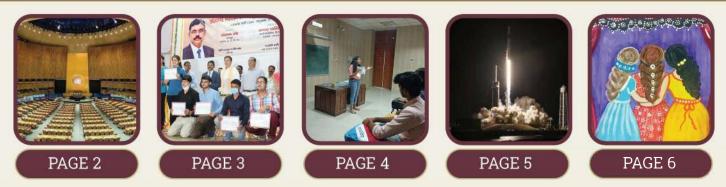


THE PULSE OF HBTU

YEAR II

FORTNIGHTLY NEWSLETTER

OCT 18 2021



World class facilities will be provided to the students in future: Minister Shri Jitin Prasad



Harcourt Butler Technical University observed "International Day of the Girl Child" on 11th October, 2021. The event was inaugurated by Hon'ble Vice Chancellor Prof. Samsher, who talked about the glorious history of our prestigious university, its present infrastructure and its future expansion plans.

Hon'ble Dean of Student Welfare Pro. Sunil Kumar delivered the welcome speech.

The occasion was graced by the presence of highly esteemed Minister of Technical Education Shri Jitin Prasad, who shared his views on how independence can result in the emergence of truly empowered women. He further laid emphasis on the importance of Start-up culture in the forthcoming times and to not let the ongoing pandemic effect the prerequisite diligence and dedication towards education.

He advised the students to observe the principles of three C's - Creativity, Curiosity and Commitment, given by Hon'ble Prime Minister, so that they can fulfil the dreams and expectations of their parents, the nation as a whole and most importantly, their own selves.

He paid attention towards suggestions made by the students during the interaction session and gave assurance that, the Ministry would look into the matters of infrastructure development, connecting the East and West campuses of the University, courses and other problems that the students have been facing. He also announced a scheme



of tablet distribution to university students which would enhance their work efficiency.

University students displayed various ingenious projects that they had been working on. Models such as an IoT based model to help farmers protect their crops, a follower bot to help people in their daily lives, wireless notice board, automatic sanitizer dispenser, multipurpose automato bot, home automation, Bluetooth RC car, CNC printer and VR cube, drones, etc. Shri Jitin Prasad appreciated the models and was greatly impressed by the innovative approach of the students.

Hon'ble Vice Chancellor gifted Shri Jitin Prasad ji a shawl and 'Smriti Chihna' as a token of deep respect and gratitude.

Furthermore, Respected Prof. Reena Singhal, Coordinator of Mahila Adhyan Kendra delivered a powerful speech emphasizing importance of Women Empowerment and necessity of "Learning Self Defence" for girls, followed by an overawing demonstration of Self Defence techniques.

Lastly, meritorious students received awards for excellent performance in their respective branches. Students who won laurels at the State Level Championship,"Prabhajan" organized by BIET Jhansi were also awarded certificates. Hon'ble Registrar Dr. Neeraj Kumar Singh delivered the vote of thanks and the program ended with the audience singing the National Anthem in unison.

NATIONAL INTERNATIONAL

YEAR II

FORTNIGHTLY NEWSLETTER

OCT 18 2021

PM Modi meets Australian PM Scott Morrison



PM Modi meets Australian PM Scott Morrison ahead of Quad, talks to top CEO's about investments A week after Australia's Prime Minister Scott Morrison rang Prime Minister Narendra Modi to tell him about the Australia-UK-US (AUKUS) pact that was going to be announced, the two leaders met in Washington DC on Thursday.The meeting took place a day before the first-in-person Quad leaders' summit, which will be hosted by US President Joe Biden. A pact or framework on global supply chains — with an eye on China — is expected to be adopted by the Quad leaders after the high-profile summit.

Air Marshal VR Chaudhary to be IAF's next Chief of Air Staff



Vice Chief of the Indian Air Force Air Marshal VR Chaudhari has been appointed the next IAF chief. The current Chief of Air Staff Air Chief Marshal RKS Bhadauria is set to retire on September 30. Defence Ministry spokesman A Bharat Bhushan Babu tweeted: "Government has decided to appoint Air Marshal V R Chaudhari, PVSM, AVSM, VM presently Vice Chief of Air Staff as the next Chief of Air Staff."

