

October/ November/ December

Issue R1 / Vol 1

ASTITVA

TO BE OR NOT TO BE

Find the right side of the moral truth and revamp your ethics.

OPTIMISM & PRAGMATISM IN CURAJ

The cover story on misleading image of Curaj and need of a positive rethought.

THE QUEEN OF HILLS SO HIGH

Experience the serene beauty of nature through the poem.

AN ARTICLE ON AKSHAY PATRA

Read about the great organization feeding more than 16 lakh kids throughout India



ASTITVA WEBZINE

WELCOME

To the revived issue of Astitva.

The roots of the magazine were envisaged even when the university campus was not in existence. An initial start was provided but due to certain unforeseen circumstances and complications, the publication of the magazine had to be stalled. But now with the positive support provided by our honourable Vice- Chancellor. Prof. Arun K. Pujari and encouragement of Prof. Supriya Agarwal we are restarting it. Here I would also like to acknowledge the sincere efforts, and contribution of Swathi Shreekumar and Raheem Khan who have worked silently to revive the magazine. I also express my sincere thanks to all my friends and staff members whose names do not find a mention here. I along with the team of editors have done our best to make this magazine a mouthpiece of all the students. The magazine is open-ended and there is no central theme so that everyone gets an opportunity to express his/her views freely in all directions. We hope you will give your constant support to ensure the 'astitva' of ASTITVA.

I hope you enjoy this one.

RAJEEV RANJAN DWIVEDI

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अस्तित्व

हृदय को हृदय से जोड़ने की कड़ी है अस्तित्व
एक नई सोच पे खड़ी है अस्तित्व
कायम है अस्तित्व का अस्तित्व आप से
चेहरा हमारा, आईना है अस्तित्व
बगावत की बुनियाद पे खरी है अस्तित्व
एक नई सोच, एक नयी विश्वास से अभिरंजीत है अस्तित्व

मुकेश खारवाल
(संपादक अस्तित्व, MA- हिन्दी)

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Life at CURAJ

Feedback



OPTIMISM & PRAGMATISM IN CURAJ

It was a pleasant morning in July. A number of new faces strolled through the tree-lined boroughs on their way to their accommodation. Emotions were running high and words were sparse. The suitcases piled and delectable wrapped up in a smaller bag, moms were pointing out the contents-prescribing the hours in which the homemade delicacies are to be consumed and flagging the highly perishable ones. Dads unloaded more luggage from the car and carried them to the pedestal of the hostels revisiting the security details associated with the debit card that he had just handed over to his offspring. Emphasis was placed on regular phone calls and abstention from the vices in the campus. The parting ended on a rather sombre note as the child turned towards his new home with intentions of shaping his future and consequently the career in the upcoming three years.

Spread across (don't know how many acres, check!), CURaj is one of the new generation Central University set up in 2009 in the different states of India and is the only one in Rajasthan. With 11 Schools spanning over 22 departments, CURaj attracts talents from states across India and even abroad.

Starting from quite humble backgrounds, the University campus can now sustain the burgeoning student population each year with much ease. Recently, a Kendriya Vidyalaya was set up in the campus and with the staff accommodations in place, the University is poised to attain the levels of other Centrally funded Institutes in the coming years. The list of luminaries from the University isn't as yet exhaustive owing to the much recent inception but rest assured the curriculum does lay a strong foundation which has ensured the presence of CURAJians in Sashtra Seema Bal, teaching posts in other Central Universities and various administrative posts. The diversity among the alumni points out not only the success of the innovative curriculum but also the number of luminaries coming up in the subsequent generations.

For the last few months, CURaj is making it to the dailies with much regularity. Unfortunately not for groundbreaking innovations or research, but for the university administration. The newspapers have been hounding for blood, inciting that activities ranging from appointment of teachers to disbursement of central funds are not being done in a proper way.



OPTIMISM & PRAGMATISM IN CURAJ

Seems like the newspaper editor knows more about the workings of a university than our VC which brings upon the question- How much of it is the truth !

With its infrastructure, CURaj is set to be among the emerging new universities in India providing education along the lines of requirement of the emerging world trends. That is not for us to investigate or point out but to determine from the conditions within the campus. The onus lies on us, the students to ensure that the name of our university is not maligned. We should ensure that the problems being faced by us are solved through proper communication channels. I believe that being educated also instills among us the responsibility of not resorting to lawlessness and instead ensure ways to prevent the bad publicity that is being generated. Even if we do not want to get muddled into the intricacies of published news, one must realize the negative publicity generated will surely affect the career that we are shaping. Instead of maligning the University's name and sending incoherent mails that jeopardize our own future, I believe that it is imperative for the students to ensure that the brand image of our university is not tarnished for it is on the foundations of this institution that we will be able to project ourselves in our future endeavors.

CURaj was established to set benchmarks and it certainly is the "bellwether" of the quality of Indian education. I believe that communication between the administration and the students at equal intervals is a necessity and will remove the feudal mediocrity. The Administration has made attempts to ensure that the University is not relegated to another state university and has made efforts at attracting world-class faculties. However, it is still coping with the blows being dealt by newspapers that are affecting the quality of people applying for positions and thereby certainly causing problems for students. With good infrastructure, faculty and a good environment, CURaj will attract the best talent, and with the students, CURaj will do justice to the vision and mission with which it was set up.

An insightful individual might proclaim that Rome was not built in a day and thereby it is logical that changes will be made. The shifting of the departments to the new buildings, the introduction of new WiFi facilities, the streamlining of complaints are some of the more visible changes made in the campus. Therefore patience and time are the only answers coupled with the contributions of the students in order to raise the University to the epitome of success!

Devargaya Mitra

DEPARTMENTAL ACTIVITIES

Media Utsav 2017

The Department of Culture and Media Studies organised it's 3rd Media Fest. As a part of the fest, the following events were organised:

- o Role of Culture in Nation Building: Talk by Mr. Anand Verdhan Shukla (Ex-IGP, Rajasthan Cadre).
- o Documentary Screening.
- o Media Strategies for Social Change: Talk by Smt. Shipra Mathur (Rajasthan Patrika, Pen Media Foundation).

Hindi Pakhwada

The Hindi Department organised "Hindi Pakhwada", a fifteen-day long fest, which included various activities such as Essay Writing, Debate Competition, Poster Making, Self-composed Poems etc. Students also celebrated Hindi Diwas as part of the event. The Fest was concluded with a closing ceremony in which all the winners of the different activities were awarded.



DEPARTMENTAL ACTIVITIES

• WILD ARK 2k17

The School of Earth Sciences organised a wildlife awareness program - WILD ARK 2k17 on the occasion of wildlife week. The fest witnessed the following events:

- o DOCUMENTARY SCREENING
- o REDEMPTION (Model Making Out of Waste)
- o SURVIVAL OF THE FITTEST (Treasure Hunt)
- o INTO THE WILD (Bird Watching @ Campus)
- o ZOO'M IN (In Campus Photography Competition)
- o WILD BRUSH (Painting Competition)
- o ZOO'VIA (Quiz Competition)
- o IDEAS ROOM (Finding Solutions for Most Common Problems Around You)
- o STREET PLAY (On Wildlife Awareness)



DISTINGUISHED LECTURES

"Success always comes when preparations meet opportunity." Living by this saying, Central University of Rajasthan organised a number of distinguished lecture series and interaction series for both students and faculty members.

