BHASKARACHRYA COLLEGE
OF APPLIED SCIENCES
UNIVERSITY OF DELHI

DEPARTMENT OF POLYMER SCIENCE

BAHULAK

DEPARTMENTAL MAGAZINE

VOLUME 3

Polymer Education And Research Liberal Society
PEARLS

2021-22

Presented by

Department of Polymer Science

&

Pearl Society

Index

FROM THE DESK OF THE PRINCIPAL

TEXT here

From the Department

We feel privileged and proud at the release of the third issue of departmental magazine "BAHULAK-3". The department magazine is released every year to informs the world about the activeness of students of Department of Polymer Science and showcase the activities and the achievements of the Department of Polymer Science in academics as well as in extracurricular activities.

The department magazine is summary of various activities like Industrial visits, Academic programs and Socio-Academic events, Seminars etc. organized by the students and for the students during the academic year 2020-21. The Magazine also gives a platform for the students to showcase their breath-taking hidden literary talent, photography skills and artistic skills.

The Department acknowledges the efforts of students, members of departmental society PEARLS and editorial team who made the magazine come to existence along with sincere gratitude to Dr. Balaram Pani, Principal for valuable inputs and suggestions.

We look forward to another exciting issue of the “Bahulak 3” and congratulate the team for the successful release of the same.

Dr Susmita Dey Sadhu
(TIC, Department of Polymer Science, BCAS).

Editor’s Note

TEXT here

FACULTY

S. K. Shukla

Associate Professor

Ph.D. (Gorakhpur Univ.)

Email: **sarojshukla2003@yahoo.co.in**

Area of interest: Polymer Characterization, Conducting Polymers & Biopolymers

Sidhharth Sirohi

Professor

Master of Engineering (Delhi College of Engineering), Ph.D. (IIT Delhi)

Email: siddharth.sirohi@bcas.du.ac.in

Area of interest: RAFT Polymerization, Nanoencapsulation, Miniemulsion Polymerization, Composite Nanofibres

Susmita Dey Sadhu (Teacher-In-Charge)

Associate Professor

Ph.D. (IIT Kharagpur)

Email: **susmitadey.sadhu@bcas.du.ac.in**

Area of interest: Rubber Technology, Nanocomposites & Polymer Blends

Krishna Dutt

Assistant Professor

Ph. D. (CCS Univ., Meerut)

Email: **krishna.dutt@bcas.du.ac.in**

Area of interest: Polymer Recycling

Anil Barak

Assistant Professor

Ph.D. (University of Delhi)

Email: anil.barak@bcas.du.ac.in

Area of interest: Anionic Polymerization

Premlata Meena

Assistant Professor

Ph.D. (University of Delhi)

Email: premlata.meena@bcas.du.ac.in

Area of interest: Inorganic Polymers

Umesh Kumar

Assistant Professor

Ph.D. (University of Delhi)

Email: 92.sharma@gmail.com

Area of Interest: Conducting Polymers

NON-TEACHING STAFF

Mr. Parveen Kumar Yadav
(Lab Assistant)

Mr. Jai Prakash
(Lab Assistant)

Mr. Rajendra Singh
(MTS)

Mr. Dilip Das
(lab Assistant)

Events and visits

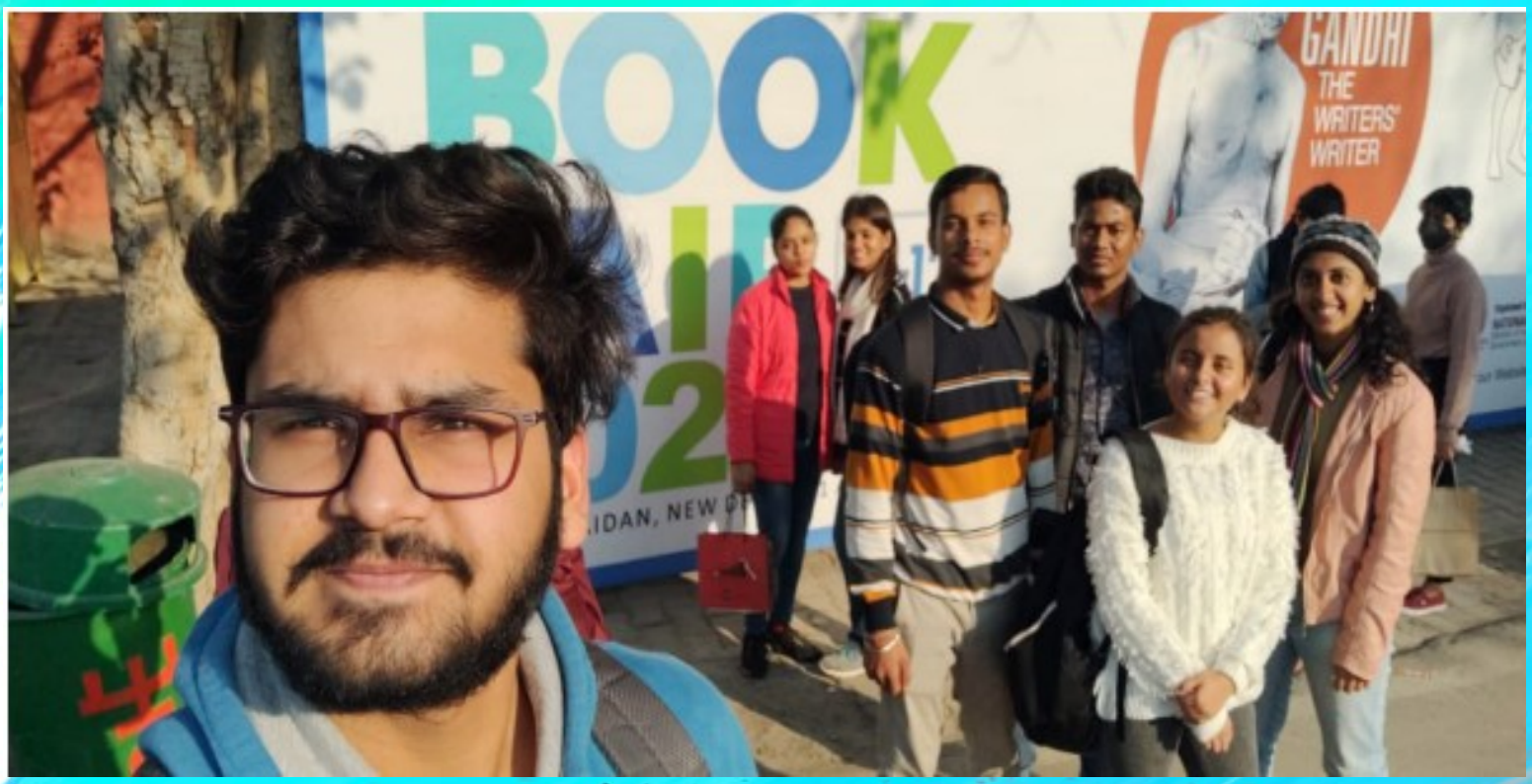
5th International footwear fair

The 2nd and 3rd year students of the department of polymer science went to the footware fair 2019 which was held at pragati maidan New Delhi. The students got the oppurtunity to interact with the leading brand representatives and industry officials. The students were told about industrail techniques of footware production by the officials and they also received product samples from few of the industries. Overall the visit was very insightful for the students.

~Pritish Jain

B.Sc. (Hons.) Polymer Science 2nd year

World Book fair 2020



Department of Polymer Science organized a visit for B. Sc. (Hons.) Polymer Science 2nd& 3rd year students to the world Book fair 2020 held at Pragati Maidan, Delhi during 4-12 January 2020. The students were overwhelmed by seeing piles of books on multidisciplinary topics. They got to know about the publishing house that publishes polymer science books in India. Students got to read various books on polymer science and engineering that were not available in the college library at that time and they got to learn about latest works in polymer Science. Based on their reading experience in the book fair, the students recommend few polymer science books that, according to them, should be added to the college library.

~Pritish Jain

B.Sc. (Hons.) Polymer Science 2nd t year

Swachhta Pledge 2020

On 16 th January, 2020 Polymer Science students, faculty and non - teaching staff took oath for the to maintain cleanliness. Mahatma Gandhi dreamt of an India which was not only free but also clean and developed. Mahatma Gandhi secured freedom for Mother India. Now it is our duty to serve Mother India by keeping the country Neat and clean. The following Swachhata pledge was taken by the concerned:

- I take this pledge that I will remain committed towards cleanliness and devote time for this.
- I will devote I00 hours per year, that is two hours per week, to Voluntarily work for cleanliness.
- I will neither litter nor let others litter.
- I will initiate the quest for cleanliness with myself, my family, my village and my work place.
- I believe that the countries of the world that appear clean are so Because their citizens don’t indulge in littering nor do they allow it to happen.

- With this firm belief, I will propagate the message of Swachh Bharat Mission in villages and towns.
- I will encourage 100 other persons to take this pledge which I am taking today.
- I will endeavor to make them devote their 100 hours for Cleanliness.
- I am confident that every step I take towards cleanliness will help in making my country
clean.

After this event faculty shared their thoughts pertaining to Swachhata with students.

~Satyam Jha

B.Sc. (Hons.) Polymer Science 2nd year

Crosslink 2020

Every year department of polymer science organize departmental fest (crosslink). This fest is celebrated every year in a unique way, In year 2019 departmental fest was organized in the month of february. The fest was organized for three different days with a lot of fun and knowledge.

