performance Computing-Parallel Algorithms" in On-Campus

Online Training for the faculties of Raisoni Group of Institutions on 05/06/2020.

5. Dr. Somak Bhattacharyya received the following awards/honors during the last academic year.

- Fellow of IETE, India, since 2021.
- Nominated as the reputable associate fellow of the West Bengal Academy of Science and Technology and has been serving since 2020.
- Elected as the distinguished Life Fellow Member of The Optical Society of India ever since 2020.
- Selected as IEEE, Microwave Theory and Techniques Society (MTT - S) Region-10 Young Professional Coordinator.

6. Prof. Tanmoy Som delivered a webinar on "Mathematical Modelling in General Sense" at the International Webinar on Mathematical Modelling in Research organized by Rabindranath Tagore

University, Bhopal, during 4-5 June 2020.

7. Dr. Kishore Sarawadekar of the Department of Electronics Engineering was selected as an Executive Committee member of IEEE, UP section for the year 2021. His membership was elevated to the grade of IEEE Senior member. He delivered an invited talk on "Career Opportunities in EDA Industry, " KIT's College of Engineering, Kolhapur, 15th September 2020. Besides this, he conducted an AICTE Training and Learning(ATAL) Academy-sponsored one-week Faculty Development Program on "the Internet of Things and Real-Time Applications." conducted during September 21-25, 2020.

8. Dr. Bidya Binay Karak of the Department of Physics published in the prestigious journal Science (Impact Factor: 41.85). It was published on 7th August 2020. Ref: Yang et al. (2020) Global maps of the magnetic field in the solar corona. The link for the same is <https://science.sciencemag.org/content/369/6504/694>.

He also gave an invited talk on "Recent Developments in the Babcock-Leighton Solar Dynamo Theory" at The 39th Annual Meeting of the Astronomical Society of India (ASI) in February 2021.

9. Dr. Indrajit Sinha delivered a keynote lecture entitled, "Computational and experimental studies on interfacial phenomena," in a webinar on "Recent contributions of chemical science to modern society" organized by Govt. Girls P.G. college Satna [M.P.] and AKS University, Satna [M.P.] on 2nd March 2021.

10. Dr. J. P. Mishra of the Department of Mechanical Engineering delivered two invited expert talks on a) Evolution of Machining Processes in TEQIP-III Sponsored Online Workshop on Contemporary Issues in Design and Manufacturing (CIDM 2021) at NIT Sikkim on 19.03.2021.

b) Expert Talk on Hybrid Machining Processes in 6-day Online Faculty Development Programme on Emerging Trends in Mechanical Engineering (ETiME-2021) at Maharishi Markandeshwar University on 23.03.2021.

11. Dr. Vinod Tiwari of the Department of Pharmaceutical Engineering and Technology delivered expert invited talks at the following places:

- a) Gurukula Kangri University, Haridwar on "Natural Products in Neurodegenerative Diseases: Implications & Challenges" during Aushadhiya Padap Mahakumbh 2021.
- b) SPER Student Congress 2020, India on "Traditional & Emerging Career Opportunities for Pharmacy Graduates."
- c) CSIR- Central Drug Research Institute, Lucknow on "Targeting PAIN Before It Reached BRAIN."
- d) Sri Vishnu College of Pharmacy, Kovvada on "PAINS You Feel are Messengers: Listen to Them"

Dr. Tiwari also organized a Short Term Online Course entitled "Pre-clinical Models in Drug Discovery & Development" under the SPARC grant awarded by MHRD in collaboration with Prof. Sanjay Singh, VC, BBAU Lucknow, and Prof. SN Raja, Director of Pain Research, John Hopkins University School of Medicine, MD, USA.

12. Prof B. Mishra of the Department of Pharmaceutical Engineering was unanimously elected as the President of Society of Pharmaceutical Education and Research, Noida w.e.f 01st September 2020 for 2 years.

13. Prof. Prasun Kumar Roy from the School of Biochemical Engineering served in the following positions in the previous academic year.

- a) Council Membership, National Academy of Sciences, India.
- b) Curriculum Review Committee Membership, IIT - Mandi.
- c) Nodal Coordinator, Indian National Node on Neuro-Informatics (INNNI).

He also delivered invited talks on a whole host of topics. One of the talks was on "Radiomics: Tensor Imaging for Personalized Medicine." In the previous academic year, he also conducted a short-term course on "Advances in Medical Imaging" with Hands-On Practical Training, March 2021.

14. Dr. Santanu Das from the Department of Ceramic Engineering was the

- a) Coordinator: AICTE Sponsored Short Term Course On "Advanced Materials Characterizations: From fundamentals toward applications" February 22-26, 2021.
- b) Convener: FAC2020: Advanced Course 2: Material Synthesis and Experimental Technique – Bulk to Nano." 21st September 2020 to 03rd October 2020.

15. Dr. Pradeep Kumar of the Department of Chemical Engineering and Technology received the Best Researcher Award by ScienceFather 2020 for his invaluable contribution in his field.

16. Prof. Yogesh Chandra Sharma from the Department of Chemistry was elected as a fellow for the International Society of Energy and Environmental Sciences (ISEES), Dec 2020. In addition to this achievement, he gave invited talks on the niche topics of his field. They are cited below:-

- a) Invited lecture on the topic "Wind Energy: the clean, renewable energy at the AICTE sponsored STP on "Bioenergy: A Hope for Future for Global Energy Security," Department of Chemistry, IIT BHU Varanasi, March 01-06, 2021.
- b) Delivered an invited lecture at the International Conference, 'Nano adsorbents for purification of drinking water at 'Molecules to Materials, MTM - 2020' held from 17th – 18th Dec. 2020.
- c) He conducted (as Convener), 26th International Conference of the international academy of physical sciences (CONIAPS XXVI) on Advances in Chemistry & Chemical Technology December 18-20, 2020 (online),
- d) He was elected Board member for three years (2021-2023) of the prestigious "Biotech Research Society of India(BRSI), March 2021
- e) He published a book titled "Alternative Fuels and their Utilization Strategies in Internal Combustion Engines", ISSN 2522-8366, ISBN 978-981-15-0417-4, Springer Nature Singapore Pte. Ltd. 2020 (Dec 2020)

