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# PRINCIPAL'S MESSAGE

It gives me great pleasure to present to you La Voice - KMC's official newsletter. La Voice is a great platform for college societies and departments to showcase the myriad of activities they carry out throughout the year. The dedicated section on faculty publication is a testament to the academic prowess of the institution. The cover page and design of the newsletter deserve special mention as they are meticulously made by our team of students, thus bearing witness to their talent and skill.

I congratulate the entire team of La Voice for their hard work and dedication, which has resulted in the fruition of their endeavour in the form of this e-newsletter.

My best wishes to team La Voice!

- PROF. DINESH KHATTAR,
PRINCIPAL OF KIRORI MAL COLLEGE





# **CONVENOR'S MESSAGE**

I am extremely delighted to present to you this edition of La Voice. The pressing need for a monthly newsletter is inevitable owing to the vibrant nature of Kirori Mal College. Our departments and societies undertake a diverse array of academic and student-centric events throughout the year, and the pages that follow chronicle this beautiful vibrancy of the institution.

Some new sections have been added, starting from the August 2023 edition, in an endeavour to make the newsletter more diverse in its content; short stories, comics, etc. These will be published throughout the upcoming editions. I hope these will make the reading experience more enjoyable for our dear readers.

I would like to thank the entire faculty editorial board, for making this issue of the newsletter possible, through their relentless and indefatigable support. Special thanks also to the student team for their dedicated efforts.

Wish you an enjoyable reading!

 MS. SUKANYA TIKADAR, CONVENOR, LA VOICE



# FACULTY EDITORIAL BOARD



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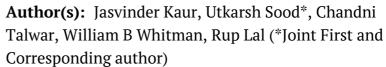
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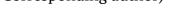


# **PUBLICATIONS**

# IN THE MONTH OF AUGUST

#### **RESEARCH PAPER**







DR. UTKARSH SOOD
DEPARTMENT OF ZOOLOGY

Article title: Phylogenomics-based reclassifications in the genus Psychrobacter including emended descriptions of Psychrobacter pacificensis, Psychrobacter proteolyticus and Psychrobacter submarine

Journal name: Antonie van Leeuwenhoek

Volume: In press Issue: In press Page no: In press

Month and Year: August, 2023



DR. LEENA SHAKYA DEPARTMENT OF BOTANY

#### **RESEARCH PAPER**

**Author(s):** Dr. Leena Shakya, Dr. Ram Babu, Dr. Archana Singh, Srishti Dhiman, Dr. Sunil Kumar Dhiman

**Article title**: Vermitechnology: A Sustainable Approach to Manage Organic Waste in Urban Areas

Journal name: International Journal of Current

Science Research and Review

Volume: 6 Issue: 08 Page no: 5373-5380

Month, Year: August 2023



DR. ARCHANA SINGH DEPARTMENT OF BOTANY



# MOMENT OF PRIDE FOR KMC FAMILY

THE ENTIRE TEAM OF LÁ VOICE CONGRATULATES
PRINCIPAL PROF. DINESH KHATTAR ON BEING
APPOINTED AS THE TREASURER FOR DUPA – DELHI
UNIVERSITY PRINCIPALS' ASSOCIATION





# **G20 CULTURAL AND ACADEMIC PROGRAMMES**

As India gears up to host the prestigious G20 event, a gathering of leaders from the world's most influential economies, there is an innovative initiative led by the University of Delhi's Cultural Council to add to this fervour of G20.

On August 23rd, the Vice Chancellor of the University of Delhi assigned each of the 18 participating colleges a specific nation to represent. The aim was to illuminate the cultural wealth and significance of each country, in a bid to celebrate the rich diversity within G20 member countries.

Kirori Mal College has been entrusted with the task of spotlighting Australia's profound cultural heritage and its global significance. With its reputation for a vibrant and diverse culture, Australia promises to be a captivating subject for exploration. The college is currently working tirelessly to infuse the spirit of Australia into their event, and their preparations are in full swing.

Through this groundbreaking initiative, the University of Delhi's Cultural Council underscores the immense potential of cultural exchange in enriching and strengthening international relations on a grand scale.



# **ORIENTATION DAY**

# **15TH AUGUST 2023**



Kirori Mal College, University of Delhi, hosted its Orientation Programme to welcome the new batch of first years to the academic session 2023-24 on 15th August, 2023 at the Ashoka Lawn.

The programme began with the lighting of the lamp and the National Anthem, followed by the felicitation of the honourable guests. The august gathering was addressed by Prof. Dinesh Khattar, Principal, Kirori Mal College followed by the guest of honour Prof. Rajni Abbi, Proctor, University of Delhi, and Chief Guest Shri. Chandra Wadhwa, Chairman, GB, Kirori Mal College.

The audience was brimming with bright faces of enthusiasm and curiosity, which added to the luster of the evening. After the welcoming remark by the distinguished guests, the official college logo was released followed by the release of La Voice, the college newsletter.

The subsequent section of the programme entailed an overview of the college, followed by a showcase of the cultural societies and sports facilities of the college. Thereafter, block representatives from the college presented insights regarding their respective departments. Following this, the TICs of various departments were introduced. The zestful evening came to an end with a beautiful cultural extravaganza presented by Players – the theater society, MuSoc - the music society and Sensation – the dance society of the college, and a high tea. The evening was a unique amalgamation of enthusiasm, vigour, and celebration.





# ARTICLES



# A NIGHT OF VICTORY UNDER MOONLIGHT – CHANDRAYAAN-3



DR. KAVITA GUPTA

MANYA GUPTA

On the eve of 23rd August, 2023, our honourable Prime Minister Narendra Modi took pride in announcing "Chandrayaan-3, scripts a new chapter in India's Space Odyssey. It soars high, elevating the dreams of and ambitions of every Indian."

The Indian Space Exploration Association's (ISRO's) Chandrayaan-3, the third lunar investigation mission, is supposed to fortify India's situation in space investigation. ISRO Chairman, S. Somanath, said that Chandrayaan-3 is a mission that will take us one step closer to understanding the moon and its mysteries. Like Chandrayaan-2, the mission comprises of the Vikram lander and the Pragyan rover; however, it doesn't have an orbiter. The scientists have not sent an orbiter with Chandrayaan-3 as the orbiter of Chandrayaan-2 is still working, which it proved by sending a welcome message to Chandrayaan-3 on its arrival on the lunar surface. Up until the spacecraft arrives at a 100 km lunar circle, the propulsion module goes about as a communication handoff satellite and conveys the lander and rover setup. Chandrayaan-3 was sent off on July 14th 2023 at 2:35 PM, by LVM3 from Satish Dhawan Space Centre, Sriharikota. On August 23, 2023, the lander and rover softly landed near the Lunar South Pole has created an incredible history.