DAY 1 (3RD FEBRUARY) started with the inaugration session contain lamp lighting, pot distribution and speech by head of the department (Dr. Siddharth siroi) after this all students were guided by some other faculty members and some basic knowledge about polymer field.
Then poster making competition was held and lunch was organized for all the faculty member, students and alumni. In the last the most informative and entertaining session that is alumni meet.

DAY 2 and DAY 3 (4th & 5th FEBRUARY) was all about events, different types of polymer related things like best out out waste with only polymeric material, some tech games like tike the pile and polymer trivia, etc. And more fun and knowledgeable games and competition was there.

There was a street play totally based on polymer. Everyday in our life we are exposed or surrounded by polymeric materials, like right after we wake up we brush our teeth with polymeric material and even throughout the day we use polymer in a lot of ways. Ultimately we are dependent on polymeric materials and to show this our department organizes a street play.

~Inderjit Satyam

B.Sc. (Hons.) Polymer Science 2nd year

Street Play: Plastic Man

This play was scripted and presented by the pearl society during the college fest. This play pointed out the importance of polymers in our daily life. The play also shed light on the fact that banning plastics is not a solution to the problem of plastic pollution because most of the technology around us depends on the production of polymers. The play was really well scripted with very good comic punches as well as quality information.

~Pritish Jain

B.Sc. (Hons.) Polymer Science 2nd year

IIT Delhi Visit

Students of department of polymer science visited department of textile engineering at IITD. They were told about the natural and synthetic polymers that are used to make modern fabrics. They were also told in brief about the post polymerization processing techniques for production of fabrics and yarns. The students were given a campus tour and were shown working of different instruments. The students were also told about the masters programs offered by IITD. Students were told about the projects and internships offered by IITD. This visit motivated the students to pursue further studies thde the field of polymer science.

~ Ms. Mamta Gupta
B.Sc. (Hons.) Polymer Science 3rd Year

National Science Day-2020

Visit to Vigyan Bhawan, Delhi

Department of Polymer Science with two faculty members (Dr. Sidhharth Sirohi & Dr. Anil Barak) and 2- students each from B.Sc. (Hons.) Polymer Science 2nd& 3rd year visited Vigyan Bhawan, Delhi on the occasion of National Science Day 2020 on 28th February, 2020. The theme of the event was “Women in Science”. President of India Shri Ram Nath Kovind presented several awards for science communication and popularization as well as for women scientists.

A total of 21 awards were given which includes National Science and Technology and Communication Awards, Augmenting Writing Skills for Articulating Research (AWSAR) awards, SERB Women Excellence Awards and National Award for Young Woman Showing Excellence Through Application of Technology for Societal Benefits.

Dr. Harsh Vardhan, Minister of Science & Technology, Health and Family Welfare and Earth Sciences graced the occasion with his presence. Eminent scientist Prof. Gagandeep Kang, Director of the Translational Health Science and Technology Institute(THSTI), Faridabad who is first women FRS of India delivered a lecture on the theme of NSD-2020.

~Monika

B.Sc. (Hons.) Polymer Science 1st year

Dr. Sidhharth Sirohi with Prof. Ashutosh Sharma (Secretary, Department of Science and Technology), Dr. Avneesh Mittal, Dr. Meetu Luthra, Dr. Sujata Bhardwaj, Dr. Shikha Srivastava and students of Bhaskaracharya College of Applied Sciences

Industry Visit(Recycling Plant)

A visit on " Recycling plant " was conducted by Nidhi Enterprises at Bawana Delhi on 18 February 2021 Tuesday. This visit was arranged for specially 2nd year students to give practical knowledge about Recycling process.
Total 38 students and 4 faculty members and one lab staff participated in this visit. The main objective of this visit was to make the young mind aware about the wastes and methods of Recycling as well as career opportunities in Recycling plant. The visit on Recycling plant was coordinated by Dr. Susmita Dey Sadhu, Dr. K D , Dr. Prem Lata meena and Dr. Umesh Sharma .

This visit covered the complete Recycling process and techniques. And lecture was delivered by Dr. Susmita Dey Sadhu It was mainly divided in to 2 units.

First unit mainly focused on collection process , waste handling and sorting (manual). Sorting is very important process to separate out different kind of waste and kept in different compartments for ease process.
After that it is cut it in chips which is called shredding or chipping step.

Second unit is important and all other steps done in this unit such as
After shredding it is washed to remove dirt and grease
Then drying is done . After drying blending is done in which some additives (for example carbon black is added for water tank) are added according to products requirement.

After blending it is passes through Extruder (Extrusion is a process in which molten polymer is forced through a shaped die using pressure) Extrusion is useful to generate a stable and homogeneous supply of polymer melt. Now it is converted in to granules.
End product was recycled plastic granules which is used for different purpose such as water tank , plastic chair , Household items and many more.

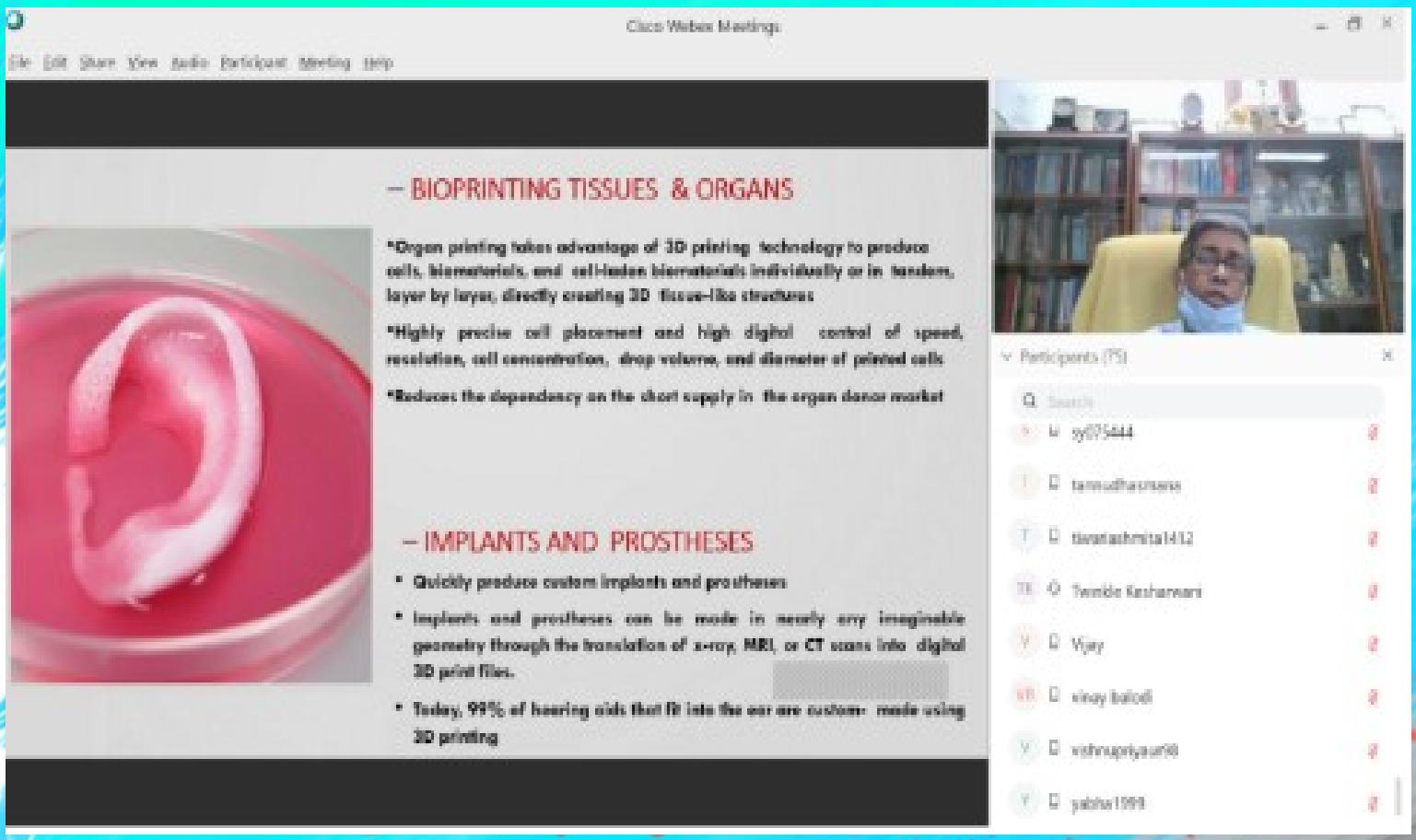
This visit is highly informative and awaring. Really it was a great practical approach to deal with wastes in to useful products.
All students and faculty members enjoyed the informative visit and had a group photographs.
Refreshments were served among students after the visit.