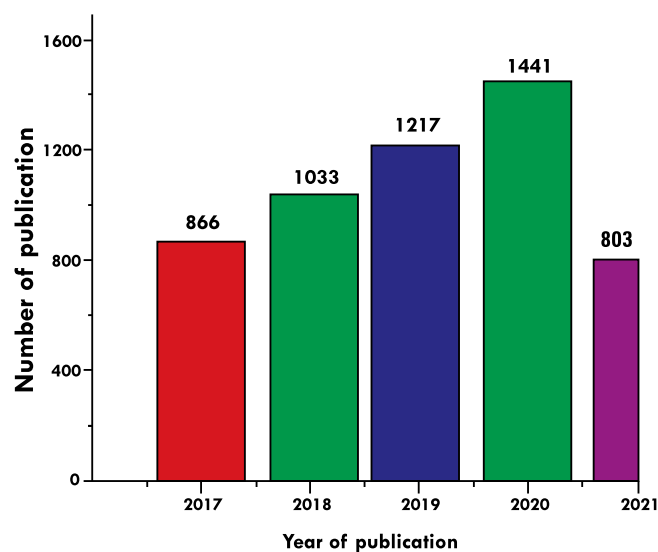
List of Faculty Members, who joined IIT (BHU) w.e.f. 01.03.2020 to 28.02.2021

| Sl.No. | Name of Employee | Designation | Deptt./School | Date of Joining |
|--------|-----------------------------|---------------------|-------------------------|-----------------|
| 1 | Dr. Subrata Panda | Assistant Professor | Ceramic Engineering | 09.11.2020 |
| 2 | Dr. Abir Ghosh | Assistant Professor | Chemical Engg. & Tech. | 28.11.2020 |
| 3 | Dr. Sanjay Katheria | Assistant Professor | Chemical Engg. & Tech. | 29.01.2021 |
| 4 | Dr. Ajay Pratap | Assistant Professor | Computer Sci. & Engg. | 30.06.2020 |
| 5 | Dr. Mayank Swarnkar | Assistant Prof. | Computer Sci. & Engg. | 07.07.2020 |
| 6 | Dr. Prasenjit Chanak | Assistant Prof. | Computer Sci. & Engg. | 13.08.2020 |
| 7 | Dr. Sukarn Agarwal | Assistant Prof. | Computer Sci. & Engg. | 03.12.2020 |
| 8 | Dr. Avirup Maulik | Assistant Prof. | Electrical Engineering | 11.12.2020 |
| 9 | Dr. Chinmaya K.A. | Assistant Prof. | Electrical Engineering | 16.12.2020 |
| 10 | Dr. Priya Ranjan Muduli | Assistant Prof. | Electronics Engineering | 27.07.2020 |
| 11 | Dr. Shushant Mittal | Assistant Prof. | Electronics Engineering | 29.07.2020 |
| 12 | Dr. Amit Subhash Shedbale | Assistant Prof. | Mechanical Engineering | 02.03.2020 |
| 13 | Dr. Saurabh Pratap | Assistant Prof. | Mechanical Engineering | 07.12.2020 |
| 14 | Dr. Joy Prakash Misra | Assistant Prof. | Mechanical Engineering | 21.12.2020 |
| 15 | Dr. Akhilendra Pratap Singh | Assistant Prof. | Mechanical Engineering | 28.12.2020 |
| 16 | Dr. Sudipta Patra | Assistant Prof. | Metallurgical Engg. | 10.11.2020 |
| 17 | Dr. Pandeewar Makam | Assistant Prof. | Chemistry | 24.12.2020 |
| 18 | Dr. Samya Banerjee | Assistant Prof. | Chemistry | 07.01.2021 |
| 19 | Dr. Rosy | Assistant Prof. | Chemistry | 01.02.2021 |
| 20 | Dr. Abhash Kumar Jha | Assistant Prof. | Mathematical Science | 09.06.2020 |
| 21 | Dr. Prodyut Dhar | Assistant Prof. | Bio-chemical Engg. | 22.10.2020 |
| 22 | Dr. Abhishek Suresh Dhoble | Assistant Prof. | Bio-chemical Engg. | 22.01.2021 |
| 23 | Dr. A.R. Jac Fredo | Assistant Prof. | Bio-Medical Engg. | 16.11.2020 |
| 24 | Dr. Nikhil Kumar | Assistant Prof. | SMST | 09.11.2020 |

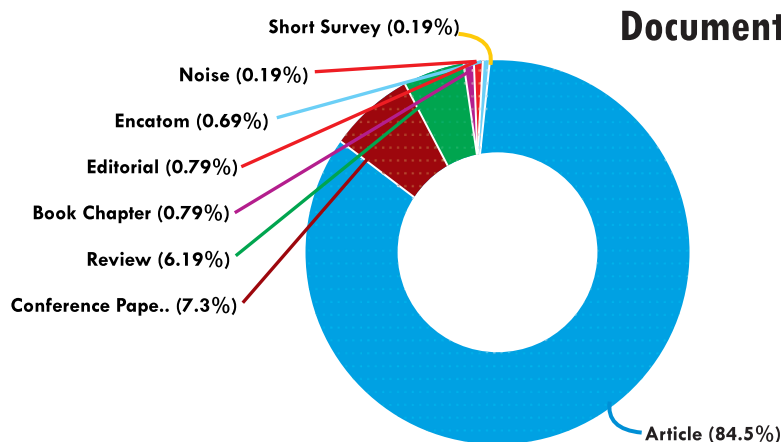
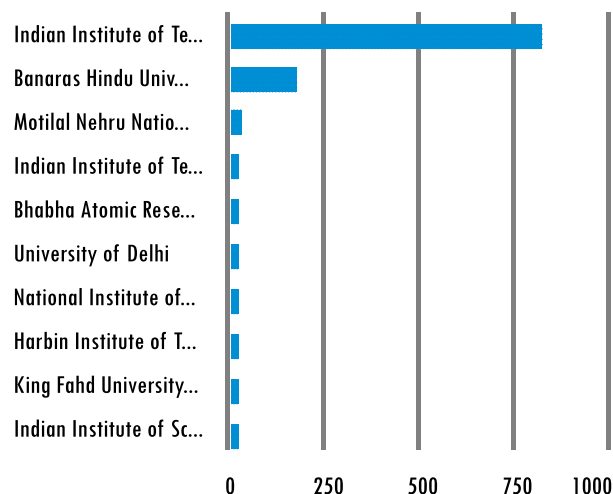
List of faculty members who retired w.e.f. 01.03.2020 to 28.02.2021