Through such session, university desires to bring public speakers of the highest calibre from the world of academia, business, art and culture and the civil society to share their thoughts and ideas. The purpose of distinguished lecture series is to inspire young minds for discussions and debates and open the horizon of knowledge.

- **"Innovations for Inclusive Development: Role of Institutions, Initiatives and Incentives"**: This special lecture was taken by Dr. Vipin Kumar (Director, National Innovation Foundation, India) in order to inspire young minds towards innovation for a better picture of future India.

- **"The art of Mind Control: Rule your mind or it will rule you"**: This was a talk and interactive session organised by Akshaya Patra Foundation. *Shri Ananta Shesha Das* (Vice President Akshaya Patra Foundation, Jaipur) and *Shri Vijaya Sarathi Das* (Youth Mentor Akshaya Patra Foundation, Ajmer) beautifully provided the teachings on how to blend knowledge and spirituality.

- **"Sanskrit Bhasa ke varno ka darshan aur adhunik vaigainik sankalpanaye"**: The session was a complete scientific and spiritual description of Hindi letters (vowels) concluded after a long research of 28 years by Dr. Surendra Bhatnagar. Dr. Surendra Bhatnagar is currently working with (Bharitiya vidhya addhayan avam anusandhan kendra) Atal Bihari Bajpayee Hindi University, Bhopal, MP.



UNIVERSITY EVENTS!

The world is a kaleidoscope of adventures, experiences, sciences, arts, sports, and much more.

Here are the notable events that have been fruitfully organised by our university.

• **Celebration of National Handloom Day:** To create awareness amongst youth about our rich heritage of Handlooms, Directorate of Field Publicity, Ministry of information and Broadcasting, Government of India, organised 3rd National Handloom Day. As a part of Nationwide campaign, a major event, "Handlooms & Young India" was celebrated in our university. This event included talks by experts, cultural events, quiz and a painting competition on the theme - "Mere Sapno Ka Bharat".

• **National Youth Parliament:** The Group Level Competition of National Youth Parliament Competition was organised in the University which was being sponsored under the National Youth Parliament Competition Scheme for Universities/ Colleges, Ministry of Parliamentary Affairs, Government of India.



UNIVERSITY EVENTS!

• **NEW INDIA MANTHAN 2022 “Yeh India Ka Time Hai”**: To celebrate the 70 years of Independence and 75th year of Quit India Movement, the Ministry of Human Resource and Development (MHRD), Government of India in collaboration with National Film Development Corporation (NFDC) organised a brainstorming session for both faculties and students, which included discussions on different themes. In the same context, a Rock Concert was also organised where the rock band “Azaadi” performed in the University.

• **Symposium on Climate Awareness**: The Department of Environmental Science in collaboration with Integrated Research and Action for Development (IRADe) organised a 3-day symposium to raise awareness on Climate Change among students and motivate young minds to participate in the discussions. There was a two-day lecture series by eminent climate experts followed by a debate competition.



UNIVERSITY EVENTS!

• **Nukkad Natak- "Aayna":** To create awareness on gender-related issues and to sensitize and motivate the students to build a healthy society, SPARSH and the Gender Champions of the University organized Nukkad Natak, Aayna which was scripted, directed and enacted by the students.

• **SPIC MACAY Programme:** The university in collaboration with SPIC MACAY presented a Kathak Dance Performance by Mr Deepak Maharaj, son of legendary Pandit Birju Maharaj of Lucknow Gharana.





UNIVERSITY EVENTS!

• **“Talk and Interactive Session”**: This session was taken by Dr. Renuka Pamecha (Social activist and retired professor of Political Science) and Dr. Rashmi Chattervedi (President women rehabilitation centre and director, Kanoria College, Jaipur) under the aegis of SPARSH Apex Body.

• **“Inclusion and Diversity for Excellence in Science”**: The speaker for this session were Dr. Krishna S Athreya, who is an Advisor to American Association for Advancement of Science on diversity. The lecture mainly focused on the development of science and its understanding by absolute observation of the surroundings and nature.

• **“General Awareness of Traffic, Safety and Security”**: Children and young people are at significant risk on our roads. In view of this, Dr. Charan Singh (Psychiatrist) and Shri Devendra Vishnoi, R.P.S., Additional S.P., Ajmer together provided road safety education, ensuring that we become responsible drivers, passengers and pedestrians.





SPORTS EVENTS!

University celebrated many sports events in the year 2017. All the events saw huge turnouts in the number of participants as well as the audience. They kept the teams motivated and supported them till the end. We had our 2nd Annual CURAJ volleyball festival, Kabaddi league, Cricket league and last but not the least Handball league. Our Teachers and not teaching staff also participated actively.

The new session was welcomed by mind-blowing volleyball festival. It was celebrated during 10th to 12th August 2017. Fourteen Teams participated in the festival and the final was played between the two favourites KKH and Fast & Furious.

CURAJ Cricket League was the next in timeline. CCL2k17 saw huge participation, around 50 teams registered themselves and it was played during 8th to 16th September, 17. All girls team also registered themselves and played well. The girl's finale was between Elite Girls and Game Swingers. The boy's finale was between Flash and United Curajians. All the teams won hearts with their performances.

Then we had our first ever Handball League. It was played from 22nd to 25th September 2017. Twelve teams registered themselves. The Vice-Chancellor inaugurated the event on 22nd September 2017 and an inaugurator match was played between staff team and student team of CURAJ. The Chetan Gang were the winners of the league.

Then last in our timeline, we had Kabaddi league. The League started with the motto of "Le Panga". Nineteen teams in total registered themselves out of which 3 were all girls team. Kabaddi League 2k17 was celebrated on 9th September 2017.

SWACHCHATA PAKHWADA

No matter how many students, but it matters how much concern you have for your own and your own nation-building. No matters how much you contributed but at least you tried to serve with real essence. your small contribution matters to your nation and society. It's all about initiative, and social commitment. With this message, NSS CURAJ in collaboration with Ministry of Human Resource and Development (MHRD) organised Swachhata Pakhwada. It comprised of various events occurring for fifteen days regularly with major focus on cleanliness in which all the students and faculty members volunteered enthusiastically.

- Clean Campus Day: This was the day 1 activity in which students cleaned the university campus.
- Clean Hostel Day: On day 2, the students cleaned their respective hostels.
- Green Campus Day: In green campus activity, on day 3, the volunteers planted several plants all around the campus area.
- Clean Mess Day: As part of the activity, the participants made sure that the mess of their respective hostels as well as the Mega Mess was clean in every possible way.
- Essay Competition: As a part of the fifteen-day event, an Essay competition on "Innovative Ways for Spreading the Message of Hygiene", "स्वच्छता-संदेश के प्रसार हेतु अभिनव तरीके" both in Hindi and English Language respectively was organised.
- Clean Surroundings: Under this activity, the surrounding areas of the university (outside the campus) were cleaned by the volunteers.
- Care for Surroundings: In view to create awareness regarding the importance and benefits of cleanliness among the various sections of the society, the students became part of the following field excursions:
 - o Visit to Study the Garbage Cleaning System,
 - o Visit to Kishangarh,
 - o Visit to Govt. Hospital, Kishangarh,
 - o Visit to Slum/Villages to explain the concept of cleanliness,
 - o Visit to nearby markets (Bandarsindri) and
 - o Visit to Orphanage, Ajmer.
- Cleanest Hostel Room Contest: On the basis of several criteria, one room from every hostel was adjudged as the cleanest room.
- Elocution Contest: Elocution Competition on the topic "Health and Hygiene is the real Wealth" was organised in both Hindi and English language.