~Mamta Gupta

B.Sc. (Hons.) Polymer Science 3rd year

Webinar Series 2020-21

Webinar-1: Introduction to 3-D Printing

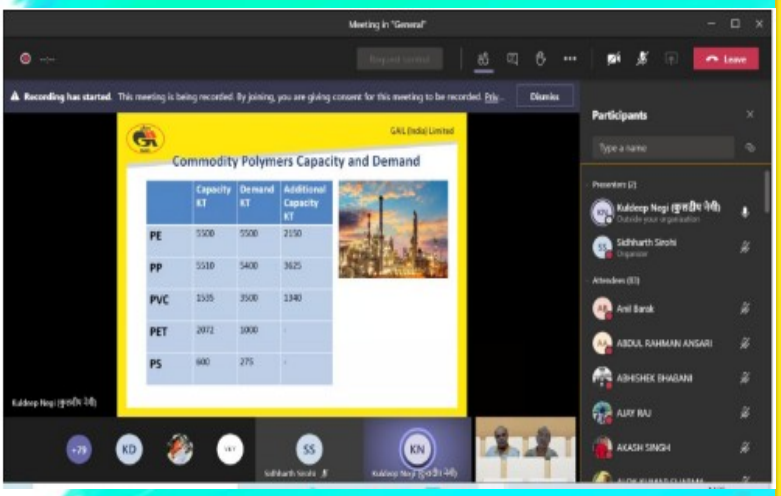


The Department of Polymer Science Bhaskaracharya College of Applied sciences has organized webinar on “Introduction to 3D printing” on 12 May 2020. The resource persons were Dr. A.K. Ghosh and Mr. Saroop Chand The webinar was attended by academicians, and students from other departments of college. The event began with the message from the Principal- Dr. Balaram Pani . The session was delivered by Dr. A.K. Ghosh on introduction to 3D printing and its relevance to industry. He explained the need for 3D printing technology with respect to Industry. He continued the session by explaining the basic concepts and different technology associated with 3D printing. He also explained the various materials that can be processed using 3D printing technology. He described in detail, about the procedure adopted in 3D printing.

~Monika

B.Sc. (Hons.) Polymer Science 1st year

Webinar Series 2020-21
Indian Polymer Market



The 1st national webinar of webinar series was on 10th October, 2020. The invited speaker “Shri Kuldeep negi (DGM (Mktg-GPTC),GAIL(India) ltd.) had spoken about “ Indian polymer industry-opportunities, challenges & the way forward”. More than 85 students and teachers had attended this webinar. He had talked about

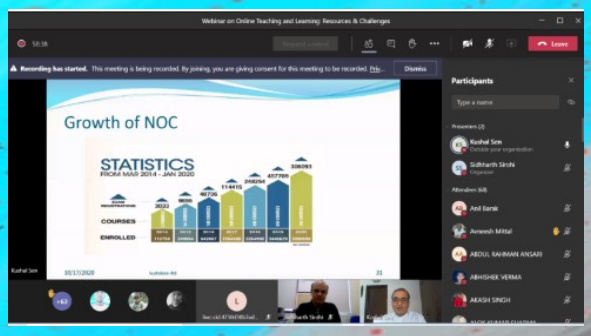
-GAIL,
-Global polymer industry,
-Indian polymer industry,
-polymer producers capacity,plastic processing machines, manufacturing industry
-commodity polymer producers demand, per capita plastic composition,
-Indian PE industry, HDPE/LDPE market segmentation, PE pipes in gas distribution
-market demands of plastics, domestic needs
-government initiatives and schemes
-innovative ideas and technology for future demands.

At the end of knowledgable talk. Question and answer session was started . Many students ask their doubts and sir answer them . at last feedback forms are provided and all partcipants got E-certificate

~Swati Jha
B.Sc. (Hons.) Polymer Science 1st year

Webinar Series 2020-21

Webinar-2: Online Teaching and Learning



Department Polymer Science organized 2nd Webinar of Webinar Series - 2020 on 17th October 2020 via Microsoft Team Platform

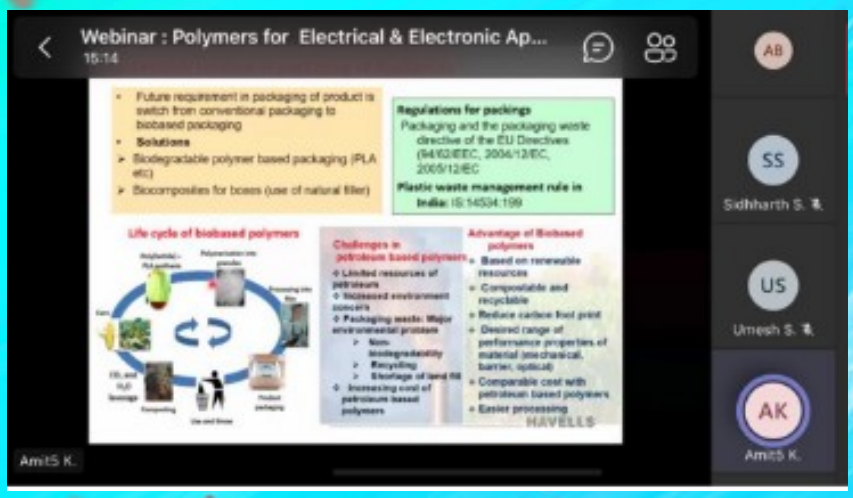
Prof. Kushal Sen (Dept. Textile Technology and Fibre Engineering, IIT Delhi) delivered talk on “Online Teaching and Learning: Resources & Challenges" in the webinar.

The webinar was very effective and informative and the lecture was well delivered, the pace of speech was very gentle. Whenever we say about online teaching it reduces our energy to attend the particular session but there are many ways teacher and students can adopt to avoid such things and for better concentration.

~Inderjit Satyam B.Sc. (Hons.) Polymer Science 2nd year

Webinar Series 2020-21

Webinar-3: Polymers for Electric and Electronic Applications



Department Polymer Science organized 3rd Webinar of the Webinar Series 2020-21 on 29th December 2020 via Microsoft Team Platform.

The lecture was delivered by the Dr. Amit Kumar(DGM Havells India Ltd.) on the topic "Polymers for Electrical & Electronic Appliances". The speaker discussed both the aspects of polymers in electrical application, theoretical as well as the practical or industrial .

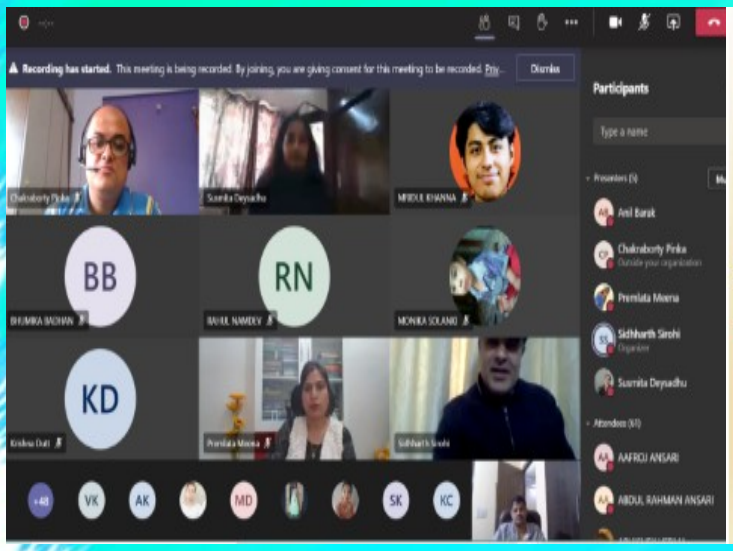
In the beginning he started with some theoretical parts of polymer like which polymer is suitable for what application followed by how those polymers were processed and how the quality of products was controlled by companies in a cost effective manner and what were the major challenges associated with the processing of these material. The speaker also gave a general idea about recycling of polymer. Apart from the commodity plastic he also discussed some speciality Polymer which are used in the electrical appliances and explained the aspects of processing of specialty polymer. He also gave a glimpse into the conducting polymers which are being used in the electrical appliance .

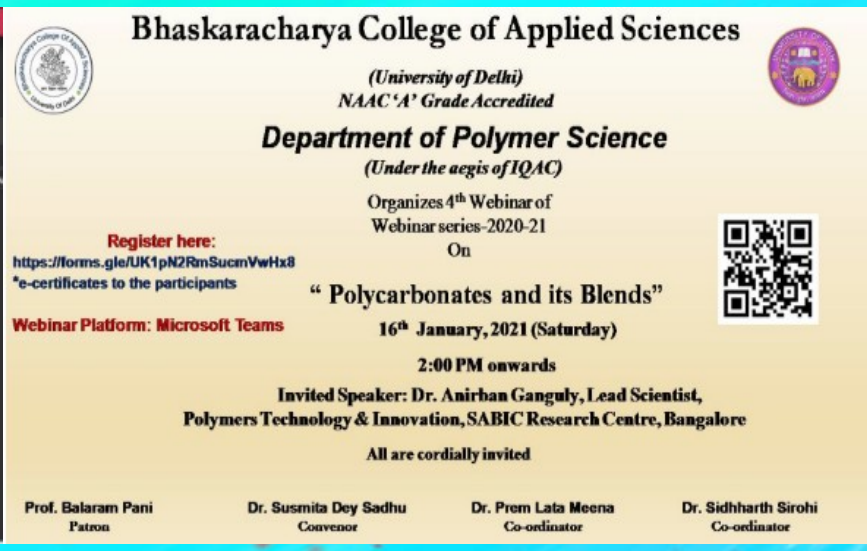
After that he gave a brief idea about industries working channel and how they managed their work and also they gave idea about marketing aspects of products. At the end, a doubt session was held in which lots of students asked their queries. At last, the session concluded by vote of thanks given by Dr. Sidharth sirohi .