| Sl.No. | Name of Employee | Designation | Deptt./School | Date of Retirement |
|--------|------------------------------|---------------------|----------------------------|--------------------|
| 1 | Dr. (Mrs.) R.B. Rastogi | Professor | Chemistry | 30.04.2020 |
| 2 | Dr. Ram Pyare | Professor | Ceramic Engg | 31.05.2020 |
| 3 | Dr. S. K. Nagar | Professor | Electrical Engg | 31.05.2020 |
| 4 | Shri A. C. Mohan | Assistant Professor | Chemical Engg | 31.07.2020 |
| 5 | Shri A. K. Srivastava | Associate Professor | Pharmaceutical Engg & Tech | 30.09.2020 |
| 6 | Dr. V. K. Srivastava | Professor | Mechanical Engg | 31.10.2020 |
| 7 | Dr. R. M. Banik | Professor | Bio-Chemical | 30.11.2020 |
| 8 | Dr. B. N. Rai | Professor | Chemical Engg | 31.12.2020 |
| 9 | Dr. Om Prakash Sinha | Professor | Metallurgical Engg. | 31.12.2020 |
| 10 | Prof. Veerendra Pratap Singh | Professor | Mechanical Engineering | 31.01.2021 |

Publications

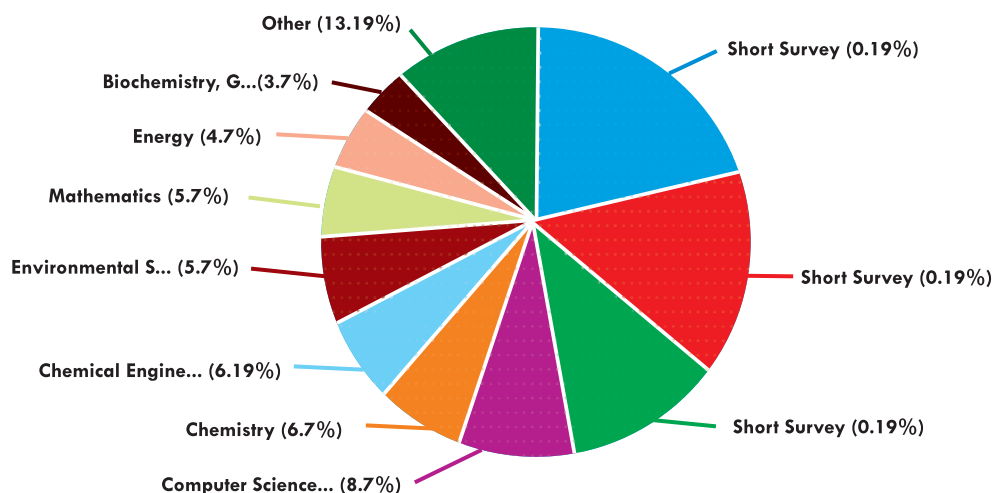


Documents by affiliation



Documents by type

Documents by subject area



Information from www.scopus.com as on 27th June 2021

Students Achievements

1. Vikram Mehta and his team stood first in a Consulting Competition organized by SHARE for a detailed project on the future of Electric mobility of two-wheelers in India.

2. Shashwat Kumar Mohanty was deemed the OP Jindal Engineering and Management Scholar 2020 (won a cash prize of 80,000 INR along with a scholarship medal).

3. Team X Ash A-12, consisting of Sirusala Niranth Sai, R Lokesh Krishna, Nishant Kumar, Ayush Kumar Shaw, Raghav Soni, and Yash Sahijwani was a national finalist in Flipkart GRID 2.0 Robotics Challenge in the category of Intelligent Picking.

4. Pulkit Gupta was nominated for the prestigious OPJEMS Scholarship 2021.

5. Pranjal Aggarwal served as a Taiwan Experience Education Program (TEEP) Scholar at Asia Plus and solidified his place among the top 500 international talents.

6. Ashish Sen grabbed a whopping 99.99%ile in CAT 2020.

7. Aman Mishra and his team (Winnovation) & Ayush Raj and his team (Terrific Lights) were two among the top 12 teams selected for the finals of Hyundai H-Social Creatorz out of around 500 teams.

8. Prakhar Agarwal received a study grant amounting to 1 lakh Rupees from LPU for being one of the top 10 students in IIT BHU.

9. Zahle Sakir Khan and his team won Smart India Hackathon 2020 in the software category under the Railways Ministry.

10. Niyati Srivastava and Saumya Mathur secured the third position in the Industry Analysis Competition organized by Finfest.

11. Asif Husain Mazumder and team (M

Madhumitha, Deepti Gupta, Pratibha Yadav) were declared winners in the national level collaborative Indian mapping event "mapathon" conducted by "IITB-ISRO-AICTE".

12. Yazura Shankdhar and team (Hemank Vats, Anju, Priyanshu Prasad) were declared winners in the national level collaborative Indian mapping event "mapathon" conducted by "IITB-ISRO-AICTE".

13. Prathmesh Sharadrao Shinde and team (A Mohamed Rafee, Seema Hozowary, Paras Bhatiya) were declared winners in the national level collaborative Indian mapping event "mapathon" conducted by "IITB-ISRO-AICTE".

14. Akarsh Vatsa, along with teammates Shashwat Khare and Vibhanshu Chaubey, won the OnCampus Round of Hult Prize 2021 in the Hult Prize Impact Summit at Kuala Lumpur, Malaysia, on 26th and 27th March of 2021.

15. Aditya Chandra Mandal and his team will be working in a project from the Ministry of Coal to develop a drone-mounted Optical Sensor for estimation of Particulate Matter Concentration in a railway siding at a mining area.

16. Shashwat Agarwal, along with his startup, developed a mobile application, "Happy Minds." This app won accolades in different competitions, which are as follows:-

- He secured second position in the global hackathon (The Global Hack), which the government of India and Europe organized.
- He won the first prize in the national level Hackathon (NOVATE+ 2020).
- Mr. Aggarwal bagged second prize in FIIB Meraki, a B-plan competition for India and South Asia's top colleges.
- Another feather in his cap is the first prize in a competition called "E-

pitch" organized by NIT Surathkal. He also emerged as a runner-up in the round "Horse's Stable", organized by IIM Bodh Gaya and "YES'21", which FMS Delhi managed.