The valedictory session was graced by the presence of Ms. Tina Dabi (Assistant Collector, Ajmer) as the chief guest along with Vice Chancellor sir. All the winners of the events as well the volunteers of different activities were awarded.

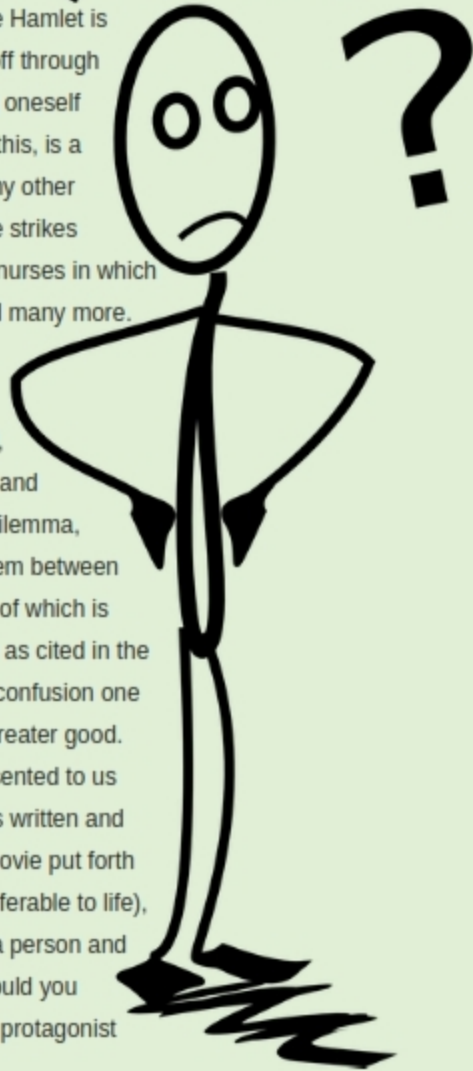


ETHICAL DILEMMA.

TO BE OR NO TO BE....

The above read phrase is the opening phrase of the play Hamlet written by William Shakespeare, in which Prince Hamlet is basically contemplating suicide on and off through his soliloquies. Suicide, the act of killing oneself intentionally or a person who has done this, is a case of ethical dilemma along with many other examples like, the abortion debate, the strikes conducted by medical physicians and nurses in which increment in their salary is the goal, and many more.

What is ethics? Ethics seeks to resolve questions of human morality by defining concepts such as good and evil, right and wrong, virtue and vice, justice and crime. Moving on to what is an ethical dilemma, it is basically the decision making problem between two possible moral imperatives, neither of which is unambiguously acceptable or preferable as cited in the internet, in other words the dilemma or confusion one faces while taking the decision for the greater good. An example of ethical dilemma was presented to us through the movie, Guzaarish which was written and directed by Sanjay Leela Bansali, the movie put forth the topic of euthanasia (death that is preferable to life), i.e., when life becomes unbearable for a person and one wishes for death rather than life. Would you also choose to do what the female lead protagonist in the movie had done?



A Lie in a Truth or A Truth in a Lie?

In our daily life we come across situations, statements and theories which are self-contradictory and seem absurd when given a brief thought but yet they are true. Paradoxes have been a central part of philosophical thinking for centuries, and are always ready to challenge our interpretation of otherwise simple situations, turning what we might think to be true on its head and presenting us with provably plausible situations that are in fact just as provably impossible. Confused? You should be.

THE BOOTSTRAP PARADOX

The Bootstrap Paradox is a paradox of time travel that questions how something that is taken from the future and placed in the past could ever come into being in the first place.

It's a common trope used by science fiction writers and has inspired plotlines in everything from Doctor Who to the Bill and Ted movies. But one of the most memorable and straightforward examples—by Professor David Toomey of the University of Massachusetts used in his book *The New Time Travellers*—involves an author and his manuscripts. Imagine that a time traveller buys a copy of Hamlet from a bookstore, travels back in time to Elizabethan London, and hands the book to Shakespeare, who then copies it out and claims it as his own work. Over the centuries that follow, Hamlet is reprinted and reproduced countless times until finally a copy of it ends up back in the same original bookstore, where the time traveller finds it, buys it, and takes it back to Shakespeare. Who, then, wrote Hamlet?

LIAR PARADOX

This is a well-known paradox written by the great stoical logician Chrysippos.

1. A Cretan sails to Greece and says to some Greek men who are standing upon the shore: "All Cretans are liars." Did he speak the truth, or did he lie?
2. A week later, the Cretan sailed to Greece again and said: "All Cretans are liars and all I say is the truth." Although the Greeks on the shore weren't aware of what he had said the first time, they were truly puzzled.
If someone says "I always lie", are they telling the truth? Or are they lying

03

THESEUS'S PARADOX

Imagine a ship that needs to be repaired and for this purpose the parts of the ship are replaced plank by plank with new wooden planks until none of the original part of the ship remains. Is it still the same ship?

The parts replaced are used to make another ship. Now which the real ship of Theseus.

This paradox arises because of the intuition that no single physical object can have two spatial locations at once. For this reason, we cannot simply say that both ships are the Ship of Theseus. It also seems odd to say that the original ship popped out of existence as soon as it began to be replaced. Metaphysical problems concerning the nature of an object's identity, and to what extent that identity depends on physical make-up, are raised in consideration of this problem.

04

THE CARD PARADOX

Imagine you're holding a postcard in your hand, on one side of which is written, "The statement on the other side of this card is true." We'll call that Statement A. Turn the card over, and the opposite side reads, "The statement on the other side of this card is false" (Statement B). Trying to assign any truth to either Statement A or B, however, leads to a paradox: if A is true then B must be as well, but for B to be true, A has to be false. Oppositely, if A is false then B must be false too, which must ultimately make A true.

Shubham
M.Sc. Tech. Mathematics.

THE HIDDEN TRUTH OF BHARATIYA MATHEMATICAL WORLD

One of the remarkable Mathematical figures of the nation Srinivasa Ramanujan with his thousands of conjectures and theorems in the domain of number theory, Vedic Mathematics, notation of zero, infinity, and the decimal value number system brought respect to Bharat from rest of the world. The geometrical approach to all of these things changed the phenomenon of the mathematical world. But there are many more such discoveries made by Bharatiya mathematicians that have been known to the world as the work of Europeans. Here is an effort to bring all those hidden facts into the light.