~Satyam Jha B.Sc. (Hons.) Polymer Science 2nd year

Webinar Series 2020-21

Webinar-4: Polycarbonate and its blends





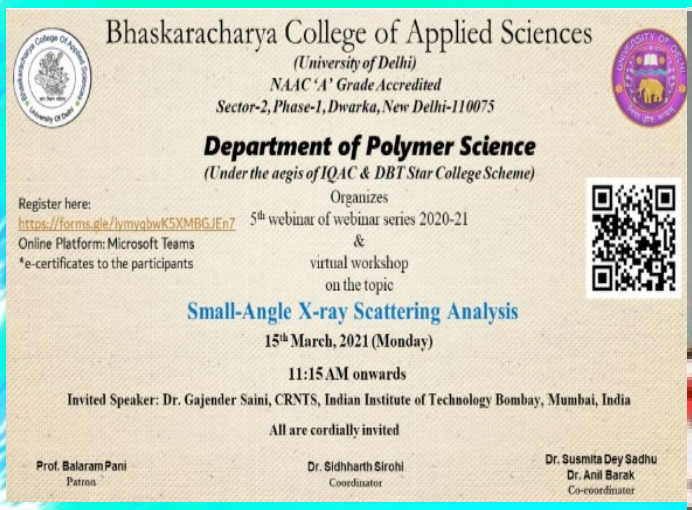
Department of Polymer science organized 4th webinar of webinar series 2020-21 on January 16 2020 via Microsoft Team platform talk was delivered by the Dr. Anirban Ganguly lead scientist of SABIC Banglore on the topic of " Polycarbonate & it's Blend".

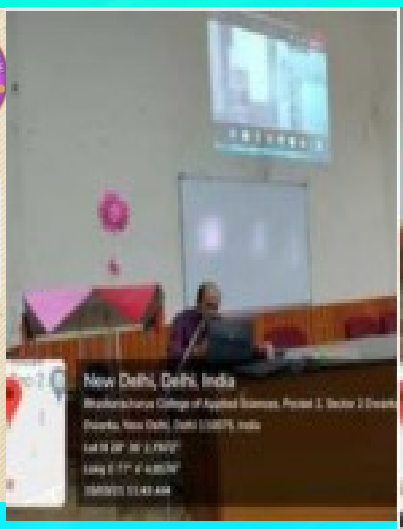
He gave a excellent talk on the topic polycarbonate and it's Blend in which he explained a various aspects of the polycarbonate. First they explained about the basic of Polycarbonate and its industrial name and brief history. Then he described about different grade of Polycarbonates and there trade name. He explained about the effect of bromination and its effect on properties of Polycarbonate. He talked about MFI and different technical aspects of processing of Polycarbonates and compared the high molecular weight PC with the low molecular weight PC and their different applications. He also briefly talked about different type of PC blends and their processing techniques as well as their applications . At last, the vote of thanks was given by Dr. Sidharth sirohi and all the attendees got the participation certificate .

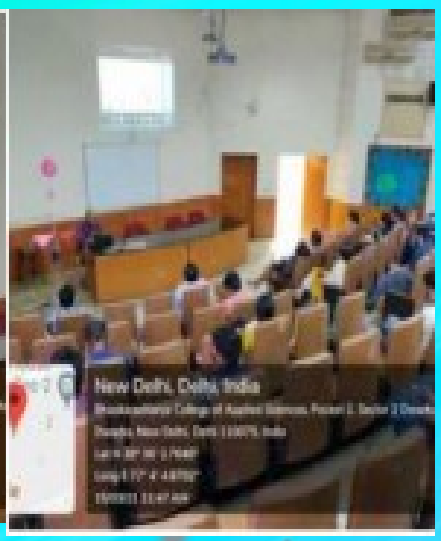
~ Satyam Jha

B.Sc. (Hons.) Polymer Science 2nd year

Webinar-5: Small angle X-Ray Scattering Analysis







Department of Polymer Science conducted the 5th webinar of webinar series 2020-21 & virtual workshop was on the topic "Small-Angle X-ray Scattering Analysis" on March 15, 2021 in blended mode. Dr. Gajender Saini, CRNTS, Indian Institute of Technology Bombay, Mumbai, India was the invited speaker for the event. He talked about the difference between X-Ray scattering and diffraction in brief. He also gave information to the students about the difference between wide angel and small angle X-ray scattering techniques. He pointed out that small angle is used for nanoparticles while the wide-angle scattering can even detect atomic size structure. He told the students about the SAXS apparatus and it's working in brief. He also briefly explained the students about the analysis of the graph, the importance of peaks and the area under the curve. The most important part of the event was that a virtual workshop regarding working of SAXS apparatus was discussed and explained by the speaker and the technicians involved. Overall, the webinar was really good and it gave the students an insight into a very important analytical technique.

~ Pritish Jain B.Sc. (Hons.) Polymer Science 2nd year

Interaction Program for Batch of 2020

The interaction program for batch of 2020-23 was held on 9th January 2021. In this program the first year student were introduced to the teaching faculty of department of polymer science and were told about the various departments as well as the facilities available in the college. The students were told about the various clubs that they can join and the students students that can be contacted to know more about the club activities. .The students were also informed about the sports activities that they can take part in.

Few third year students and first year students sang songs to make the atmosphere lively. At last, all the queries of first year students were solved by the teachers as well as by the senior students and the session was concluded by closing remarks from the teacher in-charge.

~ Pritish Jain B.Sc. (Hons.) Polymer Science 2nd year

Campus Darshan for Batch of 2020

Campus darshan was held on 17th February 2021 for first year students. Students of department of polymer science who were residing in Delhi came to attend this event. The event commenced by introduction of teaching and non teaching faculty. First year students also introduced themselves. Identification cards and library cards were issued to the first year students. The students were given a tour of the three labs and were told about all the instruments related to the course. and give information related to it. The students were also given a tour of the whole college by senior students. The first year students saw:

-The library with large number of books
-open gym
-canteen(not open at that time due to covid guidelines)
-badminton court
-football ground
-cricket ground
-Basketball area
-The greenery and green house.

Some areas were occupied with beautiful flowers which were very attractive. This campus darshan was amazing.

~ Swati

B.Sc. (Hons.) Polymer Science 1st year

Crosslink 2021 and Alumni meet

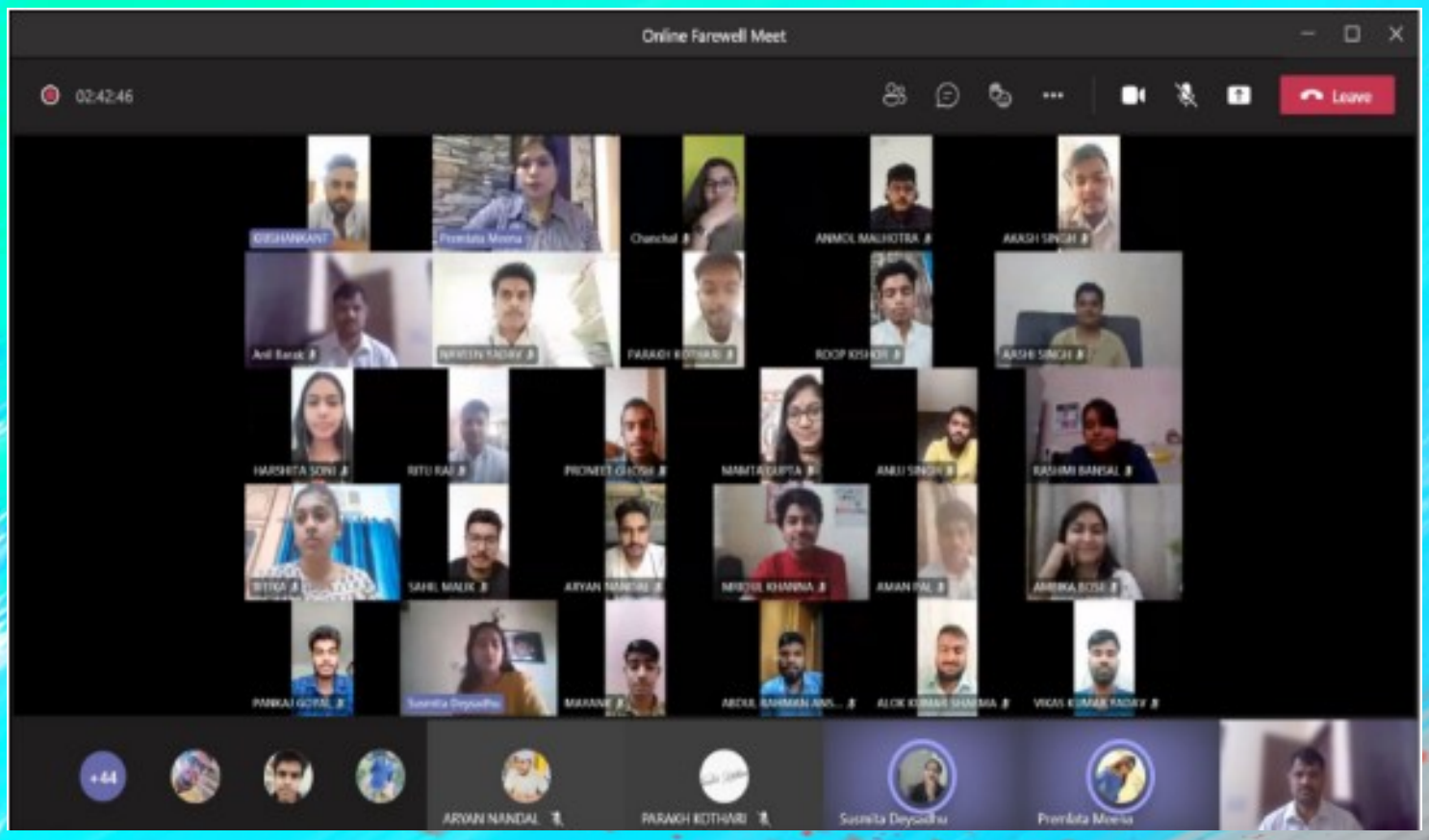
The annual department fest CROSSLINK 2021 was conducted in online mode via Microsoft teams on 1st March 2021 due to the unforseen Covid-19 pandemic. The fest commenced by a small inauguration speech by Dr. Balram Pani and Dr. Siddharth Sirohi followed by two very interesting lectures by the chief guests. The follow-up event was the alumni meet in which the students from the graduated batches shared their experience in the college and their present designation/position/job. The alumni interacted with the current students and solved their queries regarding future prospects in various universities.