- His startup was one among the Top 10 finalists in "Together 2021", a renowned competition organized by the Schulich School of Business (Canada) and Startup India (Government of India).

17. Prabhakar Kumar was the fourth position holder in the 110-meter hurdle race in the Inter-IIT Competition held at IIT Guwahati.

18. Kshitij Sinha and the team brought glory to the college as they grabbed the Gold medal at Drishtee's tech-led Innovation for Rural Entrepreneurs.

19. Vivek Parihar secured first position at Zest, IIT Hyderabad. Siddhant Jaiswal was a national finalist at Atharva, IIM Indore.

20. Team of Yashashvi Singh, Deepro Nath, Karthik garg secured overall first place at ExQuizite 2.0, organised by IIT Bhilai. Also the team of Saumya Mathur and Samridhi Jain stood second in the Literature quiz, conducted at NIT Warangal.

21. Suraj Barfa secured first place (age above 19 category) in Dream Celebration-Facebook Portrait Competition.

22. Team of Sanskriti Shrivastava, Nabeel, Soniya Karamchandani stood first at Creative Kalakaar, IIT Kharagpur. Also, Team of Anju and Harshit Singh secured first position at Outshine, IIT Dhanbad.

23. Vikhyat Dwivedi secured first position in Abhimat Open mic, conducted by Delhi University.

Aditi Khanna stood first in Spill the ink (story telling), NIT Agartala.

In talks with Miss Sweta Suman

An interview with IIT-BHU alumna Miss Sweta Suman. She graduated from IIT(BHU) in 2016 from the department of Biochemical Engg. & Biotechnology and went on to secure a good rank in civil services examination.

1. UPSC itself is a prestigious examination that demands excellent

skills and high work energy. Being an IIT-BHU alumna, did it give you an edge over this examination?

Yes, I think it did. First of all, being from an IIT connects one with our seniors and alumni in different fields. For me also, my seniors and their guidance helped substantially in preparation. Other than that, I think being

an engineer helps approach different things objectively.

2. During your time in IIT BHU, what opportunities did you get that helped you in heading towards your goal of UPSC?

In the second year of college, students think of what they want to do in future and there are options like job, MBA, research,



master's, or UPSC, etc. I was interested in public policy as a field and I liked to be involved in organizing different events. I had, thus, ruled out other options and was interested in UPSC the most.

From second year itself, I got opportunities in organizing events and in policymaking later, being a member of Student Parliament in 2015-16 which shaped my orientation towards my job and UPSC.

4. You have been a student parliamentarian during your years in IIT BHU. As a student with such a crucial role, what were your key responsibilities and did they help you in improving your leadership qualities?

I was a student parliamentarian for its first term in 2015-16, where I was a member of the grievance redressal committee and alumni affairs committee. Being the first term, I was involved in drafting the constitution of SAIC and grievance redressal cell. I count this as a unique and enriching experience that has helped shape my leadership and managerial skills.

5. Your past engineering career reveals that you have been doing internships and extensive research on areas of Traction Force Microscopy from Indian Institute of Science. How do you think it helped in your journey? How do you aim at applying this knowledge in the public sector?

The research experiences at IISc and IIT

Bombay helped me realize that I would like a field oriented public-facing job, i.e., public service more than lab-based research. But having worked as a research intern, I hope it would help me use a perspective in service towards research projects, required funds in future.

6. Cracking UPSC requires strong willpower and determination. When do you think your goals became clearer to you and strengthened you to give the most prestigious examination of the country, despite being an IITian?

I always wanted to prepare for UPSC since my second year, but I also wanted to gain work experience before taking the plunge. When I was working at J-PAL on a research project in Jharkhand, I had regular interactions with the MD, JBVNL (an IAS officer) and though, I was working on evidence-based policymaking at J-PAL, I realized that the maximum impact in our country can be created directly as an IAS officer.

7. Your excellent research experience also reveals that you have done an internship from Indian Institute of Technology, Bombay on Organic and Inorganic matrices and many more such interesting areas of study. Have you had second thoughts of broadening yourself to research fields and not think of UPSC?

No. The research internships were more exploratory in nature to rule out other options.

8. How did you seek opportunities in IIT BHU to enhance your interests in every other activity you wanted to be a part of? For e.g. film and media council, animation club.

It was merely exploratory in nature. FMC was created in my second year and there were positions available as secretary, so I went for it. It was a beautiful thing to see FMC grow in my college years and even now, learning about what different clubs are up to. I follow the Instagram handle of the photography club for regular updates.

9. Was getting into Indian Administrative Service your childhood dream?

No. More like a college second year

clarification.

10. You have also been working and gaining experience from J-PAL and I-PAC. How do you think it made your goals easier to achieve? How did this experience help at every stage of the UPSC examination?

Working at I-PAC gave me enriching field exposure and helped me understand elections from an insider's perspective. Working at I-PAC helped me join J-PAL, and there, I gained experience in the field of public policy. This experience, I consider, as a background for UPSC preparation.

11. As an IIT-BHU alumna, what message do you wish to give to the students aiming to become an IAS officer just like you?

Be clear that you wish to prepare and be consistent in your efforts. This exam is a test of perseverance and people who stay consistent and dedicated, succeed.

12. Share a moment that comes to your mind whenever you think of your final interview for the UPSC examination.

As any normal and sincere first-time interviewee, I was nervous before the interview and did not check the time before entering the board room. In the UPSC building, they even take your wristwatch and as you obviously cannot glance at the clock in the boardroom, I was at a loss to deduce how long my interview was. I still don't know the duration of my interview.

14. What are the most important things you learnt from this institution?

The most important thing I've learnt from IIT (BHU) is independence and self-discovery, because before college, we are all in a way following a herd career path and it is only here that you come across different fields and wish to explore. In fact, I learnt about the existence of J-PAL from our two seniors who were working there and the idea of working extensively on quality research for policymaking was very exciting for me. It was then that I decided I will definitely apply to work at J-PAL.

In talks with strategic minds: Prasanjan Mitra

Prasanjan Mitra, alumnus of IIT BHU, delightfully shared his outlook towards Business Administration, and the on-campus experience in an IIM.

1. In what field did you pursue graduation and the clubs and councils of IIT BHU you were involved in?

I graduated in 2018 in Electrical

Engineering. During my second year, I was the Joint Secretary of the Media club and have also been a part of the FMC and Quiz club. In 3rd year, I became the



student editor of the Institute newsletter.