## THE CHANDRAYAAN-3 MISSION'S DESIGN

Chandrayaan-3 focused on a "failure-based" design approach. Lessons from the Chandrayaan-2 Mission when applied to Chandrayaan-3 turned the hard journey into a soft landing. The Chandrayaan-3 mission's design comprises a lander, a rover, and a propulsion module. The lander and rover are moved by the propulsion module until they reach the lunar orbit. The lander, which plays out the soft landing, is furnished with devices to examine the inside and the outside. With cameras, spectrometers, and a drill, the rover will investigate the lunar surface, voyaging 500 meters throughout one lunar day. Chandrayaan-3 took a whole group of researchers long periods of difficult work and \$\text{P615}\$ crores to observe a seemingly easy arrival on the outer layer of the Moon.

### **OBJECTIVES OF CHANDRAYAAN-3 MISSION**

Three essential objectives have been laid out by ISRO for the Chandrayaan-3 mission. The principal objective is to accomplish a soft and safe lunar surface landing. It also intends to flaunt the rover's adaptability on the lunar surface. The mission's last goal is to direct in-situ logical perceptions of the Moon's normal and substance parts, including its dirt, water, and different components.

India's space program has progressed essentially with Chandrayaan-3, displaying the country's mechanical ability. The mission is strategically set up to offer significant new data about the make-up of the lunar surface, the presence of water ice, the historical backdrop of lunar effects, and the improvement of the Moon's climate.

Chandrayaan-3's fruitful sent-off addresses a defining and proud moment in India's successful space investigation' The mission is expected to essentially add to how we might interpret the Moon's arrangement and advance our logical comprehension of Earth's satellite as ISRO keeps on gaining ground in lunar investigation.

#### **WONDER WOMEN OF CHANDRAYAAN-3**

India must take pride in announcing the immense contribution of our Indian women scientists. As Chandrayaan-3 makes a soft arrival on the lunar surface, we praise the ladies associated with the venture. As indicated by ISRO, they really changed the circle of the Lander Module (LM) of the Chandrayaan-3 mission. Recently, India turned into the primary country on the planet to investigate the southern district of the Moon, and it could never have been conceivable without the minds of our scientists behind it.

A significant piece of the group behind India's aggressive moon mission is **Ritu Karidhal Srivastava**, **known as the 'Rocket Woman of India'** who led the mission of sending India to the moon. It was Ritu Karidhal and her competent team that made it possible for India to create history.



Kalpana Kalahasti, Deputy Project Director of the Chandrayaan-3 mission said after the arrival, "This will stay the most essential and the most joyful second for us all and for our group at Chandrayaan-3. We have accomplished our objective perfectly from the day we began reconstructing our rocket after the Chandrayaan-2 experience." She was among the minds behind the improvement of the speciality that made Mangalyaan a fruitful mission. It permitted the speciality to work autonomously in space.

Born in Thiruvananthapuram, Kerala, **Dr. V.R. Lalithambika** is a specialist in Advanced Launcher Technologies. She led the 'Gaganyaan' mission, which was expected to send Indian space travellers to space in 2022. She has won the Astronautical Society of India award for excellence in launch vehicle technology. She has been an integral part of several missions at ISRO. Before working at ISRO, she was the appointee overseer at Vikram Sarabhai Space Centre (VSSC), taking care of control, reproduction, and direction.

**Nandini Harinath, Deputy Operation Director of Mangalyaan,** has been a part of more than 14 missions at ISRO for over twenty years.

**Vanitha Muthayya, Project Director of Chandrayaan-2**, has a remarkable career spanning more than thirty years at ISRO. In 2006, she was awarded the title of Best Woman Scientist by the Astronomical Society of India.

Anuradha TK is ISRO's first woman satellite Project Director, a researcher whose area of interest is communication satellites. She worked at ISRO for close to 34 years prior to resigning. She served in the workplace of the project director and headed the send-offs of three correspondence satellites - GSAT-9, GSAT-17, and GSAT-18.

**Moumita Dutta** is an important person in **Chandrayaan-3 and Mangayaan** groups. She has spent significant time in the turn of events and testing of optical and IR instruments, sensors, and payloads, Moumita Dutta is a physicist who played an integral part in Mars orbiter mission. She is currently working for the 'Make in India' idea and exploring the scaling down of gas sensors.

#### **ISRO'S FUTURE EXPEDITIONS**

**CHANDRAYAAN-4:** After Chandrayaan-3, it is Chandrayaan-4 that will explore the ways of lunar development. Expanding upon past missions, Chandrayaan-4 will aim for a sample return mission. The mission is expected to gather more comprehensive information about the lunar surface, its composition, the possibility of life on the moon and many others.



**LUPEX:** Lunar Polar Investigation (LUPEX) mission, a collaboration between ISRO and JAXA(Japan), is ready to investigate the Moon's polar districts. It will be explicitly intended to wander into permanently concealed regions. Examining the presence of water and evaluating the potential for a maintainable long-term station are among LUPEX's targets.

**Aditya-L1**: Aditya L1 will be the first space based Indian mission to explore and study about the Sun. The rocket will be set in a radiance circle around the Lagrange point 1 (L1) of the Sun-Earth framework, which is around 1.5 million km from the Earth. Noticing the sun's corona, emissions, solar winds, flares, and coronal mass discharges are among the key focus areas of Aditya-L1.

**XPoSat (X-ray Polarimeter Satellite)**: It is India's previously committed polarimetry mission to concentrate on different elements of brilliant galactic X-ray sources in outrageous circumstances. The spacecraft will convey two scientific payloads in a lowearth orbit.

**NISAR: NASA-ISRO SAR (NISAR)** is a Low Earth Orbit (LEO) observatory being jointly developed by NASA and ISRO. NISAR will map the whole globe in 12 days and give spatially and transiently reliable information for understanding changes in Earth's environments, ice mass, vegetation biomass, ocean level ascent, groundwater, and regular dangers including tremors, torrents, volcanoes, and avalanches.

<u>Gaganyaan</u>: The Gaganyaan mission aims to have a trip for humans from Earth to outer space and bring them back safely. The mission will comprise two automated flights and one monitored flight, utilising the GSLV Mk III launch vehicle and a human-rated orbital module. The monitored flight will carry three space astronauts, including a woman, for as long as seven days in low-earth orbit.

<u>Shukrayaan 1</u>: It is a mission to send an orbiter to Venus. It is expected to explore Venus' geographical and volcanic movement, outflows on the ground, wind speed, cloud cover, and other planetary qualities.

Chandrayaan-3, driven by a passionate mission, and inspired by failures, serves as an inspiration for upcoming generations to aspire towards the stars. The successful landing of Chandrayaan-3 made all our prayers and dreams come true. It taught us to never stop believing and keeping working for our goals. The success of this mission is a proud moment for each and every Indian.



# A GLIMPSE OF INDIA'S CONTRIBUTION TO WORLD MATHEMATICS

## DR. PREETI GARG



The contributions of Indian Mathematicians to global Mathematics are both profound and enduring. Their ideas have transcended centuries, impacted diverse mathematical disciplines, and influenced scientific and technological advancements. It is important to acknowledge and celebrate not only the latest developments, but also the foundational contributions made by Indian Mathematicians.