Bihar's Shubham Kumar tops UPSC exam , Bhopal's Jagrati second



Shubham Kumar from Bihar, and Jagrati Awasthi from Bhopal — both engineering graduates — bagged the first and second ranks, respectively. A total of 761 candidates have cleared the civil services examination, 2020, the UPSC stated in the results declared on Friday. A total of 545 men and 216 women have cleared the examination and recommended for various civil services by UPSC, the Commission said in a statement. It said there are 13 men and 12 women in the list of top 25 candidates.

Afghanistan's Taliban won't speak at UN General Assembly



It's almost certain that Afghanistan's Taliban rulers won't get to speak at this year's UN General Assembly meeting of world leaders. The Taliban challenged the credentials of the ambassador from Afghanistan's former government, which they ousted on August 15, and asked to represent the country at the assembly's high-level General Debate. It began Tuesday and ends Monday, with Afghanistan's representative as the final speaker.

Badminton : Indians bring laurels to Country



Indian shuttlers dominated three – Polish International, Belgium Junior and Guatemala International Series – tournaments abroad on Sunday. Kiran George won the men's title in Polish International while Tasnim Mir and Naren Shankar Iyer triumphed in Belgium Junior.However, in the 7th Guatemala International Series, Samayara Panwar was beaten in the final.

US successfully flight tests Raytheon hypersonic weapon, says Pentagon



United States has tested an air-breathing hypersonic weapon capable of speeds faster than five times the speed of sound, marking the first successful test of the class of weapon since 2013, the Pentagon said on Monday. The test took place as the United States and its global rivals quicken their pace to build hypersonic weapons – the next generation of arms that rob adversaries of reaction time and traditional defeat mechanisms. In July, Russia said it had successfully tested a Tsirkon(Zircon) hypersonic cruise missile, a weapon President Vladimir Putin has touted as part of a new generation of missile systems without equal in the world.

IN & AROUND

YEAR II

FORTNIGHTLY NEWSLETTER

OCT 18 2021

ORGANIZATIONAL SETUP

Finance Controller	Sri Ajay Johri Prof. Ram Autar Prof. Deepak Srivastava	
Dean, School of Basic and Applied Sciences		
Dean, School of Humanities & Social Sciences		
Dean, Research & Development and Coordinator CRS Project	Dr. R. K. Shukla	
Associate Dean, Research & Development	Dr. V. K. Yadav	
Dean, Planning & Resource Generation	Dr. P. K. Kamani	
Dean Of Academic Affairs	Prof. Anand Kumar	
Associate Dean of Academic Affairs	Dr. Deepesh Singh Dr. Lalit Kumar Singh	
Dean, Students Welfare	Prof. Sunil Kumar	
Associate Dean, Students Welfare	Dr. Alak Kumar Singh	
Dean, Incubation Hub	Prof. Arun Maithani	
Associate Dean, Incubation Hub	Dr. A K Shankhwar	
Dean Continuing Education & Internal Quality Assurance	Prof. Yaduvir Singh	
Associate Dean, Continuing Education & Internal Quality Assurance	Dr. G L Devnani	
Dean, School of Engineering	Prof. S. K. Singhal	
Associate Dean, School of Engineering	Dr. V. D. Kaushik	
Dean, School of Chemical Technology Associate Dean, School of Chemical Technology	Prof. Alak Kumar Singh Dr. Praveen Kumar Yadav	

Welcoming Prof Sunil Kumar as New Dean of Students Welfare



It is a matter of great pleasure and honor for the PSMSC team to welcome Prof Sunil Kumar as the new Dean of Students Welfare. He started his journey as a Lecturer in 1989 and henceforth worked in various administrative posts of HBTI like Dean of School

Of Engineering, Dean of Academic Affairs, Head of Civil Engineering department, and many more. He also published many National and International Journals. He is a very bold, and brave man with great ideology, determination, and vision. We hope that his energy, enthusiasm, and focus on education and learning, our university achieve greater excellence. Under his leadership, and guidance we will reach the next levels of glory. Congratulations, and WELCOME!