2. How did you decide upon MBA as your career path?

Primarily, in my 2nd year, I realized that for a more fulfilling

and exposure-oriented role in the private sector, an MBA will be important at some point in time. It makes sense to do a global MBA later on after a few years of experience, but if you're doing an Indian MBA, it's better to do it as early as possible for several reasons, and hence writing CAT became more of a priority in the fourth year.

3. If one has made up their mind to do an MBA, what should be the very first step towards it? What is the right time to start preparing for the CAT exam?

It depends on when you pick that as a career plan. If you decide it early, utilize this time in doing thorough research about the kind of opportunities that each college has to offer, especially post your MBA. It's more about the outcome rather than the facilities provided in the college. Do the digging properly, think whether you want to do it from India or abroad or if you should do it at all. After that, understand what kind of preparation is needed for CAT (if you are going for CAT). There is no right time as such, but since I am assuming the audience for this transcript is from the IIT BHU itself, I would suggest somewhere around the 3rd or 4th year. Do not spend the entire college life preparing for CAT because it doesn't make sense. Explore everything around you and understand what you want to make of your life.

4. What was your CAT preparation strategy? Did you join any institute or took LDS packages or self-study?

My CAT preparation was essentially self-oriented, apart from the mock test series to which I had subscribed. I just gave it erratically towards the end and had put a lot of it in solving sample questions, old test papers, and stuff that more or less turned out to be sufficient for me.

But if somebody is aiming to grab the top spots in CAT, I would suggest starting a little early and giving a lot of mock tests. Figure out your weaknesses and address them head-on.

5. How was your IIM Interview experience, and what would be your tips to ace an interview? What kind of questions had you encountered?

I had received a call from every IIM, but finally, I went to IIM Bangalore. That interview had a very faint technical aspect to it. It was more like a general conversation that could head in any direction. What you should be possessing is a nice SOP and an open mind to acknowledge whatever comes your way. An interview is not only about testing your academic rigor and skillset, but the prime qualities they're looking for comprise a good personality, potential to learn, work ethics, and related stuff.

Typically for an interview, you should focus on the following parts: Firstly, Academics. Whichever branch you are studying in, a broad idea of the main things covered in respective branches is a must, at least from a practical point of view. Secondly, you should be ready to answer HR questions, for instance: Why do you want to pursue an MBA? What is it that you want to achieve? Through these questions, they judge your overall persona. Thirdly, General Knowledge plays a crucial role. Do read newspapers regularly, especially stay updated about the developments on the business page. This will not only aid you in entering into an MBA course, but even after that, it's essential to walk parallel to the world.

Questions from the regular B.Tech course are also put forth. Some amount of maths can also be expected depending on the college you are interviewing for.

6. What were the mistakes you made while preparing that you want others to avoid? Would you like to say a few words to boost the morale of aspirants?

I would suggest starting your preparation early and being diligent thereon. Give as many mock tests as possible, not for the sake of marks but to identify your weak spots. On the interview part, be confident and well prepared since this one is very different from job interviews. It's okay to be nervous about it, but the way you handle it defines you.

Stay motivated and remember that job offers on the campus might lure you when preparing for CAT. So, it's crucial to keep your goals straight. Also, stay in touch with your family, friends, and the people who uplift your spirit. CAT is not an exam to be

cleared with rote learning, but with a calm and confident mind. Walk in the exam hall with a positive attitude in your stride. It is more important than how many hours of effort you have put in beforehand. Believe me; if you do that, you can expect many happy surprises.

7. Do students aiming to pursue MBA have to be specific to interns during their B.tech, or are typical interns in SDE or core profile fine? Does POR play a significant role?

You don't need to go for specific internships; any of the normal ones will do to get into an IIM. But if you have a clear vision beforehand about the kind of work you want to do afterward, say product management or finance, you can target that field in your internship for 3rd year. This work experience will support you in the future. POR is a significant part of the overall profile. Essentially, the interviewer is looking for people who understand what they have done, who have a story to tell. If you take initiatives in spheres other than work, that is always considered a plus point. It's not necessary, but if it's there, it adds quality to your profile.

8. What is your personal experience about IIM, and how is it different from an IIT? What new opportunities open up for a student after doing an MBA from IIM?

It depends a lot on the IIM or IIT you are enrolled in. The campus of IIM is much smaller, with relatively fewer people than an IIT, but again you have to understand that IIM life is shorter. You get to interact with ambitious people from different age groups. Often, many activities are going on to keep you engaged and help build an interactive atmosphere. Academically, it's as rigorous as any top IIT with competitions and exams round the year. Fests are organized at a smaller scale than IITs but are undoubtedly enjoyable. Not to mention the various job opportunities that open up after completing MBA from IIM, from marketing, finance to strategy and consulting. HR is typically not one of the biggest recruiters here, and the type of job roles differ from that offered at IIT after B.tech.

9. Kindly briefly explain consulting, finance, HR, and marketing, and what among these is your domain of interest?

In consulting or management consulting,

you would solve challenging business problems of some of the bigger and smaller businesses in India and at international level too. Consulting is a very broad and vast subject. It depends a lot on the firm you're getting in, the work it does, and the kind of projects you have taken up. It is a very enlightening thing to get into because it introduces you to the nitty-gritty of the business.

Finance has many sub-sectors, namely, investment, banking, financial markets, corporate banking, treasury roles of big

companies, and depending upon the sector, the kind of work entailed is very different.

The HR team looks at various aspects of employees, like hiring and maintaining internal processes of the employees. So again, just this claim that the top IIMs still do not typically see a lot of HR hiring.

Marketing and product again are critical business functions which involve managing the product launched into the market, designing how that product will be sold to

customers at the end of the day, and managing its entire life cycle. Depending on the firm you are in, it could be a sales job, strategy job, and marketing.

Each of these fields has its importance, and none is better than the other. All the businesses have a finance function, a marketing function, HR function, and consulting to run it smoothly. During MBA, you will get exposure to all these domains, and it will be up to you what you want to go forward with.

Start-Up Corner: E-Cell, IIT (BHU)

The Entrepreneurship Cell (E-Cell) is an Institute body run by the students of IIT (BHU) Varanasi acting as a symbiotic link between the entrepreneurs of E-Cell IIT (BHU) and the existing startup ecosystem.