From Vedic era to Modern-era there is a continuous flow of work in mathematics which is induced by the natural activities. The Vedic Mathematics and use of decimal place value system in the Rig-Veda is the barefaced proof of it. Besides this, the famous "Pythagorean Theorem" was described 300 years before Pythagoras discovered it, by Baudhāyana in his Vedāᅅga(limbs of the Veda) "Baudhāyana Śulbasūtras". In these Śulbasūtras he discussed the formula for the transformation of a geometrical figure to another geometrical figure, preserving the area and also the concept of the value of irrational number, knowing it to be an approximate one. The "Santi mantra" one of the Upaniᅅad gives a clear idea of infinity and other interesting aspects of numbers.

In the primitive age, the work of Bharatiya mathematician marks an eye-catching impression on the of the history of Mathematics. Āryabhaṭa(499 AD) gave the sine difference table with its proof in geometric and analytic approach, algorithms for finding square, cube, square root, and cube root of a number and also gave an analytic method to solve an indeterminate equation. Another great mathematician Brahmagupta (650 AD) enlightened the method to deal with the famous Pell's equation($y^2 - Dx^2 = 1$). 900year before Pell, he also gave an interpolation formula in term of sine function which is similar up to second order with Newton-Stirling interpolation formula. In 1050 AD there was an invention of famous series named Hemachandara Sankhya(1,1,2,3,5,8,13,21,34,.....) by Jain Sanskrit scholar Acharya Hemachandara to solve a problem in music literature which later became the Fibonacci Series.

Later in the 12th century a Bharatiya mathematician named Bhaskara-II germinated the seed of modern view of calculus . In his creations he described the notion of infinitesimal, taking the small amount of time interval (1/33,750 second) to calculate the instantaneous velocity which is the soul aspect of calculus. Indian mathematicians were also familiar in dealing with very large or very small numbers even before the invention of calculus. In some verse Siddhanta Shiromani gave the same meaning of condition for maxima and minima and also the same meaning of Mean Value Theorem. His book Lilabati dealt with the way of finding the surface area of a sphere using elementary area method, as we do in today's application of calculus.

One the most important contributions in the history of mathematics is the contribution of the Kerala School of Mathematics. The first and most important character of this school was Madhava whose work established a mile stone in 17th century. After his death, all of his work was described by Yeṣṭhadeva in the book Ganita Suktibhāṣā in the Malavalam language.

Madhava introduced series for the expansion of Pi, 300 year before Leibnitz, but the world later called it Leibnitz's Series. He also contributed the correction terms for some order of the same series. Another most important work of Madhava is Gregory-Madhava series for the expansion of $\tan^{-1}x$. He studied the convergence of infinite series through geometry, various ways for faster convergence of infinite series, continued fraction, and so many other important fields of matter. The work of Nilakhanta Somyaji of Kerala school in his book Tantarangraha talks about the series for sine and cosine which is framed in the name of Newton. He formulated the method of differentiating $\sin^{-1}x$ to describe the equation of centre of planetary motion. The idea of differentiating the ratio of function and a lot of other works of the Kerala school is the matter of research nowadays.

The systematic evolution of the number "pi" in Bharat goes a long way back to the Vedic period. There are proofs of Jain text in which the value of pi is correct up to one decimal place, but Āryabhata made a calculation which is correct up to 4 decimal places and he also knew that it was an approximate value. Then after him Madhava made a calculation using infinite series resulting a value which is correct up to 11 decimal place, finally, in the modern era Mr Ramanujan calculated it correct up to 17million decimal place using the Modular Equation.

Lot of other mathematicians from Bharat named Ktyayana, Pingala, Varahamihira, Yativrasabha, Bhaskar I, Sridharacharya, Mahabira, Narayana Pandiata, Parameshvara, Kamalakara, Jagannath Samrat many other who have done remarkable work in the field of Algebra, Combinatorics, Infinite series, Number theory, and Geometry. Being a Bharatiya, we should know the work of our own civilization in our own original form and get inspiration from it to invent something new and original as Prof. Manjul Bhargava has done by getting inspired by the work of Bhramhagupta.

Dinesh Nayak
M.Sc. Tech. Mathematics,

No Child In India Shall Be Deprived Of Education Because Of Hunger

AN AKSHAYA PATRA INITIATIVE

The Akshaya Patra Foundation is a nonprofit organisation headquartered in Bengaluru. Akshaya Patra strives to fight issues like hunger and malnutrition in India, by implementing the Mid-Day Meal Scheme in the government schools and government-aided schools. Its aims not only to fight hunger but also to bring children to school. Since 2000, the organisation has worked towards reaching more children with wholesome food on every single school day. Akshaya Patra is continuously leveraging technology to cater to millions of children. Its high-tech kitchens have become a subject of study and they attract curious visitors from around the world. In partnership with the Government of India, various State Governments, the inestimable support from many businesses, philanthropic donors and well-wishers; grown from its beginnings in the year 2000, serving just 1,500 children across 5 schools. Today Akshaya Patra is the world's largest (not-for-profit run) mid-day meal programme serving wholesome food to over 1.6 million children from 13,839 schools across 12 states in India.



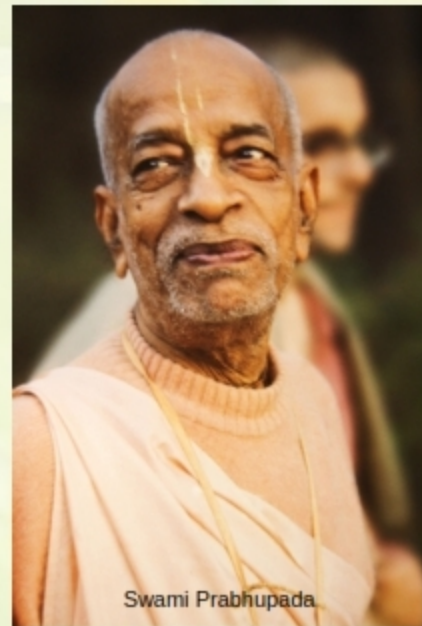
A brief on the growth of The Akshaya Patra Foundation

On November 28, 2001 the Supreme Court of India passed a mandate that: "Cooked mid-day meal is to be provided in all the Government and Government-aided primary schools in all the states." Akshaya Patra was also called upon to provide testimonies to the Supreme Court.

By the time the Ministry of Human Resource Development - Department of School Health and Education extended its support to the initiative in 2003, Akshaya Patra was already reaching out to 23,000 children. Today, Akshaya Patra has kitchens in 34 kitchens spread across 12 states in India, a result of the successful partnership with the Government of India, various State Governments and generous supporters.