The fest concluded with various fun online activities such as polymer hunt, quizerables(rapid fire quize on polymers), Marvel Travia, Crossbridge(crossword), poster making and scrap craft. Top 3 students/groups were awarded with certificate while the winner in each segment was given prize money.

Even if the event was conducted online, it was a huge success as students from various colleges participated in the events and everyone had a total blast.

~ Pritish Jain B.Sc. (Hons.) Polymer Science 2nd year

Farewell Event for Batch of 2018-21



The farewell was organized by the PEARL Society of Department of Polymer Science on 13th April, 2021 to bid goodbye to the outgoing B.Sc. (Hons.) Polymer Science 2018-2021 batch. Due to the COVID-19 norms event was organized in an online mode (through Microsoft Teams) which was coordinated by Dr. Sidhharth Sirohi and Dr. Susmita Dey Sadhu.

In the event there were various segments as under:
Event was inaugurated by Dr. Susmita Dey Sadhu and the event was started with the virtual lightening of the ceremonial lamp amidst the chanting of the Saraswati vandna.
After the inauguration, all faculty (Department of Polymer Science) delivered encouraging speech and shared their experiences with the outgoing batch and motivated students for the future and career. All this filled the outgoing batch with immense pride to be associated with the Polymer Science faculty. It was indeed an inspiring beginning for all the students and teachers,
alike.

Then the ongoing batch students gave a short talk and interacted with teacher and juniors as well.

B.Sc. (Hons.) Polymer Science 1 st Year and 2 nd Year students performed with their unique skills in songs, poetry, jokes etc. which put everyone in the perfect mood and filled them with positive energy for the day.

Then the event progresses with the announcement of students of the year for the batch 2018-21. The student of the year were declared to Mr. Mridul Khanna, (the result was decided according to points achieved by ongoing batch students being voted by 1 st and 2nd year students).

Another segment of the event was “Hall of Fame” award in which some students got this award in accordance to their caliber in various activities.

The program was followed by breath-taking dancing performance performed by 1 st year students.

Further in the program all the outgoing batch students received a title which was based on the quality which relates with any polymer like Mr. Bakelite, Mr. Kevlar etc. In order to make it interesting, there were twist in the segment that outgoing batch had to recognize the person that could best fit in the announced title.

The program was carried forward by an open mic segment wherein most of the outgoing batch students shared their thoughts, experience, advice, mistakes and so on.

Then comes another which is “your signature become our autograph” in which students of 2nd year gave a farewell gift that was a wall of signature to the outgoing batch.

Finally, towards the end of the session, the vote of thanks was given by Dr. Sidhharth Sirohi wherein he addressed the gathering and gave a lighting farewell speech and bid goodbye to the outgoing batch. On that note the event was concluded.

~Satyam Jha

B.Sc. (Hons.) Polymer Science 2nd year

GATE Preparation Classes

PG Entrance/ Gate preparation classes were conducted first time by Department of Polymer Science via online mode through Microsoft Teams during 3rd April to 24thApril, 2021 on weekends. The classes were conducted by Dr. Siddharth Sirohi and Dr. Anil Barak.

The classes were arranged for final year students.Total 15-18 students participated in the classes.

The main objective of Gate preparation classes was to make the students aware about the Gate syllabus, type of questions asked by Entrance examination and smart way to prepare and attempted the new format questions and last but not least career opportunities in polymer science.

The lectures on Gate preparation were delivered by Dr. Siddharth Sirohi and Dr. Anil Barak.

The lectures covered the brief review on B.Sc. (hons.) Polymer ScienceSyllabus coveredin three years of under-graduation and presented new types of conceptual questions asked by Gate Entrance exam.

These classes were very useful to tackle competitive exams faced by students after under-graduation.

~ Ms. Mamta Gupta
B.Sc. (Hons.) Polymer Science 3rd Year

Rhyme box

Its as pretty

You might not see it,
But its as pretty, as a falling flower from a gaunt branch on a windy autumn day.
Its as pretty, as the words we write, and thousands of emotions that remain.
Its as pretty, as temples of the divine, and the devotees who pray.

Sometimes i feel,
You don't wish to see, the prettiness, the beauty that still exists to be,
Things that we know nothing of, things that seem little but hold the power of posieden's seas.
Its as pretty,

As the girl who first held her father's finger, and now leaves his hand.
Its as pretty, as learning to ride a bicycle without any supporting wheels but just a side stand.
Its as pretty, as the castles built once for queens and also the one's made of sand.

Sometimes i see,
That you seek them,
But still close your eyes for when they appear to be,
Things that might give us hope to live on,
Things that may remind us to smile,
Or truly be happy.
Its just as pretty,
As you and me.

~ Aashi Singh
B.Sc.(H) Polymer Science, 1st year

Aasman ki aasha

Ye neela asmaan,
Jo apni dhun gaata hai.
Baarish ki bheegi harkato se ithlata hai,
Apni dhun sunata hai.

Vo bade vishal baadal,
Jo iss asmaan ke chamche hain,
Ussi mien lipat kar, ussi mien simate hain, neele asmaan ke hisse hain.

Ainthte hue ye unche ped,
Jo gusse mien khade hain,
Inhe dar nhi bijliyo ka,
Ye to behti hui mastaani hava ke deewane hain,
Issi ke isharo par chalte hain.

Meri chaar diwari ke jharokho se,
Ye samaa garam dhoop ke jaise tapakta hai,
Kabhi garajta hai, kabhi barasta hai,
Mujhe apni haalat batata hai.

Koi puchhta nhi hai isse,
Sab sirf koste hain.
Koi dhoop ke aagman ko rota hai,
Koi chale jaane ko kehte hain.

Kuchh to keh rha hai ye mausam,
Jaane kyu aisa lagta hai.
Mai koshish to kar hi rhi hu,
Kya ye baat ye samajhta hai?

Koi aur bhi sune to,
Ye baarish kya gaa rhi hai?
Koi aur bhi puche to,
Kiski kahani bata rhi hai.

Sunti hu mai, ye dhun,
Jo neela asmaan aur uske dost gaate hain.
Ek mai hi to hu,
Jisse ye apni baat keh pate hain.

~ Aashi Singh B.Sc.(H) Polymer Science, 1st year

The Eagle

In my dreams,
I fly like an eagle,
Always high
Above the sky,
Not afraid of thunderbolt
As they fly beyond the cloud
Not like a parrot,
Copying everything
Said by human being,
But like an eagle,
Don't utter a single name
But focus always on aim.

~Satyam Jha,
B.Sc.(H) Polymer science, 2nd year

ARTICLES

AN EXISTENCE COMPLETE OF PLASTICS

(By Anmol Malhotra)

Humankind has quickly turned out to be hooked on plastic. In simply over 70 years, we have gone a long way from living a life with extraordinarily restricted use of plastics to plastic in nearly everything. Even your automobile is about 25 percent plastic!

Plastic has infiltrated our lives due to its precise properties: the reality that it may be freely molded even as warm and after which it can hold its form whilst cool has allowed the enterprise to come up with countless varieties of uses. Also, exceptional styles of plastic hold exceptional tiers of tension whilst cool - that is why plastic may be as skinny and bendy as plastic wrap or as strong and inflexible as the automobile's bumper.

This is why we produce 20 times as much plastic nowadays as we did about 50 years ago.

Given the insidiousness of plastic, what could show up in case we attempted to stay plastic-free? Well, one individual did precisely the equal

Environment is a blogger running the website "Living Plastic Free". In an interview with her, she stated that she has finished 2 complete years of residing with the pledge to deliver no new plastic into her existence. Her total plastic waste for 2010 totals to a mere of .50 kilograms, or simply below 1 pound. While Environment lives a way of life that won't be attractive to all folks (as she is a vegetarian who has been inclined to surrender her automobile to keep away from plastic), she is an instance of what we can do to restrict our plastic consumption. In the end, she also states that she's now in her best health than ever along with the planet but her kids have also discovered a few precious training about being aware and accountable clients.

While maximum folks won't need to move as a long way as this woman, she does display that it miles viable to stay an affordable way of life with inside the center of a big city while not having to shop for or personal plastic yourself.