New Initiatives:

The E-Cell was active even in an online semester and held many webinars, talks and brought two new initiatives in these challenging times to help students gain knowledge about start-up ideas. In this academic session, they introduced two new initiatives, namely Mentorship Program and Founders Speak.

The Mentorship Program aims to give the freshmen an insight into the basics of Entrepreneurship. It is organized in a small

group with 20 freshers and two mentors. Mentors are the sophomores who are actively associated with the ongoing work, initiatives of the E-Cell. This program benefits freshers in sharpening their ideas, actively participating in group discussions, gaining knowledge by reading books, and discussing the learning with the group members. Every weekend around 320 mentees and 30+ mentors meet virtually for an hour or two and discuss their takeaways, experiences of that particular week, and ideas that can be implemented to grow the E-Cell. This program also helps students communicate their ideas and bridges the gap between the seniors and juniors during this online semester.

The Founder's Speak is a weekly program curated by E-Cell, IIT(BHU), Varanasi, in which successful and serial entrepreneurs share their journey with the start-up ecosystem. It is a platform where entrepreneurs share precious insights from the Business World. The primary goal of this initiative is to create awareness about the start-up culture and provide students with a better overall view of the start-up ecosystem.

E-Cell, IIT(BHU) recently inaugurated its official website on 11th April 2021. It transcends a step further to bring together the academic community, venture capitalists, new-age entrepreneurs, and all those passionate about entrepreneurship to a common forum.

Development of compact hybrid heat pump dryer

Dr. Jahar Sarkar and his PhD student Mr. Akhilesh Singh have developed an indigenous compact heat pump dryer in the Department of Mechanical Engineering, Indian Institute of Technology (BHU) Varanasi. The developed dryer uses next generation refrigerant (R1234yf), which is personally as well as environmentally safe. This dryer can operate in dual-mode: open and closed loops, depending on the outside ambient

condition (or the air recirculation can be controlled). This dryer uses infrared heater and evacuated tube collector based solar heater for the optional heat source, which can be utilized based on the requirement. If the thick materials are required to dry, infrared heater can be used and the solar heater can be used if either the drying rate needs to be increased or the dryer inlet temperature is not sufficient for desired drying output.

The drying cabinet is designed for best possible air distribution to get maximum moisture extraction rate (the tested value is more than the reported values of other heat pump dryers available in the literature). The developed dryer can be suitable for any food materials and the product moisture content can be reduced up to 5% on a dry basis.

All-inclusive Centre: The Gymkhana

Cultural Council

Events organised

In March 2020, Kriti- a street play was held by Masquerades at Assi Ghat, with the theme revolving around blood donation. It aimed to create social awareness about blood donation among the common masses. Their efforts turned

out to be fruitful as more people volunteered for blood donation to BloodConnect (Varanasi).

In July 2020, Kalakriti Inter Institute Arts Contest was conducted successfully. It was organised jointly by art clubs of 7 IITs including our institute, IIT Bombay, IIT Delhi, IIT Kharagpur, IIT Kanpur, IIT

Madras and IIT Roorkee. Our institute secured the overall second position.

In October 2020, Vayam, a poetry writing competition was organised by Lit Club. It turned out to be a national level poetry competition, with participation coming from all parts of the country, including the premier institutes like IITs.

In November 2020, Writing and Dramatics Workshop was held with Divyendu Sharma, an actor who attained critical acclaim for his performance in Mirzapur. It was held in collaboration with ALT Balaji. This incredible workshop was a result of combined efforts of Lit Club and Masquerades.

Aagman, the annual intra fresher's competition, gives a taste of the activities of various clubs of cultural council to the freshers. Despite the online challenges, Aagman' 21 witnessed an all-time high, 600+ participation from first-year students (479 participants, 260 winners) in 25 different categories of the cultural events.

Cultural week saw a plethora of different events organised by all the clubs of the cultural council. Events like Chitrakala, Quizfest, Varanasi Wordfest witnessed participation from national and international institutes. Along with competitions, there were also many inspiring and educating workshops. Notable mentions include a workshop on Hindi debate and literary skills by IIT BHU alumni and IAS officer Mr Ankit Scahan, a writing workshop by author of Sacred Games, Mr Vikram Chandra.

Games and Sports Council

Events organised

The Council organized the Win India 1.0, Pan IIT event on Fitness challenges during March and April 2020, a proactive initiative, which served as a beacon of zeal and hope in the gloomy virtual life of the students.

The Council conducted the IIT BHU Grand Prix (A year-long chess competition) from August 2020 to March 2021.

Freshers On Board (FOB), December 2020, a Chess tournament, was held for all enthused freshers to cater to their cognitive skills.

Quite a few chess conferences and exhibitions were conducted, such as the simultaneous exhibition with IM Erik Kislik and an interactive session with WIM Harshitha Guddanti. They did this to foster a sports culture and feed the yearnings of the students of Sports.

The Council organized fundamental Fitness Challenges in January and February 2021, a cogent incentive to ensure that the students remain fit amidst these testing times.

The flagship event of the Council, Girls Weekend, March 2021 was conducted to serve the mental and physical cravings of the girl students and spur interest among them through a well-devised engrossing set of events which included three mini events, which are, a 3km Walk, 60 second challenges & Women's chess tournament.

A series of Motivational Talks by Shri J P Singh (Basketball coach, Indian Men's team) & Maj Gen (Retd.) PK Sehgal was conducted in January 2021. It was revitalizing. They educated the attendees on the importance of sportsmanship and the prerequisites of success in a sport.

Daily Yoga sessions conducted as a collaborative effort of the Parliament and the Council inspired students to adopt healthy lifestyles and bring an air of serenity to their lives.

Achievements

The members of the Chess Council emerged victorious in the face-off between the two Chess Heavyweights in the Kashi vs Prayag Chess Festival held in March 2021.

The members of the Chess Council participated in the AICL 2.0 (All India Chess League, Pan India chess event), December 2021 and proved their mettle by securing second place among all the IITs and stood fifth in the overall standings.

Science and Technology Council

The Aeromodelling Club hosted some fabulous workshops and events like Gaganyan.

The Astronomy club organised sessions like Astrophotography and Observation of Jupiter Saturn Conjunction over Discord. Events held included a workshop on Black Holes, stars and three quizzes conducted on D2C. The Astronomy club was also able to launch its own static website this year.