School of Engineering

S No.	Student Name	Branch	
1	Tushar Bhatia	2nd CSE	In the first-year examination of the academic session 2020-21, secured the first position with the highest marks in all the disciplines of the School of Engineering.
2	Kartik Chauhan	3rd ME	In the second-year examination of the academic session 2020-21, secured the first position with the highest marks in all the disciplines of the School of Engineering.
3	Deepika Juneja	4th CSE	of the third year of the academic session 2020-21. of the School of Engineering in the examination. Secured first position with highest marks in all disciplines

School of Chemical Technology

S no.	Name	Branch	
1	Shivanshu Kushwaha	2nd CHE	In the first-year examination of the academic session 2020-21, got the first position with the highest marks in all the disciplines of the School of Chemical Technology.
2	Abhishek Ojha	3rd CHE	Ranked first with highest marks in all disciplines of School of Chemical Technology in the second-year examination of academic session 2020-21
3	Dev Tiwari	4th PT	Ranked first with highest marks in all disciplines of School of Chemical Technology in the third-year examination of academic session 2020-21

State Level Competition

Awardees of state level sports competition organised by BIET Jhansi (2019-20).

S no	Name	Branch	Game	Place
1	Kanchan Singh Rathore	2nd CHE	Discus Throw (Athletics)	letics) Second Second Second
2	Jagriti Sachan	2nd PT	Shot Put (Athletics)	
3	Roli Yadav	2nd CHE	400m (Athletics)	
4	Yuvraj Singh	2nd EE	Basketball (Event)	Second

MENTAL HEALTH

YEAR II

FORTNIGHTLY NEWSLETTER

4

OCT 18 2021

Mental Health Care for All: let's make it a reality



"What mental health needs is more sunlight, more candour, and more unashamed conversation." - Glenn Close On the global occasion of, 'World Mental Health Day' on 11th October, a dialogue session

was organised for the students, engendering a safe space to share their stories of struggle, setbacks and triumphs in their journey of recovery and life in general and lead up to the realization - "YOU ARE NOT ALONE" dawning upon people facing similar situations. Close to one billion people worldwide have a mental disorder and anyone, anywhere, can be affected. Furthermore, the COVID-19 pandemic has had an adverse impact on people's mental health.

The prime motive of this session was to make the assemblage realise the gravity of this topic and make them ponder over the stigmatized mental health issues like depression, anxiety, etc. The idea that – "It never gets easier, you just become stronger" was at the core of this interaction.

Listening to music is the most general means of catharsis for everyone. To make the Listening to music is the most general means of catharsis for everyone. To make the interaction more inclusive, songs that brought solace and repose for individuals were collected anonymously and a Spotify playlist called "STELLIFY" was created, which currently has a collective of 686 songs. For the first time ever in the University's history, significant efforts were made to mobilise a mental health awareness campaign.

If you think you might have depression, read on....

Depression can happen to anyone and is not a sign of weakness. It is an illness characterized by persistent sadness, and loss of interest in activities that you normally enjoy, accompanied by difficulty carrying out daily activities. If you are depressed, you may experience several of the following: loss of energy, change in appetite, sleeping more or less, anxiety, reduced concentration, indecisiveness, restlessness, feelings of worthlessness, guilt or hopelessness, thoughts of self-harm or suicide in the worst cases.

What you can do:

Talk to someone you trust about your feelings. Most people find that talking to someone who cares about them helps.

Seek professional help-your local health care worker or doctor is a good place to start. Try to keep doing at least some of the activities that you usually enjoy- even when you don't feel like it.

Stay connected with friends and family. Stick to regular eating and sleeping habits as much as you can. Maybe exercise a bit and go out in the open air.

go out in the open an.
B Be kind to yourself and try to focus on the positive. Congratulate yourself on your achievements -past and present, no matter how small.

If you feel like life is not worth living.

- If you are suffering through pain that seems overwhelming and unbearable
- Feelings of worthlessness, hopelessness and loneliness
- **Constant negative thoughts**

Difficulty imagining any way to deal with your problems other than suicide. The feeling that everyone would be better off without you.

Difficulty understanding why you are thinking or feeling this way,

YOU NEED TO KNOW

You are not alone. It's okay to talk about suicide. Talking can help alleviate some of the feelings that you are experiencing.
Thinking about suicide isn't a weakness and nothing to feel guilty about.
You can get better, help is available. If you feel that life is not worth living, reach out for

help.

How can you help?