Here are some few Tips to reuse, lessen and recycle non-biodegradable Plastics:

1) **CONSIDER PACKAGING**:- When shopping for meals or client goods, it's recommended that you pick the merchandise with recyclable or reusable packaging, which includes plastic or glass jars. If that's now no longer viable, pick the product with the least packaging. For instance, if one set of electronic devices are available in a plastic shell and some other in a cardboard box or minimum plastic wrapping, pick the latter. At the workplace or home, purchase reams of paper packaged in paper and cardboard, now no longer plastic.

2) **USE CLOTH ITEMS**- use material towels, napkins, and rags for cleaning and ingesting, and reusable luggage—especially material luggage, for shopping, picnicking, and transporting objects. To lessen waste, even more, split vintage garments for rags and napkins and reduce raggedy tub towels into hand towels in place of shopping for new ones. We may even stitch our personal reusable luggage from pieces of denim or canvas.

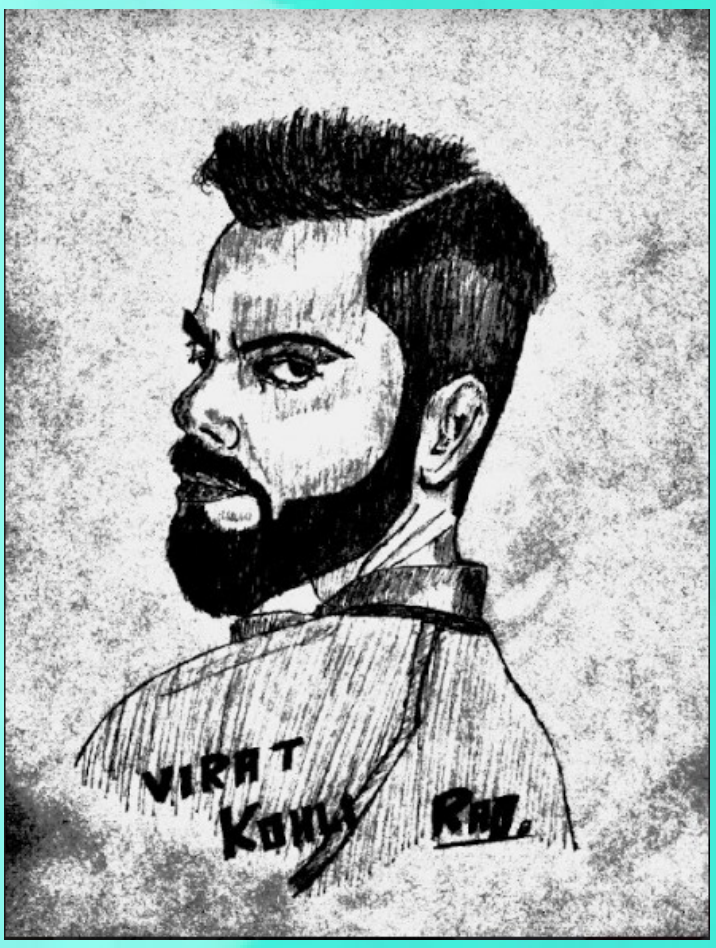
3) **COVER AND STORE LEFTOVERS IN REUSABLE CONTAINERS:**- Don't purchase aluminium foil, plastic wrap, or waxed paper. Use glass or plastic bins with lids to save leftovers. Rather than moving meals from serving dishes into garbage bins since you'll consume it within the subsequent day or two, put a plate over the pinnacle of the plate or bowl and place it properly into the refrigerator.

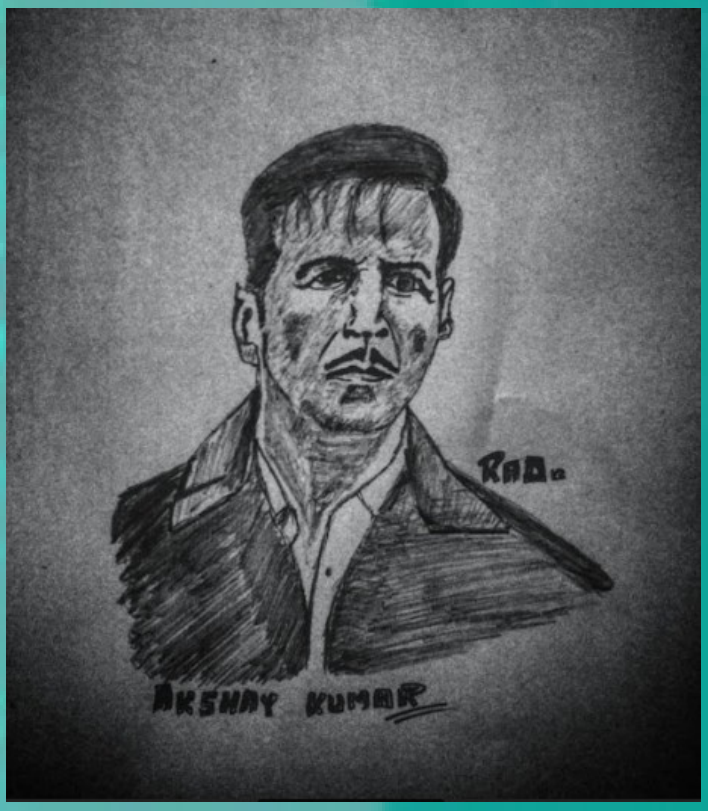
4) **BUY IN BULK**- shopping for objects like cereals and grains the most important thing to be kept in mind is to lessen packaging waste. Many grocery shops have a bulk objects phase in which one may purchase the precise quantities of grains, cereals, and many others. Bring your personal reusable luggage to the shop for bulk goods.

5) **REUSE FOOD JARS FOR DRY STORAGE-** When you get your bulk purchases home, shield them for a long-time period with the aid of using move them to plastic or glass meals bins that you have saved. Put objects you'll use with inside the following couple of weeks, which include cereal, in plastic bins like big dairy bins. Store spices in child meals or different small jars. To get rid of odors from jars one may propose reusing them, it's recommended washing them with warm water and white vinegar or maybe permitting them to take a sit down in a single day with the aggregate earlier than rinsing.

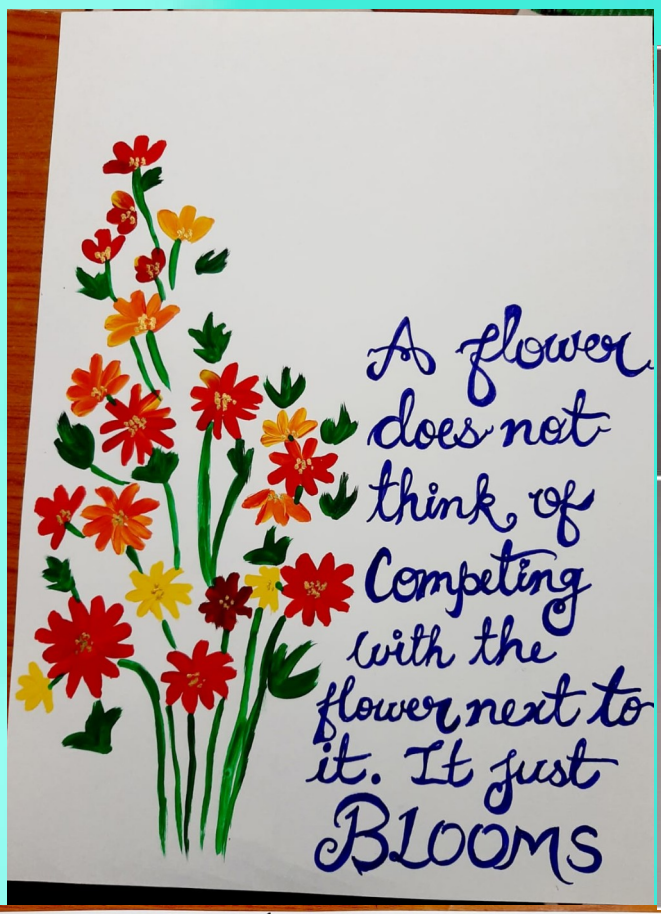
Many human beings consider that plastics have to be banned given that it's constantly inflicting harm to earth however now no longer all of that is true, it isn't the plastic it's us who's inflicting harm by neglecting our obligations/responsibilities with not properly disposing of it, recycling it and burning it. If we turn out to be responsible enough we can shield our planet.