The Business club organised workshops on the basics of stock trading, investment and the basics of case solving. A session on microeconomics was conducted by Mr. Aditya, an alumnus of IIT (BHU), who is currently pursuing MBA in IIM-A.

FinFest, a festival which exclusively concentrated on Finance and Economics, was launched by the Finance, Economics and Business Clubs of IIT Bombay, IIT Guwahati, IIT Delhi, IIT Roorkee, and IIT (BHU), Varanasi. FinFest organized numerous workshops, webinars, and

competitions. Prizes worth INR 1.8 lakhs were awarded.

The business club organized a session on the ISB YLP program in collaboration with SAIC. Mr. Piyush Ranjan, an alumnus of 2012, IIT (BHU), addressed all the queries about the program's application process and scholarship.

The Club of Sustainability and Innovation conducted events and competitions like Decipher, Techno conundrum, X Æ A-12, the Fake Investors. Several hands-on workshops pertaining to current technologies and innovation were conducted. These include Neural Style Transfer, Augmented Reality and 3P (Procure-Product Development-Pitch). A Product Management Webinar was also organized by Rakshit Sinha, the Senior Product Manager at Spotify.

The COPS Youtube channel was launched in Oct 2020 by Dev Group to facilitate the conduct of hackathons. The channel organized workshops on Introduction to Infosec, Neural Networks and a GSoC Mentorship program. The latter witnessed 30+ alumni coming together to mentor the students. COPS also launched its meticulously designed institute app and Hackalog. COPS week was organized from the 5th to 12th February. This event witnessed four diversified competitions that included all the domains - NP Compete, Ctrl-Shift Intelligence, DebugIt, WannaHack for the freshmen to help them experience a simulation of COPS and its functioning.

A Github page was created for the Robotics research group - RoboReg. All its projects were open-source ones. A fruitful meeting with IvLabs, one of India's most recognized student-led research groups, discussed projects on AI. Interactive events like iMaze based on Webot Simulation and Vision 2.0, an image-processing-based competition, were organized by the club to facilitate learning about various branches of Robotics.

Apart from covering the fundamentals of automobile engineering, SAE conducted insightful workshops about functionality of engines and their contemporaries, followed by quizzes, thus, expounding the much-needed rudimentary knowledge to an overwhelming crowd of freshers.

Film and Media Council

The Photography club launched 'Varanasi

Album', sharing glimpses of a city we all find ourselves attached to.

A contemporary series, 'Virtuoso', was initiated by the Media Club, exploring the life experiences of some of the most inspiring personalities.

Digital arts workshops featuring eminent personalities like Mr. Vishal Anand (Visual Effects Supervisor), Mr. Satyaprakash Upadhyay (Prominent Documentary Filmmaker), and more were conducted in Dec 2020.

The Outreach Club released Fresher's

Introduction Video, which spiced up the gloomy online semester.

Online workshops on report writing, video editing, and illustrating saw enthusiastic participation from intrigued freshers. Writing, B-roll making, and photography competitions were also organized to test their learnings and skills.

The Cinematography Club and The Animation Club brightened up everyone's mood by delivering a fabulous After Movie and an electrifying Theme Launch Video for the first online edition of FMC

Weekend, which was a major hit! The fascinating workshops conducted by the experts and interesting competitions witnessed tremendous participation from all over the nation. It concluded with a bang, leaving its indelible impact!

Social Services Council

The project 'Healthcare Awareness App' made it into the zonal finals along with 24 teams.

Another project 'Winnovation' and 'Terrific Lights' reached the national finals (top 10 teams from 700+ teams).

Obituary/स्मरण

स्वर्गीय डा. आशीष कुमार सिंह



डॉ आशीष कुमार सिंह का निधन दिनांक 27 अप्रैल 2021 को काशी हिंदू विश्वविद्यालय के सर सुंदरलाल चिकित्सालय में हुआ। उस दिन हमने एक प्रतिभावान कर्मठ एवं सुविज्ञ प्राध्यापक और शोधकर्ता को खो दिया। जिला चुनार के ग्राम गौरा में दिनांक 17.07.78 को जन्मे डॉ आशीष कुमार सिंह ने अपनी स्कूली शिक्षा मिर्जापुर से पूरी की एवं 1998 में यूपी कॉलेज, वाराणसी से वनस्पति विज्ञान और रसायन विज्ञान के साथ बीएससी पूरा किया। उन्होंने 2001 में जैव-रसायन विज्ञान विभाग, बीएचयू से स्नातकोत्तर किया।

डॉ सिंह कुशाग्र बुद्धि थे, आणविक जीव विज्ञान में डॉक्टरेट के लिए सीसीएमबी हैदराबाद गए। 2008 में डॉक्टरेट पूरी करने के बाद डॉक्टर सिंह 2009 तक पोस्ट डॉक्टोरल अध्ययन के लिए मैरीलैंड विश्वविद्यालय चले गए जिसके बाद उन्होंने 2 साल तक यूएसए के नेशनल कैंसर इंस्टीट्यूट में विजिटिंग फेलो के रूप में काम किया। 2014 में

भारत लौटने के पश्चात, उन्होंने जैव प्रौद्योगिकी केंद्र में सहायक प्रोफेसर के रूप में इलाहाबाद विश्वविद्यालय में सेवा प्रारंभ की तथा 2016 में आईआईटी (बीएचयू) में बायो-केमिकल इंजीनियरिंग स्कूल में सहायक प्रोफेसर के पद पर कार्य ग्रहण किया। डॉक्टर सिंह अनेक शोध एवं अनुसंधान परियोजनाओं में शामिल थे।

वे बहुत ही हंसमुख और विनोद प्रिय व्यक्ति थे। उनका सकारात्मक जीवन एवं प्रभावशाली व्यक्तित्व सदैव हमारे हृदय में प्रतिष्ठित रहेगा। हम सभी उनके निधन से शोक संतप्त हैं तथा काशी हिंदू विश्वविद्यालय परिवार के सभी सदस्य उनकी आत्मा की शांति के लिए ईश्वर से प्रार्थना करते हैं एवं इस दुख की घड़ी में हम उनके परिजनों के प्रति अपनी हार्दिक संवेदनाएं अभिव्यक्त करते हैं।

स्वर्गीय श्री एस आनंदनारायण



संस्थान के प्रशासनिक भवन के निदेशक कार्यालय में वरिष्ठ वैयक्तिक सहायक के पद पर कार्यरत श्री एस आनंदनारायण का 24 अप्रैल 2021 को असामयिक निधन हो गया। श्री एस