The roots of Indian mathematics date back to the Indus Valley civilization (3300-1300 BCE). Studies suggest that mathematics was used by Indians during that period, where geometric shapes and measurements were used for trade and construction. The Vedic period (1500-500 BCE) introduced the concept of numbers and basic arithmetic operations, setting the stage for more advanced mathematical thought. The period between 500 BCE and 200 CE witnessed the emergence of seminal mathematical texts. The "Sulba Sutras", a series of texts detailing geometry and algebraic concepts, laid the groundwork for geometric constructions and Pythagorean triples. The "Jaina mathematics" also flourished during this time, with contributions to algebra and arithmetic.

The period between 400 CE and 1500 CE was known as the golden age of Indian Mathematics and was termed the Classic Period. The Classic Period witnessed exceptional mathematicians like Aryabhata, Brahmagupta, Bhaskara I, Bhaskara II to name a few. Their insights, innovations, and methodologies have left an indelible mark, particularly in the realms of astronomy, trigonometry, algebra, and numeral systems that we use today.

The introduction of the decimal numeral system, along with the concept of zero, revolutionized mathematical notations and computations. This system, often referred to as the Hindu-Arabic numeral system, facilitated efficient and accurate calculations. The pioneering work of Indian Mathematicians like Brahmagupta and Aryabhata laid the groundwork for these innovations. Brahmagupta's "Brahmasphutasiddanta" is the first text to mention zero as a numerical placeholder and gives the rules governing arithmetic operations involving zero. Aryabhat's "Aryabhatiya" or "Aryabhatiyam" written in 5th

century introduced concepts that are now integral parts of modern mathematics. It covers concepts related to trigonometry, arithmetic, algebra, and astronomy. He provided accurate calculations for planetary motions and eclipses.

Bhaskara II, also known as Bhaskaracharya, was the leading mathematician of the 12th century. He extended the work of Brahmagupta on the number system and wrote many books on topics of mathematics and astronomy. "Siddhanta Siromani" written by him is considered to be a masterpiece. His work was picked up the Indian mathematicians like Madhava and Nilakanatha Somayaji of Kerala School of Mathematics. They demonstrated insights into mathematical analysis and developed methods close to calculus, centuries before the calculus of Newton and Leibniz.

The 19th and 20th centuries witnessed the resurgence of one of India's greatest mathematical geniuses. Born on 22 December 1887 Srinivasan Ramanujan, considered as one of the most brilliant mathematicians of all times, amazed the world with his contribution to number theory, infinite series, and modular forms. He was elected a Fellow of the Royal Society for his work on Elliptic functions and the Theory of numbers. He discovered new theorems and identities, many of which bear his name today. Unfortunately, the world lost him too soon; he died at an early age of 32. The Government of India declared 22 December as the National Mathematics Day to commemorate his birthday. Shakuntala Devi, born in the year 1929, was given the name 'Human Computer' for her capability to do superfast calculations. She could beat the speed of computers in the calculation. Her talent stunned the world. In 1980 her name was recorded in the Guinness Book of World Records when she demonstrated her ability to multiply two rando13-digitit numbers within just 28 seconds. Other luminaries like C.R. Rao, Harish Chandra, and S.S. Pillai further enriched mathematics and statistics with their work.

As the 21st century unfolds, the field of mathematics continues to witness significant work and achievements of Indian mathematicians and scientists as they continue to make remarkable contributions across various fields. Indian scientists and researchers created history on August 23, 2023, when India's Space agency, ISRO, successfully landed its Chandrayaan-3 mission's Lander Module on the moon's surface. India became the first country to land on the Moon's South Pole. The success of Chandrayan-3 itself speaks volumes of India's innovations and capabilities.

In conclusion, the history of Indian mathematics from ancient scriptures to modern research is a journey of continuous exploration and innovation. It is a journey of remarkable contributions across various fields of mathematics and astronomy. From foundational contributions, it extends to shaping technological advancements and scientific progress, thus unravelling the mysteries of the universe and helping the human understanding of the universe.





# THE POTENTIAL OF **UNDERUTILIZED FRUITS OF INDIA**

DR. AJIMA BEGUM

Our country is blessed with a rich genetic diversity of fruits. India is known as the fruit basket of the world. There are large numbers of indigenous and underutilised crops in the country, which are grown in wild and semi-wild conditions and are generally found in the local inhabitants, especially in rural areas.

These underutilised fruits are nutritious in nature and play an important role in the vital health and maintenance of our body. They contain various bioactive constituents including flavonoids, polyphenols, carotenoids, and micronutrients such as vitamins and minerals. The bioactive compounds of the fruits are also associated with anti-oxidant, anti-inflammatory, anti-microbial, cardio-protective, and neuroprotective properties. Besides the nutritional and medicinal values, the underutilised fruits have good flavour, colour, and juice content and these qualities can be utilised for value additions. Several underutilised fruit species have the potential for commercial utilization, but they are not utilised to their potential. In this article, the potential of some underutilised fruits of India has been discussed in brief.







sapida)



(b) Khattaphal (Baccaurea (c) Indian Plum (Flacourtia jangomas)

**Hog-plum** (*Spondias mangifera*): Hog-plum is a tree allied to Mangifera, which is known as Wild mango, Bile-tree, or Amrata in the Ayurvedic system of medicine. It is very useful for treatment against Shigellosis and tuberculosis infections as they are known as blood purifiers and are also effective against scurvy, and rickets. Hog-plum may be a rich source of vitamins; it may be eaten raw or used for the preparation of pickles (Fig. a).

**Khattaphal** (*Baccaurea sapida*): Khattaphal is a medium-sized tree and its fruits are round and creamy to yellow in color. The pulp of the fruit is edible and delicious. The bark of the tree is used as medicine for constipation. The bark is also used as a mordant in the dyeing process. The fruit is known to contain high antioxidant properties (Fig. b).

**Indian Plum** (*Flacourtia jangomas*): The Indian Plum is a medium-sized tree with hard spring branches. The fruits are dull earthy-colored under shade. Once the fruit is ripe, the tissue becomes firm and turns into caramel green, and is moderately delicious. The fruit became considerably more astringent when brushed between hands and has a very satisfying taste. It is rich in protein, antioxidants, and minerals like phosphorus, calcium, potassium, and iron. The iron content of the Indian plum is 280 times than that of apples. It additionally contains a few fundamental amino acids (Fig. c).



(d) Elephant apple (Dillenia indica)



(e) & (f) Black-or (*Terminalia chebula*)



chebulic myrobalan or Harad

**Elephant apple** (*Dillenia indica*): Elephant apple is an ornamental evergreen tree that grows up to 30 metres tall. The plant has edible fruit and the extract of the plant is used in polish, soap, and medicines. Elephant apples are eaten after being cooked and are used to prepare delicious jams. The juice of the fruit mixed with sugar and water is used as a cooling beverage for fevers and as a cough mixture. It is also used as a mild laxative. These fruits are rich in protein and vitamin C (Fig. d).