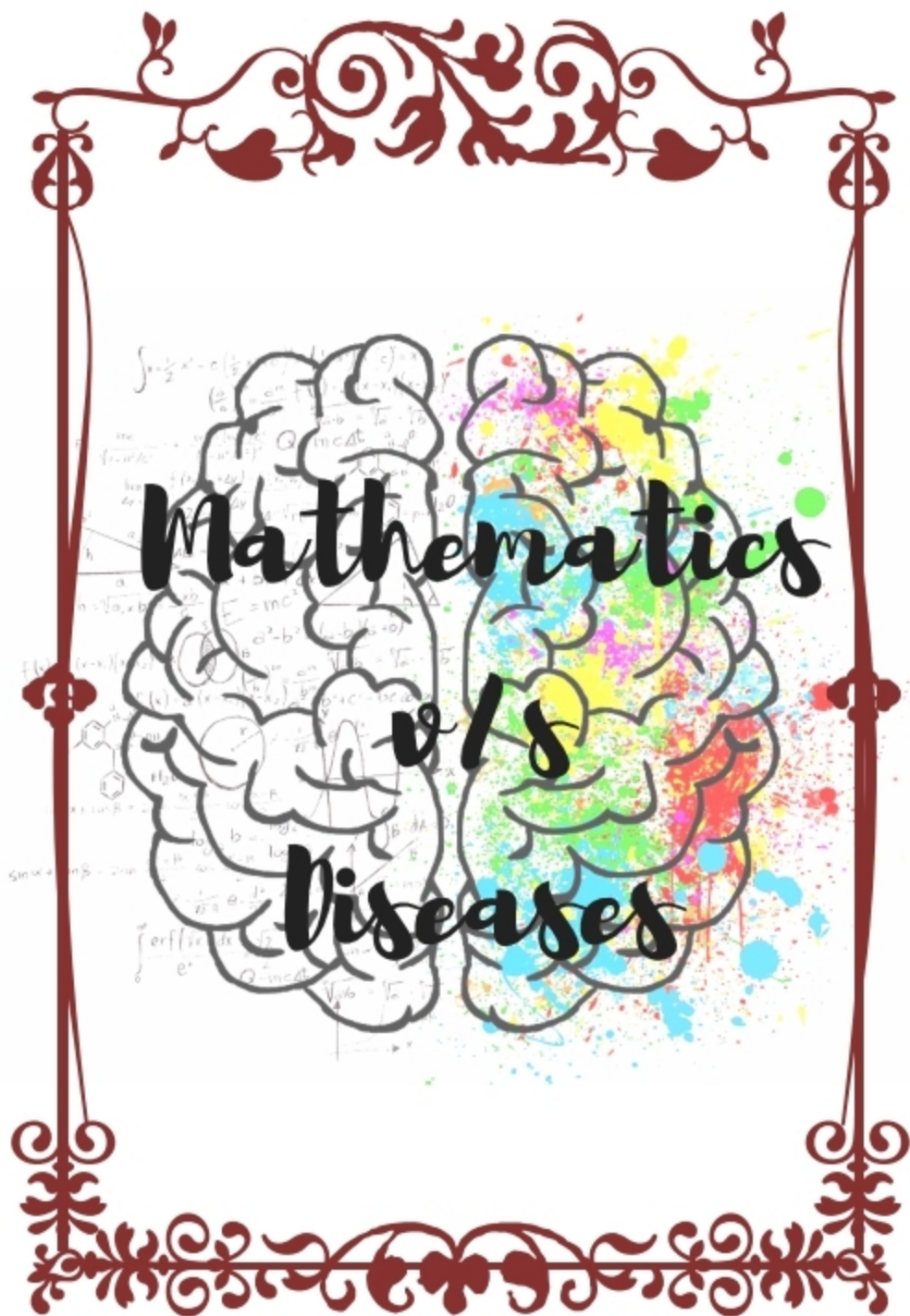
History of The Akshaya Patra Foundation

Looking out of a window one day in Mayapur, a village near Calcutta, A. C. Bhaktivedanta Swami Prabhupada, saw a group of children fighting with stray dogs over scraps of food. From this heart-breaking incident, he decided that no child within a radius of ten miles from our centre should go hungry. In June 2000, The Akshaya Patra Foundation started the mid-day meal programme in Bengaluru, Karnataka. The initial days of implementation were not smooth sailing for the organisation. But soon came the helping hands of Mohandas Pai, who took the initiative of donating the first vehicle to transport food to the schools; and Abhay Jain, who promised to bring in more donors to contribute for the further expansion of the programme. The humble beginnings of the Foundation started with serving of the mid-day meals to 1500 children across five Government schools in Bengaluru.



Swami Prabhupada

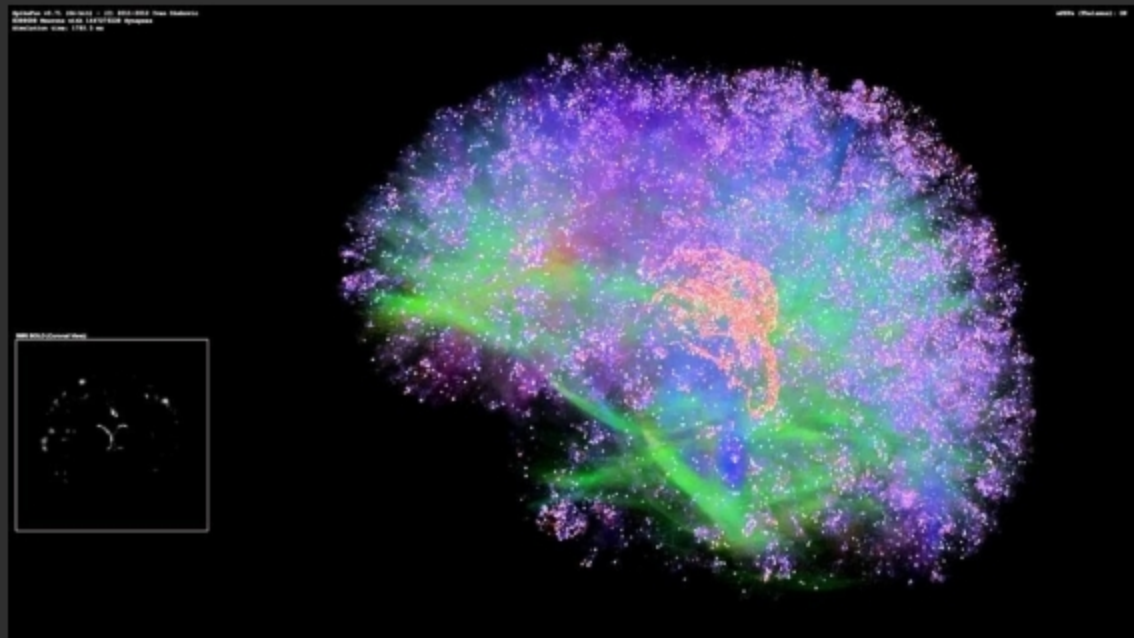
The vision of Akshaya Patra Foundation is no child in India shall be deprived of education because of hunger and
Mission is to feed 5 million children by 2020.



Mathematics
v/s
Diseases

HOW SECRET MATHEMATICS OF LIFE COULD FIGHT AGAINST DISEASE?

Mathematics is increasingly integral to biology as more detailed experiments in recent years have led to a huge influx in biological data.



Artificial Brain simulation is very tricky. Could mathematics based on symmetries help?