WORK OF ART





By Shubam yadav (Rao)
Polymer Science,3rd year



By Mamta Gupta
Polymer Science,3rd year

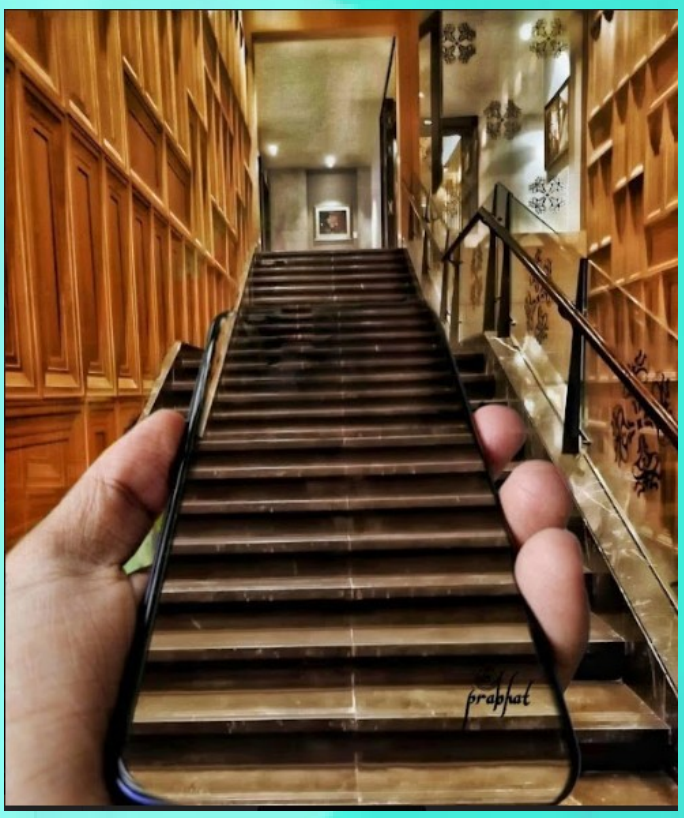
By Anuj Pal
Polymer Science,2nd year

By Shiva
Polymer Science,2nd year

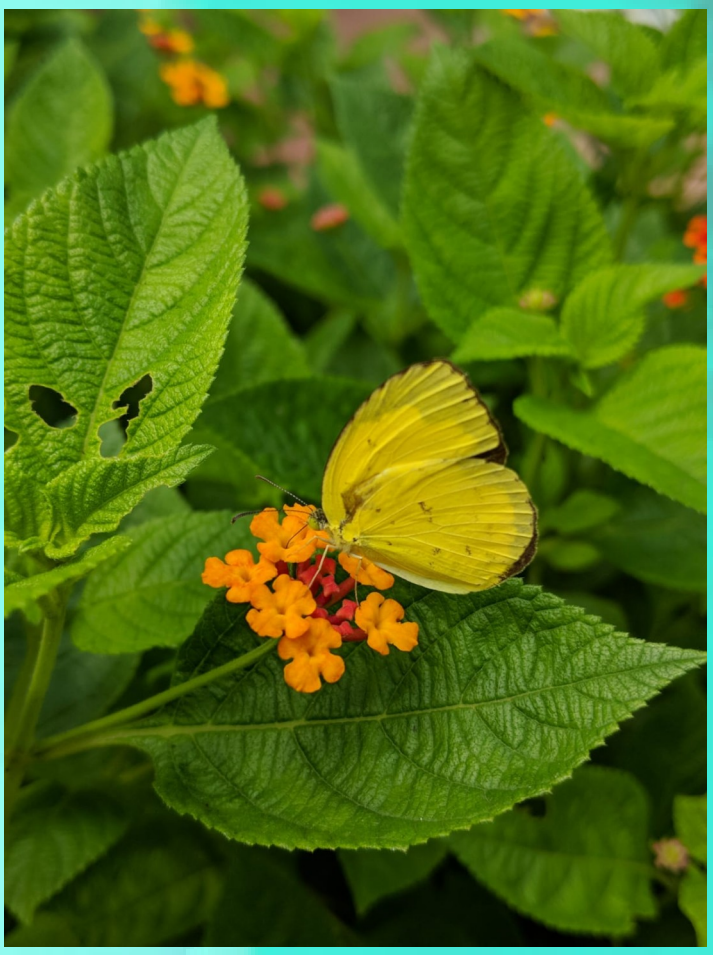
By Swati
Polymer Science,1st year

PHOTOGRAPHY

Cover photo credits: Pritish Jain,
department of polymer sciences, 2nd year



By Prabhat
Polymer Science, 3rd year



By Mridul Khanna
Polymer Science, 3rd year

By Pritish Jain
Polymer Science, 2nd year

STUDENT'S ACHIEVEMENTS


SUPERIOR URBA

CERTIFICATE

2nd Place

The 2021 "Make the Case"
Student Team Case Study Competition

Showcasing high-impact initiatives that prevent plastic waste **in India**

Presented on the 30th day of March, 2021

Certificate of Excellence

Team Name: **The Polytopes**

Institution: **Bhaskaracharya College of Applied Sciences, Delhi University**

Stakeholder: **Bharat Petroleum Corporation Limited**

Team Members
Mridul Khanna
Anmol Malhotra
Ankush Koundal
Pritish Jain

Main Sponsor Chellaram Foundation

Rob Steir
Commitments Accelerator For Plastic Pollution

Ajit Parulekar
Goa Institute of Management

Shri Hariram Thakkar
Indian Plastics Institute

Student's Name	Year	Achievements
Komal,Jyoti Dahiya, Ashmita Tiwari, Nitika	Batch 2017-2020	Secured 1st position in cricket interdepartmental tournament 2019
Ritika,Smriti, Chanchal Jangra,Ambika Bose	3rd Year	
Riya Bisht, Ujala , Chetna Thakur	2nd year	
Chetan Mishra	Batch 2017-2020	Secured 1st position in football in interdepartmental tournament 2019
Shubhanshu Singh, Amit Yadav	3rd year	
Inderjeet Satyam, Vaibhav Joshi	2nd year	
Komal , Juhi Gupta and Chanchal Jangra	Batch 2017- 2020 and 3rd year	Brought college at 9th rank in Chess among all Delhi University colleges.
Komal, Juhi Gupta	Batch 2017-2020	Secured 1st position in chess interdepartmental tournament 2019.
Chanchal Jangra	3rd Year	
Sachin Yadav, Adesh Gupta	Batch 2017-2020	Secured 1st position in Relay race of sports day tournament 2020.
Shubhanshu Singh, Shubham Rao	3rd year	
Ritika , Harshita Soni	3rd year	Secured 2nd position in table tennis (doubles) in interdepartmental tournament 2019.

Student's Name	Year	Achievements
Shubham rao	3rd year	Secure 1st position in race of 400m and 2nd position in 1500m of sports day tournament.
Ritika	3rd year	Secured 2nd position in table tennis (single) in interdepartmental tournament.
Mridul Khanna, Pritish Jain	2nd year, 3rd year	Finalist U-21 Rise Awards 2019.
Mridul Khanna, Anmol Malhotra, Pritish Jain, Ankush Koundal	3rd year and 2nd year students	2nd position in CAPP Make the case competition 2020
Sachin Yadav, Sailesh Juyal, Piyush Kaushik	Batch 2017-2020	Best poster presentation award In national conference on relationship between chemicals and society at department of chemistry shivaji college
Adesh Gupta	Batch 2017-2020	Vice President, ECA Committee in 2019.
Maanvi Bhutan	Batch 2017-2020	Secretary, ECA Committee & Vice President (Rage-The Dance Society).

Student's Name	Year	Achievements
Ankun Goyal	Batch 2017-2020	Treasurer, ECA Committee & Secured 2nd position in photography competition in Episteme - instrumentation departmental fest.
Komal	Batch 2017-2020	Coordinator in event management, ECA Committee.
Ritika	3rd year	Technical head, ECA Committee.
Juhi Gupta	Batch 2017-2020	Treasurer, Akriti - Fine arts Club.
Rahul Sehrawat , Priyansh Malhotra	Batch 2017-2020	Secured 1st position in Polymer trivia quiz competition in Crosslink'20.
Krishna yadav, Sachin yadav, Arun, Nitika	Batch 2017-2020	Secured 1st prize Finding Fanny treasure hunt(tech game) in Crosslink'20
Arun	Batch 2017-2020	Secured 1st position in quiz competition in Chemical Carnival'20.
Anmol Malhotra	3rd year	
Nitika	Batch 2017 2020	Secured 1st position in photography competition in Episteme'20.
Inderjit Satyam	2nd year	Volleyball competition
Monika Solanki	1st year	Singing competition

Student's Name	Year	Achievements
Chanchal Jangra, Shubham rao	3rd year	Secured 2nd position in Polymer trivia quiz competition in Crosslink'20.
Shubham Singh	Batch 2017-2020	President of Akriti – Fine arts club. Secured 1st position in Inter- DU sketching 2019 competition and 1st position in eco club drawing competition.
Vivek Gautam, Swati Kumari,Mamta Gupta	1st year, 1st year, 3rd year	Poster making competition 2021(anti-tobacco cell)
Palak Oberoi	1st year	Essay writing 2021 (anti tobacco cell)

NSS

Year	Student's Name
2nd year	Mayank , Ayushi,Chetna, Sachin, Kritika
1st year	Aman, Monika,Ujjjwal,Aashi Singh,Prasant, Vivek, Nitish, Lakshay, Shashank, Md Usman, Vinit

Women empowerment cell of BCAS

Year	Student's Name
3r year	Ritika, Ambika Bose
1st year	Bhumika Badhan, Aashi Singh, Karuna

Students in societies and clubs

Society	Year	Student's Name
Akriti Fine arts society	2nd year	Shiva
	1st year	Bhumika Bandhan, Swati
Astronomy club	1st year	Aman Kumar, Srijan, Bhumika Bandhan, Monika,Kajal, Ujjwal Kumar,Karuna, Prasant,Khushboo, Gourav, Nitish, Shashank,Vinit, Dhruv
Ateleir	1st year	Palak
Clickerati Photography Club	3rd year	Mridul Khanna , Ritika
	2nd year	Pritish , Sushil, Riya
Confianza Debate club	1st year	Srijan
Darpan Drama society	2nd year	Manish, Shivam
	1st year	Aashi Singh,
Film Club	1st year	Gorav, Swati
Moksha Music society	3rd year	Mridul Khanna, Naveen Yadav
	2nd year	Vaibhav Joshi
	1st year	Aashi Singh, Md Usman, Bhumika Badhan
Rage Dance society	3rd year	Krishan Kant
	1st year	Swati