**Black or chebulic myrobalan or Harad** (*Terminalia chebula*): It is a tall tree that grows in wild areas all over India. It is known for its high restorative and medicinal worth. Fruits are small, oval, and hard towards the two ends. The fruit is green when fresh and turns dark and hard when dried. It has a wide scope of medicinal uses and is very significant for numerous Ayurvedic drugs. It assists with restoring gastric difficulty and acid reflux and is said to be beneficial against asthma, piles, worms, colic pain, heart

disease, scabies, liver jaundice, stones, CUPS (chronic ulcerative parenchymal stomatitis), eye diseases, vomiting, and so forth.







(g) Star fruit (Averrhoa carambola)

(h) & (i) Garcinia species

**Star fruit** (*Averrhoa carambola*): It is popularly called star fruit due to the resemblance of the special shape of the fruit to a star. The pungency in fruit is because of calcium oxalate crystals present in the flesh, which form oxalic acid when dissolved in saliva. The fruit flesh is a light yellow-to-bright golden yellow, clear, fresh and juicy, fibreless. The root concentrate of Carambola is utilised as a cure for poisoning, and squashed leaves are utilized for relieving chickenpox, ringworm, and scabies. It is a rich source of reducing sugar, ascorbic acids, and minerals, for instance, potassium, calcium, magnesium, and phosphate. The fruit and squash prepared from the fruits are useful for draining heaps or piles and are accepted as a decent solution for jaundice, throat inflammation, mouth ulcers, toothaches, coughs, asthma, hiccups, indigestion, food poisoning, colic, diarrhoea. Carambola was broadly utilised in ancient Ayurveda (Fig. g).

Garcinia species: 'Garcinia has a place within the family Clusiaceae and is found in the tropical areas of the world. It is an evergreen tree or bush with greenish gum saps. Garcinia has the potential to be used as a valuable therapeutic plant and has antimicrobial properties. The fruit rind of the members of this genus is a very rich source of Hydroxy Citric Acid (HCA) which is a prime source for the treatment of obesity. Ethnomedically, different parts of Garcinia have been reported to have several pharmacological effects, mostly in the treatment of diarrhoea and dysentery. Different species of Garcinia are utilised for medication during childbirth, menstrual issues, looseness of the bowels, and fever in the conventional arrangement of medication and a few species have possible treatments for HIV and Cancer (Fig. h, i).





# OMICRON VACCINE: A MILESTONE FOR ATMANIRBHAR BHARAT

DR. SANJUKTA DAS

Omicron-specific vaccine, branded as GEMCOVAC-OM, is the first indigenously developed m-RNA vaccine of India, followed by two much-talked about internationally known m-RNA vaccines, Pfizer and Moderna. Since the outbreak of COVID-19, many variants of the Coronavirus have evolved across the world. After the COVID-19 Delta variant onslaught, the Omicron variant sent shockwaves in many countries including India, because of its high transmissibility and immune evasive characteristics, thus affecting the efficacy of the prevailing antibodies as well as the vaccines. As Genomic studies have revealed, Omicron is the most mutated version of coronavirus, and WHO has categorised Omicron as a variant of concern (VoC).

In sync with COVID-19 vaccine-making, countries, including India were afoot to develop an Omicron-specific vaccine to tackle the challenge of its wave due to its high transmissibility. The onus of developing the Omicron vaccine on m-RNA-based platform in India fell on Pune-based Gennova Pharmaceuticals Ltd., which plunged into action with support from the Department of Biotechnology (DBT) and the Biotechnology Industry Research Assistance Council (BIRAC) for Mission COVID Suraksha as part of Atmanirbhar Bharat3.0, which envisages making available to citizens of India the safe, efficacious and affordable indigenous Covid-19 vaccines within the shortest period.

The salient features of this vaccine are: 1) it is Omicron-specific; 2) it is thermostable, so does not need ultra cold logistics (such as for transport and storage), unlike other m-RNA-based vaccines, thus making it easily accessible across India; 3) it is needle-free, and administered intradermally; and above all, its production is based on future-ready technology.

Vaccine production based on m-RNA is a newly developed platform and India has achieved a milestone in developing this 'future-ready' technology for Atmanirbhar Bharat in vaccine production. The making of an omicron-specific m-RNA vaccine by India demonstrates to the rest of the world that India has made a smart move in technology-driven innovation, which will ensure the prospects of countering the future corona variants effectively.

In m-RNA platform vaccines, m-RNA for the viral spike proteins is incorporated. In response to the spike proteins, the immune system gets activated to generate antibodies and immune cells to act against future coronavirus invasions. There is no risk of insertion and hence no fear of any mutation with the administration of m-RNA vaccines. Clinical trials carried out in India have indicated that the Gemcovac Omicron vaccine triggers a robust immune response and it is safe as compared to other conventional vaccines.

Adding to that, heterologous booster vaccines trigger an increased level of immune response. The Lipid Nanoparticles (LNPs) are involved in m-RNA delivery into target cells. The production and approval of the Omicron vaccine and approval by DCGI (Drug Controller General of India) for emergency use, happened at a time when there was a requirement for an efficacious booster vaccine because of the limited efficacy of conventional vaccines. After primary vaccination with Covishield and Covax types, Gemcovac can be given as a booster dose to age groups of 18 years and older to generate a higher and stronger immune response specifically against the Omicron variant. This m-RNA vaccine has an extra edge over other m-RNA vaccines in terms of its stability at 2 °C – 8 °C, thus obviating the need for an ultracold supply chain across India.

The success of the Omicron m-RNA booster vaccine no doubt boosts the pride of India at the international level as a self-reliant nation in vaccine therapeutics, fulfilling the mission of Atmanirbhar Bharat through innovative technology.



# EVENTS AND ACTIVITIES



# KAVISAMMELAN





Azadi Ka Amrit Mahotsav team of Kirori Mal College organized a Kavi Sammelan on August 24, 2023, at the Academic Auditorium from 11 am. This program was the last event in a series of more than thirty programs being organized for the last two years under this Mahotsav.

The program began with the lighting of the lamp and Saraswati Vandana performed by Pranjali, a physics student. Ms. Arti, an active teacher member of the team, gave a brief description of all the programs conducted in the last two years. The program was coordinated by Geetika, a student of Hindi. Dr. Satyendra Kumar, another senior member of the team, said that this Kavi Sammelan is being held under the campaign 'Meri Mati Mera Desh' suggested by UGC on the occasion of the completion of Azadi Ka Amrit Mahotsav. Under this, he also made all the people sitting in the auditorium take five vows of service to the country and devotion to the country, in which the guests sitting in the hall and present on the stage participated wholeheartedly.

Prof. Rakesh Pandey, coordinator of the Azadi Ka Amrit Mahotsav team, shared with everyone the hard work, cooperation, and increased participation by the students in the



programs being organized for the last two years.

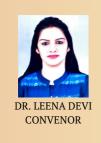
After this, he welcomed all the four poets who had come for the Kavi Sammelan (viz. internationally renowned Rajesh Chetan and Rasik Gupta, as well as two well-known poets, Manju Shakya and Sarla Mishra) by handing over the tricolor-patka to them. After this, all the members of the team were also honored by a similar tricolor patkas. Dr. Manju Rani, Shri Ram Sunil ji, Dr. Sumit Sharma, Dr. Kajal, Dr. Karuna Shri, Dr. Nand Kishore were also present among the team members. Special thanks were expressed to the coordinator of the program Dr. Manju Rani for this successful event. College Principal Prof. Dinesh Khattar could not be present in the program due to his engaging schedule, but he supported every effort made for the success of this event.

