

Editorial

ctober is the month where the monsoon come to an end and the winters arrive. It is the perfect blend of beauty, enthusiasm, positivity, goodness, oneness and harmony. All of these can be taught, seen and felt by the festivals that homes this month. Dusshera teaches that evil never wins, its always the truth that triumph over evil, this signifies that one should leave the negativity and go ahead in life with positive and goodness which, further helps to create a humble personality out of you.

This month is also privileged to have birthdays of great personalities like Mahatma Gandhi, Sardar Vallabh Bhai Patel, and the missile man of India Dr. A. P. J Abdul Kalam. Their attitude of achieving a goal has always been great inspiration for every individual.

Apart from this, our University also organized Inter-House Creative Writing Competition in this month. Students took part in the competition with great enthusiasm.

Happy reading Bestwishes Editorial Team

Dialog Box

"TURNING HUMAN WATSE INTO HYDROGEN ENERGY"

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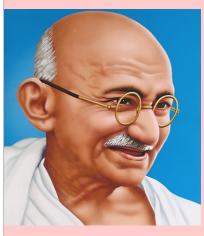
A significant downside to wastewater treatment plant is their carbon footprint. Now, researchers have found a way to reduce carbon emissions from sewage and produce hydrogen energy by using purple phototrophic bacteria and electrical currents to capitalize on human waste.

These bacteria use IR light as the energy source. The main feature of these fascinating organisms is their versatile metabolism. They can perform a range of metabolic reactions, making them a kind of metabolic Swiss army knife. They're also frequently found in wastewater treatment plants. Purple bacteria produce excess electrons from their metabolism. These excess electrons can be released through carbon dioxide fixation or in form of hydrogen gas.

By manipulating light intensity, temperature, types of organics and nutrients available and using electric current the metabolism of purple bacteria can be shifted to to pull 100% of carbon from any type of organic waste, turning it into hydrogen gas that can be used for fuel.

Kanchan Bhakuni M.Sc. Biotech 2nd Year

Remembering Some Eminent Personalities of India



Gandhi Jayanti

Celebrated on 2nd October in the fond memory of Father of the Nation, Mohandas Karamchand Gandhi born on 2nd October, 1869 at Porbandar in Gujarat, sets an example of peace and non-violence not only in India, but all around

the world. Gandhi Jayanti marks the essence of truth and non-violence in one's life. It reminds us about the struggles fought by Mahatma Gandhi to set us free, like salt movement, civil disobedience movement and videshi boycott movement. This day is also remarked as "International Day of Non-violence". Gandhi's statements, beliefs and principles have attracted many people worldwide and have influenced them to be great leaders of future.

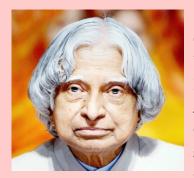


Shastri Jayanti

Shri Lal Bahadur Shastri, born on 2nd October, 1904, was the second Prime Minister of India and a great leader of Indian National Congress. He was born at Mugalsarai, Uttar Pradesh. He was

an active leader, politician and a great philosopher who led the country during the Indo-Pakistan war of 1965. He was also awarded with the Bharat Ratna in 1966.

He was deeply impressed and was a great mentor of Gandhi's teachings and beliefs. He joined INC following independence in 1947 and was appointed Parliamentary in his home state U.P. In 1951, Shastri was made the General Secretary of All-India Congress Committee and finally, after the death of Pandit Jawaharlal Nehru, came into play as the Prime Minister of India on 9th June, 1964. His slogan "Jai Jawan, Jai Kisan" still reverberates through the length and breadth of the country. He is and will be remembered all time for his large heartedness and service to the nation.



"World Student's Day" 15th October as declared by United Nation is marked as Kalam's birthday. Dr. A.P.J. Abdul Kalam, born on 15th October 1931, was an Indian scientist and researcher who served the nation as 11th

president from 2002 to 2007. He was a man of great personality and one of the best scientists our Nation ever had. He received 7 Honorary Doctorates from 40 Universities. He is recognized as "missile man of India" for his excellence and management in Space-related projects. He was awarded with the Padma Bhushan in 1981 and the Padma Vibhushan in 1990 for his work with ISRO and DRDO and his role as the scientific advisor to the Government. For his tremendous contribution to the scientific research and modernisation of defence technology in India, he was honoured with the highest civilian honour, The Bharat Ratna in 1997. His teachings and guidelines are inspiration for all the youth of the country.