Student participation in project and internships

Name	Batch	Institution / company	Brief description
Mr. Sunil Choudhary	2017-20	APPL industries limited	Successfully completed 45 day (From 25th May - 10th July 2018) internship
Ms. Komal Gupta	2017 -20	IIT Delhi	Successfully completed project work (19 Dec 2019 – 03 Jan 2020) under Dr. Bhanu Nandan(Dept. of textile and fibre engineering) on the topic “electrospinning of polymer “
Mr. Sahil Malik	2018-21	UMEED (NGO)	Successfully completed 30 day (01/06/2019-30/06/ 2019) internship .
Mr. Ankun Goyal , Mr. Sachin Yadav,Ms. Manvi Bhutani, Ms.Pariksha Gupta	2017-20	Indian rubber manufacturing research association (IRMRA)	Successfully completed their project entitled “Evaluation of castor and modified castor oil as a medium for dispersion of nano-clay “ (24 May – 25 July 2019)

Student participation in project and internships

Name	Batch	Institution / company	Brief description
Mr . Anmol Malhotra Ms Smriti Anand	2018 - 20	Bhaskaracharya college of applied science	They did the project work entitled “ synthesis and characterization of graphene quantum dot “under Dr. Sidharth Sirohi
Ms. Komal Gupta	2017-20	Bhaskaracharya college of applied science	Successfully completed the project work under Dr. Sidharth Sirohi on the topic of “ silver nanoprism for selective and sensitive detection of mercury(II) ions”

ALUMNI WALL

Background Art Credit: Priya Sharma, Department of Polymer Science, 1st year

ALUMNI OF BATCH 2017-2020

ANKUN GOYAL
Year of Passing: - 2020
Current Designation: -
Preparing for UPSC - CSE

SHUBHAM SAINI
Year of Passing: - 2020
Current Designation: -
Preparing for Govt. Exam

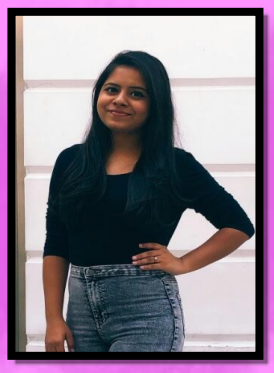
YUVRAJ NAMAN
Year of Passing: - 2020
Current Designation: - Preparing for Govt. Exam (SSC-CGL).

ADESH GUPTA
Year of Passing: - 2020
Current Designation: -
Preparing for Govt. Exam.

RAHUL SEHRAWAT
Year of Passing: - 2020
Current Designation: -
Preparing for Govt. Exam

MAANVI BHUTANI
Year of Passing: - 2020
Current Designation: - Post Graduation Diploma in Packaging (PGDP) from Indian Institute of Packaging (IIP), Delhi.

ALUMNI OF BATCH 2017-2020



JUHI
Year of Passing: - 2020
Current Designation: - Masters in Advanced Materials Innovative Recycling from University of Bordeaux, France

PIYUSH KAUSHIK
Year of Passing: - 2020
Current Designation: - M.Sc in Chemistry (Specialization in Polymer Science) From Chaudhary Charan Singh University (CCS), Meerut.

SACHIN YADAV
Year of Passing: - 2020
Current Designation: - M.Sc in Environment Management from Forest Research Institute (FRI), Dehradun.

ADARSH PRATAP SINGH
Year of Passing: - 2020
Current Designation: - M.Sc in Chemistry (Specialization in Polymer Science) from Chaudhary Charan Singh University (CCS), Meerut.

PRIKSHA GUPTA
Year of Passing: - 2020
Current Designation: - Post Graduation Diploma in Packaging (PGDP) from IIP, Mumbai.

JYOTI DAHIYA
Year of Passing: - 2020
Current Designation: - Preparing for Govt. Exam

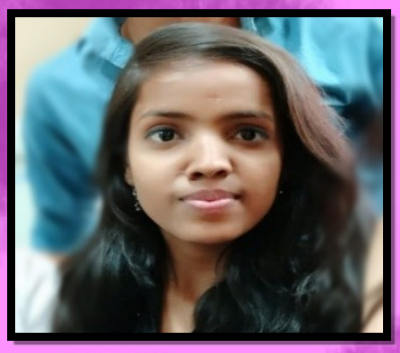
ALUMNI OF BATCH 2017-2020

RIDDHI DHAWAN
Year of Passing: - 2020
Current Designation: - Masters in Advanced Materials Innovative Recycling from University of Bordeaux, France

BENJAMIN LEONARD J.
Year of Passing: - 2020
Current Designation: - Preparing for Govt. Job , also employed as Video Editor for a company in Mumbai.

KRISHNA YADAV
Year of Passing: - 2020
Current Designation: - Preparing for Govt. Job.

HITESH DUGGAL
Year of Passing: - 2020
Current Designation: - Masters in Advanced Materials Innovative Recycling from University of Bordeaux, France



KOMAL
Year of Passing: - 2020
Current Designation: - MBA in International Business from Jamia Millia Islamia University.

NITIN
Year of Passing: - 2020
Current Designation: - M.Sc Chemistry Specialization in Polymer Science from Chaudhary Charan Singh (CCS) University.

ALUMNI OF BATCH 2017-2020

Manish
Year of Passing: - 2020
Current Designation: - M.Sc in Chemsitry(specialization in Polymer Science) from CCS University, Meerut.

Sunil Chaudhary
Year of Passing: - 2020
Current Designation: - Masters in Polymer Science from [Technical University, Humboldt University, Free University, Potsdam University in Berlin, Germany.

NITIKA
Year of Passing: - 2020
Current Designation: - preparing for Govt. Exam

ANKIT KUMAR
Year of Passing: - 2020
Current Designation: - preparing for Govt. Exam (SSC-CGL).

AKASH YADAV
Year of Passing: - 2020
Current Designation:- preparing for Govt. Exam (UPSC, CDSE).

ASHMITA TIWARI
Year of Passing: - 2020
Current Designation:- preparing for Govt. Job

ALUMNI OF BATCH 2017-2020

SUMIT PAL
Year of Passing: - 2020
Current Designation: Preparation for Government job

SHIVA
Year of Passing: - 2020
Current Designation:- preparing for Govt. Exam.

DHEERAJ RAM
Year of Passing: - 2020
Current Designation:- M.Sc in Chemsitry (specialization in Polymer Science) from CCS University, Meerut.

AJAY NEGI
Year of Passing: - 2020
Current Designation:- preparing for Govt. Exam.

ALUMNI OF BATCH 2018-2021

Mridul khanna
Year of Passing: - 2021
Current Designation: M.SC (polymer sc.)
From CIPET Bhubaneswar

Anuj Singh
Year of Passing: - 2021
Current Designation:- M.SC (polymer sc.)
From CIPET Bhubaneswar

Shivam Kushwaha
Year of Passing: - 2021
Current Designation: M.SC (polymer sc.)
From CIPET Bhubaneswar

Krishna kant
Year of Passing: - 2021
Current Designation: M.SC (polymer sc.)
From CIPET Bhubaneswar

Anmol Malhotra
Year of Passing: - 2021
Current Designation: M.SC. (material sc.)
From Sardar Patel university , Gujarat

Naveen Yadav
Year of Passing: - 2021
Current Designation: PGDP
From IIP mumbai

ALUMNI OF BATCH 2018-2021

Akash
Year of Passing: - 2021
Current Designation: M.SC (polymer sc.)
From University of Miskolc , Hungary

Proneet Ghosh
Year of Passing: - 2021
Current Designation: M.SC (polymer sc.)
From University of Miskolc , Hungary

Smriti Anand
Year of Passing: - 2021
Current Designation: M.SC (polymer sc.)
From University of Miskolc , Hungary

Shubhanshu Singh
Year of Passing: - 2021
Current Designation: M.SC (polymer sc.)
From University of Miskolc , Hungary

Chanchal Jhangara
Year of Passing: - 2021
Current Designation:- M.SC (polymer sc.)
From CIPET Ahmedabad

Ambika Bose
Year of Passing: - 2021
Current Designation:
Preparation for Entrance

ALUMNI OF BATCH 2018-2021

Parakh Kothari
Year of Passing: - 2021
Current Designation: Working at Shankar Rubber Industries

Raghav Singhal
Year of Passing: - 2021
Current Designation: general competition

Roop Kishor
Year of Passing: - 2021
Current Designation:working at Concentrix as agent

TEAM BAHULAK

FACULTY COORDINATORS

Prof. Siddharth Sirohi

Dr. Anil Barak

STUDENT COORDINATORS

Anmol Malhotra

Mridul Khanna

Naveen Yadav

Ritika Sharma

Pawan Gupta

Ambika Bose

Mamta Gupta

Inderjit Satyam

Pritish Jain

Satyam Jha

Swati Jha

Monika Solanki

Batch 2017-2020

Batch 2018-2021

For further information and details visit:
https//polybcas.blogspot.com

Bhaskaracharya College of Applied Sciences,
University of Delhi
Sector – 2, Dwarka, New Delhi, 110075
Contact – 011-25087597