The stage was, then, given to the poets for operation. Poet Rasik Gupta ji took over the responsibility of anchoring, and he first invited Manju Shakya then Sarla Mishra, and then presented his own compositions. At last, poet Rajesh Chetan took the stage and presented many compositions full of patriotic feelings in the auditorium. The compositions of all the poets, soaked in patriotism and patriotism, were applauded by the entire audience.

Enthralled by the poems of all the poets, the thunderous noise reverberating with the applause of the audience attracted the students from the surrounding areas and the fully packed auditorium became a reflection of the phenomenal success of the event. This Kavi Sammelan was completely successful in creating the spirit in the audience, which the team of Azadi Ka Amrit Mahotsav had taken the initiative to achieve, during the last two years.

At the end of the program, Dr. Manju Rani, the coordinator of the programme, thanked everyone and distributed the food boxes prepared for the occasion.





# KARTAVYA: THE CIVIL SERVICES SOCIETY

# INDIA G-20 & GLOBAL SOUTH – CARVING ROADMAP FOR A MULTIPOLAR EQUITABLE GLOBAL ORDER



Kartavya - The Civil Services Society of Kirori Mal College organized an informative panel discussion on the topic, India G-20 & Global South – Carving roadmap for a multipolar Equitable Global Order on August 28, 2023, in the Academic Auditorium from 1:30 onwards.

Mr. Amarendra Khatua, IFS (Retd.) Former Secretary, MEA, and Mr. Prasanta Sahoo, Assistant Professor, Centre for International Politics, JNU were the esteemed speakers. 200+ registrations for the event and the huge turnout of students bore testimony to the insightfulness of the session.

The guests were received warmly by the audience, who expressed their delight by a round of applause. They were then honored with the planters and were humbly addressed by our Principal Prof. Dinesh Khattar, as he welcomed Amarendra Khatua Sir who is an alumnus of Kirori Mal College, and Professor Sahoo for their presence.

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#### SPEAKER 1 - Prasanta Sahoo

The Major Takeaways from the discourse were –

- India's G20 presidency is a festive season for us.
- A large part of the world is being neglected, especially third-world countries like Ethiopia, Sudan, Mozambique, etc.
- Africa should be included in G20 and the developed countries should support Africa and the UN has responded positively towards this.
- Many times even world organizations (like the UN, and NATO) decisions are influenced by powerful countries. The powerful countries dominate and try to exploit the resources of the third-world countries.
- Today's Era is not of war.
- India's Vision of the World When we're rich, we didn't exploit anybody and when we were poor, we weren't a burden on anybody.
- Through G20, India shows its leadership capacity.
- Digitalization is the reality of today's world, and India is leading from the front in digitalization.
- The world needs technology to solve contemporary problems.

### Speaker 2 - Mr. Amarendra Khatua

The major Takeaways from the discourse were

- Highlighted the 6 priorities for India -Issues like Russia Ukraine War, and unnecessary Chinese Aggression should be addressed in the G20.
- Accelerated, inclusive, and resilient growth.
- Addressing global skill gaps.
- Technology and Digital Infrastructure transformation, Financial
- Inclusion, Agricultural development, climate financing.
- Women-led development.
- Accelerated progress for SDGs and agenda to achieve SDGs by 2030 and addressing COVID-19 impact.
- 1. Africa-centric developmental programmes should be there.
- 2. Make cities a hub for entrepreneurship. India requires \$5.5 trillion to make cities entrepreneurship-ready.
- 3. National Centre for Disease Control (Health care aspect)- we have to make such centres regional.
- 4. The great disparity between the North and South (Developed and Developing Countries.)
- 5. There isn't any replacement for the UN, but the G20 can highlight the concerning issues and demand for actions but can't solve them completely.



6. We need to frame – What is the mandate of G20? India's Presidency and contribution to G20 and What are our short, mid, and long-term goals? Besides this, the need for developing and reaching a point of consensus on issues of critical importance concerning climate issues, security threats, and others, is one of the major goals of G-20.

The detailed discussion on a topic of contemporary importance with the G-20 meeting just around the corner heightens not only the relevance of such a discourse but also the need for such discourse.

The session helped us to develop an informed point of view regarding the topic.

The session culminated with the answering of queries of students by the panellists, followed by the memento felicitation of the guests for their worthy presence.

It was indeed an enlightening and fruitful venture, and Kartavya plans on taking up more such informative discourses in the near future.





# **BHOOMI: THE ECO CLUB**



## PEACEFUL COEXISTENCE WITH STREET DOGS

On 21st August, the Eco Club of Kirori Mal College organised a seminar on the theme of the **peaceful coexistence of street dogs** in the Academic Auditorium. The main motto of this event was to provide a platform to spread awareness about street dogs. 80-85 students and members of the club actively and enthusiastically took part in this seminar.

The chief guest for the event was Ms. Ayesha, CEO, and Founder of Neighbourhood Woof, who praised the club's initiative in her speech. She talked about her journey from a dog lover to a dog saviour. Talking about this further she told us about the nature of dogs during mating season how they get aggressive during this time and the health issues dogs especially female dogs face. She focused on the need for sterilization and vaccination among stray dogs for population control. She also pitched the idea of microchipping stray dogs to keep track of their information and their location in our campus area so that we can have a confined population of dogs on our college premises. Furthermore, she put light on why one should adopt dogs instead of buying them from breeders. Altogether it was a very informative session focusing on a more friendly approach towards stray dogs and their habitat in our premises. Around 80–85 students actively took part in the event.

#### **SESSION HIGHLIGHTS:**

#### UNDERSTANDING CANINE BEHAVIOUR:

Ms. Ayesha delved into the fundamental principles of dog behaviour, shedding light on how dogs perceive the world around them. This understanding forms the basis for effective communication and coexistence.

#### POSITIVE TRAINING TECHNIQUES:

The session covered positive reinforcement training methods that create a strong bond between humans and dogs. We were provided with insights on using rewards, praise, and play to encourage desirable behaviour.

#### **COMMUNICATION SIGNALS:**

We also learned to decipher the various cues and body language that dogs use to communicate their emotions and intentions. She demonstrated how interpreting these signals can lead to better interactions and fewer misunderstandings.



#### ADDRESSING COMMON CHALLENGES:

Whether it is harsh treatment and culling, leash pulling, or territorial behaviour, Ms. Ayesha addressed common challenges faced by dog owners and provided effective strategies to overcome them.

She also presented us with the case study of the Red Fort area, where dogs were forcefully drawn by municipalities for the Independence Day celebration. This led to poor conviction later by dropping them off at random locations and not providing them with proper shelter and care.

#### **CONCLUSION:**

The session empowered us with knowledge and tools to establish a deep and meaningful connection with our four-feet friends. The journey to peaceful coexistence with dogs is one of patience, understanding, and love.