Understanding how to provide support for someone who is suffering from a mental illness can be overwhelming and emotionally exhausting.

Make it clear that you want to help, listen without judgement, and offer support. Sometimes starting the conversation can be the hardest part. Focus on "I" sentences like "I am listening."; "I am here for you." instead of using 'you' like "you should." etc.

sick. When they're struggling, they aren't monsters, when they get better, they are not new people...but our feelings and our situations can trick us into thinking so. Mental illness can change circumstances and even change their personalities, interests and spirits. But they are the same person you have always loved, and they need you to see that person in them—even when they can't see themselves clearly.

Empathy and Validation: When we empathize with the people in our lives without needing to hold their circumstances up against ours or anyone else's, we lessen the chance that our loved ones feel alone in their pain and we strengthen the chance that they'll be vulnerable enough to reach out to us in their times of need. Validation is simply the acknowledgement that a person has a feeling, even if we don't agree that it's an appropriate feeling to have or the response we would have in similar circumstances; validation sounds like, "I understand that your angry right now, that must be difficult."

Encourage them to seek professional help and offer to go with them on their appointments. If they have a prescribed medication, help them remember to take it.

Be mindful and remember that trying too hard can make things worse for them.

If they are thinking of self-harm, or have already intentionally harmed themselves, don't leave them alone. Seek help from emergency services or a health-care professional. Remove items

such as medicines, sharp objects and firearms. Take care of yourself too. Try to find ways to relax and continue doing things you enjoy.

Where to find help?

While you can always reach out to a professional therapist for help, sometimes your circumstances may not allow you to do so. Here is a list of organisations pan-India that are offering telephonic as well as online counselling, that could come in handy if you or someone you know is seeking mental health help.

NIMHANS: One of India's most sought-after institutions for mental health and neuroscience education, NIMHANS, Bengaluru, is offering free psychosocial support and mental health services to people experiencing stress, anxiety, fear or any kind of emotional distress during the pandemic. A team of professional psychologists and psychiatrists is available to help Indian residents 24 hours a day, through a toll-free number. Call: 080-46110007 Visit: Nimhans.ac.in/pssmhs-helpline

Sumaitri: A crisis intervention centre for people experiencing depression or suicidal thoughts, Sumaitri offers telephonic counselling conducted by trained volunteers, seven days a week, from 2 pm to 6:30 pm. Call: 011-23389090, 09315767849 Visit: Sumaitri.net

Sneha: A suicide prevention organisation based in Chennai, Sneha offers emotional support to anyone feeling distressed or suicidal. Run by a group of volunteers, the service is available from 10AM to 10PM every day. The experts at the centre are also providing support through email. Call: 044-24640050, 044-24640060 Visit: Snehaindia.org/new

Fortis Stress Helpline: Launched in 2016 for students and parents dealing with exam stress, the Fortis Stress Helpline offers mental health support in over 15 languages. The 24-hour service is taking emergency calls and offering instant responses every day. Call: 08376804102

Mpower 1 on 1: In collaboration with the Maharashtra Government and the Brihanmumbai Municipal Corporation (BMC), Mpower has launched a toll-free mental health support helpline at the onset of the pandemic in 2020. Giving you access to trained professionals 24 hours a day; the free service can be availed by anyone above the age of 18. Call: 1800-1208-20050 Visit: Mpowerminds.com/oneonone

Chasing Myself

Foraging for something ulterior, I lost myself. Darkness formed a wreath, And trapped me somewhere beneath.

Dim lit room, Curtains pulled, But still conscious Because even the walls looked ferocious.

I had caged myself, Within my own expectations. Although I had its key, But deplored to set myself free.

Formed a hatred towards mirror, For it portrayed my culprit. Signed a pact with dusk, Coz it promised me night.

Life became filthy, Desperate to redeem itself. And impotent to continue, For I had lost Me to Myself.

-Shivangi Kshatriya 2nd B.tech ,FT.