आनंदनारायण का जन्म 26 मई 1965 को हुआ था। उन्होंने आईटी बीएचयू में 22 नवंबर 1988 को स्टेनोग्राफर के पद पर कार्यभार ग्रहण किया तथा उसके बाद वह डीन, फैकल्टी ऑफ इंजीनियरिंग एंड टेक्नोलॉजी के कार्यालय के साथ संबद्ध रहे। 1 जनवरी 2000 को उन्होंने पर्सनल असिस्टेंट के पद पर कार्य ग्रहण किया और डीन के पीए के रूप में कार्यरत रहे। 1 जुलाई 2014 से वह संस्थान के निदेशक कार्यालय में वरिष्ठ वैयक्तिक सहायक के पद पर कार्यरत थे।

अपने कार्य को पूरी निष्ठा एवं लगन से निभाने वाले सहृदय एवं मृदुभाषी श्री आनंदनारायण अपने सहकर्मियों, वरिष्ठ अधिकारियों एवं संस्थान के सभी सदस्यों में समान रूप से लोकप्रिय थे। कार्यालय में वे कठिन से कठिन कार्यों को भी अत्यंत सहजता से पूरा किया करते थे। जो भी उनके सानिध्य में आता था वह उनके व्यवहार की सादगी और कार्यकुशलता का प्रशंसक हो जाता था। संस्थान के सभी लोग उनके अकस्मात निधन से शोकाकुल हैं और उनकी आत्मा की शांति के लिए ईश्वर से प्रार्थना करते हैं। यह हमारे लिए एक अपूरणीय क्षति है और इस दुख की घड़ी

में हम उनके परिवार के साथ हैं।

स्वर्गीय डॉ. संजय कुमार गुप्ता



संस्थान के सिविल इंजीनियरिंग विभाग के सह-आचार्य एवं संस्थान निर्माण विभाग के अधीक्षण अभियंता डॉ संजय कुमार गुप्ता का 18

मई 2021 को अकस्मात निधन हो गया। उनका जन्म 26 मई 1970 को वाराणसी में हुआ था एवं 1992 में उन्होंने गोरखपुर विश्वविद्यालय से सिविल इंजीनियरिंग में स्नातक की उपाधि प्राप्त की। 1995 में उन्होंने आईएसएम धनबाद से औद्योगिक इंजीनियरिंग और प्रबंधन में मास्टर और 2008 में आईआईटी दिल्ली से एप्लाइड मैकेनिक्स में डॉक्टरेट की उपाधि प्राप्त की।

डॉक्टर गुप्ता ने 1997 में नॉर्थ ईस्टर्न रीजनल इंस्टीट्यूट ऑफ साइंस एंड टेक्नोलॉजी में लेक्चरर के रूप में शामिल होकर अपने शिक्षण करियर की शुरुआत की। 2007 में उन्होंने तत्कालीन आईटी-बीएचयू में सिविल इंजीनियरिंग विभाग में कार्य प्रारंभ किया तथा 17 नवम्बर 2015 से वे सिविल इंजीनियरिंग में एसोसिएट

प्रोफेसर के रूप में कार्यरत थे। उनकी रुचि हाइड्रोलिक और जल संसाधन इंजीनियरिंग के क्षेत्र में थी।

उनके पास व्यापक प्रशासनिक अनुभव था और वे अनेक समितियों के सदस्य भी थे। उन्होंने अपनी जिम्मेदारी को निष्ठा एवं लगन से निभाया तथा संस्थान निर्माण कार्यों से जुड़े एवं अन्य विषयों से संबंधित मुद्दों पर जब संस्थान को उनकी आवश्यकता पड़ी उन्होंने अपना बहुमूल्य योगदान सदैव दिया।

उनके असामयिक निधन से संस्थान परिवार अत्यंत मर्माहत है। हम सब उनकी आत्मा की शांति के लिए ईश्वर से प्रार्थना करते हैं एवं उनके परिजनों के प्रति अपनी हार्दिक संवेदनाएं अभिव्यक्त करते हैं।

स्वर्गीय डॉ. इंद्रजीत चक्रवर्ती



भारतीय प्रौद्योगिकी संस्थान (का.हि.वि.) के मेटलर्जी इंजीनियरिंग विभाग के प्रोफेसर डॉ. इंद्रजीत चक्रवर्ती का दिनांक 14 जून

2021 को निधन हो गया। वे 62 वर्ष के थे। उनके अकस्मात निधन से संस्थान

परिवार शोक संतप्त है। अपने विषय के विद्वान एवं प्रकाशन कार्यों में संलिप्त रहने वाले डॉ. इंद्रजीत चक्रवर्ती का अकस्मात निधन न केवल मेटलर्जी विभाग के लिए बल्कि संस्थान के लिए एक बहुत बड़ी क्षति है।

डॉ. इंद्रजीत चक्रवर्ती का जन्म 27 अक्टूबर 1959 को कोलकाता में हुआ। 12 सितंबर 2007 को वे संस्थान में (तत्कालीन आईटी बीएचयू) रीडर पद पर नियुक्त हुए और 6 फरवरी 2018 को प्रोफेसर पद पर प्रोन्नत हुए। इसके पहले वे बेस्को लिमिटेड कोलकाता, हिंदुस्तान डेवलपमेंट कॉर्पोरेशन, बीजू पटनायक नेशनल स्टील इंस्टीट्यूट में उच्च पदों पर आसीन थे। फाउंड्री मेटलर्जी, वियर ऑफ मेटल्स और मेटल मैट्रिक्स कंपोजिट्स उनके प्रमुख रुचि के क्षेत्र रहे हैं। उन्होंने हमेशा मेटलर्जी विभाग को आगे ले जाने का प्रयास किया।

संस्थान परिवार इस दुख की घड़ी में पूरी संवेदना के साथ उनके परिवार के साथ है। संस्थान के अध्यापकों, अधिकारियों, कर्मचारियों और छात्रों ने डॉ. इंद्रजीत चक्रवर्ती को श्रद्धांजली अर्पित की। हम सब उनकी आत्मा की शांति के लिए ईश्वर से प्रार्थना करते हैं एवं इस दुख की घड़ी में हम उनके परिजनों के प्रति अपनी हार्दिक संवेदनाएं अभिव्यक्त करते हैं।