# **BOTANY DEPARTMENT**

PLANTATION DRIVE





The Garden Committee of Kirori Mal College successfully organized a significant plantation drive within the College Campus on 25th August 2023 at 10:30 a.m. under the Mission LiFE Programme of DU. This was done as a part of its commitment to environmental sustainability and creating a greener campus. The drive was organized under the leadership of the Convener of the Garden committee (Prof. Rajni Gupta)

The event aimed to raise awareness about the importance of native trees, promote a sense of environmental responsibility, and contribute to the overall improvement of the campus environment. A total of 9 saplings were planted during the drive in different parts of the campus – Botanical Garden, Ashoka Lawn, Nursery, and Herbal Garden. The plantation drive began with the planting of saplings done by the Respected Principal Sir (Prof. Dinesh Khattar) followed by plantation by faculty members of the garden committee with the help of college gardeners. The saplings of native tree species for planting were provided by the Garden Committee, University of Delhi. They were: Bottle palm (Hyophorbe lagenicaulis), Jacaranda (Jacaranda mimosifolia), Amla (Phyllanthis emblica), Baheda (Terminalia bellirica), Harad (Terminalia chebula), jackfruit (Artocarpus heterophyllus), Conocarpus (Conocarpus lancifolius) and lasoda (Cordia myxa).

The plantation drive was a resounding success, fostering environmental consciousness and encouraging active participation in creating a greener campus. This initiative not only enhanced the aesthetic appeal of the college but also instilled a sense of responsibility towards the environment among all participants.









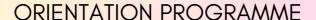








# THE PEACE CLUB







On August 29th, 2023, the Peace Club, a student body committed to promoting harmony and positive change, hosted its highly anticipated orientation programme. The event proved to be a momentous occasion for club members, setting the stage for their future endeavours. The ambiance was filled with excitement and anticipation as attendees gathered to partake in an experience that would define their journey ahead.

#### **SYMBOLIC OPENING:**

The orientation began with a symbolic gesture that captured the essence of the club's mission. Dr. Vandana Chaudhary, the convenor along with President and Vice President of the club, lit a candle, symbolising the club's dedication to guiding the path towards peace and unity. This act served as a poignant reminder of the individual light that each member brings to the collective pursuit of the club's objectives.

#### **MUSICAL EXPRESSION:**

The event witnessed a soul-stirring musical performance by Khushi Bhobhria from the

cultural team. Her rendition of the emotionally charged song "Besabriyan" resonated deeply with the attendees, fostering an atmosphere of unity and inspiration. Through her melodious voice, she conveyed the emotions of the youth, leaving a lasting impact that contributed to the event's overall ambiance.

#### ARTICULATE HOSTING:

The president, Saharsh, and the vice president, Jagrati anchored the orientation. Their poised demeanour and eloquent words guided the event's proceedings, facilitating smooth transitions from one segment to the next. Their articulate hosting contributed to maintaining the attendees' engagement and enthusiasm throughout the program.

#### PROMOTING INCLUSIVITY:

A highlight of the orientation was the engaging "jar activity," ingeniously designed to foster inclusivity and camaraderie among club members. Participants were invited to share their thoughts, dreams, problems, and hopes by placing notes inside a communal jar. This interactive exercise not only encouraged self-expression but also highlighted the club's commitment to providing a platform for diverse voices to be heard and valued.

#### **CONCLUSION OF THE CEREMONY:**

As the curtains fell on this remarkable event, a shared sense of collective purpose and enthusiasm lingered in the hearts of all present. The orientation had successfully paved the way for the Peace Club's journey towards fostering understanding, empathy, and positive change in the days ahead.

The Peace Club's orientation programme on August 29th, 2023, marked a significant milestone in the club's endeavours. Through symbolic gestures, musical expressions, and engaging activities, the event showcased the club's commitment to its mission. Attendees left with a renewed sense of purpose and a clear understanding of the path forward in their pursuit of fostering harmony, empathy, and positive transformation.





# GRUBSTREET

## **ORIENTATION**



Event Overview: On August 31, 2023, Kirori Mal College's Grubstreet, the Literary Society, hosted their Orientation Programme for the academic year 2023-2024. The event, held at the Academic Auditorium at 2:00 p.m., saw a lively and packed audience in attendance. The occasion was honoured by the presence of several esteemed faculty members from the Department of English, including Prof. Someshwar Sati (Staff Advisor), Ms. Neeru Jaiswal, Ms. Shweta Sharma, Ms. Ananya, and Ms. Tanya Rohilla.

**Introduction and History:** The programme commenced with an introduction to the Literary Society's illustrious history, emphasizing its key milestones and significant contributions over time. Attendees gained insight into the society's journey and its ongoing dedication to promoting literary initiatives within and beyond the academic sphere.

**Yearly Events:** Grubstreet team members then introduced the various events that comprise the society's annual calendar, including:

*Bohemia*: Grubstreet's yearly festival, a two-day event inviting participants from various universities to participate in seminars, workshops, competitions, and more.

*Palimpsest*: The department's bi-annual magazine, whose each issue is centered around a specific theme or subject, allowing contributors to delve into creative and critical writing within that thematic framework.

*Oceanvale Workshop*: A workshop designed to nurture highly promising students, offering guidance in advanced research, analytical skills, and writing through collaborations with esteemed scholars and authors in the field.

**Core Council and Editorial Board**: The dedicated individuals forming the core of Grub Street for the academic year 2023-2024 were introduced, encompassing the core council, department heads, and the Editorial Board of Palimpsest. Each member shared their roles and responsibilities within the society, underscoring their collective efforts in making Grub Street a thriving literary community.

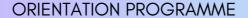
Additionally, the core council members of Grubstreet announced the annual theme for the current academic year: 'Urban Imaginary in the Metropolis of Delhi.' The theme delves into the multifaceted interplay of historical, cultural, political, economic, and environmental factors shaping Delhi's urban imagination as the city continues to evolve. It highlights the diverse hopes, dreams, and concerns of both residents and those drawn to Delhi's dynamic urban landscape.

In closing, Prof. Someshwar Sati delivered a vote of thanks, expressing his vision of transforming Grubstreet into an inclusive space where everyone is embraced, and he concluded with a warm congratulatory note to the audience. The Orientation programme hosted by Grubstreet served as an informative and inspiring introduction to the year 2023-2024 while underscoring the enduring commitment of our institution to the literary arts and academic brilliance.





# STATISTICS DEPARTMENT







The Department of Statistics, Kirori Mal College had an orientation for the students of the first year of B.Sc. (H) Statistics on 16th August 2023 in the Statistics Lab.

The program began with a warm welcome from the Teacher-in-Charge, Dr. Surendra Kumar, highlighting the importance of the journey the students are embarking upon. He presented the department's goals, values, and contributions to the field of study. He shared the details about the timetable to be followed during the semester, the academic advising, and mentorship programs, and how students can seek guidance from the department.

This was followed by brief introductions of faculty members, highlighting their areas of expertise. Teachers and students interacted with one another, and the new batch gave their brief introduction.

It was an insightful session for the students as teachers elaborated on not just the curriculum but also the opportunities that a degree in Statistics provides.