"...The combination that can be formed with numbers and symbols are an infinite magnitude. In this thicket how shall we choose those that are worthy of our attention? Shall we be guided only by whimsy?" That Poincarè's argues not only gives the complex interaction between mathematics and physics but also sense the beauty and order of mathematics. So mathematics is an essential language of science. It croups up everywhere from physics to engineering, chemistry and economics helping us to understand the origin of universe, build up the most basic concept between demand and supply, building bridges that won't collapse in the wind. Probably with more surprisingly, mathematics can integrate with biology. Hundred years of mathematics has been identified with great efforts to model in physical systems. Newton's gravitational law relatively simple example which describe motion of celestial bodies billions of miles away with help of relatively simple observation led into the rule with great accuracy. But Biology has been shown as much complicated to submit such mathematical treatment.

Biological systems are often classified as "complex". Complexity in this sense means that, due to the complicated interaction of many sub-components, biological systems can exhibit what we call emergent behavior – the system as a whole demonstrates properties which the individual components acting alone cannot. This bio-complexity has often been mistaken for vitalism, the misconception that biological processes are dependent on a force or principle distinct from the laws of physics and chemistry. Consequently, it has been assumed that complex biological systems are not amenable to mathematical treatment.

There were some early dissenters. Famous computer scientist and World War II code-breaker Alan Turing was one of the first to suggest that biological phenomena could be studied and understood mathematically. In 1952 he proposed a pair of beautiful mathematical equations which provide an explanation for how pigmentation patterns might form on animals' coats.

An Emergent Field

The field of mathematical biology has already been exploded since then. Presently, increasing details experimental procedure have lead to a huge influx of the biological data available to scientists.

This data is being helped to generate hypothesis about the complexity of previously cryptic biological systems. For testing these hypotheses, they must be generating some model which can be interrogated to determine whether it mimics the biological observations. Mathematics is the natural language in which to do this.

High computational mathematical technics can treats to understand the bio-medical data like Magnetic Resonance Imaging (MRI) or Nuclear Magnetic Resonance Spectroscopy (NMR). On the other hand, Human Genome project has already been started about two decades ago, to identify the root of these disease like cancer and the human evolution. This project has already produced a huge amount of genomic data which is seriously challenging for scientists to understand and characterize the data. Mathematics can help to do this.

Mathematics has become a vital weapon for the scientific community. We have to tackle some of the most pressing questions in medical, biological and ecological sciences in the 21st century. By describing biological systems mathematically and then using the resulting models, we can gain insights that are impossible to access thought experiment and verbal reasoning alone. Mathematical biology is incredibly important if we want to change biology from a descriptive into a predictive science – giving us power, for example, to avert pandemics or to alter the effects of a debilitating disease.

A New Weapon

Since last 50 years, mathematical biologists have built increasingly complex computational representations of the heart and brain physiology. Recently, these highly sophisticated models are being used in an attempts to understand better the complicated functioning of the human heart and brain. Computer simulation of heart functions allows us to make predictions about how the heart will interact with candidate drugs, designed to improve its functions without having to undertake expensive and potentially risky clinical trials.

We used mathematical biology to study disease as well. On an individual scale, the researcher has elucidated the mechanism by which our immune systems battle with viruses through mathematical immunology and suggested potential interventions for tipping the scales in our favour. On a wider scale, mathematical biologists have proposed mechanisms that can be used to control the spread of deadly epidemics like Ebola and to ensure the finite resources dedicated to this purpose are employed in the most efficient way possible.

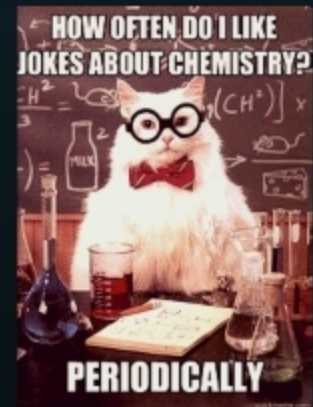
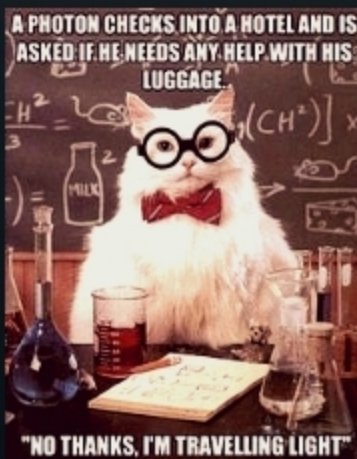
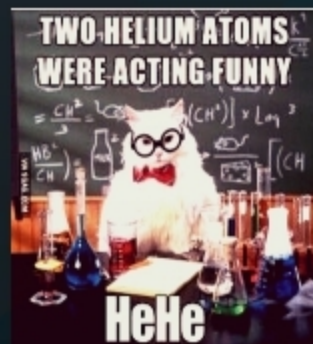
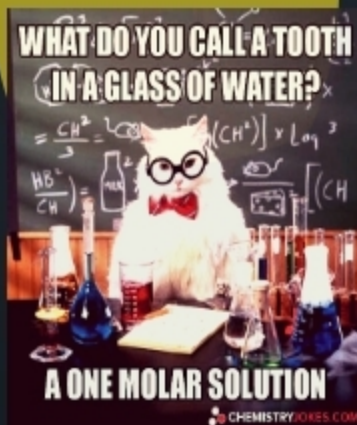
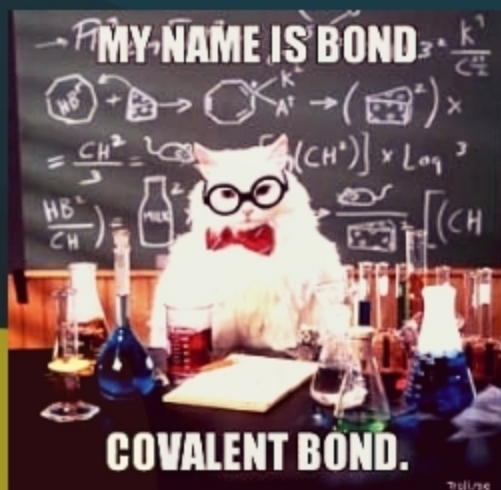
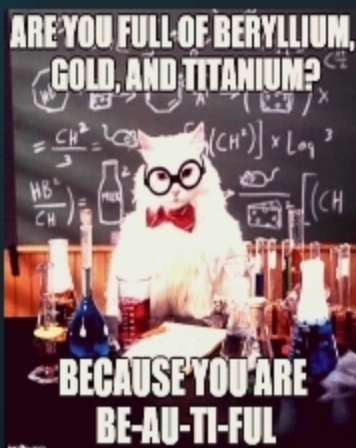
Although mathematical biology has traditionally been the domain of applied mathematicians, it is clear that mathematicians who self-classify as pure have a role to play in the mathematical biology revolution. The pure discipline of topology is being used to understand the knotty problem of DNA packing and algebraic geometry is being used to select the most appropriate model of biochemical interaction networks.

As the profile of mathematical biology continues to rise, emerging and established scientists from disciplines across the scientific spectrum will be drawn to tackle the rich range of important and novel problems that biology has to offer.

Since last five years, Systems and Synthetic biology have been developed as a two new discipline with the use of mathematical and engineering principle and molecular biology method. Systems biology try to understand the systems level mechanism of disease progression whereas synthetic biology is the re-design of existing natural biological systems for a useful purpose. Recently, world top fifty universities established these discipline for treating deadly disease like Cancer, Ebola or trying to handle the most important issue related to the sustainability of agricultural production and food security. So mathematics is not only a language of science but the mother of all science.