Simranjeet Kaur B.Sc. Biotech 3rd Yr

Photograph of the Month



Navdeep Joshi B.Sc. Biotech 2nd Year

INTER HOUSE CREATIVE WRITING COMPETITION

The SBS Publication and Creative Writing Society organized Inter-House Creative Writing Competition on 6th Oct. 2018. Articles in various categories were invited from all the four houses. The winners of the competition were as follows:

POEM (ENGLISH)

1st: Kamini Godiyal, BPT 3rd Yr (Zorawar)

2nd: Sukriti Badola, M.Sc.Biotech 1st Yr (Fateh)

3rd: Abhishek Kaushik, BMM 3rd Yr (Zorawar)

POEM (HINDI)

1st: Shivani Bisht, M.Sc.Biotech 1st Yr (Ajit)

2nd: Nisha Adhikari, B.Sc. CBZ 2nd Yr (Jujhar)

3rd: Sachin Kumar, B.Sc. MLT 3rd Yr (Zorawar)

STORY WRITING (ENGLISH)

1st: Ananya Rastogi, M.Sc. Chemistry 1st Yr (Fateh)

2^{nd:} Riya Ranjan Shukla, B.Sc.Biotech 3rd Yr (Zorawar)

STORY WRITING (HINDI)

1st: Prachika Thakur, BPT 3rd Yr (Ajit)

2nd: Amit Thapliyal, B.Sc. MLT 3rd Yr (Jujhar)

MYTHOLOGY (ENGLISH)

1st: Harshali Shandilya, BPT 2nd Yr (Ajit)

2nd: Jasandeep Kaur, B.Sc. MLT 2nd Yr (Fateh)

MYTHOLOGY (HINDI)

1st: Gunjan Shahi, BPT 3rd Yr (Fateh)

ESSAY (ENGLISH)

1st: Simranjeet Kaur, B.Sc. Biotech 3rd Yr (Jujhar)

2nd: Adarsh Rana, B.Sc.PCM 3rd Yr (Fateh)

3rd: Amisha Basnet, B.Sc. MLT 3rd Yr (Zorawar)

ESSAY (HINDI)

1st: Kanika Joshi, B.Pharm 4th Yr (Zorawar)

CRITIC COLUMN

1st: Mitali Dua, BPT 3rd Yr (Fateh)

2nd: Manpreet Kaur, B.Pharma 2nd Yr (Fateh)

3rd: Ashima Rajwansi, B.Sc. Biotech 3rd Yr (Jujhar)



STUDENT COLUMN

"The Harder you Try to be Happy, the More Depressed you Become?"

"I, not even, have the power to make myself happy or unhappy today. I can choose which, it shall be. Yesterday is dead, tomorrow hasn't arrived yet. I have just one day, today, and I'm going to be happy in it."

A simple answer to this is 'yes'; yes the harder you try to push yourself towards happiness the more you lean towards sadness. It's like, harder you try to sleep, the less sleepy you become.

Happiness and sadness are intrinsic parts of life; both exist in the experience of life. The harder you try to be happy, upbeat, and positive, the more you will tend to feel sad, down, and negative. Life is a river you have to flow with it, you have to let things flow in it, you can't change course or slow down when you see an obstruction; don't pretend to feel anything other than what you really do and accept how you feel at all times. According to a study, societal overvaluing of positive

According to a study, societal overvaluing of positive emotions, and undervaluing of negative ones, may have an unintended consequence: rather than vanquishing depression, a lopsided emphasis on happiness may be breeding it. Suppressing negative feelings leads to emotional constipation, not freedom. The best way to get rid of a negative feeling, as quickly as possible is not to push it away, but to embrace it.