The students shared their experiences including why they chose Statistics at Kirori Mal College, their interest to pursue actuaries, higher studies in statistics and become analysts/data scientists.

Beyond academics, the orientation emphasized building a sense of community among peers, fostering networking opportunities, and laying the groundwork for successful professional pursuits. Faculty members also informed the students regarding the resources to be considered to navigate their academic journey better.

The day concluded with a doubt-clarifying session and a vote of good luck to the students.





# PHYSICS DEPARTMENT

**ORIENTATION PROGRAMME** 





The orientation of the Department of Physics, Kirori Mal College, University of Delhi, was organized on 16th August 2023 at 9:39 a.m. in PLT-1.

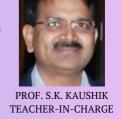
Presided over by the Teacher-in-Charge Dr. Sangeeta D Gadre, in the presence of around 80 students and all the faculty members, the event was a resounding success with a variety of topics covered; from life as a physics student at KMC to career options upon graduation.

The faculty members got the opportunity to welcome the incoming batch and learn about their future ambitions. Besides giving the students a brief overview of courses to take along with the relevant textbooks, they also got acquainted with various societies within the department.



# **MATHEMATICS DEPARTMENT**

**ORIENTATION PROGRAMME** 





The Orientation Programme for the first year students of B.Sc.(H) Mathematics was held on Aug.16, 2023 at 9.30 a.m. in Room No. 7 of the college. The teacher-in-charge Prof. Shiv Kumar Kaushik gave the welcome address and introduced all the faculty members of the department to the students.

Students were informed about the core papers, GE/SEC/VAC papers which they can opt in first semester. Information related to internal assessment (30 marks) and Continuous evaluation (40 marks) was given to the students with an emphasis to attend classes regularly. The students were made aware of the Mathematics Society "The Tensors". Staff advisor informed the students about the working of the society and various events organized by the society throughout the year. The students were told about the Anti-Ragging provisions. They were advised to contact the administration/ TIC in case of any requirement in this regard. Moreover, they were also told to maintain discipline inside the College premises. The Principal Sir as a member of the Department addressed the students and gave them tips for understanding and studying Core courses. The queries of the students were also addressed.





# ENGLISH DEPARTMENT

**ORIENTATION PROGRAMME** 





The Department of English organized the orientation program for the first-year B.A. English honors students on 16th of August 2023 in room no. 216 from 9.30 am onwards. The freshers were welcomed by Prof. Someshwar Sati, who briefed the students about KMC and talked about the importance of this new phase in their lives. This was followed by a formal introduction to the course structure, and options available for common courses, by the Teacher-in-charge, Dr. Satyendra Kumar.

Dr. Kumar also talked about the importance of cultural societies in college and how they help in providing exposure to students. After this, all the faculty members introduced themselves and talked about their specializations. Later, Mr. Rudrashish familiarized the students with the syllabus. Subsequently, a round of student introductions was followed by a query session where all doubts were addressed.

At the end of the program, the TIC thanked everyone.



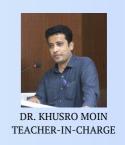


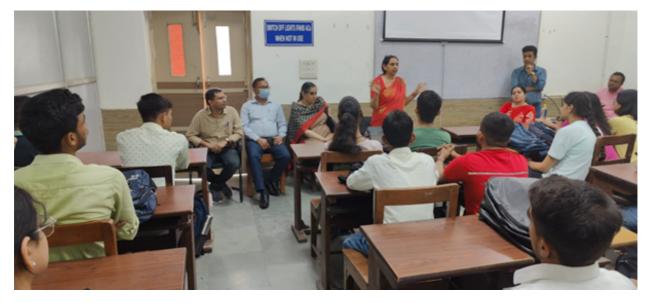
ENGLISH DEPARTMENT ORIENTATION



# **GEOGRAPHY DEPARTMENT**







The DEPARTMENT OF GEOGRAPHY at KIRORI MAL COLLEGE organized an orientation program for all first-year Geography students on 16/08/2023 at 09:30 am in room No. 214.

The inaugural session began with a warm welcome by the faculty members of the geography department. The orientation program gave the students a brief insight into the next milestone of their lives. Faculty made students aware of the college culture and the code of conduct to be maintained while in college.

A PowerPoint presentation was used by the Teacher in charge, Dr. Khusro Moin to help students understand the academic schedule to be followed in the following semesters. Students were given insight into how to excel in exams and were also made aware of the other subject papers included in their academic policy.

Teachers of the department also gave their assurance to try their best to help students prepare for their career goals and how to achieve them. Students were also made aware of the co-curricular activities and extracurricular activities that will help their overall development.

All the teachers introduced themselves and talked about the subject they would teach. Faculty included Dr. Khursro Moin, our teacher in charge, who would teach physical geography. Dr. Karuna Shree and Dr. M. Baber Ali were there and enlightened the students on the subject of DIGITAL CARTOGRAPHY. Ms. Kanchana Narsimhan would teach HUMAN GEOGRAPHY. Prof. Anshu and Dr. Jeetesh Rai are also there to welcome

and guide the students. Other geography faculty include Dr. Krishna Das, Dr. Vinod Kumar, and Dr. Vijender Kumar. They all informed us about the dos and don'ts in case any student faces harassment or ragging.

Students then introduced themselves to the faculty and to their fellow batch mates and had an insightful session. Teachers and seniors have wished all the young brains well on their new journey. All the freshmen were happy to be part of the department and were looking forward to new opportunities from the department.









# **BOTANY DEPARTMENT**

**ORIENTATION PROGRAMME** 



FIRST YEAR STUDENTS WITH THE FACULTY MEMBERS OF THE DEPARTMENT.

The Botany Department of Kirori Mal College organized the orientation programme for the newly admitted students of B.Sc. Hons. Botany on 16th August 2023 at the Botany department of the college.

The programme was graced by the presence of all the faculty members, newly enrolled students with their parents and the second- and third-year students. The prime objective of the session was to make the students and parents familiar with the academic aspects of the course, the rules, and regulations of the department as well as the college. It also aimed to exhibit the vibrant life and golden opportunities that await them in the coming four years.

The event began by the welcoming of the students followed by introduction of the faculty members who also shared their valuable words of wisdom and motivated them. Then, the students were acquainted with the infrastructural facilities such as well-equipped labs, botanical garden, herbal garden and many more provided by the college for a comfortable learning for the students.





FACULTY MEMBERS WITH STUDENTS OF ALL THE THREE YEARS

Then a brief explanation about their academic curriculum was given, followed by the departmental activities and events that take place every year. The students were also made familiar with the various societies of the college and the extracurricular activities. The students were also encouraged to keep up the rich legacy of the institute set up by their alumni with their hard work and achievements. This was followed by the introduction of the new students and a friendly talk session. The event ended with the vote of thanks.

The day ended with seniors-junior interaction, which helped the freshers to be more comfortable in the new environment.