Soumen Bera,
PhD. Research Scholar,
Mathematics

For Chemistry Loving People



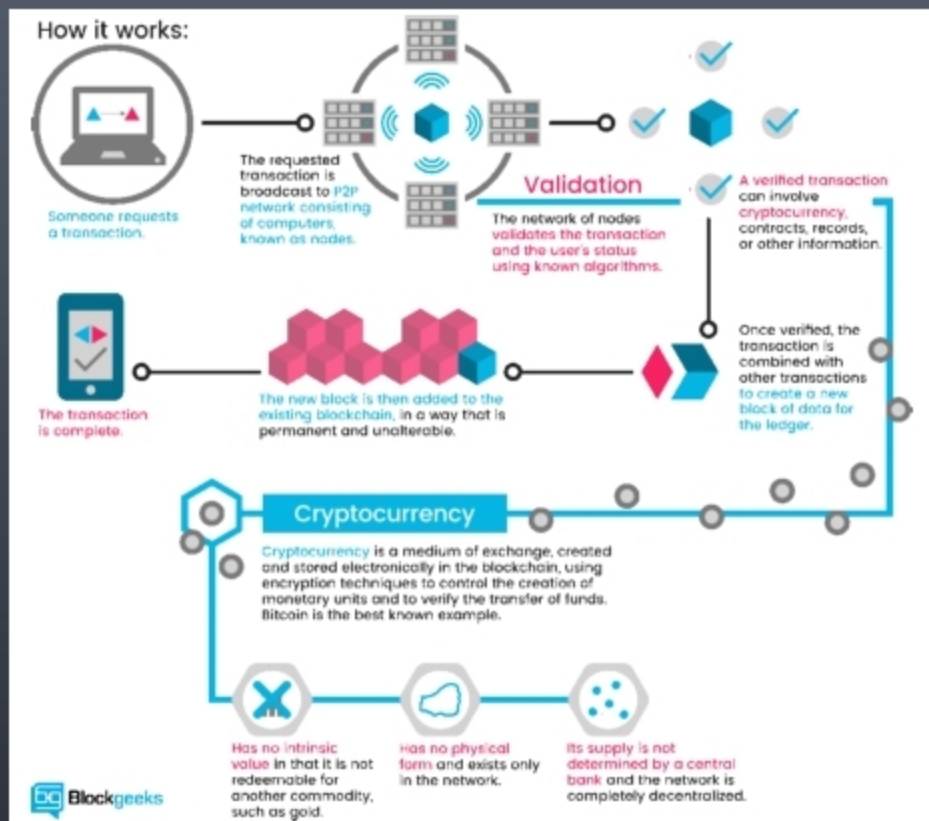
Cryptocurrencies!

What does it mean to have a bitcoin or any other cryptocurrency? Now a lot of us know it as a fully digital currency that's not issued by any government or that no bank needs to manage accounts and verify transactions or how it was originated in the first place? Cryptocurrencies are understood as the future of electronic transactions. If you have never heard of bitcoin or cryptocurrencies, one way to think of it is as tokens sold by temples — for special rituals or prasadam — in exchange for cash. These temple tokens, typically, can only be used within the premises. They are often exchangeable between individuals without the permission of any supervening authority. And if you lose the token or forget to use it, it is as good as losing money. This analogy is useful, but it can only go so far. Unlike tokens in a temple which are controlled by authorities, cryptocurrencies are generated by a network of computers that run a software called 'blockchain'.

Today, there are over 1,158 cryptocurrencies run on the blockchain technology which facilitates peer-to-peer exchange bypassing traditional central clearing houses or authorities. Bitcoin being the first cryptocurrency currently has market share of about 51.8 percent, the number of competing cryptocurrencies continues to grow while it faces the major criticisms emanating from its negative reputation of its use in some illegal transactions, but this should not be smeared to other existing and new cryptocurrencies which are designed differently.

Let's have a look at the mechanism ruling the databases of cryptocurrencies. A cryptocurrency like Bitcoin consists of a network of peers. Every peer has a record of the complete history of all transactions and thus of the balance of every account. This is basic peer-to-peer technology.

And this is how it works:



Cryptocurrencies are digital gold. Sound money that is secure from political influence. Cryptocurrencies are also a fast and comfortable means of payment with a worldwide scope, and they are private and anonymous enough to serve as a means of payment for black markets and any other outlawed economic activity. Markets are dirty but this doesn't change the fact that cryptocurrencies are here to stay – and here to change the world. This is already happening and it is gaining importance as the world is gaining knowledge about this revolutionary idea. Cryptocurrencies change the world. Step by step. You can either stand beside and observe – or you can become part of history in the making.

Shubham
(M.Sc. Tech Math.)

THE QUEEN OF HILLS SO HIGH

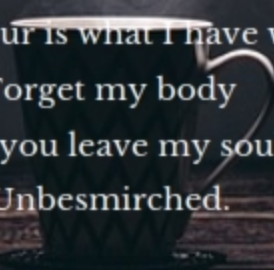
The queen of hills greeted us with gentle gaze,
Sitting in the toy train, viewing teak trees was dramatically amaze
Sunkissed majestic mountains welcomed us warm
Exploring hills was unplumbed charm
The healing rain
Always began with a story trail
Adventure of Chadwick hills reincarnated our lost soul
Great triumph was carried in our heart bowl
Hills all brown
Gave us leisure deep down
Viceroy lodge so renowned
Explained us how high was destructed English Crown
As we walked along the Brook
A short note we took
The Brook had something to say
And we had attention to pay
The most tussled pebble was
The most buffed pebble
The lesson learnt was enough divine
Now it was all fine
But sitting in train
From the window pane
It was time to say goodbye
To the queen of hills so high.

Shivani Bhatia

Int. MSc. EVS

UNBESMIRCHED

Since I was four
Even before I have known
In a bus
When I was travelling abode.
The guy I had known
And the one who goes untold,
One who doesn't know
What no is like,
And the one who thinks
It's gonna be alright.
Numen of their deeds
Burn my core,
The wrath of my deity
Starts to sore.
It has been forever since
That honour is what I have wished,
Forget my body
Can you leave my soul,
Unbesmirched.