This latest research, adds more to the foundation of empirical evidence for constructive wallowing. It suggests that if we want a chance of happiness, we should allow ourselves, and allow each other, to be sad. It seems our unhappiness is amplified by comparison with the more socially desirable shearfulness. Not only

with the more socially desirable cheerfulness. Not only are we sad, anxious, or depressed, but now, because of social pressure, we feel bad about ourselves for not being happy, which makes us feel worse.

Accept the way you feel in this moment. If it's not due to a medical condition, there's a reason for how you feel. Take it as information that's what feelings are for.

Simply it can be said, you believe that things or people make you unhappy, but this is not correct. You make yourselfhappy/unhappy.

Md. Danishwar Khan BPT 3rd Year

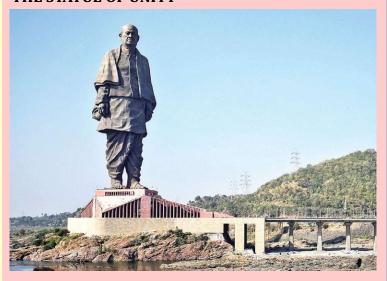
STUDENT COLUMN

"Mitochondrial Disease: A Story of Crafty Tricksters in Our Cells"

The mutation rate of mitochondrial DNA (mtDNA) is extremely high and is estimated that it is 10-17 folds higher than mutation rate of nuclear genome. mtDNA repair system, although present, is not sufficient to counteract the oxidative damage sustained by the mtDNA because of its proximity to the respiratory chain complexed in the inner mitochondrial membrane and reactive oxygen species (ROS) they produce. Most alteration of the mt DNA are netural polymorphism, which have proved to be powerful mean of tracing human migrations. Over 250 pathogenic mtDNA mutations (point mutations and rearrangements) have been characterized since 1988, which cause a wide variety of disease. We lack effective therapies for patients with mtDNA disease. Understanding the phenotypic diversity and elucidating the molecular mechanisms at the basis of these diseases has however proved challenging. Progress has been hampered by the peculiar features of mitochondrial genetics, an inability to manipulate the mitochondrial genome, and difficulties in obtaining suitable models of disease. Current compendium of polymorphism and mutations in human mt genome is formed and found in a database called MITOMAP. MITOMAP uses the mtDNA sequence as the unifying element for bringing together information on mitochondrial genome structure and function, pathogenic mutations and their clinical characteristics, population associated variation, and gene-gene interactions. The main purpose of this database is to report published and unpublished data, on variation of human mtDNA and variant tables currently maintained by the database report frequencies from 50,589 human mtDNA sequences. The mitochondrial database is available to the general public through the World Wide Web (http://www.gen.emory.edu/mitomap.html). The interface provides both browsing and querying capabilities. **Mukund Sharma**

Mukund Sharma M.Sc. Biotech 2nd Year

THE STATUE OF UNITY



The statue of unity is built in dedication to Iron Man of the country-Sardar Vallabhai Patel, who served as the first Home Minister of Independent India. So far, its the tallest statue in the World with a height of 183 meters and is located in river island facing the Sardar Sarovar Dam on the river Narmada in Gujrat. The statue is able to withstand wind velocity up to 60 m/s, vibration and earthquakes. The statue was built by Padma Bhushan recipient sculptor Ram V. Sutar, within three-and-a-half years by an army of over 3,000 workers. Its location on the Narmada Rivere signifies credibility of Sardar Patel for uniting all 562 princely states in pre-independent India to build the Republic of India and thus leaving behind a rich legacy of unity and integrity. Hence, the name "Statue of Unity". The date for the inauguration of the statue (October 31st, 2018) also marks the 143rd birth anniversary of Sardar Vallabhai Patel and is also commemorated as "National Unity Day" (Rashtriya Ekta Diwas). The tremendous contributions made by Sardar Patel to India's freedom struggle and the resolute leadership displayed by him while, our great nation was still in its early years of independence are **Novleen Kaur** indeed praiseworthy and memorable. BPT 3rd Year

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