SCIENCE & TECH

YEAR II

FORTNIGHTLY NEWSLETTER

OCT 18 2021

Far less than that: Billionaire on paying \$200 mn for all-civilian mission



Days after completing his historic ride into space as part of the first all-civilian crew to reach Earth orbit, billionaire e-commerce mogul and mission commander Jared Isaacman is back at home, and unexpectedly back in guarantine. Isaacman said his wife, their two daughters, aged 5 and 7, and his in-laws all came down with COVID-19 upon their return from Florida, where the family stayed in the days immediately before, during, and after the spaceflight and were exposed to the virus. Florida has experienced some of the highest COVID-19 infection rates in the nation during a recent surge of cases driven by the spread of the highly contagious Delta variant. He said all the adults in his household were fully vaccinated before their trip to Cape Canaveral, where the SpaceX rocketship he flew aboard blasted off from the Kennedy Space Center. The family also spent time in Orlando before heading home earlier this week.

Isaacman, founder and chief executive of financial transaction service Shift4 Payments (FOUR.N), said he was still "processing" his spaceflight experience. But he recalled that seeing the moonrise over Earth from orbit was a personal highlight of the three-day expedition.

Scientists in US build the 'smallest-ever human-made flying

The size of a grain of sand, dispersed micro fliers could monitor air pollution, airborne disease, and environmental contamination.

Researchers designed a new flying microchip by studying the aerodynamics of wind-dispersed seeds. The team used mechanisms similar to those of pop-up books to manufacture the devices. The resulting technology is packed with ultra-miniaturized sensors and wireless communication capabilities.

By studying maple trees and other types of wind-dispersed seeds, the engineers optimized the microfiber's aerodynamics to ensure that it — when dropped at a high elevation — falls at a slow velocity in a controlled manner. This behavior stabilizes its flight, ensures dispersal over a broad area, and increases the amount of time it interacts with the air, making it ideal for monitoring air pollution and airborne disease.

Global Cancer Risk From Burning Organic Matter Comes From Unregulated Chemicals

Whenever an organic matter is burned, such as in a wildfire, a power plant, a car's exhaust, or in daily cooking, the combustion releases polycyclic aromatic hydrocarbons (PAHs) - a class of pollutants that are known to cause lung cancer.

There are more than 100 known types of PAH compounds emitted daily into the atmosphere. Regulators, however, have historically relied on measurements of a single compound, benzo(a)pyrene, to gauge a community's risk of developing cancer from PAH exposure. Now MIT scientists have found that benzo(a)pyrene may be a poor indicator of this type of cancer risk.

Interestingly, about 17 percent of PAH-associated cancer risk comes from "degradation products" — chemicals that are formed when emitted PAHs react in the atmosphere. Many of these degradation products can in fact be more toxic than the emitted PAH from which they formed.

An analysis revealed that benzo(a)pyrene had a surprisingly small contribution, of about 11 percent, to the overall risk of developing cancer from PAH exposure globally. Eighty-nine percent of cancer risk came from other chemicals. And 17 percent of this risk arose from degradation products.

The team hopes the results will encourage scientists and regulators to look beyond benzo(a)pyrene, to consider a broader class of PAHs when assessing a community's cancer risk.

Smartphone sensor can detect marijuana intoxication



Smartphone sensor data can be used to determine whether someone is intoxicated after consuming marijuana, a study by Rutgers University found. A combination of time features and smartphone sensor data had a 90% rate of accuracy in detecting marijuana intoxication, it said. Travel patterns from GPS data and movement data from the accelerometer were found to be the most important sensor features.

CREATIVE CLUSTER

FORTNIGHTLY NEWSLETTER

OCT 18 2021

YEAR II



Anurag Rajawat 3rd B.Tech Electrical Engineering

हरकोर्ट बटलर प्राविधिक विश्वविद्यालय तेरी अजब निराली

शान।

वैभवशाली भवन शान्तिमय नाम है तेरा बहुत महान।

शिक्षा के प्रसार में खूब बढ़ाया तूने हाथ।

लेते तेरा नाम सभी जन पूरे यश वैभव के साथ।

। ज्ञान्ता का पू<mark>ण सरीवर अन</mark>न्त ज्ञान 💭 भरता ज

मस्त क्षेत्र में जलती तेरी ये अनुपम ज्योति प्रचण्ड

ले-फले उन्नति करे ये अनुराग की कामना है अखप्रदा

ज्ञान प्रसार

ें तुनित उन्नति करता जा।

Keshav Rajput 3rd b. Tech Food technology



Anushree Trivedi 3rd B.Tech Chemical Engineering

6