Shivani Singh

Int. MSc. Chemistry

~ किस्मत के कलमकार ~

जो जी रहे हैं वही जिन्दगी है। इसके बाद न स्वर्ग है, न ही नर्क। इसीलिए दोस्तों जिन्दगी जियो जूनून से और कुछ कर गुजरो ताकि आने वाली पीढ़ियां हमारा नाम इतिहास में स्मरण करे और यही सच्चे अर्थों में जिन्दगी की जंग में जीता गया स्वर्ग है। बाकी तो कपोल, कल्पित, कल्पना या ढोंगी लोगों का प्रवचन है या इससे इतर भी कुछ, मैं कुछ नहीं जानता। बस यही कहता हूँ कि मेरे किस्मत का कलमकार मैं ही हूँ और मैं जो चाहता हूँ वो ख़्वाब वक्त के साथ यथार्थ के धरातल पर भी हकीकत होगा। इसमें ईश्वर का कोई रोल नहीं है। यह मेरी उम्मीद या कल्पना नहीं पूर्ण विश्वास है। जो अनुभव की अनुभूतियों से अभिरंजित यायावर जीवन से पाया गया है। बस जिन्दगी कुछ नहीं परमब्रह्म द्वारा दी गई एक निश्चित समय सीमा है। जिसमें हमें देश-दुनिया व समाज के लिए कुछ कर गुजरना है और हमेशा हमेशा के लिए अजर अमर इतिहास रचकर गुजर जाना है जैसे गुजरे इसी सर जमी से दीवाने दुनिया में हज़ार थे। बस यही उम्मीद करते हैं दोस्तों अपने जनाजे का काफिला यारों के कंधों पर नहीं अशकों के उस सैलाब पर जाये जिसकी कल्पना अलौकिक परम् ब्रह्म भी नहीं कर सकता बस आपको इसी अहसासात से रूबरू करवाना चाहता हूँ कि यही जन्म है, यही जहन्नम और यही जिन्दगी भी। जिन्दगी की जंग बस इतनी है कि अब "आपको उतरना है मैदानों में और मारना है मैदान" क्योंकि इस जहाँ में हमारा कोई प्रतिद्वंदी नहीं है, जो है या जो कुछ भी है हममें ही है। हमसे बढ़कर कुछ भी नहीं क्योंकि यारों किस्मत के कलमकार हम ही हैं और हमें ही यह निर्णय लेना है कि हम कटघरे में खड़े रहें या उस सिंहासन पर बैठे जो जिन्दगी और मौत की हुकुमत की इजाजत देता है। बस इन चंद अल्फाजों के साथ अपने दिल की आवाज को कोरे कागजों पर अभिव्यक्ति प्रदान कर एक असफल प्रयास मेरे माध्यम से इन कागजों पर मुल्लिजर हुआ है। हो सके तो अपनी उगालदानी से इसे उच्चरित कर सार्थकता प्रदान करने का सफल प्रयास आपके माध्यम से भी मुल्लिजर हो सकता है जो मुझे और आपको आपकी मंजिल को अवश्य सफल बनाएगा यही सार्थकता आपको खुदा को नहीं खुद को जानने का बेहतर प्रयास होगा। क्योंकि खुद में ही खुदा है और हम ही इसके कलमकार हैं उठाओ कलम और लिख दो इतिहास क्योंकि अभी तक तुम्हारा इतिहास कोरा है जिसे लिखा जाना है।

संक्रांति की खुशबू

अब तो अमूमन हर छुट्टियों में नींद बारह बजे के आस पास खुला करती है .. मगर घर में कांटा कभी - कभार हीं बमुश्किल नौ पार करता होगा..और संक्रांति की सुबह, सबरे से हीं मेरी दादी मेरे कमरे का दरवाज़ा यह कहते हुए खटखटाना शुरू कर देती थी कि " जल्दी उठ जो आज नहा-धो के खैला हई न तो बहुरिया सांवर आइतो" (मगही) और मैं कुनमुनाते हुए अनमने ढंग से जबाब देता " अरे अईया हम तो वियाहे न करे करवई त फिर ई सांवर गोर कहाँ से" ..हालाँकि मेरी दादी खुद सांवली है मगर मुझे आज तक बड़ी बुजुर्ग औरतों का यह समीकरण हीं समझ में नहीं आया कि आखिर उन्हें गोरी बहु हीं क्यों चाहिए और फिर उस गोरी बहु से चाँद जैसा लड़का.. खैर मेरा इरादा बातों को कहीं और मोड़ना नहीं है..

तो मेरे लाख हील-हुज्जत नाज नखरे के बाबजूद भी मुझे नहाने पर मजबूर कर देने के बाद ..सामने खाने के लिए जो कुछ भी परोसा जाता था वह स्वाद की दृष्टि से अलौकिक होता था..गांव से आये बासमती धान से कूटे हुए नए चुड़े (पोहा) जिनकी सोंधी और मीठी खुशबु आज भी नथुनों को उद्द्वेलित कर देती है.. नाना प्रकार के तिल-तिलवाड़े तिलकूट के साथ नाम मात्र की दही (मुझे दही मना है) के साथ एक कटोरी दूध... लेकिन जिह्वा सुख का सिलसिला संक्रांति में यहीं थम जाए हो नहीं सकता ..पता नहीं उस दिन प्यार की किस छँकन के साथ खिचड़ी को छौंकते हैं कि उसका स्वाद को हजारों गुना बढ़ जाता है ..वैसे तो मुझे मुझे खिचड़ी,चोखा,घी,अचार बेहद पसंद है, फिर भी उस दिन की खिचड़ी का इंतज़ार मैं बरस भर बेसब्र होकर करता था..

मुझे याद नहीं, मैं पिछले किस त्यौहार में घर गया था. कई सालों से लगभग घर का रास्ता भूल चुका हूँ..तीज- त्यौहार तो दूर की बात..अब तो परदेश में हर दिन मेरे लिए त्यौहार सा कुछ नया है..आज अचानक न जानें क्यों सुबह-सुबह दादी की याद आ गयी और इन यादों ने उन चुड़ों की मीठी महक के साथ खिचड़ी की वह खुशबु भी याद दिला दी.. जिसके बनते हीं मैं अक्सर थाली लेकर रसोईघर के सामने खड़ा हो जाता था...खैर संक्रांति एक उत्सव है परिवर्तन का.. स्वागत प्रतीक है नए अनाजों के आगमन का... सूर्य की स्थिति का यह बदलाव आपके भंडार को अनाज से परिपूर्ण रखे.. शुभकामनाएं.. :)

अमर

प.एच .डी सी.ऍम .एस

अमन वर्मा की कविता

कभी भटक गया था उस
विशाल संसार रूपी सागर में
खो बैठा था अपने आप को ।
खुले गगन की छाँव तले
निशा की शीतल पवन को
महसूस कर रहा हूँ आज मैं ।
खिल उठा हैं मन का हर कोना
उस जलते रवि के संग
जो प्रकाश दे रहा हैं मन को मेरे ।
अब चलता हूँ दूर, मिलूँगा खुद से
शायद दून्ढ लूँगा एक और रवि
अपने ही भीतर छिपा कहीं ।

सावन की वो बारिश,
त्रत्य करते हुए मयूर,
घने बादलो का गर्जन,
हरता हैं मन को मेरे क्षण-क्षण ।
पानी में नाचते बालको
के पदचाप सुनाई पड़ते हैं,
जैसे झंकार हो पायल की
सावन पल-पल हर्ष के साथ
उल्लास से भरे मेरे
मन में हिल्लोरे मारता हैं ।
डूब जाना चाहता हूँ
सावन की उस घटाओ में
जहाँ मन मेरा आजाद हो
उस उड़ते पक्षी की तरह ।



यह दुनिया अगर मिल
जाये तो क्या है



Praveen Goyal
April 02, 2017

GURU DUTT
SAHIB



ART AT WORK

- Praveen Goyal





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THANK YOU

WE HOPE YOU LIKED THIS ISSUE.

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We are looking for more members for our team especially the writers and reporters.

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