# STUDENT ACHIEVERS



# **STUDENT ACHIEVERS**



# **ISHANI WALIDA**

WOMEN'S DOUBLES SILVER MEDAL AT
YONEX - SUNRISE NORTH ZONE INTER-STATE
BADMINTON CHAMPIONSHIPS 2023 - JALANDHAR
PUNJAB BADMINTON ASSOCIATION





# तबाह दुनिया की दास्तान

- प्रो. प्रज्ञा हिंदी विभाग



#### पिछले संस्करण से जारी -

मुझे याद आया कि कल चेकअप के लिये जाना था उसे मेघा को लेकर। कहीं कोई मिसकैरेज क्या? या कुछ और.. क्या एक पूरे परिवार का सपना चरमराकर ढेर हो गया? दुःख का सबब कुछ नुमाया होने पर मेरे कुछ भी महसूस करने की क्षमताएं जैसे चुकने लगीं। मैंने ज़रा ध्यान लगाया तो पाया उसने मेघा के बारे में कुछ नहीं कहा था। अब तक की बात में मेघा का नाम नहीं आया था। मैं जरा निश्चिंत हुआ ही था कि तबाही की तस्वीर में अब मुझे उसकी मासूम बेटी दिखने लगी। कहीं कोई दुर्घटना उसके साथ... शहर का चेहरा आजकल कितना भयानक दिखने लगा है। हर गली-कोने में जगह-जगह दांत और नाखून बढते ही जा रहे हैं कहीं... ओह नहीं, कभी नहीं।

मैंने फिर गौर किया। अपनी याददाश्त को ठोक-पीटकर तराशा तो उसके दुख की दास्तान में कहीं बीबी और बेटी का जिक्र नहीं मिला। मुझे याद आया वो इंसानी मजबूरियों का रोना रो रहा था ओह! तो ये ज़रूर बड़े वेतन वाली किसी अच्छी नौकरी का चक्कर है। महत्त्वाकांक्षी नौजवान है और अकेला कमाने वाला। फिर परिवार भी बढ़ जाएगा तो जिम्मेवारियां भी बढेंगी। तबीयत का कुछ खर्चालू भी है। अपनी ज़रूरत और बेज़रूरत की चीज़ें फैशन के कायदे के मुताबिक खरीदने में उसे मेरे जैसा कोई संकोच नहीं रहता। कुछ दिन पहले कह रहा था-"सर! कोई नई ऑपरचुनिटी हो तो बताइयेगा। आखिर यहां कब तक?" मेरा अपना तर्जुबा है कि ये प्राइवेट जॉब्स अक्सर एक हॉल्ट बन जाती हैं कुछ समय के बाद। एक नए बेहतर सफर का सुरक्षित हॉल्ट। बड़े दिन से विनीत इसी फिराक में था पर लगता है कल मौके पर मात खा बैठा शायद। यही बात मुझे सबसे मुफीद कारण जान पड़ी।

आशंकाओं के तूफान में किनारे जल्द नहीं मिलते। दूर तक मुश्किलों से भरा समंदर ही दिखाई देता है। लाख हाथ-पैर मारो मंज़िल नदारद। आंखें थककर हार भी जाएं पर उम्मीद की धरती कहीं दिखाई नहीं देती। उसकी आवाज़ का दुख और मेरी आशंकाओं का समंदर एकमेक हो रहे थे। फिर जितने बुरे ख्याल आ सकते थे आते चले गए। कहीं बुजुर्ग मां–बाप में से तो कहीं कोई... परसों ही तो ले बैठा था मां की बीमारी का ज़िक्र। मौत अक्सर बेआहट, बेखटके दबोच लेती है। कहींबहन की शादी तो नहीं टूट गई। आजकल कितना मंहगा है शादी का झंझट।

पढ़ी-लिखी लड़की हो, नौकरीपेशा चाहे बेरोज़गार, शादी के समय सब एक ही नाव में सवार होती हैं। ऊपर से ससुराल वालों की बेधड़क फरमाईशें। हर दिन कुछ नया इज़ाफा। मेरा दिमाग अस्थिरता में ढोलता ही जा रहा था। कहीं कोई ठिकाना उसे नहीं मिल रहा था। कहीं नये मकान की जीवन से भारी होती जा रही किश्तें तो विनीत के दुख का कारण नहीं थीं। मैंने कहा भी था-"क्या जल्दी थी मकान की तुमको? जिम्मेवारियों की चक्की में एक साथ इतना क्यों पिसना?"

"सर! धीरे-धीरे सब ठीक हो जाएगा। किराए की रकम लोन में जाती है, कुछ पापा ने दिया है और छोटा भाई भी कुछ मदद कर रहा है ।"

कहीं छोटे भाई की नौकरी न चली गई हो। बैंक को अपनी किश्त से मतलब। वो क्या जाने किसकी नौकरी बची, किसकी गयी। सोच के झनझनाते तारों को मैंने सतर किया तो जाना उसका दुःख गहरा है और उससे उबरने के लिए उसे मेरे सहारे की ज़रूरत है। 'डूबते को तिनके का सहारा' वाकई कहावतें यूं ही नहीं बन जाती हैं मैंने शिद्दत से महसूस किया। मेरी शख्सियत आज तिनका ही सही पर अगर ये विनीत के काम आ जाए तो तिनका भी सार्थक हो जाएगा। जाहिर है दुःख काफी बड़ा था और दुःख के आगे वो एक मामूली इंसान। पर दो मामूली इंसान एक साथ दुख से लड़ें तो दुख के तीखे-नुकीले सिरे कुछ हद तक घिसते ज़रूर हैं।

मैंने उसे कई बार फोन मिलाया पर बार-बार आउट आफ कवरेज एरिया के शब्दों ने मेरी बेचैनी बढ़ा दी। न जाने किन मजबूर हालात में उसने मदद के लिए मेरी ओर हाथ बढ़ाया था। शहर में अकेले किसी बड़े-बुजुर्ग के साथ के बिना उसे मुसीबत में मैं ही याद आया था। कितना मुश्किल होता है परिवार से दूर होना। कितने शहर ऐसी मजबूरियों की मिसालें बने खड़े हैं जिनमें हज़ारों विनीत तन्हा हैं। मैंने तय कर लिया आज, अभी मुझे उसके घर चलना चाहिए। इंसानी जज़्बा मेरे भीतर उछालें मार रहा था। यह मेरे ज़िन्दा होने की और मेरे भीतर के आदमी के साबुत बचे रहने की पहचान था। जेब में मदद लायक संतोषजनक राशि नहीं थी। एटीएम से पैसा निकालकर मुझे इत्मीनान हुआ। उसके घर के नज़दीक पहुंचकर मैंने एक बार फिर विनीत का नम्बर मिलाया ,विनीत के घर की गली की पहचान पूछने के लिए। नम्बर लग गया और विनीत की आवाज़ गूंजी-

" बस सर! बात अधूरी रह गई उस वक्त। दुख तो यही है कि कल पूरे दिन तमाम कोशिशों के बाद भी मेगासेल में मेरा पसंदीदा फोन हाथ से निकल गया। मेरा नम्बर नहीं लगा सर! मेरी तो दुनिया ही लुट गई।"



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